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UNIVERSITY OF DUBLIN
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Intentionality, Intersubjectivity, and Education

A Study in the Philosophy of Bernard Lonergan

by Seán McDermott

A study submitted to the Department of Higher Education and Educational Research, Trinity College, Dublin, in fulfilment of the requirements for the award of the Ph.D. degree.

May 2007

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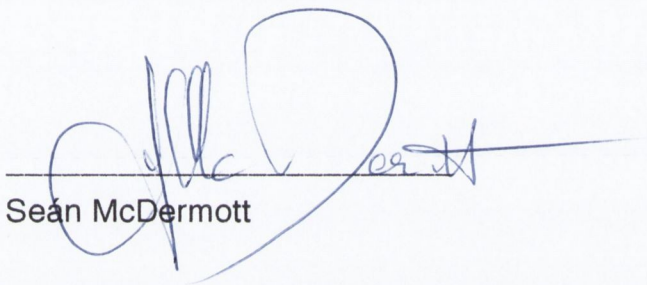
Signed: 

Seán McDermott

Date: 11/5/2007

Summary

This study seeks to establish the following three aims which are set out in the Introduction:

1) To examine the relevance of Lonergan's theories as a foundation for a comprehensive philosophy and theoretical model of the educational process;

2) To explore the possibility of a practical pedagogical method based on such a model or philosophy, and particularly on the 'self-appropriation of cognitive interiority' which is an integral part of it; and

Apart from Lonergan's own method of 'self-appropriation of interiority', the other method of 'proof' adopted by this study has been described as 'the method of converging theories'.[1] This is the preferred method of Jean Piaget,[2] and such a method necessarily entails a synthesis, a 'grand scheme', a bringing together and collating of the theories of many different philosophers, psychologists, and educationalists. By demonstrating the 'convergence' or compatibility of Lonergan's insights with these theories, the study attempts to establish the validity of these same insights, bearing in mind that, strictly speaking, "proof is a concept that should be restricted to closed systems, such as mathematics."[3]

It is argued in this study that Lonergan alone among modern philosophers appears to have set the foundation for a "philosophy of philosophies,"[4] "a philosophy that is capable of performing an integrating function with regard to knowledge in general,"[5] and so is capable for forming the basis for a philosophy of education. He claims that his self-appropriation of interiority in particular "cuts to the root of philosophical differences and incomprehensions."[6] And again he says: "It is possible, I believe and suggest, to classify the differences of philosophies in terms of the measure of self-appropriation."[7] That Lonergan's theories appear so consistent with those of modern neo-Thomists like Pieper and Maritain should come as no surprise. That his work is capable of complementing, and being complemented by, the works of philosophers like Marcel, Dewey, and Langer, on the other hand, would appear to support his contention that he has in fact produced such a "philosophy of philosophies." Husserl attempted to do the same, and he even claimed that he had succeeded in producing such a unifying philosophy. But this study has argued that in two central areas at least, intentionality and intersubjectivity, Husserl's theories have been found wanting, while those of Lonergan appear to be more satisfactory and more comprehensive in explication.[8]

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[1] See Section 1.8.2

[2] Jean Piaget, in D.R. Green et al (Eds.) *Measurement and Piaget* (London: McGraw-Hill, 1971) p. 213.

[3] David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art* (London: Thames and Hudson Ltd., 2002), p. 48.

[4] Bernard Lonergan, *Insight* (London: Longmans, 1957), p. 691.

[5] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 102.

[6] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 95.

[7] Bernard Lonergan, *Understanding and Being*, p. 220.

[8] Sects 3.3.4 & 17.7 for a comparison of Lonergan's and Husserl's notions of intentionality and intersubjectivity.

Yet it has also been argued[9] in this study that Lonergan's scheme by itself does not translate into an effective pedagogy, but that certain learned cognitive functions are also necessary for the efficient exercise and employment of one's mental operations of experience, understanding, judgment, and decision. This does not contradict Lonergan's hypotheses in any way, rather it is quite consistent with his notions of the two ways of human development. It is argued that Feuerstein's deficient cognitive functions are corrected by mediation from above-downward or 'way of heritage', while Lonergan's own mental operations constitute a natural spontaneous development from below-upwards, the 'way of achievement'. It is also argued that, while Lonergan's self-appropriation of interiority is necessary for development of what this study terms the *being* mode of living, for one's full self-realisation and happiness, yet for its proper implementation within the school situation a practical methodology such as Feuerstein's Instrumental Enrichment programme, which recognises and utilises this notion of the 'two ways', is also necessary.

This study concludes that Lonergan's transcendental method forms an excellent basis for a philosophy of education. As a basis for a practical and usable pedagogical model, however, it has clear limitations. The first limitation is that, like Aquinas before him, he has tended to neglect corporality, at least in the full existentialist sense adopted by philosophers like Marcel, Merleau-Ponty, and Wojtyla. It is argued in Chapter Seven that Lonergan tends to equate the notion of personhood, for example, with the exercise of mental or rational capacity. This rather narrow conception of 'person' can be shown to be inadequate, and not in keeping with the ontological reality of an individual human entity. Kevin Doran maintains that "this inadequacy is due, at least in part, to the failure to take account of the body as an aspect of the nature of finite persons."[10]

Secondly, and closely linked to the first, is Lonergan's lack of sufficient attention to the notion of *habitus* or habit. Lonergan's model may not be idealist in nature but, as becomes a philosophical model, it is certainly idealistic. It is idealistic in the sense that it has a tendency to portray things in a visionary or utopian light. His cognitive philosophy ignores the very obvious fact that it is not enough for a child simply to have an intact mind given him by nature, nor is it enough for him to grasp this ideal mind in its dynamic operations, but that an essential part of the operation of this mind, and a necessary part of his understanding of it, are the set of *learned,* and frequently deficient, cognitive functions identified by Feuerstein. An essential part of 'self-appropriation' of cognitive interiority, in other words, must involve not just the grasp of Lonergan's dynamic cognitive operations in practice, but also an understanding of, and a compensating for, these same deficient cognitive functions.

Finally, while Lonergan gives more space to a consideration of the emotions than most other philosophers, and while he has managed quite successfully to integrate the emotions with the cognitional, there has been no attempt by Lonergan in any of his works to provide a phenomenology of emotionality on a par with his detailed analysis of the cognitional. It has been argued in this study that the theories of Susanne Langer are capable of complementing greatly Lonergan's own thinking, adding a kind of self-appropriation of emotional interiority to Lonergan's notion of self-appropriation of cognitive interiority.

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[9] See particularly Chapters 10, 11, 12, and 13 of this study.

[10] Kevin Doran, *What is a Person* ? (Lewiston, NY: The Edwin Mellen Press, 1989), p. 61.

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Dedication

This study is dedicated to the countless children all over the world who have been 'taught' that they can never aspire to anything great, and who just 'know' in their heart of hearts that it is best not to think too much. It is dedicated particularly to the 'Band 5' kids of Hong Kong - the wounded 'Deltas' of this *Brave New World*.

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Part I

General Philosophical and Psychological Considerations

Chapter 1

Introduction - Philosophy, Science, and Education

1.1 *The Aims of this Study*

"Why is there no word in English for the art of learning?" This rather startling question is posed by Seymour Papert in his book *The Children's Machine*. Papert, who is generally regarded as one of the foremost authorities on the use of computers in education, continues:

> Webster says that the word pedagogy means the art of teaching. What is missing is the parallel word for learning. In schools of education, courses in the art of teaching are often listed simply as "methods." Everyone understands that the methods of importance in education are those of teaching - these courses supply what is thought to be needed to become a skilled teacher. But what about methods of learning?[1]

Papert's point is that there is no such word for the art of learning because there is no art, or more precisely, no science, of learning. Lonergan's seminal work *Insight* may be regarded, in part, as an attempt to address this problem,[2] and his art or 'method' is just as stark and startling as Papert's original question: it is: "to discover, to identify, to become familiar with the activities of one's own intelligence."[3] Or, as he also phrases it, it consists "in one's own rational self-consciousness clearly and distinctly taking possession of itself as rational self consciousness."[4] This study is, in part, an attempt to examine just what Lonergan means by this statement and in the process fulfil the following aims:

1) To examine the relevance of Lonergan's theories as a foundation for a comprehensive philosophy and theoretical model of the educational process;

2) To explore the possibility of a practical pedagogical

[1] Seymour Papert, *The Children's Machine - Rethinking School in the Age of the Computer* (London: Harvester Wheatsheaf, 1993), p. 82.
[2] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (Longmans, London, 1964), p. xxii.
[3] Ibid., p. xix.
[4] Ibid., p. xviii.

method based on such a model or philosophy, and particularly on Lonergan's 'self-appropriation of cognitive interiority'[5] which is an integral part of it;

The first aim above indicates and hopes that in the process of writing this study there might emerge a comprehensive and usable philosophy of education, a philosophy which is based solidly on what is known about the art of learning from many different philosophical and scientific perspectives. Fulfilling the second aim, on the other hand, should ensure the practical pedagogical usefulness of such a philosophy, which should also be consistent with what is known about the art of teaching. If a usable pedagogy does emerge from the process, then this might be regarded as not just as useful in itself, but it may in turn be taken as a validation of the philosophy from which it has emerged.

1.2 *A General Overview of the Work*

The study is divided into five main parts. Part I consists of four chapters and deals with general philosophical and psychological considerations. The first chapter of Part I includes this introduction, but it also seeks to examine the relationship between education, science and philosophy. The second chapter gives an introduction to Lonergan and to his general philosophical theories. It strives to give a glimpse of Lonergan 'at home', as it were, by dealing with his origins and background, and how he relates to those of his own 'family' in the neo-Thomist tradition. At the same time, it aims to give an overview of the original Thomistic notion of intentionality, which is so central to this study.

The aim of the third chapter is inevitably more difficult; it is that of placing Lonergan 'in context', among the non-Scholastic, contemporary philosophers of his own time. This is necessary, to some degree, because modern philosophy has appropriated (Lonergan might say, 'misappropriated') the notion of intentionality to its own ends. The task is a difficult one because philosophy today is a much more disparate discipline than at any stage in its history. The chapter examines not only those philosophers like Brentano and Husserl who were influenced more or less directly by Scholasticism, but also others like Gabriel Marcel and John Dewey who

[5] Lonergan's notion of 'self-appropriation' is central to his cognitive philosophy and is dealt with in detail in Chapter 9 of this study.

were subject to no such influence but whose common ground with Lonergan will be used to elaborate and expand the reach of his thinking. The fourth chapter, dealing with Lonergan's place in modern psychological thought, introduces the reader to some of the other great thinkers in the field of education - Jean Piaget, Lev Vygotsky, and Reuven Feuerstein. These latter are considered important because their theories allow a further development and expansion of the theoretical model or scheme which will hopefully emerge as this study progresses.

Part II of the study, consisting of Chapters Four, Five, and Six, deals with "The Intrasubjective Nature of the Human Person", man in his interiority, man as subject.[6] Chapter Five, for example, gives an overview of Lonergan's basic cognitive philosophy, which forms the foundation for all that is to follow in subsequent chapters. Since one of the key objects of this study is to widen and expand the scope of Lonergan's philosophy so that it more readily forms the basis for a philosophy of education, several new non-Lonergan terms are introduced and defined in Chapter Six, dealing with the "The Primary Modes of Human Existence". A scientific approach to a work such as this requires that the central terms employed be clearly defined and their meanings consistently used. This is particularly important where the terms used have common, everyday meanings which may be different and broader than the senses in which they are employed in this study. Thus the terms *'being'*, *'having'*, and *'doing'* are italicised throughout the study when they are being used in their more theoretical or technical sense. The same applies to the concept of *'work'* employed as an extension of this same model. While this 'triarchic model' of *'being'*, *'having'*, and *'doing'* owes its direct origin to Yacov Rand, it is in fact a development of the philosophical works of Gabriel Marcel and Eric Fromm.

However, since education deals essentially with the development of individual human persons and not of disembodied minds, as indiscriminate use of the word 'cognitive' or 'cognitional'[7] sometimes seems to imply, Chapter Seven examines what Lonergan means by the term 'person' and how this relates to his

[6] It is important to emphasise at the outset that the term "man" is used throughout this work in its broad inclusive and generic sense, as in "mankind" for example. While"The Nature of the Human Person" is dealt with as a separate philosophical issue in Chapter 7, the terms "man" and "person" tend to be used interchangably throughout this work. Again, for simplicity, the work uses the masculine "he," or "his," or "him" in its broad inclusive sense, to include by implication "she" and "her."

[7] While the term 'cognitive' is used extensively in modern psychology, 'cognitional' is the term preferred by Lonergan, and this study will confine itself to the use of this term, except when dealing with the specialised terminology of psychologists like Feuerstein.

various other philosophical concepts like 'subject" and 'thing'. This Chapter, in other words, is an opportunity to describe, explain, and define many more of the philosophical terms which are used extensively throughout this work.

Having established the premiss in Part II that the human person has an intrasubjective nature, Part III of the work tries to show that he also has a transcendent nature. For example, the first chapter of this section, Chapter Eight, attempts to show that man is by his very nature self-transcendent, and that this view is as apparent from his biological and psychological development as it is from the inherent intentionality of his mind. This chapter also introduces the notions of 'cycle' and 'spiral' of growth, as reflected not only in organic development, but also as applicable to cognitive growth. The theories of Piaget, Erikson, and Feuerstein are appealed to in support of this hypothesis. Chapter Nine then follows with a more detailed exposition of Lonergan's notions of consciousness and of what he terms "self-appropriation' of interiority", both of which, it is argued, are central to man's inherent transcendent nature.

Chapters Ten, Eleven, Twelve, and Thirteen are an attempt to examine Lonergan's 'transcendental precepts' in such searching detail as to constitute a type of 'self-appropriation of interiority' in themselves. It is argued that to approach this study from a purely theoretical viewpoint would, as an exercise, enhance only the *'having'* mode of both the author and the reader. Like Lonergan in *Insight*, one of the aims of this study is also to aid 'self appropriation' and hence to achieve an enhancement of what is termed the *'being'* mode of living. Chapters Ten to Thirteen, in particular, set that process in train. As part of this process, concepts and ideas already introduced in the first chapters are repeated, expanded, and clarified in these later ones. There is a clear logic to such repetition both from a pedagogical viewpoint and also from the point of view of the organisation of this work: as one seeks for ever higher and higher viewpoints on Lonergan's philosophy, one necessarily subsumes or 'sublates' all of the previous insights into newer and higher structure of knowledge.

Having established the premiss that the human person has an intrasubjective nature in Part II, and that an essential part of that intrasubjective nature is its inherent transcendent quality in Part III, Part IV seeks to show that man's intersubjective nature is a natural consequence of both. Part IV, in other

words, deals with man from an intersubjective and cultural perspective. Chapter Fourteen, for example, brings together Lonergan's 'two ways of human development' and integrates them with the notion of 'cultural deprivation' as expounded by Feuerstein. This chapter also deals at length with the notions of love, care, belief and trust as the main motivators of intersubjective relations. The work of Josef Pieper augments and complements the work of Lonergan throughout this section. Chapter Fifteen then offers a model for human intersubjectivity based on Lonergan's notion of mediation, while Feuerstein's 'mediated learning experience' (MLE) extends this model into the educational arena. Thus, once again, Lonergan's theories are further expanded and 'sublated' into what Lonergan would describe as a 'higher viewpoint'. This higher synthesis is further reinforced, concretised, and made relevant to the field of practical pedagogy by a consideration of the role of questioning in mediation in Chapter Sixteen.

Further educational expansion is achieved through a more detailed theoretical treatment of Lonergan's theories of intersubjectivity in Chapter Seventeen. This chapter also attempts a comparison between the intersubjective theories of Lonergan and and those of Husserl. While this inevitably involves a somewhat heightened level of abstraction, the exercise has been deemed necessary since Husserl is widely regarded as the major philosophical authority on the notion of intersubjectivity. However, the study returns to earth, as it were, with the more concrete examination of the developmental aspects of intersubjectivity, and of the role of the family in education. The assimilation of the theories of John Bowlby into the overall scheme or model is realised through the introduction of this author's own notion of the 'intentional bond'.

Part V constitutes the conclusion of the work. It is first of all an attempt to bring together the findings of the study and integrate them with a consideration of the educational needs of a rapidly changing world. An attempt is made to show that what is sorely needed and sadly lacking in this challenging era is what this study defines as education for *being*. Then, an attempt is made to show that a possible answer lies in integrating what Lonergan terms 'self-appropriation of cognitive interiority' into the practice of education. Far from being overly abstract and esoteric, a concrete, realistic and serviceable technique for the achievement of this end is available through the practical methodologies employed by Reuven Feuerstein in his 'mediated learning experience' and 'instrumental enrichment' programme.

The final chapter, in other words, in addition to being a summary, attempts to lay bare the challenges facing educators in the new millennium, and then attempts to show that the solution to the problem lies essentially in Lonergan's scheme. As a result of the investigation of this study, however, it will be argued that Lonergan's theories alone will not provide an adequate pedagogy, but that they require in addition the further theoretical elaboration provided by Marcel, Langer, and others and, more importantly, that they require a practical methodology like that proposed by Feuerstein. If it manages to establish all of this with sufficient conviction, then it will have accomplished the threefold aims put forward at the start of this introduction. However, since there is no such thing as 'proof' outside of a closed quasi-mathematical system, success or otherwise must be gauged through the dual lenses of what this study terms 'convergence of theories' on the one hand, and what Lonergan terms 'self-appropriation of interiority' on the other. The notion of 'convergence' is dealt with in the following sections below. Briefly, it consists in illustrating how Lonergan's theories are consistent with, interface, or dovetail with the theories of a wide variety of thinkers some of which, like the theories of Piaget, Vygotsky, and Feuerstein, are based on solid clinical and experimental research findings.

1.3 *Education as Philosophy*

One aim of this study is to use Lonergan's cognitional theories to produce a philosophy of education. Such a philosophy needs to be validated in some way; it needs to be verifiable, in other words. The fact that it may be capable of being translated into a usable pedagogy may be taken as one form of validation, but even this would need to be established scientifically and empirically, if it is to be acceptable. Thus it is necessary and instructive at the outset to examine the tripartite relationship between philosophy, education, and science, in the hope that in the process there might emerge an acceptable strategy and methodology for this work as a whole.

In *Education at the Crossroads*, Maritain says:

> If the aim of education is the helping and guiding of man toward his own human achievement, education cannot escape the problems and entanglements of philosophy, for it supposes by its very nature

> a philosophy of man, and from the outset it is obliged to answer the question: "What is man?" which the philosophical sphinx is asking.[8]

In other words, a philosophy of education is first and foremost a philosophy of man, with all that that entails. Most people, for example, would agree that education involves the development of the human person. However, before one can view man in the light of his development, one must first consider him as he is in himself; one must speak of *Existenz,*[9] and what it is to be a truly authentic human being. Thus, this study dwells at some length on man in his individuality, man the 'person', before considering the more developmental or, one might say, transcendent aspects of his nature.[10]

Dewey appears to support the above contention of Maritain's that education and philosophy are inseparable. In his book *Democracy and Education* he goes even further when he states: "The most penetrating definition of philosophy that can be given is, then, that it is the theory of education in its most general phases."[11] Dewey, in other words, equates philosophy with educational theory. He goes on to add that not only philosophy but the human sciences also are in some part intrinsic to educational theory and practice. This implies that philosophy, and the human sciences themselves, may also benefit from this engagement with education, in the form of new ideas and insights that may accrue from that engagement. Dewey's contention is that if educational theory needs to be responsive to developments in the sciences, then it follows that education, in its turn, is entitled to treat such developments critically and with circumspection. It is even entitled to suggest hypotheses and to initiate developments of its own in these fields. Dewey saw this as being particularly true with regard to philosophy. As the last quotation implies, he saw education as a laboratory for the testing of the human significance of philosophical theories and distinctions, as well as a privileged vantage point from which to engage in philosophising. Thus philosophising about education is central to the needs of both education and of philosophy itself, and is part of a process in

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[8] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 4. Maritain (1882 - 1973) was a French Neo-Thomist. Bergson's teaching saved him from metaphysical despair and a suicide pact with his fiancée. After his discovery of Aquinas, he rejected Bergsonism in favour of "a realistic account of the concept and a unified theory of knowledge, aligning the empirical sciences with a philosophy of nature, metaphysics, theology, and mysticism." (*The Cambridge Dictionary of Philosophy,* Cambridge University Press, 1995, p. 464).

[9] *Existenz* like *Dasein* is an existentialist term referring to the existence of man, "not as intelligently grasped and reasonably affirmed, but as experiencing, inquiring, and reflecting, yet not obtaining the definitive answers to his questions about himself." - Bernard Lonergan, *Insight* (London: Longmans, Green and Co. Ltd., 1957), p. 669

[10] Chapter Seven in particular deals in detail with Lonergan's theory of "The Human Person."

[11] John Dewey, *Democracy and Education* (Toronto: Macmillan, 1916), p.329.

which education itself can begin to take its rightful place among the human sciences, bearing in mind Lonergan's assertion that "a science emerges when thinking in a given field moves to the level of a system."[12]

Dewey appears to view the relationship between education and philosophy as one of 'mutual-mediation', to use a Lonergan term,[13] or as one involving 'assimilation' and 'accommodation', to use more Piagetian terminology. This study aims to use Lonergan's cognitional philosophy to throw light on the process of education itself, with the assumption that, if it is successful in so doing, then this should be taken as a validation of Lonergan's insights; one could then say that education had been 'assimilated' to Lonergan's philosophical 'scheme'. If, however, certain changes, additions, or adaptations need to be made to Lonergan's system in the process, then Dewey would demand that education, in its turn, has the right to insist that Lonergan's scheme 'accommodate' itself to the demands of education. One such accommodation, for example, which is explored in Chapter Six of this study, arises out of Lonergan's and Aquinas' relative neglect of the implications of corporality, or 'embodiment', in dealing with a consideration the human person.

The process outlined above commends itself as a logical, and even scientific, way of proceeding. For example, Paddy Walsh, Professor of Education in the University of London, agrees with this assessment of Dewey's statement when he says that

> education's central concerns are one profound stimulus to questions in philosophy. And analogous claims can be made for education's contribution to the human sciences. In sum education's proper relationship with philosophy and the human sciences is not a client relationship, but a seriously mutual affair.[14]

Thus, there are two main ways in which philosophy and education are related. Firstly, philosophy, from its wider and more abstract vantage point, yields a comprehensive understanding of reality, a world view, which when applied to educational theory and practice lends a direction and structure which would otherwise be lacking. Secondly and reciprocally, the experience of the educator in nurturing the young places him in touch with dimensions of reality of immense

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[12] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 241.

[13] Lonergan's notion of mediation is dealt with in some detail in Chapter Fifteen of this study.

[14] Paddy Walsh, *Education and Meaning* (London: Cassell Educational Limited, 1993), p. 50.

interest to philosophy. In other words, while philosophy acts as a guide to educational theory and practice, education as a field of investigation yields valuable data which can form a basis for philosophical insights and judgments.[15]

It can be argued that existing philosophies of education are either in the form of practical wisdom arising from experience and reflection in the light of an existing religious *'weltanshauung'*, as in the case of Don Bosco, or Tolstoy, or Comenius, or Maritain, or they consist of scientific theories or conceptions arising from careful observation of children's behaviour combined with more philosophical speculations as to the nature of human development. Maria Montessori and John Dewey would fit the latter type of approach. Both of these approaches have led to useful insights as well as practical methodologies. A third approach is to confine oneself to careful scientific experimentation and to leave it to others to develop any practical pedagogical conclusions which might arise therefrom. Jean Piaget and Lev Vygotsky would fall into this latter category. Only one of the educators adopted by this study, Reuven Feuerstein, has succeeded in combining careful clinical observation and research with more theoretical speculation, as well as developing a highly successful practical pedagogic method based on both.[16]

A truly comprehensive philosophy of education must avail of all of these approaches, and more. A philosophy of education must not only be a cognitional philosophy of the human person, viewed as he is in himself, but must also consider man as he is in his life in society; that is, it must consider not only man in his intrasubjective nature, but also man as intersubjective. Thus the whole of Part II of this study is given over to a consideration of "The Intrasubjective Nature of Man" while Part IV deals with the intersubjective nature of man in some detail.

1.4 *Education as Science*

The most useful analogy one can point to in support of the main thrust of Dewey's ideas on the relationship between education and philosophy is that of Medical Science. The theory and practice of Medicine, like that of education, is a collection, an assemblage, a synthesis, of many disparate sciences including

[15] J. Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper and Row, 1968), p. 11.

[16] Feuerstein's theories and his practical methodology are to be found throughout the various chapters of this study but particularly in Chapters Four, Ten, Eleven, Twelve, Thirteen, Fourteen, Fifteen, and Sixteen.

anatomy, physiology, biochemistry, genetics, microbiology, clinical theory, and psychiatry. Yet clinical studies in medicine itself have contributed greatly to insights and understanding in each of its constituent sciences. Such also, Dewey would say, is the interdependency and cross-fertilisation between education on the one hand and philosophy and the human and natural sciences on the other. In this study, the experimental and theoretical findings of psychologists like Jean Piaget, Erik Erikson, and Eric Fromm as well as the theories of clinicians like Viktor Frankl, John Bowlby, and Reuven Feuerstein will be used to clarify the nature of the child and his development as well as, hopefully, lending some support and empirical substance to the more theoretical work of Bernard Lonergan and others.

Jacques Maritain uses the same medical analogy to highlight the next tenet of this study, that once one has identified the nature of the child through the contributions of the various sciences and the clarifications of philosophy, then any practical pedagogic method that derives therefrom can do no better for the child than "nurture its flowering in ways appropriate to its natural unfolding"[17], that is assist and further the natural evolution of the child's propensities according to the principles discovered by science and philosophy. In Maritain's words, education, like medicine, is an "*ars cooperativa naturae*." He explains:

> The doctor exerts real causality in healing a sick man, yes, but in a very particular manner: by imitating the ways of nature herself in her operations, and by helping nature, by providing appropriate diet and remedies that nature herself uses, according to her own dynamism, toward a biological equilibrium. In other words, medicine is *ars cooperativa naturae*, an art of ministering, an art subservient to nature. And so is education. [18]

1.5 *Philosophy and Science*

First, then, with the help of the sciences, one seeks to understand the nature of the human organism and the processes that make for its growth and development. Then, and only then, can one formulate an educational system designed to mirror and support the normal developmental processes which have been identified. However, the implication of Dewey's statement is that the human and natural sciences alone cannot provide an adequate picture of human nature; philosophy is also needed. Kenny explains that one of philosophy's roles is to

[17] William Eidle, *The Self-Appropriation of Interiority* (Peter Lang Publishing, New York, 1990), p. xv.
[18] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 30.

provide the "conceptual clarity" which the sciences, left to themselves, seem incapable of affording. He complains, for example, that

> while there has been a steady progress in empirical discovery, there has not been parallel growth in conceptual clarity. Indeed physiological investigation has sometimes brought with it the temptation to conceptual confusion, which confusion has in its turn led to misinterpretation of the physiological findings.[19]

Susanne Langer, whose works also make an important contribution to this study, supports this contention of Kenny's and explains more fully the relationship of philosophy to the sciences:

> Philosophy is a fabric of ideas. It is not, like science, a body of general propositions expressing discovered facts, nor is it a collection of moral truths learned by some other means than factual discovery. Philosophy is a stocktaking of the ideas in terms of which one expresses facts and laws, beliefs and maxims and hypotheses - in short, it is the study of the conceptual framework in which all our propositions, true or false, are made. It deals primarily with meanings - with the sense of what we say.[20]

Only through philosophy can one rise to a sufficient level of abstraction and generalisation to provide a unified theory, a foundation, revealing a common core to the various educational and psychological theories that abound in the modern world, whilst at the same time opening the prospect for a deeper enlightenment by pointing out lacunae in one's knowledge and pinpointing possible new areas of research. In order to look at education from the widest possible perspective and see how one part relates to another, in order to give a semblance of order and system to a sphere of human activity which is both complex and disparate, it is necessary to enlist the help of philosophy, to take a philosophical viewpoint. This means, in the words of Frederick Crowe,

> bringing to bear on education the precepts that Lonergan calls transcendental: Be attentive. Be intelligent. Be reasonable. Be responsible. Or, put a little less concisely: attend to the data, try to understand the data, weight your understanding on the scale of truth, and allow your informed conscience to guide your conduct.[21]

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[19] Anthony Kenny, *The Metaphysics of Mind* (Oxford: Oxford University Press, 1992), p. 98. Sir Anthony Kenny is frequently quoted in this study. He is a noted Neo-Thomist based in Oxford who is also very familiar with the works of Bernard Lonergan. He is Warden of Rhodes House, Oxford.

[20] Susanne Langer, *Feeling and Form* (London: Routledge and Kegan Paul Limited, 1953), p. 3. The theories of Langer are dealt with in some detail in Chapter 11 of this study.

[21] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p xiv

Education, on the other hand, is a human activity, it is a 'praxis'[22], and practical considerations demand that philosophical theories in turn find a justification on a level of psychology and the empirical sciences. Thus the insistence that any philosophy of education emerging from a study such as this should be empirically verifiable.[23]

This still leaves an obvious question to be answered: Which of the many philosophies current in the world today is best suited to this task of providing the necessary conceptual clarity and structure? After all, the same complaint which Kenny directs against the sciences has also been made with regard to philosophy itself. Husserl, for example, says:

> The splintering of present-day philosophy, with its perplexed activity, sets us thinking. When we attempt to view western philosophy as a unitary science, its decline since the middle of the nineteenth century is unmistakable. The comparative unity that it had in previous ages, in its aims, its problems and methods, has been lost.[24]

And Lonergan adds:

> The scandal still continues that men, while they tend to agree on scientific questions, tend to disagree in the most outrageous fashion on basic philosophic issues. So they disagree about the activities named knowing about the relation of these activities to reality, and about reality itself.[25]

Both of these philosophers, Husserl and Lonergan, claim to have produced a philosophy of philosophies, that is, a philosophical system which is so broad in its scope that it is capable of providing a general foundation, a unifying explanatory framework, for all other philosophies.[26] This study will argue that the philosophy of Bernard Lonergan offers the best basis for a philosophy of education because it alone seems capable of providing a framework, or theoretical system, in which all other philosophies can be compared and made meaningful. Moreover, the study will attempt to show that Lonergan's scheme is also capable of the expansion and extension of scope that allows the natural and human sciences also to be assigned

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[22] This study will follow Freire's definition of 'praxis' which is "the action and reflection of men and women upon their world in order to transform it." (*The Pedagogy of the Oppressed*, p. 60) It may also be termed variously "the exercise of a theory", or the doing of something intelligently.

[23] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (Longmans, London, 1964), p. xi.

[24] Edmund Husserl, *Cartesian Meditations* (Kluwer Academic Publishers, Dordrecht, 1995), p. 4.

[25] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 20.

[26] Bernard Lonergan, *Insight*, p. 691; *Understanding and Being*, p. 102; *Method in Theology*, p. 95.

their logical place in the overall scheme of things. Lonergan explains in *Method in Theology:*

> First, we shall appeal to the successful sciences to form a preliminary notion of method. Secondly, we shall go behind the procedures of the natural sciences to something both more general and more fundamental, namely the procedures of the human mind. Thirdly, in the procedures of the human mind we shall discern a transcendental method, that is , a basic pattern of operations employed in every cognitional enterprise. Fourthly, we shall indicate the relevance of transcendental method in the formulation of other, more special methods appropriate to particular fields.[27]

This author in his M.Ed. dissertation *Intentionality in Learning and Education* examined the applicability of Lonergan's theories, particularly his theory of intentionality, to education. In it he concluded:

> Lonergan's approach to philosophy is startlingly new and revolutionary, particularly the grounding of his whole system on his cognitional theory and his acceptance of 'self-appropriation' as a valid philosophical method. However, he cannot claim to have made some vast new discoveries in the fields of human cognition and education. Even his central notion of insight he owes to Aquinas. Rather, it would seem that Lonergan's contribution in these fields lies in his 'grand scheme', in his breath of vision, in the synthesis which he achieved through his 'generalised empirical method' or 'intentionality analysis'; he has succeeded in identifying "a basic pattern of operations employed in every cognitional enterprise"[28]

This present study aims to extend this "grand scheme" even farther into those areas of education which are, as yet, largely unexplored by Lonergan researchers - the intersubjective and social dimensions of education. In the process, it is hoped to deepen, widen and concretise Lonergan's familiar cognitive system in order to produce a practically useful, and scientifically verifiable, model of the wider educational process.

The implied superiority of Lonergan's over Husserl's system in what has been said above has to be established, however, and this study seeks to address this problem, particularly with regard to those areas of philosophy which are

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[27] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 4.

[28] Seán McDermott, *Intentionality in Learning and Education* (Trinity College Dublin, M.Ed. Thesis, 1997) pp. 188 - 189. This emphasis on "grand scheme" does not imply that Lonergan was even remotely interested to producing a *Summa*. The development and growth of knowledge since the time of Aquinas have been so great that, in Pieper's words, "there is no longer any attaining of a closed and rounded view of the world, in any legitimate way. The wealth of available knowledge of the natural world has become too boundless." Lonergan advocated instead a philosophy based on what is most important and the most common in all philosophies - that which Walsh describes as "the transcendent reality within the soul of the philosopher." See Section 2.8 of this study.

regarded as uniquely Husserlian - intentionality and intersubjectivity. However, as regards the first aim of this study which is to develop a philosophical model of the education process, the principal concern is not so much with establishing the superiority of one system of philosophy over another, as of achieving a synthesis, a 'sublation', a borrowing of those aspects of the theories of others which can render the theories of Lonergan more "generalizable" and "fecund", to borrow terms from Susanne Langer. That such an expansion of his philosophical system, demanding an accommodation to the needs of specialist areas, would be necessary was recognised by Lonergan himself when he affirmed:

> If I may be sanguine enough to believe that I have hit upon a set of ideas of fundamental importance, I cannot but acknowledge that I do not posses the resources to give a faultless display of their implications to the wide variety of fields in which they are relevant. I can but make the contribution of a single man and then hope that others, sensitive to the same problems, will find that my efforts shorten their own labour and that my conclusions provide a base for further development.[29]

1.6 *Philosophy and Psychology*

Like Piaget, Lonergan claims that his theories occupy the border area between two jealously guarded disciplines - philosophy and psychology.[30] Psychology claims to be an empirical science: psychologists like Piaget make careful observations, perform experiments and claim to make discoveries about the real world of people from empirical data. Philosophers, on the other hand, generally do not have any special observation techniques; they do not perform experiments, and they generally do not claim to discover hitherto unsuspected facts about the real world. They generally claim only to draw out logical and conceptual connections between ideas and beliefs by *a priori* analysis of those ideas and beliefs. Just as Piaget, the psychologist, claims, surprisingly, that his apparently empirical discoveries based on apparently empirical data can illuminate questions about the nature of knowledge, an area which generations of philosophers have claimed as their own, so Lonergan, the philosopher, claims for himself a 'generalised empirical method' whereby he experiences and analyses the data of consciousness and draws psychological conclusions on the basis of these; which

[29] Bernard Lonergan, *Insight: A Study of Human Understanding* (Longmans, London, 1964), p. xxx.

[30] Bernard Lonergan, *Verbum: Word and Idea in Aquinas* (Univ. of Notre Dame Press, Notre Dame, 1967), pp. 46, 56, 76, and 95,

observations, analyses, and conclusions he claims can be repeated and validated by others.

1.7 *A Theoretical Model*

Every body of knowledge which lays claim to the title of 'science' has a model, or an interrelated group of models, which give a coherence and unity to that body of knowledge. Lonergan explains:

> By a model is not meant a description of reality or hypothesis about reality. It is simply an intelligible, interlocking set of terms and relations that it may be well to have about when it comes to describing reality or to forming hypotheses. As the proverb, so the model is something worth keeping in mind when one confronts a situation or tackles a job.[31]

Thus, Chemistry would be nothing without the atomic model and quantum theory; Physics also would be sadly lacking without the models of Newtonian mechanics and relativity theory. Even Psychology has its models of mental functioning. Education, alas, has no such coherent model to which the term 'scientific' can be attached. For this reason it is dismissed by Schön as a "minor profession." He explains:

> The minor professions suffer from shifting, ambiguous ends and from unstable institutional contexts of practice, and are therefore unable to develop a base of systematic, scientific professional knowledge.[32]

Schön's ideas will be returned to in the final chapter where the study will attempt to show that Lonergan's 'self-appropriation of interiority' can form the basis for what Schön calls 'Reflection- in-Action'.

A useful model can do much more than merely account for known empirical facts, however; it also has the advantage of pointing towards further fertile areas of research, even if in the process it has to suffer some revision itself. However, if a model is sound, revisions should not be radical; evolution rather than revolution is the norm in science. The model of education and development put forward in this

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[31] Bernard Lonergan, *Method in Theology* (London: Darton, Longman & Todd, 1972), p. xii

[32] Donald A. Schön, *The Reflective Practitioner* (Aldershot, Hants: Ashgate Publishing Limited, 1995), p. 23. Schön is Ford Professor of Urban Studies and Education at the Massachusetts Institute of Technology. He is also a social scientist and an industrial consultant. In *The Reflective Practitioner* he examines five professions - engineering, architecture, management, psychotherapy, and town planning - to show how professionals in these areas really go about solving problems. Despite the fact that he barely mentions education, in the opinion of this author his findings are very relevant to a Lonergan based philosophy of education.

study as part of its overall aims is just such an attempt to produce a workable, testable, modifiable image or model of the education process. It is a synthesis of the work of many different philosophers and scientists, but, ultimately, it is based on Lonergan's cognitional theory and his dynamic structure of knowing, which is itself, as Lonergan says, "the condition of the possibility of any revision."[33]

The real problem to be faced is how to construct a model of the human person which will incorporate all of the latest scientific facts integrated into a unified philosophical system, and which will throw useful light on the practical educational process, viewed as human development. Such a model must allow one to discuss scientifically the whole notion of human modifiability, its scope and its limits, both as a general abstract characteristic of all men, and as a reflection of the propensity for growth possessed by each individual person. To grace such a model as the one proposed in this study with the title 'Philosophy of Education' may be premature, nevertheless one must try seriously to formulate such a model in philosophical terms, bearing in mind Lonergan's words:

> One of the great utilities of a philosophy of education .... is that it will provide ultimate criteria for judging the truth and estimating the value of what is to be found in the constant, enormous flow of books and articles written for educators.[34]

1.8 *Philosophy of Education, Theology, and Metaphysics*

Maritain claims that a purely scientific notion of man can never be sufficient but that, on the contrary, "the complete and integral idea of man which is the prerequisite of education can only be a philosophical and religious idea of man." Regarding his "religious idea of man", however, it must be borne in mind that Maritain is a traditional Thomist. That is, like Aquinas, and unlike Lonergan, he takes metaphysics as his starting point and derives his notions of cognition and the nature of man from there. Unfortunately, this also means that an admixture of theology and philosophy is almost inevitable in his writings. As will be seen, it is a contention of this study that a philosophy of education, if it is to be a step towards a more systematic and verifiable pedagogy, must stay firmly on the philosophical and scientific planes, avoiding theological deliberation. If what evolves in the process

[33] Bernard Lonergan, *Method in Theology* (London: Darton, Longman & Todd, 1972), p. xii .

[34] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 158.

transpires to be a true, valid, and useful picture of man and his development, then those qualified in theology should have no difficulty in assimilating it to the supernatural; hopefully, there can then be added those extra steps which might translate a valid scientific model into an authentic Christian pedagogy, complementing and perfecting the natural with the supernatural, as it were. If what is proposed here does not prove acceptable, however, then at least no damage will have been done to that realm of learning, theology, which Newman regarded as the highest of all of the sciences.

One must also bear in mind that the modern Western world is no longer united by an adherence to a Christian world view. This makes it all the more important that human minds, whether Catholic, Protestant, Hindu, Buddhist, Jewish, agnostic or atheist, should be able to meet, first and foremost, on a solid, rational, philosophical plane, a plane which, according to Lonergan, must be verifiable. Pope John Paul II, for example, insists that "philosophy must obey its own rules and be based upon its own principles,"[35] stating more fully:

> Philosophical thought is often the only ground for understanding and dialogue with those who do not share our faith. ... Such a ground for understanding and dialogue is all the more vital nowadays, since the most pressing issues facing humanity - ecology, peace and coexistence of different races and cultures, for instance - may possibly find a solution if there is a clear and honest collaboration between Christians and the followers of other religions and all those who, while not sharing a religious belief, have at heart the renewal of humanity.[36]

The religious aspirations of man, however, are as a valid an object of philosophical study as, say, his social and intersubjective needs. In fact, insofar as they represent a real need, and hence a real value, in the life of the human person, it is arguable that no philosophy of education would be complete without giving considerations of religion their proper place in the overall scheme of things. There is a clear difference, however, between taking such a philosophical view of religion and allowing theology to hold sway over one's philosophical speculations in the way of a prejudice or bias. Lonergan would insist that what Aquinas, and Thomists in general, have to say is as eminently insightful, rational, and important today as at any stage since the Middle Ages. However, it is Aquinas' and Lonergan's *philosophies* which will be explored and developed in what follows, and not their theological writings.

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[35] Pope John Paul II, *Fides et Ratio* (London: Catholic Truth Society, 1998), p. 115.
[36] Ibid., pp. 148 - 149.

Most conscientious educators would agree that education ought to develop the human person in all aspects of his being. One is also conscious that education often falls far short of achieving such a goal. The problem is that the concepts used in education are often too vague and imprecise to be practically useful and hence many of the arguments used in favour of what might be termed 'depth development' are frequently unconvincing from a pragmatic and utilitarian point of view. Even where the terms and concepts employed are clearly defined, the difficulty still remains with regard to "how to make the transfer from ideas that are so fundamental, to procedures and materials that are so concrete as the education process."[37] It will be argued in this study that Lonergan's 'pure desire to know' is not enough. It is, after all present in all men, saints and villains alike. It must be nurtured in schools; but even that is not enough. "The unconscious search for ultimate meaning can lead to nefarious ends: flagrant nationalism, obsessive jealousies, ethnic hate, compulsive work."[38] One needs all the levels of conscious intentionality working harmoniously to bring about personal development, but even that is still not enough. One simply cannot teach this as yet one more academic subject: "abstract theory is not an end in itself, it must shape concrete living,"[39] particularly in "a field so important, so crucial, so profitable, as that of education."[40]

While education cannot ignore the findings of the human and biological sciences, since it is dealing with man in his concrete development, neither can it avoid the metaphysical dimension, regardless of what Dewey and Piaget might think. Philosophy of Education cannot avoid being a theory of man as he really is, an inquiring subject, a searcher after the truth, the good, and the beautiful. Questions of what is true and of what is real, what it means to exist in the world, are just too fundamental to be ignored. It can be argued, then, that philosophy of education is not simply a branch of philosophy, nor is it simply the application of philosophy to some specialist sphere of action, but, as Dewey implies, it is itself by its very nature philosophy in all its fullness.

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[37] Frederick E. Crowe, *Old Things and New: A Strategy for Education,* p. xi.

[38] Swanee Hunt, United States Ambassador to Austria, in Forward to Viktor Frankl, *Man's Search for Ultimate Meaning* (Cambridge MASS: Perseus Publishing, 2000), p 10.

[39] Ibid.

[40] Frederick E. Crowe, *Old Things and New: A Strategy for Education,* p. xi.

1.9 *Practical Methodology Employed*

1.9.1 *Lonergan's "Scissors Action"*

This study attempts to adopt the duel "scissors action" approach advocated by Lonergan. On one level it is concerned with general philosophical and scientific principles and their logical coherence among themselves. This might be termed a 'top-down' approach. On another level it is concerned with empirical research findings. This may be termed a 'bottom-up' approach. According to Lonergan, to qualify for the appellation 'scientific', both approaches are necessary and complementary:

> All science is a matter of a scissors action - from above downward and from below upward; data, alone, lack significance; principles and leading ideas, alone, lack reality; it is by the coming together of the two that a science is developed.[41]

Or, as the eminent anthropologist Lewis-Williams explains: "In day-to-day research, theory and data must interact; they must illuminate one another."[42] In this case, both of these approaches are necessary in order to extend Lonergan's philosophy more deeply and widely into the realm of education than has been attempted in the rather limited outline laid out in his Cincinnati Lectures[43]. The limitations of his work on Education were clearly appreciated by Lonergan himself when he said:

> I am not a specialist in education. But I have suffered under educators for many years and I have been teaching for an equally large number .... most of the concrete applications, the ironing out of things, will have to be done by you who are in the field of education and the philosophy of education.[44]

1.9.2 *Methods of Verification*

According to Dewey, it is for practical pedagogy itself, operating at the 'coalface', as it were, in classrooms and staff rooms of the world, to decide on the usefulness or otherwise of any philosophical model proposed. But once one arrives at such a model, apart from practical usefulness, what 'scientific' method can be used for its verification? How might one judge it? Lonergan would reply that since

[41] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 251.

[42] David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art* (London: Thames and Hudson Ltd., 2002), p. 26.

[43] Subsequently published as Volume 10 of his *Collected Works*.

[44] Bernard Lonergan, *Lectures on Education* (Original unpublished format), p. 27, as quoted in Carley, Ed.D. thesis, p. 6. Not found in *Collected Works Vol. 10*.

what one is dealing with is man in his deepest privacy, then a new empirical method, a 'generalised empirical method,' which accepts data of consciousness as well as data of sense as valid empirical data, must be employed. This, fundamentally, is a matter for the individual scientist. And for those who object to such a method as being too subjective to be scientific, there remains the tried and trusted procedure of repeating and validating the experiment for oneself, in the privacy of one's own mental 'laboratory'. After all, this is where Newton and Einstein did some of their most successful experiments. This is also one area in which so called 'peer review' should present no problem. Each and every scientist, after all, can be an expert on his own mental functioning. Besides, as Lewis-Williams again explains: "Proof is a concept that should be restricted to closed systems, such as mathematics. At the end of an algebraic problem, a student can write 'Q.E.D.' - that which had to be demonstrated." [45]

However, Lonergan's 'generalised empirical method' is not the only scientific way available for the verification of the proposed model; one can also employ what might be loosely termed 'the method of converging theories.' Piaget himself supports this method when he says:

> There are many ways of proving something: the first is to study one problem in as great detail as possible, using statistical methods, calculation of variations, and whatever else you may think feasible; the second is to keep moving from problem to problem, from field to field, seeking - and this is what counts - convergences and links between one field and another ... . When you pass from one field to another, either there is chaos or you find results which link up with observations already made, i.e. you find all sorts of convergences and analogies. I personally think it is far more satisfactory, as far as proof is concerned, to find these convergences and connections between fields than it is to work only one problem using increasingly accurate statistical methods.[46]

Interestingly, Charles Darwin also appears to use much the same argument when seeking to justify his theory of evolution:

> I believe in the truth of the theory, because it collects under one point of view, and gives a rational explanation of many independent classes of facts.[47]

Or, as the anthropologist Lewis-Williams explains more precisely:

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[45] David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art,* p. 48.

[46] Jean Piaget. Closing remarks. In D.R. Green et al (Eds.), *Measurement and Piaget* (London: McGraw-Hill, 1971), p. 213.

[47] Charles Darwin, *Variations of Animals and Plants under Domestication* (Baltimore: John Hopkins University Press, 1998), quoted in David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art,* p. 49.

> A hypothesis that covers diverse fields of evidence is more persuasive than one that pertains to only one, narrow type of evidence.[48]

Bertrand Russell also appears to advocate what might be termed a 'method of converging beliefs' when he says:

> There can never be any reason from rejecting one instinctive belief except that it clashes with others; thus, if they are found to harmonize, the whole system becomes worthy of acceptance.[49]

This investigation seeks to use a similar method of validation or justification for its findings. In this it is helped enormously by the open-ended nature of much of Lonergan's work. One of the most attractive features of Lonergan's philosophy is, as will hopefully be shown, the degree to which it interfaces, dovetails with, or conforms to, the theories of significant other philosophers and psychologists. For example, the pages that follow will detail not only Lonergan's dependance on Piaget for the more developmental aspects of cognitive theory, but also the extent to which he borrows from Piaget his terms and concepts of 'operation', 'structure', and 'function'. Another example is Lonergan's assimilation of von Hilderbrand's theories of emotion and feelings[50] into his own scheme, thus integrating for the first time the cognitive and the affective into a unified philosophical scheme. Yet another example is his reliance on the theories and speculations of Susanne Langer in his consideration of the role of the Arts in human life and development.[51] All of these will be dealt with at some length, as will the attempt to link Lonergan's scheme with the theories of Reuven Feuerstein, which are, in turn, a development of those of Piaget and Vygotsky.

Lonergan's step-by-step analysis of the human thought processes, and his invitation to 'self-appropriate', should be sufficient in ideal circumstances. In practice, however, one instinctively seeks for validation from other sources. This may appear as if one is yielding to the old appeal to authority "in which authority has taken the place of personal development,"[52] and which is rejected by Lonergan. So, in a sense, one is. Such an appeal is not only useful scientifically but, as has already been argued, it is also normal practice and is a perfectly valid scientific

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[48] David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art,* p. 49.

[49] Bertrand Russell, *The Problems of Philosophy* (Oxford: Oxford University Press, 1998), p. 12.

[50] See Section 9.4 of this study.

[51] See Section 11.11 of this study.

[52] Bernard Lonergan, *Collected Works of Bernard Lonergan, Vol. 5 - Understanding and Being* (Toronto: University of Toronto Press, 1990), p. 184.

approach, provided the authorities used are generally recognised as such by the scientific or philosophical communities, and are numerous and disparate enough to provide a representative sample of overall opinion.

This consistency of Lonergan's thought with the theories of other major thinkers should come as a no surprise to the serious philosopher. A convergence of theories which are firmly intent on truth as their objective is to be expected, whether approached from the viewpoint of philosophical speculation or of empirical scientific investigation. Moreover, as Piaget intimates above, this very convergence can be taken as a type of mutual confirmation of these various and disparate philosophies and theories themselves. Thus one must also take great satisfaction from the fact that, as will be argued, there are so many parallels between the works of Lonergan and those of Husserl, for example, and that so many of Josef Pieper's concepts and ideas to do with human love and belief slot immediately and effortlessly into Lonergan's scheme, without any major adaptation or alteration.[53]

This study, then, will attempt to do justice to the very large number of "convergences" and "connections" that exist between Lonergan and other eminent thinkers in the fields of philosophy, psychology, and pedagogy. This, it is hoped, will not only provide a confirmation of Lonergan's considerable insights, but also allow an expansion and development of Lonergan's theories into a much wider field of application. If this enterprise succeeds, the theories developed will have fulfilled Susanne Langer's conditions for a satisfactory philosophy, the capacity for what she terms "generalization" and "fecundity".

To reach such a convergence of theories is not an easy task. One must bear in mind that some serious experimental scientists like Jean Piaget have expressed definite misgivings about philosophy in general, and about metaphysics in particular, for its neglect of the findings of experimental psychology.[54] This is only to be expected as, in Maritain's words, "the scientific idea of man, like every idea recast by strictly experimental science, gets rid as far as possible of any ontological content, so that it may be entirely verifiable in sense experience."[55] However, he insists that the philosophical idea of man is primarily an ontological idea, and is not entirely verifiable in sense experience, though it possesses criteria and proofs of its

[53] See Section 14.5 of this study.

[54] Jean Piaget, in Jean-Claude Bringuier, *Conversations with Jean Piaget* (Chicago: University of Chicago Press, 1977), p. 13.

[55] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 4.

own; "it deals with the essential and intrinsic, though not visible and tangible characters, and with the intelligible density of that being which we call man."[56] Not that Piaget entirely rejects the role of philosophy, he merely insists that with regard to epistemology, and by extension education, the validity of a particular philosophy must be checked against the hard-won findings of experimental psychology.[57] Every attempt is made in this study to achieve just this, largely through the contributions of the theories and methods of Piaget himself, as well as those of Reuven Feuerstein, Eric Erikson, and others. The underlying assumption is that only thus can a truly usable model or theory of education emerge.

Nevertheless, as has already been said, philosophy is necessary to provide the broader view. Only a knowledge of man in his deeper and ontological sense can provide an understanding of where his true development lies. Furthermore, Maritain would answer Piaget's objection to metaphysics:

> ... if we tried to build education on the single pattern of the scientific idea of man and carry it out accordingly, we could only do so by distorting or warping this idea: for we should have to ask what is the nature and destiny of man, and we should be pressing the only idea at our disposal, that is the scientific one, for an answer to our question. Then we would try, contrary to its type, to draw from it a kind of metaphysics.[58]

1.9.3 *Case Studies & Practical Exercises*

What is being attempted in this study is not just the construction of an idealised model of the education process, with idealised learners and teachers, in ideal circumstances. In order to translate this model into a practical pedagogy, theory must be related to concrete living. In other words, using Lonergan's analogy, as well as having the upper blade of the scissors, representing theory, there must be a lower blade representing concrete reality, concrete data. Even actual defects of student performance are put under the microscope, as it were, in the form of Feuerstein's 'deficient cognitive functions'.[59] These two approaches, the two blades of the scissors, really converge, however, when one successfully appropriates one's cognitive interiority, "rational self-consciousness taking possession of itself *as*

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[56] Ibid, p. 5.

[57] Jean Piaget, in Jean-Claude Bringuier, *Conversations with Jean Piaget* (Chicago: University of Chicago Press, 1977), pp. 9 - 15.

[58] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), pp. 5 - 6.

[59] These are dealt with in some detail in Chapters Ten, Eleven, Twelve, and Thirteen of this study.

rational self -consciousness."[60]

As an aid to such self-appropriation, there are dispersed throughout this investigation a number of what are termed 'Case Studies'. Their inclusion follows the example of Frederick Crowe in *Old Things and New* who characterised them "as illustrations for my suggestions, as paradigms for my principles, as something of a test for the views I advocate." These particular 'case studies', for the most part, come from the experiences of the author, accumulated over many years in education. Like the diagrams and illustrations which are dotted liberally throughout this text, they serve a pedagogical purpose, as well as being a relief from the dead weight of theory and abstraction. Importantly, they also enhance the usefulness of the work as a personal journey of 'self-appropriation' on the part of the author.

Just as Lonergan in *Insight* proposes examples from science and mathematics as a means towards self-appropriation, so in this study examples from education and psychology are taken both as an aid to self-appropriation and as what might be termed 'convergent validation' of Lonergan's scheme. Where possible, practical exercises are also presented as a more direct, less theoretical, and more immediate aid to both. Some of these practical exercises are based on Feuerstein's various instruments and serve as an additional practical link between the theoretical systems of Lonergan and Feuerstein. A few of the exercises are culled from the phenomenological illustrations of Edmund Husserl.

1.9.4 *Glossary*

This investigation purports to be a philosophical study of education. Susanne Langer explains that a philosophy "deals primarily with meanings - with the sense of what we say." As such, it is important that all the basic concepts employed be carefully defined, because, as Langer continues, "if the terms of our discourse are incompatible or confused, the whole intellectual venture to which they belong is invalid."[61]

But, this study in particular has sought a convergence of theories and concepts not only among disparate philosophers of quite divergent attitudes,

[60] From an interview with Bernard Lonergan quoted in Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 46. See also Chapter Nine of this study.

[61] Susanne Langer, *Feeling and Form* (London: Routledge and Kegan Paul Limited, 1953), p. 3.

approaches and methodologies, but has also sought common ground with experimental and clinical psychologists, as well as with educators like Montessori who are often more inclined to statements of received wisdom than to coherent theory. In these circumstances even greater care is considered necessary to ensure that similar terms and concepts employed by different philosophers and others are genuinely compatible. To this end, it has been thought prudent to append to the overall work a glossary of terms, concepts and definitions to which reference can be made by the reader for the sake of clarity and, perhaps more importantly, by the author for the sake of ongoing accuracy and consistency.

Conversely, while this study adheres to accepted philosophical terminology or nomenclature where possible, nevertheless, where it is necessary and useful to do so for the sake of clarity, attempts have been made to 'laicize' the language used to make it more consistent with everyday usage. Joseph Peiper says that "without such a link to human speech as actually spoken, thinking would necessarily be ethereal, insubstantial, fantastic." [62]

1.10 *Chapter Conclusions*

This chapter has attempted to state the general aims of the study as well as giving an outline or overview of the shape and structure of the work. The general principles on which the work is based as well as the criteria of proof which is to be adopted have also been outlined.

If education is to emerge as a science in its own right, then its theories need to be consistent with the findings of the various related empirical sciences. But because the object of education is man and his development, then philosophy must have a guiding role in the emergence of such theories, since, it has been argued, only philosophy can do justice to the human person in all his depth and complexity.

This study intends to adopt the duel "scissors action" approach advocated by Lonergan. On the one hand it is concerned with general philosophical and scientific principles and their logical coherence among themselves. On the other hand it is also concerned with empirical research findings. Similarly, one can say that success or otherwise of the study must be gauged through the dual lenses of what

[62] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 19.

this author has termed 'convergence of theories' and what Lonergan terms 'self-appropriation of interiority'. 'Convergence', it must be remembered, consists in illustrating how Lonergan's theories are consistent with, or dovetail and 'interface' with, the theories of a wide variety of thinkers, some of whom, like Piaget, Vygotsky, and Feuerstein, base their theories on solid empirical research findings.

More succinctly, one can say that every effort must be made to ensure that any theory or hypothesis developed in this study is internally consistent within itself, as well as being consistent with the available data. At the same time a hypothesis that covers diverse fields of evidence will be regarded as being more persuasive than one that pertains to only one narrow type of evidence. In addition, one can say that any theory or hypothesis developed must be of such a nature that other verifiable empirical facts can be deduced from it by ensuring that "a hypothesis must relate explicitly to observable features of data."[63] It follows that a useful theory or hypothesis should have heuristic potential; that is, it should lead automatically on to further questions for further research.

[63] David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art* (London: Thames and Hudson Ltd., 2002), p. 49.

Chapter 2

Lonergan's Place in the Thomist Tradition[1]

> "Philosophy is so all-embracing in its subject-matter, so wide in its field of operation, that the achievement of a systematic philosophical overview of human knowledge is something so difficult that only a genius can do it .... For all of us who are not geniuses, the only way to come to grips with philosophy is by reaching up to the mind of some great philosopher of the past."
>
> Anthony Kenny[2]

2.1 *Introduction*

At the end of his book, *Verbum*, Lonergan quotes the words of Pope Leo XIII: "*vetera novis augere et perficere.*" [3] These words could be regarded as a kind of motto or slogan which permeates all of Lonergan's works: "To enlarge and perfect the old by means of the new". In practical terms, his desire was that a "completely genuine development of the thought of St. Thomas (would) command in all the universities of the modern world the same admiration and respect that St. Thomas himself commanded in the mediaeval University of Paris".[4] The aim of this chapter is to give some idea of how Lonergan set about this demanding task. At the same time, it lays the foundation for a consideration of the educational implications of his findings.

2.2 *Bernard Lonergan*

Bernard Lonergan was born in the town of Buckingham in Quebec province, Canada, in 1904. He was the eldest of three sons. His father was of Irish descent and his mother was of British extraction. At the age of 13 he was sent to Loyola

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[1] This chapter represents a synthesis and radical rewriting of two chapters which appeared in the author's 1997 M.Ed. thesis, Trinity College Dublin, titled *Intentionality in Learning and Education.*

[2] Anthony Kenny, *Aquinas on Mind* (London: Routledge, 1993), p. 9.

[3] Bernard Lonergan S.J., *Verbum: Word and Idea in Aquinas*, D. Burrell (Ed) (University of Notre Dame Press, Notre Dame, 1967), p. 220.

[4] Ibid.

College in Montreal where, despite his later criticisms of the system there, he had a meteoric career, completing three years of high school in one.

Despite uncertain health, he entered the demanding regime of the Jesuit Noviciate at Guelph in 1922. In addition to the normal demands of Jesuit formation one detects signs of the familiar, almost essential, 'contradictions' which are part and parcel of the path of spiritual progress:

> I had regarded myself as one condemned to sacrifice his real interests and, in general, to be suspected and to get into trouble for things I could not help and could not explain.[5]

In 1926 he moved to Heythorp College near Oxford where he studied philosophy and prepared for the examinations of the University of London. It was at this point that he started to read Aristotle, and his interest in the theory of knowledge began to emerge; in a letter to a friend he mentions rather prophetically: "The theory of knowledge is what is going to interest me most of all."[6] In her Harvard D. Ed. thesis, Moira Carley describes this as Lonergan's "life question," and explains:

> A life question functions in a person's life as somewhat the same way as the undertow functions in the ocean. It pulls you along and dumps you onto strange and wonderful and sometimes dangerous shores.[7]

In four articles published by him between 1928 and 1929, the features of his 'life question', his ideas on knowledge and cognition, were already apparent. These later formed part of his *Verbum* articles of 1946.

2.3 *Lonergan and Aquinas*

Lonergan's period in England was followed by three years of 'regency' at Loyola College, Montreal, where he was expected to do some teaching and to organise school activities. In 1933 he moved to Rome to study theology, but he also ended up studying an unlikely combination of Aquinas, Marx and Hegel. In his letters of the time one gets a clear sense of his interest in Thomistic epistemology. His dissatisfaction with some of the interpretations of Aquinas then current is

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5 B. Lonergan, Letter of January 1935 to Henry Keane, p. 3. Quoted from F.E. Crowe, *Lonergan* (Geoffrey Chapman, London, 1992). p. 17.

6 Ibid.

7 Moira Teresa Carley, *Bernard J.F Lonergan S.J.: On Teaching* (Harvard University, Ed.D. Thesis, 1989),p.8

evident in the following quotation:

> The current interpretation ... is a consistent misinterpretation ... what the current Thomists call intellectual knowledge is really sense knowledge.[8]

Aquinas was by no means his first love, however. In later life he was to describe the progress of his studies in the following terms: "My philosophic development was from Newman to Augustine, from Augustine to Plato, and then I was introduced to Thomism." [9]

Lonergan was ordained priest in Rome in 1936. In 1937 the focus of his interest began to change from philosophy, his "fine frenzy", to history, resulting in 1938 in his 'file 713-History', a series of notes in various stages of completion dealing principally with social matters, but interwoven with what F.E. Crowe terms a "theoretical analysis of history."[10]

In the autumn of 1938 Lonergan arrived at the Gregorian University in Rome to do his doctoral thesis. His decision to do his dissertation on an aspect of Aquinas was a turning point in his life. In Crowe's words, it "converted him from a student favourably disposed [to Aquinas] into a lifelong disciple."[11] Lonergan's study of Aquinas was both deep and thorough, and was to take eleven years of his life. In 1943 he began collecting material for what he called his *Verbum* articles, an account of Aquinas' views on understanding and the 'inner word'. Lonergan describes this as follows:

> The result was a series of articles that appeared in *Theological Studies* from 1946 to 1949. They took into account the psychological, metaphysical, and Trinitarian aspects of Thomist thought on the subject. Their basic point was that Aquinas attributed the key role in cognitional theory not to inner words, concepts, but to acts of understanding.[12]

His observation regarding "acts of understanding" as distinct from "inner words" is important not only for grasping the foundation for Lonergan's theory of insight, but

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8 B. Lonergan, Letter of January 1935 to Henry Keane, p. 3. Quoted from F.E. Crowe, *Lonergan* (Geoffrey Chapman, London, 1992). p. 17.

9 Bernard Lonergan, E.A. Morelli and M.D. Morelli(Eds.), *Collected Works of Bernard Lonergan, Vol. 5 - Understanding and Being* (Toronto: Univ. of Toronto Press, 1990), p. 350

10 F.E. Crowe, *Lonergan* (London: Geoffrey Chapman, 1992), p. XX.

11 Ibid. p. 41.

12 Bernard Lonergan, "Insight Revisited", *A Second Collection: Papers by Bernard Lonergan S.J.*, F.J. Ryan & B.J. Tyrrell Editors (London: Darton, Longman, Todd, 1974), p. 267.

also for appreciating why he is said to have an 'intellectualist' rather than a 'conceptualist' interpretation of Aquinas. This will be dealt with in greater detail later in this chapter.

In 1947 Lonergan received the Cardinal Spellman Award for outstanding theological scholarship. He began his major work, *Insight,* immediately he had finished *Verbum* in 1949, and he finished it in 1953. It was published in 1957. Its aim was to impart to the reader an 'insight into insight', which Lonergan saw as helping

> people experience themselves understanding, advert to the experience, distinguish it from other experiences, name and identify it, and recognise it when it recurs.[13]

This he termed the attainment of 'self-appropriation of interiority'. In the *Halifax Lectures*, for example, he states that "*Insight* may be described as a set of exercises in which, it is hoped, one attains self-appropriation."[14] The object, the importance, and the scope of such "self-appropriation" is explained as follows in his introduction to *Insight*::

> Thoroughly understand what it is to understand, and not only will you understand the broad lines of all there is to be understood but also you will possess a fixed base, an invariant pattern, opening upon all further developments of understanding.[15]

Lonergan returned as professor to the Gregorian University in Rome in 1953. During this period his attention switched to the questions of 'meaning' and the historical consciousness of man. There were two notable interruptions to his tenure there. The first interruption was a series of ten lectures on *Insight* which he delivered at St. Mary's University at Halifax in August 1958 and which were published in 1980 under the title of *Understanding and Being*. The second interruption was a two-week 'institute' for educationalists from the United States and Canada which he gave at Xavier University, Cincinnati, during August of 1959. His lectures and seminars at this institute have been published as part of the *Collected Works* (Volume 10), and dealt with 'topics' related to the philosophy of education.

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13 Bernard Lonergan, "Insight Revisited", p. 269.

14 Bernard Lonergan S.J., *Understanding and Being: An Introduction and Companion to Insight*, Elizabeth Morelli & Mark Morelli (Eds.), (Edwin Mellon Press, Toronto, 1980), p. 1. The term 'self-appropriation' is dealt with in some detail in Chapter 9 of this study.

15 Bernard Lonergan S.J., *Insight: A Study of Human Understanding*, (London: Longmans, 1958), p. xxviii.

He later commented, jokingly, that such lectures and seminars were necessary to pay his tram fares in Rome.

He was diagnosed as having lung cancer in 1964, but with it came what Moira Carley describes as a "mystical experience of being loved.... (that) somehow transformed Lonergan's way of being in the world."[16] Due to ill health, he left the Gregorian University in 1965 and went to Regis College, Toronto. In 1970 his work was the subject of "The First International Lonergan Congress." In the same year the Canadian government paid him its highest honour, naming him a Companion of the Order of Canada. The fruit of this period in Regis College was also *Method in Theology,* which was published in 1971. While *Insight* was concerned with the relationship of philosophy to natural science, *Method* aimed to integrate theology with hermeneutics[17] and critical history, and was "concerned not with the objects that theologians expound but with the operations which theologians perform."[18] The fullest and most mature exposition of his cognitional theory and what he calls 'intentionality analysis' is to be found in *Method* . In his forward to Bernard Tyrrell's book Lonergan explains that

> intentionality analysis has ulterior implications. They were not adverted to in *Insight*. They came to the fore in subsequent incidental papers and more fully in *Method in Theology*. [19]

Intentionality analysis might be described as Lonergan's exploration of the structure of intentionality, his insight into this structure, and his articulation of the structure "in the pulsing flow of life."[20]

Until his death in November 1984, Lonergan wrote extensively on such diverse topics as modern culture, pluralism, Vatican II, and economics. Brian Davies says in his editorial foreword to Crowe's book on Lonergan: "The range of his interests and the sheer intellectual force of his literary output cannot but command respect."[21]

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16 Moira Teresa Carley, "Bernard J.F Lonergan S.J.: On Teaching" (Harvard University, Ed.D. Thesis, 1989), p.7.

17 Meaning the art or theory of interpretation.

18 Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. xii.

19 Bernard Lonergan S.J., quoted in the foreword to Bernard Tyrrell S.J., *Bernard Lonergan's Philosophy of God* (Dublin: Gill and Macmillan, 1974), pp. ix - x.

20 Bernard Lonergan S.J., *Insight*, p. xix.

21 Brian Davies O.P., Editorial Forward to F.E. Crowe, *Lonergan* (Geoffrey Chapman, London, 1992), p. vii.

In the quotation from *Aquinas and Mind* given at the beginning of this chapter, Anthony Kenny states:

> Philosophy is so all-embracing in its subject-matter, so wide in its field of operation, that the achievement of a systematic philosophical overview of human knowledge is something so difficult that only genius can do it .... For all of us who are not geniuses, the only way to come to grips with philosophy is by reaching up to the mind of some great philosopher of the past.[22]

Aquinas was undoubtedly such a genius. Lonergan spent eleven years of his life "reaching up to the mind" of Aquinas. This investigation attempts in a small way to reach up to the mind of Lonergan. But much more time and study will be required to tell whether Lonergan also qualifies for Kenny's accolade of "great philosopher." In the words of Frederick Crowe, "The validity of Lonergan's thinking is in the long run a question for history to settle."[23]

2.4 ***Thomist Concepts Adopted by Lonergan***

2.4.1 *Lonergan as Thomist*

The controversy over whether Lonergan is or is not faithfully Thomistic in his writings still continues. Suffice it to say that Lonergan himself claims to have been influenced enormously by the Scholastic tradition, particularly by the writings of Aquinas, and that no clear understanding of his theory of intentionality, for example, or of his theory of cognition in general, can be grasped without reference to basic Thomistic metaphysical notions. Most of these notions found in Thomistic philosophy, like 'substance', 'act', 'being', 'essence', and 'form', were originally developed by Aristotle and then adopted by Aquinas in the development of his own Christian philosophy. Copleston says: "In developing his philosophy Aquinas made considerable use of Aristotle. When he speaks, as he so often does, of 'the Philosopher', he means Aristotle."[24]

2.4.2 *Metaphysics and Being*

Aristotle calls metaphysics "first philosophy". He uses the word 'first' in the

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22 Anthony Kenny, *Aquinas on Mind*, (Routledge, London, 1993), p. 9.

23 Frederick E. Crowe, *Old Things and New: A strategy for Education* (Atlanta: Scholar's Press,1985), p. xi.

24 F.C. Copleston, *Aquinas* (Harmondsworth, Middlesex: Penguin Books, 1955), p. 59.

sense of 'primary'. It is primary because it is the philosophical investigation of the nature, constitution, and structure of reality. But it is broader and more fundamental than science. It investigates questions science does not address, but the answers to which it presupposes: Do things exist all all? Do they have being? What is the nature of being? What are the most general and necessary characteristics that anything must have in order for it to count as a being, or as an entity (an *ens*)? Metaphysics is the philosophy which studies being *as being,* and the properties of everything that is *real*, as distinct from what is imaginary. The renowned contemporary Neo-Thomist, Joseph de Torre, states that metaphysics is the "*science of the principles and causes of being as being.*" [25]

Gilson states that Aquinas' "conception of the real and of being dominates his metaphysics, consequently the whole of his philosophy."[26] When one talks about 'being' in metaphysics, one is not talking about any being in particular, but about being in general, that is about 'being' as applied to every real thing. For Aristotle and Aquinas, however, this objective reality, this 'real being', while it does not have its origin in the mind, can nevertheless be grasped only by the mind. Reality, in this sense, *is* what the mind grasps or understands. And what does the mind grasp? First and foremost that a thing exists. For Aquinas, being is the first object of the intelligence: "Being is that which the intellect first discovers as most known and into which it resolves all its other conceptions."[27] Being and existence are not precisely the same thing, however. Existence is a judgment of the intellect as to the reality of an object perceived. Being on the other hand is the most fundamental aspect or characteristic of the object which is grasped by the intellect in that same act of judgment. Being inheres in objects, existence is a judgment of the mind.

Without a basic and fundamental notion or concept of being, according to Aquinas, the intelligence would not be able to know anything; there would only be sensible knowledge, not intelligent knowledge. Being is implied in every concept that one forms in one's mind, since the most fundamental thing one can say about something is that it exists, that it is, that it has being. According to Aquinas, a child naturally and spontaneously reaches the notion of being the moment he starts thinking, regardless of his cultural background, his educational experience, or his

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25 Joseph M. de Torre, *Christian Philosophy* (Vera-Reyes, Manila, 1980), p. 71. Italics in original.

26 Etienne Gilson, *The Christian Philosophy of St. Thomas Aquinas* (Random House, New York, 1966), p. 29.

27 Aquinas, *Quaestiones Dispuatae de Veritate*, 1.1

level of intelligence:

> *The notion of being is the first among all notions which our intelligence acquires.* Before we understand in detail what a thing is and what its characteristic perfections are, we know, first of all, that *that thing is*, that is, that *it is something.* Given this initial knowledge, we gradually acquire a better understanding of that reality through our experience. Thus, even before a child is able to distinguish well the objects found in its surroundings, he knows that they are.[28]

It will be argued later that Lonergan does not accept this notion of an innate concept of being but holds a much more dynamic notion of being linked to his 'pure desire to know'.[29]

2.4.3 *Metaphysics and the 'A Priori'*

Being is implied in every judgment that one makes, since every judgment implies that most fundamental of all judgments: being is not non-being; in other words, a thing cannot both be and not be at the same time. This is called the *principle of non-contradiction,* and it is said to be *a priori* in that it is obvious and is not in need of any formal proof. If we were to deny this principle, we could teach nothing, neither could we communicate with one another, since when saying or asserting one thing, we could hold the opposite also to be true.

Another universal and *a priori* principle of Thomistic philosophy is that a thing cannot be itself and another in the same sense: a thing is always what it is. This statement is called the *principle of identity.* These two principles, the 'principle of non-contradiction' and the 'principle of identity', are assumed in all of one's common sense, day-to-day relations with the world. They are assumed also in one's communication with another, and in the assertions of all of the sciences. These principles are not proven, but just accepted as obvious. As such, they form part of the *a priori* foundation on which Thomistic metaphysics is based.[30]

2.4.4 *The First Division of Being - 'Ens' and 'Esse'*

Aquinas distinguishes two aspects of being which may be denoted by the

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28 Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-Tala Publishers, 1991), p. 28. Italics in original.

29 See Section 5.8 of this study.

30 See also Section 12.2.1 of this study.

verb *esse* and the noun *ens*. *Esse* designates an *act* (the act-of-being) and not a state. It is the summit and the heart of the real. Gilson says that "the act-of-being is the most intimate element in anything, and the most profound element in all things."[31] For *Esse* Suárez uses the word 'existence', that which "is participated in by other things, but does not itself participate in anything else." Most Thomist interpretations, however, distinguish between being and existence:

> "To be" *(esse) is not exactly the same as "to exist"; "esse" expresses an act, whereas "to exist" simply indicates that a thing is factually there.* When we assert that a thing exists, we want to say that it is real, that it is not "nothing", that "it is there". *Esse*, however, signifies something more interior, not the mere *fact of being there* in reality, but rather the innermost perfection of a thing, and the source of all its other perfections.[32]

Being is deeper and more fundamental than existence; being is what places something in existence in the first place. A thing either exists or it does not. However, a thing which exists is capable of *being* with greater or lesser degrees of perfection.

For Aquinas, all finite being has both *Ens* and *Esse*: Aquinas also maintains that God alone is pure *Esse*, pure act-of-being. *Ens*, on the other hand, is a *state*. It is the state of being. It is the state in which the *esse* places that which receives it or participates in it. *Ens* is composed of *esse* (act of being) and 'essence' (manner of being).

> Two constituent principles are therefore present in every reality in the universe: the act of being (*esse)* and the manner of being (*essentia* in Latin). These are two necessary and inseparable components of every being that exists in the world.[33]

Literally 'essence' comes from *esse:* if *esse* is 'to be', essence is a 'manner of being'. More precisely, it is *what* a thing is or *that whereby a thing is what it is*: e.g. the essence of man is all that makes man to be man.

An *esse* is limited or contracted by an *ens* , more precisely by an essence, by a 'manner of being'. One can say of both essence and *ens* that it is *that which* the thing is. *Esse*, on the other hand, is *that by which* the thing is. *Esse* is not a "thing". One cannot form a notion or concept of *Esse* by itself. One cannot, in other words,

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31 Etienne Gilson, *The Christian Philosophy of St. Thomas Aquinas* (Random House, New York, 1966), p. 39.
32 Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-Tala Publishers, 1991), p. 23. Italics in original.
33 Ibid., p. 20. Italics in original.

know being as being:

> To define *being*, in the strict sense, is impossible, since a definition places the subject to be defined within the scope of a broader concept (its genus). ... no such concept exists simply because *being* encompasses all reality. Instead of a strict definition, several descriptions of *being* can be given: *being* is "that which is", "that which exists", or "that which is real".[34]

This will be discussed again in some detail in Chapter Four when Lonergan's 'notion of being' is explored as part of his cognitional theory.

2.4.5 *The Second Division of Being - 'Substance' and 'Accident'*

There are certain realities that cannot exist by themselves. This applies not only to properties like colour or size but also to activities such as thinking or writing. In Thomist philosophy these are called 'accidents'. Underlying or 'standing under' *(substare)* these realities are other realities called 'substances' which can subsist or exist by themselves, and which act as subjects in which the 'accidents' can exist or inhere. The term substance, according to Aristotle, applies to anything which is neither predicable of something else nor present in something else as an aspect or property of it. Thus a man or a horse can be termed a substance to which many different accidents - size, colour, weight, intelligence - can be attributed. A substance, in so far as it can be conceived, formulated, or defined, is an essence. This division of reality into 'substances' and 'accidents' is a second division or partition of being; the first was that of *esse* and *ens,* above.

An accident can be said to 'inhere' in a substance. However, accidents are in no way less than, or exist less than, substances. A particular accident may even be part of the essence of a substance. The human mind, for example, is accidental to the substance of a person. Yet this accident (the mind) may be regarded as essential in that it forms part of the very essence of the substance of the person. For Aquinas, and for Lonergan, the senses alone cannot grasp being; the eyes, for example, can see or sense only accidents like colour and shape. Aquinas considers that only with the intellect can one grasp the being of an object.

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[34] Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-Tala Publishers, 1991), pp. 17 - 18. Italics in original.

2.4.6 *The Third Division of Being - 'Potency' and 'Act'*

For Aquinas, the intellect also 'grasps' change. Change, as such, is only intelligible, not sensible. The intellect grasps the state of being before the change, the 'potency' or potentiality, and the state of being after the change, the 'actuality'. Change is the movement from potency to actuality (act). In every changeable being there is potency and act. In other words, there is that which it is capable of becoming, and that which it actually is right now. This is yet a third division of being.

In general, substances undergo changes while remaining identically themselves: a tree grows in size, for example, while remaining the same tree. A child is still the same person at twelve as he was at two years of age. In these cases it is the accidents (size, shape) that change. A substance has potentially and actually many accidents. A substance does not only have the capacity to gain and lose accidents, however, but material substances have also the potentiality to change substantially, to become other, different, substances. If one burns the tree, for example, it becomes carbon dioxide, water and ash. Thus there are two types of potentialities, or potencies, one on the level of accidents and the other on the level of substance.

2.4.7 *The Fourth Division of Being - 'Matter' and 'Form'*

When, through a process of change, a substance receives an accidental actuality, one can say that it receives an 'accidental form'. This form can be termed a configuration, a structure or shape of quantitative factors inherent to the matter. This notion of form is important not only metaphysically but also psychologically, and will be dealt with in some detail in Chapter Nine where it is equated with Lonergan's notion of the 'material dispositions' of an object. 'Substantial form', on the other hand, is that deeper more essential configuration that makes something to be what it is. In material beings this configuration is a configuration of 'prime matter'. Prime matter is matter which is in potency to substantial existence. The word "prime" here indicates 'first', or "that there is nothing prior to it."[35] In substantial change, the configuration of substantial form is lost, but other more 'primary' configurations of prime matter are still retained. When food is eaten, for example, both the accidental

[35] Joseph Bobik, *Aquinas on Matter and Form and the Elements* (Notre Dame, Indiana: University of Notre Dame Press, 1998), p. 5.

form and substantial form of food are lost, but the prime matter may be said to be retained and takes on the form of flesh and bones instead of food.

It follows that in any sensible or corporeal substance there is the following composition: (1) prime matter and substantial form constituting actual material substance, and (2) prime matter, informed by substantial form and accidental forms, constituting an individual substance, an entity. Thus, prime matter does not individuate directly and by itself; it is indirectly the principle of individuation when in conjunction with substantial form it has become the secondary matter for further form. As one ascends the scale of being, formed matter becomes the matter of higher forms. Watkin in his book *A Philosophy of Form* explains:

> As we ascend the hierarchical ladder of being, physical energy becomes the matter of vital form; the vital energy so constituted, becomes in turn the matter of a sensible form, and higher still this vital-sentient energy becomes the matter of a spiritual form, which forms respectively constitute in union with these physical, vital and vital-sensitive energies, life, sentience, and intelligence.[36]

It can be said that 'form' is what makes something to be what it is; it determines the 'essence' of something. Form, as explained above, may be either substantial or accidental. According to Aquinas, the form of a substance is also that in the nature of the substance which makes knowledge of it possible. When we know something as something we are recognising its configurations or forms. Prime matter, devoid of form, would not be recognisable or intelligible. Form is that which makes the datum of our sensible experience capable of being understood and conceptualised. Gilson explains: "We say, then, that every substance implies a form, and that it is by virtue of this form that a substance is classified in a determined species, whose concept the definition expresses"[37]. This will be discussed further under the heading of Aquinas' theory of mind.

To consolidate what has been covered so far, it is useful to take some examples from nature. The following examples are again from Watkin:

> The form whose union with matter constitutes an individual substance - a crystal for instance, a hyacinth or a canary - is a

[36] E.I. Watkin, *A Philosophy of Form* (London: Sheed and Ward, 1935), p. 17.

[37] Etienne Gilson, *The Christian Philosophy of St. Thomas Aquinas*, (New York, Random House,1966), p. 31. It must be pointed out in passing that, while certain quotations have been taken from Gilson throughout this section, their exist some central differences between Gilson and Lonergan in their interpretations of Aquinas. None of these differences however, are relevant to the material covered thus far.

> substantial form. A substantial form embraces, co-ordinates and unifies a complex of subordinate forms which increase in number and complexity as the substantial form to which they are subordinate occupies a higher place in the hierarchy of being. For example, they are more and more complex in the canary than in the hyacinth, in the hyacinth than in the crystal. These subordinate forms whose presence is implied by the substantial form, the nature of the object, and are therefor either involved by its presence or necessary to its perfect realisation, may be termed intrinsic or constituent subordinate forms. Besides these there are accidental forms, subordinate forms which an object possesses not from any necessity of its nature but as the effect of some external agency. For example the shape and colour of an oak leaf are intrinsic subordinate forms demanded by the substantial form of the tree: the presence of oak apples on the twigs, or an arrangements of the branches by which they all point away from the sea, are accidental forms due to factors extraneous to the nature or substantial form of the oak.[38]

The form of a substance is not the sum total of all of its properties, but rather what determines it in the first place to have those particular properties rather than others. This includes its capacity to have certain accidents and not others. The form of a substance cannot have an independent existence apart from the matter which individualises it; this can be the matter of the object itself or the matter of the senses which perceive the object. One can say that the same form can exist in the senses as exists in the object, but in a different 'mode' because in a different matter, and also in different degrees of 'dematerialisation'. The form as it exists in an object is both materialised and in its natural state; the same form as it exists in the senses is still materialised, but in a representational or intentional state; the same form as it exists in the mind is still in an intentional state, but is now totally dematerialised.[39]

2.4.8 *The Subsisting Subject*

The last four sections dealt with the various components of reality, or the partial aspects of the real, - matter and form, substance and accident, potency and act. These may also be termed 'principles of being'. However, all of these principles "are bound together and actualized by a single act, namely, the act of being,"[40] *esse*. So, one must also consider being in its complex unity, as a whole composed

[38] E.I. Watkin, *A Philosophy of Form* (London: Sheed and Ward, 1935), pp. 17 - 18.

[39] This will be dealt in more detail later, both when considering Aquinas' philosophy of mind in Section 2.5, and in a detailed psychological examination of "Form and Relation in Insight" in Section 11.3.

[40] Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-Tala Publishers, 1991), p. 117.

of these principles, as a whole that subsists as a composite unity.

In metaphysics the name subsisting subject or *'suppositum'* designates the particular being with all its 'perfections'. This is what Lonergan terms a 'thing', or an intelligible 'unity-identity-whole'. This will be dealt with in some detail in Chapter Seven, dealing with the "Human Person."[41]

2.4.9 *Causality*

According to the metaphysics of Aquinas, changes in the corporeal world can involve changes of substances, accidents, matter, and forms. That which determines something to be the way it is called its 'formal cause'. Formal cause and 'material cause' are both intrinsic to the thing itself. But no change is possible without something to cause it; Thomist philosophy terms this an 'agent' or an 'efficient cause'. The agent gives form to the matter or extracts form from it. But there must also be a 'final cause', that cause which motivates or sets a goal for the agent.

To illustrate and differentiate the four different causes or types of causality Aristotle in his *Physics* uses, among others, the illustration of building a house.[42] While the 'material cause' may be the matter from which the house is built, the 'efficient cause' would be the builder, "the agent which reduces potency to act."[43]. The 'formal cause'(*causa essendi*), on the other hand, is the plan or form of the house in so far as it is incorporated into it. The 'final cause' is the end or purpose for which the house is built, or the end to which the action of the agent tends.

As was mentioned already, Aristotle and the Scholastics after him described metaphysics as the science of being as being. Science itself, on the other hand, or what is termed 'natural philosophy', is regarded as a certain knowledge of things through their causes. Furthermore, Aquinas explains the difference between metaphysics and the other sciences by saying that "the degrees or types of science can be classified according to the degrees of elevation above matter."[44] Metaphysics may be regarded as the highest since the real things studied by

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[41] See particularly Section 7.2.

[42] Aristotle, *Physics*, Book II, Ch. 3. Taken from Richard McKeown (Ed.),*Introduction to Aristotle* (The University of Chicago Press, Chicago, 1973), pp. 128 - 131.

[43] Bernard Lonergan S.J., *Verbum*, (Notre Dame: University of Notre Dame Press, 1969), p.134

[44] Joseph de Torre, *Christian Philosophy* (Manila: Vera-Reyes, 1980), p. 46.

metaphysics are not exclusively those which depend on changeable matter in order to exist and to be understood. 'Natural philosophy', on the other hand, is the science of being as changeable or in motion. Since metaphysics studies being as a whole, being as being, it must be above all of the other sciences and must "not depend on them."[45] The terms 'changeable' or 'mobile' refer only to those material beings which, as active, constitute nature. The objects of science are discovered by abstracting something universal from the individuating conditions of matter. All of what are generally termed 'sciences' are included under this heading. Even the science of mathematics is said to be the science of being as quantifiable and therefore refers to what is concrete and material. "Quantity cannot exist alone without matter," even though "it can be conceived without matter."[46] Metaphysics, on the other hand, according to Aquinas and Lonergan, can and does consider beings which can both exist without matter and be conceived without matter.

2.5 *Thomist Cognitional Theory*

The Thomist tradition views the cognitional process as consisting of two main acts: understanding of simple ideas *(intelligentia indivisibilium)* and judging, or affirmation and negation *(compositio et divisio)*. Aquinas states:

> There are, as Aristotle says in *De Anima*, two kinds of activity of our intellect. One consists in forming simple essences, such as what a man is or what an animal is: in this activity, considered in itself, neither truth nor falsehood is to be found any more than in non-complex utterances. The other consists in putting together and taking apart, by affirming and denying: in this truth and falsehood are to be found, just as in the complex utterance which is its expression.[47]

The 'conceptualist' interpretation of Thomistic cognitional theory explains how 'knowing' takes place by proposing that one grasps singular objects with the help of invisible concepts like "man" or "animal". To account for the formation of these interior concepts, the Thomist concludes that the mind must possess an active power called the 'agent intellect' *(intellectus agens)*. Through this 'inner power' the intellect illuminates, dematerialises, and transforms sensibly impressed images into luminous inner words called 'universals' or concepts. Though some have claimed

[45] Joseph de Torre, *Christian Philosophy* (Manila: Vera-Reyes, 1980), p. 57.
[46] Ibid., p. 47.
[47] St. Thomas Aquinas, *Quaestiones Disputatae de Veritate*, 14, 1. R.M. Spiazzi (Ed.). (Turin, 1953)

that Aquinas is not an abstractionist[48], he certainly uses the term *'abstractio'* for this process of concept formation. Lonergan complains that this narrow 'conceptualist' view of Aquinas' theory is overly simplistic. He describes it as a "metaphysical sausage machine" in which sensations and images go in one end and concepts pop out the other[49].

This automatic, machine-like model of understanding, which Lonergan dismisses, is then extended by those Neo-Thomists who subscribe to it to explain the second cognitional act through which one reaches truth, the act of judging. They see the same 'agent intellect' proceeding to use a process called reasoning to combine concepts into propositions, and propositions into premises that lead to universal and necessary conclusions to which all can (and eventually must) give assent. In the process of judging the validity of a proposition, and giving assent to it, or negating it, the mind automatically looks backward to its 'first principles' *(resolutio ad principia)*. Just as the first mental act automatically generates concepts or definitions, so the second act produces conclusions.

2.6 *Lonergan's Rejection of the Conceptualist Tradition*

The influence of the study of formal logic on the above model of mental functioning is quite evident. It is an influence that, with language theory, also underpins many modern theories of mind. One can argue that the philosophers who subscribe to it are more interested in the products of mental functioning, in what the mind produces, than what it is in itself. Lonergan, however, was more interested in understanding the structures and processes of the mind itself, prior to what it does. Flanagan explains:

> Instead of characterising knowing and deciding in terms of the products of these activities, namely, concepts, conclusions, and decisions, Lonergan turned his account of knowing around and focussed on the questions that initiated the acts of understanding, judging and deciding.[50]

It is fair to say that those philosophers who reduce knowledge to logic, and

48 P.T. Geach, *Mental Acts* (Routledge & Keegan Paul, London, 1957), p. 130.

49 Joseph Flanagan, "Knowing and language in the thought of Bernard Lonergan", Philip McShane (Ed.), *Language Truth and Meaning: Papers from the International Lonergan Congress 1970* , pp. 49-77. (Gill & Macmillan, Dublin, 1972), p. 50.

50 Ibid., p. 53.

start from a foundation in metaphysics, develop a theory of knowing that relegates psychology to a secondary position. Most Thomists would say that while psychology is important in understanding why and how man knows, nevertheless centre stage belongs to the more pivotal or cardinal issues of metaphysics. Lonergan, however, from a starting point in cognitional theory, has brought psychology to centre stage and seeks to use his epistemology as a foundation for his metaphysics. He explains in *Insight:*

> Among contemporary Scholastics there is a broad agreement on metaphysical issues and, at the same time, a strongly contrasting divergence on epistemological questions. This disparity may lend my work an appearance of wrong-headedness for instead of approaching what is doubtful from what is assured I begin from knowledge and reach metaphysics only as a conclusion.[51]

Lonergan's so called "subjectivist principle"[52] is a natural consequence of this radical change of orientation. Whereas Thomists in general fall back on the *a priori* principles of 'non-contradiction' and 'identity' as their starting point for metaphysics, and hence for their whole philosophical structure, Lonergan starts from a standpoint of cognitional structure and falls back on what he calls 'self-appropriation of interiority' by way of confirmation. In other words, he champions a system of personal insight as an acceptable way of nurturing and validating philosophical insights. While he accepts that this method can lead to his being labelled a 'subjectivist', he denies that this can any longer be regarded as a "pejorative term"[53]. However, the important question is not whether subjectivism can or cannot be regarded as a derogatory term, as whether Lonergan's starting point is or is not a valid one from which to reach the heart of the true and the real.

Lonergan claims that it is not in human knowing that objectivity ultimately lies, but in the fullness of human being. Of objective truth he says: "Intentionally it is independent of the subject, but ontologically it resides only in the subject."[54] He

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51 Bernard Lonergan, *Insight*, p. xxvii.

52 Shubert M. Ogden, "Lonergan and the subjectivist principle", Philip McShane (Ed.), *Language Truth and Meaning: Papers from the International Lonergan Congress 1970*, pp. 218-235. (Gill & Macmillan, Dublin, 1972).

53 Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection*, (London: Darton, Longman, Todd, 1967) p. 30.

54 Bernard Lonergan, "Subject", William Ryan & Bernard Tyrrell (Eds.), *A Second Collection*,(Darton, Longman & Todd, London, 1974), p.70

rejects the 'naive realist'[55] and 'idealist'[56] alike for their "forgetfulness of being"[57]. He is adamant that "objectivity is simply the consequence of authentic subjectivity, of genuine attention, genuine intelligence, genuine reasonableness, genuine responsibility"[58]. In other words, it is in an authentic fidelity to the demands or requirements of the intentional nature of the human mind that objects become known and are objectivity grasped.

Like the Scholastics in general, the concept of 'being' is central to the philosophy of Lonergan. Unlike most neo-Thomists, however, his concepts of being and knowing are radically intertwined with one another. He maintains that "the ontological and the cognitional are not incompatible alternatives but interdependent procedures."[59] He would still maintain that being 'is' even if the human mind does not know it. Thomists in general would presumably agree with him that being and 'knowable' are synonymous. After all, Aquinas himself asserts: "Omnis res est vera et nulla res est falsa,"[60] implying that the cognitional and the ontological are equivalent. They would also agree that in God 'to be' and 'to know' are identical. But, as one might expect from his 'subjectivist' stance, it is the fundamental question concerning his order of priority between being and knowledge, *ens* and *verum, esse* and *intelligere* that has given rise to considerable criticism. Desmond Connell, for example, in an article in the *Irish Theological Quarterly* concludes that this position of Lonergan "contradicts the teaching of St. Thomas." [61]

Yet Lonergan would maintain that his main departure from most other neo-Thomists was his 'rediscovery' of Aquinas' notion of 'insight'.[62] In his book, *Insight,* he complains that "until recently Thomist commentators have tended, almost universally, to ignore Aquinas' affirmation of insight."[63] This will be dealt with in much more detail when dealing with Lonergan's dynamic theory of knowing in

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55 The 'naive realist' for Lonergan is the philosopher who grounds objective knowledge of reality in looking or perceiving.

56 Lonergan rejects the extreme idealism which sees the source of objectivity as residing primarily in the mind.

57 Bernard Lonergan, "Cognitional Structure", p. 30.

58 Bernard Lonergan, *Method in Theology*, (Darton Longman & Todd, London, 1972), p. 265.

59 Bernard Lonergan, "Insight: Preface to a Discussion," in F.E. Crowe & R.M. Doran (Eds.), *Collected Works of Bernard Lonergan* (University of Toronto Press, Toronto, 1988), p. 144

60 Aquinas, *Quaestiones disputatae de veritate*, I, 10 - "Every thing is true, and no thing is false."

61 Desmond Connell, "Father Lonergan and the Idea of Being", *Irish Theological Quarterly*, 37, (1970), p.122

62 It is important to note at this stage that the term 'insight' is not of mediaeval or Scholastic origin, but is a Middle English word, possibly of Scandinavian or Low German origins.

63 Bernard Lonergan, *Insight*, p.413.

Chapter Three. Suffice it to say for the moment that Lonergan's complaint is that their account of understanding does not seem to identify clearly this most common of human experiences, the sudden flash of insight which occurs during the process of thought. Their account passes over it and focusses instead on the subsequent phase that occurs with concept formation, which in Lonergan's scheme is merely the formulation or definition of the previous insight. This championing of insight, combined with his so-called 'subjectivism' sets Lonergan apart quite definitely from mainstream neo-Thomism.

There is also apparent in the works of Lonergan a subtle but important development in his thinking from the initial outlines of his cognitional theory in the *Verbum* articles of the late 1940s to their full exposition in *Method in Theology* in 1971. This is best exemplified by his abandonment of mainstream Thomistic 'faculty psychology' in favour of what he termed 'intentionality analysis'. Not until *Method in Theology* and his later articles and lectures does one find the full expression of his central notion of intentionality and of its role in cognition. Indeed, so central had it become to his overall cognitional theory that intentionality and the attendant notion of transcendence could be said to have permeated and informed his whole philosophy.[64]

Lonergan makes no apologies for his development of the philosophy of Aquinas. To him the Scholastic philosophy of the Middle Ages was merely a moment in the development of the perennial philosophy. He would say that philosophy needs to change to take cognisance of the developments in learning since that time. One could argue that the philosophy of the Middle ages was a philosophy *simpliciter.* In Sanders' opinion, for example:

> It existed as a discipline complete and sufficient unto itself. It was not, and could not be, a philosophy of anything. It could not provide a philosophy of science, of history, of literature, of education.[65]

Modern philosophy, particularly a philosophy of education, needs to be able to deal with a developing individual in a changing world. Thomistic philosophy, however, dealt with eternal truths and, as Sanders puts it, one "cannot make a timeless

[64] Lonergan's notion of intentionality is developed in the next section of this chapter.

[65] James W. Sanders, "A New Approach to a Catholic Philosophy of Education", *Jesuit Educational Quarterly*, (October 1962 - January 1962), p. 93. Sanders was here attempting to apply Lonergan's cognitional theory to the field of education.

philosophy timely"[66]. But Lonergan is not suggesting that there are no aspects of truth and reality which are permanent and valid for all time; such would be the nature of the human mind, for example. Rather he is suggesting that the traditionally held conception of mind, or cognitive philosophy, is too narrow and too rigid to invite the various sciences under its umbrella, which is what is needed if one is to make sense of the modern world in which one lives, and moves, and has one's being.

Finally, both Sanders and Lonergan would hold that traditional philosophy was not concerned with the individual. It left the individual as he existed in the world to theology. But, to summarise Lonergan's position in Sanders' words, "it is the individual man as he exists in this world, fallen and redeemed, who must be educated."[67]

2.7 ***The Thomist Notion of Intentionality***

2.7.1 *Thomist Intentionality and Lonergan*

The term 'intentionality' as conceived by the Scholastic philosophers of the Middle Ages derives from the Latin verb *Intendo* 'to point (at)', 'to aim (at)', 'to extend (towards)'. The Cambridge Dictionary of Philosophy defines it as follows: "Phenomena with intentionality ... point outside of themselves to something else: whatever they are of or about."[68] However, William Eidle gives a definition more in tune with Lonergan's 'pure desire to know' when he says: "By intentionality is meant the dynamic thrust of the patterned cognitive operations ... as they reach out to know reality."[69]

While Lonergan's overall interpretation of Aquinas does differ significantly from that of many other modern neo-Thomists, and while Lonergan has clearly gone beyond Aquinas in certain aspects of his later thinking, particularly regarding 'intentionality analysis', nevertheless, his theory of intentionality appears to be

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66 Ibid.

67 Ibid.

68 Robert Audi (Ed.), *The Cambridge Dictionary of Philosophy*, (Cambridge: Cambridge University Press, 1995), p. 381.

69 William R. Eidle, *The Self-Appropriation of Interiority: A Foundation for Psychology* (New York: Peter Lang, 1989). p. 8.

grounded squarely on the work of the mediaeval Schoolmen. There are those who would disagree with this assessment. Anthony Kenny, for one, in his book, *The Legacy of Wittgenstein*, accuses Lonergan of distorting Aquinas when he uses the word "similar" instead of "identical" with regard to form in describing intentionality of the intellect.[70] However, Gerard Casey, in an essay titled "Immateriality and Intentionality", counters:

> While I am in some sympathy with Kenny in his efforts to understand Lonergan on this point, ... it does not seem to constitute a denial of the formal identity of knower and known in the act of knowledge.[71]

Lonergan clearly remains a contemporary challenge even to the most professional of philosophers.

2.7.2 *Intentionality and the Problem of Knowledge*

The mystery of human knowledge has occupied philosophers since the dawn of time. Plato in his doctrine of forms proposed that ideas, in the form of universals or abstractions or incorporeal essences, have an independent existence of their own in a transcendental realm where they are beheld by souls prior to their incorporation into bodies at birth. The real world, he claimed, was merely a changing and imperfect image of these unchanging forms or ideas. Copleston says of these ideas of Plato: "The process of knowledge, or getting to know, consists essentially in recollection, in remembering the Ideas which the soul once beheld clearly in its state of preexistence"[72] . This concept may sound quite implausible to the 'scientific' mind of the twenty-first century, but its influence is still prevalent today. The Latin root for "educate," for example, is *educare* , meaning "to lead out" or "to draw out"; the implication being that the child already possesses knowledge innately, and that the teacher's role is merely to draw out of the child, or remind him of, what he already knows.

Aristotle, in his *Metaphysics*, was quick to point out that, since Ideas according to Plato constitute the reality or "substances" of things, they cannot exist apart from the corresponding sensible things:

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[70] Anthony Kenny, *The Legacy of Wittgenstein* (New York: Basil Blackwell, 1984)

[71] Gerard Casey, "Immateriality and Intentionality", Fran O'Rourke (Ed.), *At the Heart of the Real* (Dublin: Irish Academic Press, 1995), p. 100. This problem with be returned to in Section 2.7.3 below.

[72] Frederick Copleston, *A History of Philosophy*, Vol. 1 , (Image Books, New York, 1962), p. 192.

> It would seem impossible that the substance and that of which it is the substance should exist apart; how, therefore, could the Ideas, being the substances of things, exist apart?[73]

In his *De Anima,* he went on to formulate his own idea of knowledge which was later to have such an influence on the thinking of Aquinas and, through him, on the thinking of such modern philosophers as Brentano, Husserl, and Lonergan. For Aristotle, as for Aquinas, knowing involved a correspondence, or an identity, between the mental act of the knowing subject and the act, or actualisation, of the known object manifesting itself to the knower. The Aristotelian scholar Jonathan Lear explains this notion rather poetically as follows:

> Man is by nature a questioner of the world: he seeks to understand why the world is the way it is. The world for its part reciprocates. It answers man's questions ... And the world's answers are not merely responses to man's probing: they manifest the ultimate intelligibility of the world.[74]

Or, as Lonergan explains more succinctly: "knowing involves an identity in act of knower and known."[75] In this Lonergan is clearly a Thomist; as will be shown in what follows, both Aquinas and Lonergan see this "identity in act" as applying equally well to direct apprehension of objects by sense perception, and to knowledge of objects through the action of the intellect.

Firstly, insofar as direct knowledge by sense perception is concerned, Aquinas uses the formula: "*Sensus in actu est sensible in actu",* meaning that the activated sense becomes identified with the sense object itself in act. By way of explanation, Lonergan paraphrases Aristotle[76] as follows:

> The one operation, sensation, is effected by the sensible object and received in the sensitive potency; as from the object it is action; as in the subject, it is passion; thus sounding is the action of the object and hearing the passion of the subject, and so by the theorem of identity, sounding and hearing are not two realities but one and the same.[77]

In *Aquinas on Mind* [78] Anthony Kenny uses the following, somewhat simpler

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73 Aristotle, "Metaphysics", 991b, 1-3. Richard McKeon (Ed.), *Introduction to Aristotle*, (Chicago: University of Chicago Press, 1973), pp. 302 - 303.

74 Jonathan Lear, *Aristotle: The Desire to Understand*, (Cambridge University Press, New York, 1988), p. 26. The notion that all being is inherently intelligible is developed further in Section 7.5 of this study, dealing with the work of W. Norris Clarke.

75 Bernard Lonergan, *Verbum*, p.147

76 Aristotle, *De Anima*, 425b 26-426a-2. (Oxford: Clarendon Aristotle Series, 1974), p.48.

77 Bernard Lonergan, *Verbum*, p.147

78 Anthony Kenny, *Aquinas on Mind*, (Routledge, London, 1993), pp. 35 - 36.

illustration: a lump of sugar is potentially sweet (sweet 'in potency'); the child has to put the sugar in her mouth to activate its sweetness (sweet 'in act'); to Aquinas, the sugar releasing its sweetness to the child is one and the same event, or act, as the child tasting the sweetness of the sugar. Thus, the activation or actualisation of the sense (taste) is identical with the sense object in actualisation or 'in act' (sweetness).

To use another example from Aquinas, the colour red is in the wall, as an accident; yet if one is to perceive it, it must also be in one's eye. It exists in the wall naturally and materially; it exists in one's eye intentionally, but still materially. The colour is in one's eye, yet one sees it 'out there' in the wall, through the intentional nature of human experience.

In Aquinas' theory there are no intermediaries which come between the sense and the sense object. His is not a 'representational' theory. In other words, in sensation the sense faculty does not come in contact with a 'likeness' of the sense object. Instead, it becomes itself 'like' the sense object, by taking on the sense object's form; but it takes on the form not physically (as when a stone is heated by the sun it can be said to take on the form of heat physically) but 'intentionally'. In other words, there is a kind of change happens in the sense itself, a change that is intentional. Viewing the situation philosophically rather than physiologically, Aquinas would say that a sense can be regarded as the power (or potency) to undergo an intentional change effected by an appropriate sense-object.[79] It is essentially a passive power. It does not itself initiate change. The outer source of internal change is the primary object of sense perception.

Aquinas frequently used the word 'spiritual' in place of 'intentional', as when he says in his *Summa Theologica:*

> There are two sorts of change, one natural and the other spiritual. Natural change is when the form of the source of change is received in its changing object in its natural mode of being, as heat is acquired when something is heated. Spiritual change is when the form of the source of change is received in the object of change in a spiritual manner, as the form of colour is received in the eye without the eye thereby becoming coloured. The senses can only operate if there is a spiritual change whereby the intention of the sensible form comes to be in the sense organ. Otherwise, if natural change sufficed for sensation, all natural bodies would feel whenever they

[79] Ibid., p. 34.

underwent a change.[80]

The sense possesses receptivity or passive potency which allows the form of the object to become, in a sense, the form of the subject. The sense is designed or structured to receive not whole objects but patterns, structures, forms, configurations or relations identified and perceived in that object. The word 'spiritual' seems to imply that to grasp the form or configuration of the sensitive object some dematerialisation takes place in the organ of sense, even though there is still material substance in both the sense and the object. Dematerialisation does occur in the way that the material in the object clearly does not enter the sense; dematerialisation also occurs in the way that only forms, or configurations, or 'material dispositions', in the object are received by the sense. However, the form is materialised in both the object and the sense; only the material medium is different.[81]

In addition to maintaining the identity in actualisation (identity in act) of sense-faculty and sense-object, Aquinas had a corresponding theory about thought. Not only is the actualisation of a sensible object the same as the actualisation of its corresponding sense faculty, so too the actualisation of an object of thought is the same thing as the actualisation of the capacity for thinking. Aquinas used the formula "*Intellectus in actu est intelligible in actu*" to express this idea.[82] Or, even more startlingly, he says: *"Intellectus in actu et intellectum in actu sunt unum,"*[83] which Pieper translates as: "In knowledge the intellect and the known reality become one."[84] The form, after all, is what makes a thing to be what it is. If the mind possess the form of the object, in a real sense it can be said to possess the object itself, though clearly in a different mode of existence. In the mind, the Thomist would say, the dematerialisation of sense knowledge is absolute and that therefore the form of the object of knowledge is identical with the form of the intellect itself in act. What is a materialised form, and natural state, in the intentional object, can be said to become dematerialised form, in an intentional state, in the mind.

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80 Thomas Aquinas, *Summa Theologica*, 1, 78, 3C quoted from Anthony Kenny, *Aquinas on Mind*, (Routledge, London, 1993), p. 33.

[81] It can be argued that for 'dematerialisation' one can also speak of 'abstraction', and that for both one can speak of 'interiorisation' as the term is used by Feuerstein. Interiorisation is dealt with formally in Section 9.9 of this study.

82 Anthony Kenny, *The Legacy of Wittgenstein*, (Basil Blackwell, Oxford, 1984), p. 64.

[83] Thomas Aquinas, *Summa contra Gentiles*, 2, 59.

[84] Josef Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 127.

It is of the very essence of education that when one comes to know something, one is changed in some way by that act of knowing. Casey expresses this idea as follows: "Knowledge .... involves a certain modification of the knowing subject."[85] In a sense, one can say that the mind of the knowing subject becomes the object known. This capacity of the knowing subject to be modified, which gives rise to knowledge, is the same capacity which prepares the subject to stretch out *(intendere)* toward something other than himself. Knowledge which results from the intentional nature of the mind is itself also intentional. Casey defines intentionality in terms of knowledge thus: "This directedness of knowledge towards something other than itself is .... termed 'intentionality'."[86] Such knowledge changes the subject and predisposes him to further intentional interaction. The form of an object, once it is conceived in the intellect through the medium of the senses, then becomes the subject's subsequent means of relating to that object through the medium of meaning.

2.7.3 *Lonergan, Intentionality, and Form*

By intentionality, then, is meant that outward tension and orientation which is an innate characteristic of the mind (and knowledge) whereby it stretches out towards something beyond itself. Lonergan explains in an article titled "The Subject" that "ontologically the subject is capable of an intentional self-transcendence, of going beyond what he feels, what he imagines, what he thinks .... to something utterly different, to what is so."[87]

Kenny explains that the notion of intentionality was developed by Aquinas in an attempt to answer the question: "what makes a picture of X a picture *of X,* what makes an image of X an image of *X*, what makes a thought about X be about *X*?"[88] As has already been described, the Scholastics decided that the solution to the problem of knowledge lies in the identity in act of knower and known.

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85 Gerard Casey, "Immateriality and Intentionality", Fran O'Rourke (Ed.) *At the Heart of The Real*, (Irish Academic Press, Dublin, 1994), p. 98.

86 ibid.

87 Bernard Lonergan, "The Subject", F.J. Ryan & B.J. Tyrrell (Eds.), *A Second Collection of Papers by Bernard Lonergan S.J.*, (Darton, Longman & Todd, London, 1974), p. 70.

88 Anthony Kenny, *The Legacy of Wittgenstein*, p. 61.

But what is the nature of this identity? How can one, for example, have any identity between a material object and an immaterial mind? To reiterate what has been said thus far, the solution, according to Aquinas, lies in the doctrine of form. The concept of form, or formal cause, in Aristotle and Aquinas includes the principle of actualisation. The formal cause of a thing is what causes something to be the way it is. Intentionality involves an identity in act of the knowing subject and the intentional object known, "an identity in act of knower and known"[89]. It follows that what the mind or the sense absorbs from reality is not the various objects themselves, nor mere representations of these objects, but their principles of activation, their forms. Thus intentionality involves an identity of form (an 'isomorphism') between knower and known. The structure of the mind is such that it can grasp only relations. In the material object these relations are represented by its 'material dispositions'. These can be represented by its dimensions, its colour and form, its texture, but all viewed in comparative or relational terms, both within the object itself and in comparison to its surroundings.

However, Lonergan also goes on to claim that Aquinas equated the grasp of form with the mind's act of insight or understanding. He complains that many modern Neo-Thomists, under the influence of Scotus, equate this instead with conception, which in fact involves a further step, the formulation or definition of the insight. He also claims that full knowledge does not arrive with the grasp of form through insight but, as will be argued later, through a much more complex and more complete process of experience, understanding and judgment.[90]

Another way of explaining form is to say that the form of a substance is that in the nature of the substance which makes knowledge of it possible; or alternatively, the form of an object is simply that aspect of it which is intelligible. According to Lonergan, the form of an object is what is grasped by the 'agent intellect' *(intellectus agens)* through insight into imagery or *phantasm*, which is itself an abstraction ('objective abstraction') from sense experience. The resulting concept is the 'inner word' (*Verbum or Quiditas*) which expresses the object in so far as the intellect grasps it, its essence. According to Lonergan many Neo-Thomists

89 Bernard Lonergan, *Verbum*, p.147.

90 See Chapter 5 of this study.

hold that the form resides in the concept itself, not in the act of insight.[91]

It has been mentioned already that the principle of identity of form or 'isomorphism' applied not just between the sense and the object sensed, but also between an object of thought and the intellect itself. Kenny says that "the actualisation of an object of thought is the same thing as the actualisation of the capacity for thinking, *Intellectus in actu est intelligible in actu.*"[92] But the human mind also judges, and apprehends value. It will be argued that the intentional nature of the mind acts at each and every level of Lonergan's dynamic structure of coming to know and valuing. This means that for Lonergan intentionality is central to the whole process of coming to know. It "is the dominant content of the dynamic structure that assembles and unites several activities into a single knowing of a single object."[93] Intentionality, as has been said already, lies at the very core of Lonergan's system and its action resides in an identity of form between the object and the knowing subject, or, in Casey's words, in "the formal identity of the knower and the known in the act of knowledge."[94] This intentional object can be in the external world of material objects or in the internal world of images and concepts.

While the form of an external object is individualised by matter in the external world, the identical form, as apprehended by the intellect, is present in the mind immaterially and intentionally. The form is the same, but the 'mode' of its existence is different. While it exists in nature in the mode of *esse materiale* and in the mind in the mode of *esse immateriale* , Lonergan would add that in the mind it also exists with *esse intentionale* :

> The form of the knowing must be similar to the form of the known, but also must be different; it must be similar essentially for the known to be known; but it must differ modally for the knower to know and not merely be the known. Modal difference of forms results from difference of recipients: the form of colour exists naturally in the wall but intentionally in the eye because wall and eye are different kinds of recipient .... Thus the negative concept, immateriality, acquires a positive content of intentional existence; and intentional existence is a modal difference resulting from

[91] In a sense, one can say that the insight does reside in the concept which formulates it, even if in an abstracted form. It is possible that those Neo-Thomists whom Lonergan disagrees with simply have a wider view of the notion of concept than Lonergan gives them credit for.

92 Anthony Kenny, *The Legacy of Wittgenstein*, p. 64.

93 Bernard Lonergan, "Cognitional Structure", p.22.

94 Gerard Casey, "Immateriality and Intentionality", p. 100.

difference in the recipient.[95]

Just as matter is necessary to individualise a form, so a medium or recipient is necessary to actualise a form. This medium in which the form resides, and the corresponding mode of existence of the form, varies according to whether the form subsists in a material substance or an immaterial mind.

Can form be conceived or grasped or apprehended by the senses also? It has already been shown that, according to the philosophical theories of both Aquinas and Lonergan, the answer is "yes". In fact, looking at knowledge for a moment from a developmental psychological point of view, there is a time in the development of the human being when sense knowledge seems to predominate. This is particularly so in the early stages of Piaget's *sensorimotor* period of child development when the child has little intellectually with which to interact with the world besides "congenital sensorimotor schemata"[96]. This does not deny the existence of understanding and judgment in the operation of the young child's intellect but that the contribution of sense knowledge to concept formation must predominate. What is the child doing in the following example if not attempting to grasp the form of the wooden cube and mentally encapsulate it in a concept or schema?

> Directly he sees a cube he grasps it, senses surface and edges as he clenches it, brings it to his mouth, where he feels its qualities anew, withdraws it, looks at it on withdrawal, rotates it while he looks, looks while he rotates it, restores it to his mouth, withdraws it again for inspection, restores it again for mouthing, transfers it to the other hand, bangs it, contacts it with the free hand, retransfers, mouths it again, drops it, rescues it, mouths it yet again, repeating the cycle with variations - all in the time it takes to read this sentence.[97]

What the mind of the child grasps in the episode recorded above are what Lonergan would term "the material dispositions" of the object. It is these material dispositions which make the object intelligible. What the mind grasps best are relations, and these material dispositions represent perceivable relations within the object - a sharp corner here, a smooth plane in between, and another sharp corner here. It is relations such as these which constitutes the form of the object, and it is as a set of relations that the object is perceived. Perception itself may be regarded as a

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95 Bernard Lonergan, *Verbum*, p.151.

96 J. McV. Hunt, *Intelligence and Experience* (The Ronald Press Company, New York, 1961), p. 113.

97 Arnold Gesell, *The First Five Years of Life* (Methuen, London, 1976), pp. 22 - 23.

type of abstraction. This will be dealt with in more detail in Chapter Eleven of this work.

Lonergan states: "The senses are receptive of sensible forms without the matter natural to those forms"[98] . And in his study of both Aquinas and Lonergan Gerard Casey is quite clear that "intentional existence is also a mode of existence which a form can enjoy in the sensitive medium"[99]. Clearly form cannot exist in the senses with *esse immateriale* but that does not prevent it from being there in the mode of *esse intentionale* for, as Kenny says, "intentional existence and immaterial existence are not the same thing"[100] . Since it subsists in the material medium of the senses we must also say that it exists with *esse materiale* . Aquinas says in his commentary on Aristotle's *De Anima* that "in the senses, a thing has being without matter but not without the individuating conditions of matter nor without the corporeal organs. For the sense is of the particular, intellect of the universal"[101] . The different modes of existence of form are best summarised in the diagram below, due to Casey[102] .

	ESSE NATURALE	*ESSE INTENTIONALE*
ESSE MATERIALE	Mode of being of material things	Mode of being of things in sense organ or medium
ESSE IMMATERIALE	Mode of being of immaterial things	Mode of being of things in intellect (*esse intelligible*)

2.8 *Lonergan as a Modern Neo-Thomist*

One can look in vain through many modern anthologies of philosophy for any mention of Lonergan's name. For example, the most recent edition of *The*

98 Bernard Lonergan, *Verbum*, p.149.

99 Gerard Casey, "Immateriality and Intentionality", p. 102.

100 Anthony Kenny, *The Legacy of Wittgenstein*, p. 65.

101 Thomas Aquinas, *Commentary on II de Anima*, 282-4.

102 Gerard Casey, "Immateriality and Intentionality", in Fran O'Rourke (Ed.), *At the Heart of the Real* (Dublin: Irish Academic Press, 1995)

Cambridge Dictionary of Philosophy [103] barely mentions him, grouping his name with those of Etienne Gilson, Jacques Maritain, Désiré Mercier, Karl Rahner and Norris Clarke under the heading of "Neo-Thomists". A recent publication on intentionality by William Lyons, *Approaches to Intentionality*[104], does not mention his name at all, while even Aquinas and the Scholastics, to whom the whole idea of intentionality owes its preservation and development, are given the very barest acknowledgement. This supports Hugo Meynell's statement that "of all contemporary philosophers of the first rank, Bernard Lonergan has been up to now the most neglected"[105] . The question is, why?

Lonergan, it seems, has a number of problems to contend with as a modern Neo-Thomist. The first is a certain suspicion among Thomists themselves that some of his more controversial interpretations amount to an actual rewriting of Aquinas. In an article in *Philosophical Studies* , for example, Philip McShane states that

> Father Lonergan has been criticised not only in his theology but also for his views in other branches of knowledge. His method of interpretation has been questioned.... His epistemology has been vigourously attacked. His philosophical position has been associated with idealism.[106]

Desmond Connell writing in *The Irish Theological Quarterly*, has already been quoted as saying that Lonergan's "order of priority between being and knowledge, *ens* and *verum, esse* and *intelligere* .... contradicts the teaching of St. Thomas"[107]. Another source of controversy was his 'intellectualist' view of Aquinas' theory of cognition as opposed to the 'conceptualist' interpretation taken by those Thomists who, in his opinion, were influenced by the Scotist tradition.[108]

Duns Scotus (1266-1308)[109] was a Franciscan metaphysician and philosophical theologian. He brought many of Augustine's insights (favoured by his

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103 Robert Audi (Ed.), *The Cambridge Dictionary of Philosophy*, (Cambridge University Press, Cambridge, 1995), p. 527.

104 William Lyons, *Approaches to Intentionality* (Clarendon Press, Oxford, 1995)

105 Hugo A. Meynell, *An Introduction to the Philosophy of Bernard Lonergan* (Macmillan, London, 1991), p. 1.

106 McShane, Philip, "The Contemporary Thomism of Fr. Bernard Lonergan", *Philosophical Studies*, Vol. XI, (1961/62), p. 66.

107 Desmond Connell, "Father Lonergan and the Idea of Being", *Irish Theological Quarterly*, pp. 121,122, 1970.

108 William A. Stewart S.J. " Abstraction: Conscious or Unconscious? The *Verbum* Articles", in F.E. Crowe (Ed.), *Spirit as Inquiry*, (Continuum, St. Xavier College, Chicago, 1964).

109 See Joseph Pieper, *Scholasticism - Personalities and Problems of Medieval Philosophy* (South Bend, IND: Saint Augustine's Press, 2001), pp. 139 - 146, for a discussion of the place of Duns Scotus in Scholasticism.

Franciscan predecessors) into the mainstream Aristotelianism of his day. He gave pride of place to metaphysics and relegated psychology to a secondary position. The result was a view of mind strongly influenced by metaphysics and logic. This resulted, in turn, in a 'faculty psychology', the view that the mind is a collection of departments responsible for distinct psychological functions rather than a unified, integrated whole. Duns Scotus can be termed a 'conceptualist' as he held that the formation of concepts was a central and automatic process. Lonergan, as already seen, has caricatured this account of the formation of concepts as a "metaphysical sausage machine" with sensations and images going in one end and concepts popping out the other. Aquinas, according to Lonergan, held that the human mind had to reason in order to form concepts and that there is a conscious knowing which is pre-conceptual and that it involves insight. This is what is meant by Lonergan having an intellectualist, rather than a conceptualist, interpretation of Aquinas. He complains that

> until recently Thomist commentators have tended, almost universally, to ignore Aquinas' affirmation of insight and to take it for granted that, while Aquinas obviously differed from Scotus in the metaphysical analysis of cognitional process, still the psychological content of his doctrine was much the same as that of Scotus.[110]

It must be remembered, however, that Lonergan's aim was not merely to interpret Aquinas but to bring him 'up to date'. This involves going beyond him, treating Aquinas as Aquinas treated Aristotle - improving his insights, tactfully transcending his confusions, charitably resolving his ambiguities, but above all, applying Aquinas' incomparable philosophical insights to a whole new level of human knowledge, gaining impulse and inspiration, as was already mentioned at the beginning of this chapter, from the encyclical *Aeterni Patris* of Pope Leo XIII.[111] The development and growth of knowledge since the time of Aquinas have been so great that, in Pieper's words, "there is no longer any attaining of a closed and rounded view of the world, in any legitimate way. The wealth of available knowledge of the natural world has become too boundless."[112] Lonergan, it will be

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110 Lonergan, Bernard, *Insight - A Study of Human Understanding* (London: Longmans, Green and Co. Ltd., 1958), p. 413

111 Philip McShane, "The Contemporary Thomism of Fr. Bernard Lonergan", *Philosophical Studies*, Vol. XI, (1961/62), p. 66. This discussion will be revisited in Section 3.2, which deals with Lonergan's place among contemporary philosophers and psychologists.

112 Josef Pieper, *Scholasticism - Personalities and Problems of Medieval Philosophy* (South Bend, IND: Saint Augustine's Press, 2001), p. 158.

argued, rejected the very notion of a *Summa,* advocating instead a philosophy based on what is most important and the most common in all philosophies - that which Walsh describes as "the transcendent reality within the soul of the philosopher."[113] It must be remembered also that even the greatest *Summa* of the Middle Ages, that of Aquinas, remained uncompleted, and was meant merely as an elementary textbook "for the instruction of beginners."[114]

2.9 *Chapter Conclusions*

This chapter began with the aspiration quoted from Leo XIII: "*vetera novis augere et perficere*". Lonergan's aim in *Insight* , as was said above, was to examine how scientists and other specialists approach their work in order to gain insight into insight. Another aim of his work, however, was to update classical or Thomistic philosophy to take into consideration the enormous developments in science over the past seven centuries. He viewed this as a type of *aggiornamento* , the challenge set by John XXIII and Paul VI of translating the Church's message into the idiom of the modern world[115] . He attempted to do this by reaching up to "the mind of Aquinas, and once that mind (was) reached, ... import his compelling genius to the problems of this later day."[116] Elsewhere, he writes:

> Since St. Thomas wrote, there has piled up a heap of disputed questions that St. Thomas himself never treated directly and explicitly. Since he wrote, there has occurred a notable development in man's understanding of the material universe. Since he wrote, there has arisen an array of disciplines with new problems that press upon the Catholic philosopher and especially the Catholic theologian. Since he wrote, the human situation has changed profoundly in many ways.[117]

In the same book Lonergan sets the scene for others to take up the challenge where he left off:

> If I may be sanguine enough to believe that I have hit upon a set of

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[113] David Walsh, *After Ideology - Recovering the Spiritual Foundations of Freedom* (Washington, D.C.: The Catholic University of America Press, 1990), p. 151. Walsh is professor and chair of the department of politics at The Catholic University of America.

[114] Thomas Aquinas, prologue to *Summa Theologica* quoted in Josef Pieper, *Scholasticism,* p. 159.

[115] Bernard Lonergan S.J., "Existenz and Aggiornamento", F.E. Crowe (Ed.), *Collection.* (London: Darton, Longman, Todd, 1967)

[116] Bernard Lonergan S.J., *Insight*, p. 748.

[117] Bernard Lonergan S.J., "Insight: Preface to a discussion", F.E. Crowe & R.M. Doran (Eds.) *Collected Works of Bernard Lonergan*, (University of Toronto Press, Toronto, 1988), p. 145.

> ideas of fundamental importance, I cannot but acknowledge that I do not posses the resources to give a faultless display of their implications to the wide variety of fields in which they are relevant. I can but make the contribution of a single man and then hope that others, sensitive to the same problems, will find that my efforts shorten their own labour and that my conclusions provide a base for further developments.[118]

So it is that this study aims to examine Lonergan's theory of cognition in the light of the findings of psychology and education, and to test his assertion that "the philosophy and metaphysics that result from insight into insight will be verifiable."[119] In so doing, some comfort can be taken from Newman's assertion that "It is the second-rate men, though most useful in their place, who prove, reconcile, finish and explain."[120]

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118 Lonergan, Bernard, *Insight,* p. xxx.

119 Ibid., p. xi.

120 J.H. Newman, *Grammar of Assent*, (London, 1870), p. 374.

Chapter 3

Lonergan's Place in Modern Philosophical Thought

> "Of all contemporary philosophers of the first rank, Bernard Lonergan has been up to now the most neglected"
>
> Hugo Meynell[1]

3.1 *Introduction*

The last chapter was concerned with Lonergan's devotion to, and identification with, the spirit of Aquinas. It also referred in passing to his uneasy relationship with his fellow Neo-Thomists. This next chapter will compare Lonergan's philosophy to those of a number of other philosophers whose theories are essential to the development of this study. In other words, the chapter will serve the purpose of further expanding and consolidating the foundation on which this study is to be built. It must be remembered that this work is not just about Lonergan; it is first and foremost about education. And while Lonergan's theories certainly form its main basis and inspiration, nevertheless it will be argued in this chapter and in the ones that follow that if Lonergan's theories are really to make a contribution to the field of education, they cannot be treated in isolation; on the contrary, they need the aid and support of other key contemporary philosophers, psychologists, and educators.

3.2 *Lonergan in the Modern World*

One difficulty which presents itself when one tries to compare Lonergan with modern and contemporary philosophers is that, as already suggested in the Introduction to the study, philosophy today is a much more diverse and disparate discipline than at any stage in its history. In his *Cartesian Meditations* Husserl, for example, says:

> The splintering of present-day philosophy, with its perplexed activity, sets us thinking. When we attempt to view western

[1] Hugo A. Meynell, *An Introduction to the Philosophy of Bernard Lonergan* (London: Macmillan, 1991), p. 1.

> philosophy as a unitary science, its decline since the middle of the nineteenth century is unmistakable. The comparative unity that it had in previous ages, in its aims, its problems and methods, has been lost. .... Instead of a unitary living philosophy, we have a philosophical literature growing beyond all bounds and almost without coherence. Instead of a serious discussion among conflicting theories that, in their very conflict, demonstrate the intimacy with which they belong together, the commonness of their underlying convictions, and an unswerving belief in a true philosophy, we have a pseudo-reporting and a pseudo-criticizing, a mere semblance of philosophizing seriously with and for one another.[2]

The modern world also seems to have largely rejected Aquinas as a serious philosopher. It is understandable that an increasingly secular society would be uneasy about the close link between philosophy and theology in the wowrk of Aquinas. Bertrand Russell was one of those who accused Aquinas of not being a real philosopher because he was looking for reasons for what he already believed. This appears somewhat contradictory coming from a philosopher who, in his *Principia Mathematica* , takes hundreds of pages to prove that two and two make four, which, presumably, was something he had believed all his life.[3] Yet, the suspicion persists among contemporary philosophers that in his heart of hearts the Neo-Thomist would echo the "*Fides querens intellectum.*" (Faith seeking understanding) of Anselm of Canterbury, placing faith squarely in first place.[4] As Moira Carley expresses it : "There is a healthy suspicion in academic circles of the possibility of religious 'faith' blinding 'reason' and limiting one's capacity for objective judgment."[5]

The same accusation, however, cannot be levelled against Lonergan who, like Newman before him, places faith in the realm of the cognitional so that one can speak instead of understanding seeking faith, or "*intellectus querens fidem*", while still not denying the prime importance and ultimate supernatural character of faith. Lonergan describes the progression as follows:

> The self-appropriation of one's own intellectual and rational self-

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2 Edmund Husserl, *Cartesian Meditations* (Kluwer Academic Publishers, Dordrecht, 1995), pp. 4 - 5.

3 Anthony Kenny, *Aquinas on Mind* (Routledge, London, 1993), p.12.

4 One can say that the relationship between faith and reason was the central theme of medieval philosophy from the time of Boethius (480 - 525) onwards. In his *Proslogion,* for example, Anselm states: "I do not seek the insight of reason in order to believe; but I believe in order to gain insight; indeed, I also believe this: that I should never be able to attain insight, if I did not believe." Quoted from Joseph Pieper, *Scholasticism - Personalities and Problems of Medieval Philosophy* (South Bend, IND: St Augustine's Press, 2001), p. 64.

5 Moira T. Carley, *Bernard J.F. Lonergan S.J. : On Teaching* (Harvard University, Ed.D. Thesis, 1989), p.8.

> consciousness begins as cognitional theory, expands into metaphysics and an ethics, mounts to a conception and an affirmation of God, only to be confronted with the problem of evil that demands the transformation of self-reliant intelligence into an *intellectus querens fidem*. [6]

However, the fact that Lonergan can begin from a novel starting point, cognitional theory, and still end up re-establishing the *philosophia perennis* is treated with grave suspicion in certain quarters. S.M. Ogden, for one, says of Lonergan:

> If his understanding of understanding is sound, and if the metaphysics he says he derives from it is, in fact, derived from it, instead of being (however unintentionally) imposed upon it, then he has undoubtedly reestablished the perennial philosophy in the very way he claims. So far as I can see, however, there is ample reason for doubt.[7]

Another problem that the philosophy of Aquinas and, by association, that of Lonergan have to contend with among contemporary secular philosophers is what might be termed 'Descartes phobia'. For Aristotelians, and for Thomists before Descartes' time, the mind was essentially the faculty, or set of faculties, which differentiated human beings from the animals. For Descartes, and for many others after him, it was consciousness, not intelligence or rationality, that was the defining criterion of the mental. For Lonergan also the first principles of philosophy are not the verbal propositions and logic of Thomistic philosophy, but "the de facto invariants of human conscious intentionality."[8] A clear differentiation of human consciousness and an analysis and appropriation of the operations of the subject would, according to Lonergan, constitute the proper method of philosophy. However, Descartes, like many other philosophers, confused consciousness with an ability to introspect. As such, his concept of consciousness is very different from that of Lonergan. Kenny states: "The mind, viewed from the Cartesian standpoint , is the realm of whatever is accessible to introspection"[9]. In Descartes' philosophical system mind and body are two separate spheres of existence, two realisms. His way of reconciling the two was to claim that every human sensation as well as

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[6] Bernard Lonergan, *Insight*, p. 731.

[7] Shubert M. Ogden, "Lonergan and the subjectivist principle", Philip McShane (Ed.), *Language Truth and Meaning: Papers from the International Lonergan Congress 1970,* pp. 218-235. (Dublin: Gill & Macmillan, 1972), p. 221.

[8] Bernard Lonergan, "Unity and Plurality", I p. 246, quoted in Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 29.

[9] Anthony Kenny, *Aquinas on Mind* (Routledge, London, 1993), p.17.

being physical also had an element that was purely spiritual.

Aquinas' and Lonergan's way of reconciling the physical and the spiritual in man is to propose that there are two kinds of knowing; Lonergan states in *Insight* that "unless two distinct and disparate types of knowing were recognised, the two realisms were incompatible."[10] He sees man as having purely sense knowledge, which he possesses in common with the animals, and intellectual or spiritual knowledge which distinguishes him from the animals. Descartes, however, recognised not two kinds of knowing, but two kinds of substances, physical and spiritual. To Aquinas, man's spiritual soul is the life principle of the individual human person and, as such, informs or vitalises each and every part of the body. Descartes saw no such intimate connection between soul and body. While Descartes' mind/body duality is now largely discredited, one can argue that Descartes' ghost still exercises its baneful influence over modern and contemporary philosophers in the form of a hypersensitivity to anything that hints of the spiritual.

Finally, it is possible that one of the difficulties that people have in understanding and accepting Lonergan today is the fact that both the Thomistic tradition out of which his thought was developed and the language that it uses are largely unfamiliar to many readers of modern philosophy. This has not been helped by the tendency among Neo-Thomists in general to retreat into a philosophical world of their own so that their voices are rarely heard in the main forums of modern philosophical debate.[11] But when one sees that, in Flanagan's words, "Lonergan is attempting a rather fundamental reorientation of this Scholastic tradition"[12], then one can appreciate even more his inaccessibility to the modern reader.

3.3 ***The Philosophies of Lonergan and Husserl***

3.3.1 *Franz Brentano*

While modern philosophers tend to reject the thinking of Aquinas and of

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10 Bernard Lonergan, *Insight*, p. 414.

11 This observation was made to this author by Prof. W. Norris Clarke of Fordham University, in private conversation. The thinking of Prof. Clarke, who collaborated with Lonergan in the editing of the first edition of *Insight*, makes an important contribution to Chapter Seven of this work.

12 Flanagan, Joseph, "Knowing and language in the thought of Bernard Lonergan", Philip McShane (Ed.), *Language Truth and Meaning: Papers from the International Lonergan Congress 1970*, pp. 49-77. (Gill & Macmillan, Dublin, 1972), p. 49.

Thomists in general, they are not beyond borrowing from Scholastic philosophy whatever they find useful for their own purposes. One such 'borrowed' concept is the notion of intentionality, which has made a periodic reappearance from time to time throughout the more recent history of philosophy. The first real revival of the Scholastic term 'intentionality' in modern times, however, is due to the work of the German philosopher and psychologist Franz Brentano[13] (1838 - 1917). Brentano claimed that it is intentionality which defines the distinction between the mental and the physical. He held that all mental phenomena, and only mental phenomena, exhibit intentionality. Since intentionality is an irreducible feature of mental phenomena, and since no physical phenomena could exhibit it, he argued that mental phenomena could not be a species of physical phenomena. It would follow from this that mind cannot be brain, for example. This is an argument which might appeal to Lonergan, but would certainly not find general acceptance among those contemporary philosophers of mind who lean towards physicalism[14], reductionism[15], and functionalism[16]. It can be argued that these latter philosophers have tended to lose sight of the overall unity of the mind, and instead concentrate on laying out the parts, the elements, the structures, the states, or the functions, in a Piccasso-style collage that looks little or nothing like the real thing.

Brentano attempted to reconcile the passive, static and more content-dominated theory of mind proposed by the classical empiricists of his day, like Locke, Berkeley and Hume, with the more active, dynamic and more idealist picture proposed by Kant. Kant held an extreme idealist position best exemplified by his claim that "the order and regularity of appearances, which we call *nature*, we ourselves introduce."[17] Brentano believed that all phenomena are either mental (psychological) or physical. According to Bell, Brentano held that "mental

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13 Franz Brentano, *Psychology from an Empirical Standpoint* (London: Routledge & Kegan Paul, 1973)

14 The doctrine that everything is physical. Also called materialism, the view is associated with with Democritus, Hobbes, Holbach, Watson, Carnap, and Quine.

15 The related idea that psychological and philosophical explanations are reducible to explanations formulable in a physical vocabulary.

16 The view that mental states are definable by their causes and effects. What makes a mental state mental is not an intrinsic property of the state, but rather its relations to sensory stimulation (input), to other inner states, and to behaviour (output). It was developed by Armstrong and Putnam as an improved, or developed, form of behaviourism. In the opinion of this author, Feuerstein's theories also tend towards functionalism, despite the fact that he is a devout Jew and a firm believer in the spiritual nature of the human person. See the glossary of the this work for a more complete consideration.

17 Immanuel Kant, *Critique of Pure Reason* (London: Macmillan,1933), p. 148.

phenomena are simply acts which have contents"[18]. This leads to the apparent contradiction that if only the 'acts' of the mind are properly mental phenomena, what then of mental 'contents' like ideas and concepts? Are these physical? Obviously not! Brentano's attempts to correct this apparent contradiction were not altogether successful and, according to Bell, "there remained a pronounced solipsistic[19] tendency in Brentano's early thought."[20] This "tendency" exercised a profound influence on Husserl's philosophy. Brentano had looked on his task in philosophy of mind (He would have preferred the word 'psychology') as "first of all, one of engaging in a direct, if irredeemably private, inner observation of the workings ... of the mind. ... The second was to deliver a 'descriptive phenomenology' of his findings."[21] Since this procedure, at least in theory, never gets beyond the clear description of experience, it is a much more limited method than the 'self-appropriation of interiority' on which Lonergan bases his philosophy.[22]

Brentano's notion of intentionality, though inherited from the mediaeval Aristotelians, was not at all as clear and precise as that of Aquinas. Bell suggests, for example, that Brentano fails to distinguish clearly between the intended object and the content of a mental act. He argued that every psychological experience contains an intended object which the thought is about or towards which it is directed. Thus in desire, for example, something is desired. According to his 'immanent intentionality thesis' the desired object is literally contained within the psychological experience of desire.

Interestingly, Brentano also maintained that every thought is self-consciously reflected back onto itself as a secondary intended object. This can be compared with Lonergan's notion of consciousness as "the awareness immanent in our cognitional and appetitive activities"[23] whereby the mind is capable of experiencing itself in the process of experiencing, understanding and reflecting and capable even of understanding and reflecting on its own mental processes.[24]

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[18] David Bell, *Husserl* (London: Routledge, 1990), p. 7.

[19] Meaning, isolation from the external world. One's own immediate experience has a fundamental, self-certifying reality, but comparable knowledge of objective reality is unobtainable.

[20] David Bell, *Husserl*, pp. 8 - 9.

[21] Ibid.

[22] Lonergan's own critique of phenomenology will be dealt with later in this chapter.

[23] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 45.

[24] See Chapter Nine of this study.

3.3.2 *Edmund Husserl*

Husserl (1859 - 1938) had been a student of Brentano at Vienna. He now proceeded to adapt Brentano's descriptive phenomenology into a 'transcendental phenomenology' of his own. Husserl is generally regarded as the father of phenomenology and his writings had a lasting influence on 20th. century philosophy, particularly on the philosophies of Sartre, Heidegger, Merleau-Ponty, and the important but lesser known Edith Stein. These owe to him, among other things, their concepts of intentionality.

In their book *Understanding Phenomenology* Hammond, Howarth and Keat define the phenomenological method as "to describe objects just as one experiences them, and to extract philosophy from the process."[25] However, Lonergan himself describes phenomenology in his own terms as follows: "It is an account, description, presentation of data structured by insight." He continues:

> It is data structured by insight. In other words, it is selective. It does not offer an exhaustive description of all and any data whatever. There is a structure to it, a selection, and the selection is of the significant. It seeks basic, universal structures.[26]

There is not just the question here of the simple insight as abstracted from imagery or *phantasm* but rather of data as selected and structured or organised by that same insight, and given a form or *'eidos'* by it. Lonergan explains:

> Now to present data structured by insight, Husserl does not proceed on the basis of the first bright idea that comes along. To find what really is the proper structure of the data takes effort and time; it calls for scrutiny, penetration, contrasts, and tests. It may be necessary to overcome spontaneous tendentiousness, systematic oversights, common over-simplifications, preconceptions arising from a scientific outlook or a philosophic position or any other source.[27]

Husserl began his academic life as a mathematician but turned to philosophy and psychology under the influence of Brentano while in Vienna. Unlike other modern philosophers, Husserl was not prepared to reject Descartes out of hand. Like Lonergan, he realised the value of Descartes' discovery of the importance of

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25 Hammond, Howarth and Keat, *Understanding Phenomenology* (Blackwell, Oxford, 1991), p. 1.

26 Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18* (Toronto, University of Toronto Press, 2001), p. 267.

27 Ibid., pp. 267 - 268.

the subject in philosophy. Unlike Lonergan, however, he accepted wholeheartedly Descartes' "method of doubt" and, in his *Cartesian Meditations* [28], he developed his own version of Descartes' 'method', which he called his *"epochê"*.

Husserl's main problem with Descartes lay not so much with the mind-body duality as with his identification of the "transcendental Ego", or the subject, as another substance, which he termed the *"res cogitens"*, in addition to the substance of the material world, or the *"res extensa"*, with regard to whose existence his method required him to 'doubt', to 'bracket', or to suspend judgment on. Husserl explains:

> This Ego, with his Ego-life, who necessarily remains for me, by virtue of such epoché, is not a piece of the world; and if he says, "I exist, *ego cogito*," that no longer signifies, "I, this man, exist." No longer am I the man who, in natural self-experience, finds himself *as* a man and who, with abstractive restriction to the pure contents of "internal" or purely psychological self-experience, finds his own pure *"mens sive animus sive intellectus"*; nor am I the separately considered psyche itself.[29]

In brief, what Descartes had done, according to Husserl, was to transform the "I" which performs the *epochê* in the first place, and which gives the world (including one's own psychic being) its existence-sense, into a part of that very world which presupposes the existence of that same "I", and which his method required him to doubt.[30] Husserl says:

> Descartes does not make clear to himself that the ego, his ego deprived of its worldly character [*entweltlicht*] through the epoché, in whose functioning *cogitationes* the world has all the ontic meaning [sense of 'existence'] it can ever have for him, *cannot possibly* turn up as subject-matter *in* the world, since everything which is of the *world* derives its meaning precisely *from these functions* - including, then, one's own psychic being, the ego in the usual sense.[31]

While Lonergan would have sympathised with this criticism of Descartes, he had little time for Husserl's phenomenology, which he described as "a highly purified empiricism."[32] He goes on to explain that

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28 Edmund Husserl, *Cartesian Meditations* (Dordrecht: Kluwer Academic Publishers, 1995)

29 Ibid, p. 25.

30 Hammond, Howarth & Keat, *Understanding Phenomenology*, p. 32.

31 Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (Northwestern University Press, Evanston, 1970), pp. 81 - 82.

32 Bernard Lonergan, *Insight* (London : Longmans, Green and Co. Ltd.,1958), p. 415.

> [phenomenological] description is not enough. If it claims simply to report data in their purity, one may ask why the arid report should be added to the more lively experience. If it pretends to report the significant data, then it is deceived, for significance is not in data but accrues to them from the occurrence of insight. If it urges that it presents the insights that arise spontaneously, immediately and inevitably from the data, one must remark that data alone are never the sole determinants of the insights that arise in any but an infantile mind and that beyond the level of insight there is the level of critical reflection with its criterion of the virtually unconditioned.[33]

While Lonergan praises Husserl for his "painstaking analysis of intentionality,"[34] and "a fine analysis of psychological process,"[35] there is no indication that Husserl has had any influence whatever on the philosophy of Bernard Lonergan, least of all on his theory of intentionality which Lonergan, like Brentano, appears to have inherited directly from Aquinas and the other Aristotelian Scholastics.

3.3.3 *Lonergan and Husserl*

William Ryan, who has written extensively on both Lonergan and Husserl, takes up this last point:

> Although there is no great dependence of Bernard Lonergan upon Edmund Husserl in the manner, say, of Husserl himself upon Franz Brentano, there are nonetheless points of similarity and contrast between them.[36]

These "points of similarity and contrast" are not just interesting but highly instructive in regard to the cognitional theory of Bernard Lonergan. Besides, no treatment of the place of Bernard Lonergan's theory of intentionality in modern philosophy would be complete without a comparison with this most central figure in modern philosophy, particularly in regard to intentionality. It is also hoped that by means of such a comparison a clearer understanding of Lonergan's theory of intentionality will emerge.[37]

According to Lonergan the mental operations of "seeing, hearing, touching,

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[33] Ibid.

[34] Bernard Lonergan, *Method in Theology* (London: Darton, Longman and Todd, 1972), p. 212.

[35] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18* (Toronto: University of Toronto Press, 2001), p. 257.

[36] William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan", *International Philosophical Quarterly*, 13 (1973), p. 173.

[37] Lonergan's theory of intentionality has already been introduced in Section 2.7 above.

smelling, tasting, inquiring, imagining, understanding, conceiving, formulating, reflecting, marshalling and weighing the evidence, judging, deliberating, evaluating, deciding, speaking, writing" are all 'transitive'.[38] He means this not only in a grammatical sense, but also in the psychological sense that, by these operations, one becomes aware of their objects. This psychological sense is what is meant by the verb, "intend", the adjective, "intentional", and the noun, "intentionality". Lonergan says:

> To say that the operations intend objects is to refer to such facts as that by seeing there becomes present what is seen, by hearing there becomes present what is heard, by imagining there becomes present what is imagined.[39]

Modelling his philosophical method on that of Descartes, Husserl, as already mentioned above, proceeded by way of a Cartesian 'method of doubt' which he termed his *epoché*. While Descartes' method led him to doubt even the existence of things, Husserl's method led him to 'bracket', or to leave to one side, all considerations of existence, and to concentrate instead on the pure subjective experience, the phenomena, or the way things appear to one. Husserl would say that, while the existence of things might certainly be doubted, one cannot doubt the experience of things. While such phenomena can not be doubted, his *epoché* or phenomenological 'method' involves questioning, or doubting, or 'bracketing', the validity of one's own experiences of the world in order to arrive at a clearer idea of how one's perceptions of reality are structured, and so to arrive at a more firmly grounded basis for science and philosophy in phenomena which are both primary and 'apodictic' (indubitable). Such phenomena are certainly structured by critical analysis or, as Lonergan expresses it above, they are "structured by insight." Husserl's noted assistant and disciple, Edith Stein, explains:

> The goal of phenomenology is to clarify and thereby to find the ultimate basis of all knowledge. To reach this goal it considers nothing that is in any way "doubtful", nothing that can be eliminated. In the first place, it does not use any results of science whatsoever. This is self evident, for a science which proposes ultimately to clarify all scientific knowledge, must not, in turn, be

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38 Bernard Lonergan, *Method in Theology* (London: Darton, Longman and Todd, 1972), pp. 6 - 7.

39 Ibid.

based on a science already extant, but must be grounded in itself.[40]

When one suspends one's common sense outlook, or 'natural attitude' in one's thinking, and applies the *epoché* to the experience of the world in which one lives, one is still left with the 'transcendental ego' (or Ego) and its thoughts or '*cogitationes*' . These (the Ego and its thoughts) Husserl claims to be both primary and 'apodictic'. This Ego, or subject, is termed 'transcendental' because it and its *cogitationes* stand outside the pure experience itself and so are 'prior' to the world. One can say that they form the basis for the world's 'existential status'. This is the origin of the label 'transcendental idealism' which is applied to Husserl's philosophy. Hugo Meynell states that, unlike Scholasticism, such a philosophical method is then "free of any *a priori* metaphysical commitment," by which he appears to mean, free of any ontological commitment to anything that might exist, and he adds "indeed from any presuppositions whatever."[41]

Lonergan goes on to explain:

> Husserl cuts off, on the one hand, as beyond what is intended Galileo's mathematized world of real objects and, on the other hand, Descartes's metaphysical subject, the soul. He maintains that both of these leaps made by Descartes are disastrous. They have taken people away from the intending subject and the intended object.[42]

Descartes maintained that in the internal world of ideas there are certain ideas which can be doubted but that there were others which were clear and distinct and, hence, were indubitable, could no be doubted. Descartes, according to Husserl, while attempting to model philosophy on the empirical sciences, especially the more mathematical sciences, was mistakenly led to adopt the indubitable *ego sum* or "I exist" as a ground for objective knowledge or as an axiom or starting point from which further theorems, including "the world exists", could be deduced. In doing so

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[40] Edith Stein, *On the Problem of Empathy* (Washington: ICS Publications, 1989), p 3. This book was based on her doctoral dissertation defended in 1916 at Freiburg-im-Breisau. The dissertation was completed under the supervision of Husserl. Stein was later to become not only his assistant but also editor and collator of his later works. Stein was of Jewish origin. However, in her late twenties she converted to Catholicism and became a Carmelite nun. This did not prevent her from undergoing a similar fate to many of her fellow Jews: she was executed in Dachau during the Second World War. She has recently been canonised as a saint by Pope John Paul II.

41 Meynell, Hugo A. "From Crisis to Insight", *Method: Journal of Lonergan Studies*, 6/2, (1988), p. 93.

[42] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18* (Toronto, University of Toronto Press, 2001), p. 258.

he was guided by what he called "the principles of natural light" (principles of inference within his own axiomatic system). If this were to be so, if the *ego sum* or "I exist" were really to be the grounding of objective knowledge, then the ontological status (the existence) of the "I" and of the "world" would have to be the same. Given Descartes' realist interpretation of the world, the transcendental nature of the Ego would not be possible; the Ego could not be regarded as standing outside reality and acting as a precondition for experience. Husserl, on the other hand, does not accept the *ego sum* or "I exist" as a satisfactory, indubitable grounding for objective knowledge; instead he seeks to ground objective knowledge on the subjective certainty of experience. It is the pure "I" which lurks behind all experience which he seeks. Lonergan explains:

> Instead of reducing the subject to objects, Husserl wants the opposite reduction, the reduction of objects to the subject. The subject is what is prior. The subject is what we are certain about. The subject is what we can examine with perfect accuracy and complete certitude, without any wild leaps.[43]

In Husserl's terminology, the "I" is the starting point or the 'transcendental grounding' of his method; the 'transcendental reduction' or the *epoché* is the method. This 'transcendental reduction' or the *epoché* are the way Husserl requires for uncovering the essential intentional structure of the person. Husserl insists that not only are the subject and object given in the *epoché's* inspection of an intentional act, but that the very *correlation* between the two of them is likewise given at the same time. And the correlation is given as belonging to the essential make-up of intentional acts and their intended objects. The object is given, the subject is given, the correlation is given.[44]

Through the epochê and the transcendental reduction Husserl sought to secure for science and for philosophy a secure foundation, "an immovable ground."[45] He maintained that there is a crisis in modern science[46] because "the scientific world, so far from providing the underlying reality and the underlying truth,

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[43] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18* (Toronto: University of Toronto Press, 2001), p. 260.

44 Ryan, William F.J.,"Viktor Frankl's Notion of Intentionality", pp 79 - 93, T. P. Fallon and Phillip Boo Reilly, *Essays in Honour of Bernard Lonergan S.J.* (State University of New York Press, Albany, 1987), p. 81.

[45] Bernard Lonergan, *Phenomenology and Logic,* p. 260.

[46] Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (Evanston: Northwestern University Press, 1970).

rests on the popular world and on popular notions that the scientist does not examine and does not criticize."[47] Hence emerges the need for a philosophy which would ground science and philosophy by suspending the 'natural attitude', or the common sense view of the world. The development of just such a "philosophy of philosophies" was also the task which Lonergan had set himself in writing *Insight*.[48] It was to be a secure base from which different philosophies could be compared and contrasted with one another, "a philosophy that is capable of performing an integrating function with regard to knowledge in general."[49]

3.3.4 *Intentionality in Lonergan and Husserl*

The last sub-section above attempted to give an introduction to the philosophy of Edmund Husserl whilst at the same time drawing some comparisons with the thinking of Bernard Lonergan. Of all the points which can be compared and contrasted in the theories of the two philosophers, by far the most fundamental are the notions of intentionality which underlie the cognitive theories of the two philosophers. William Ryan states: "Husserl and Lonergan share a common problematic: the structure of intentionality."[50] To expand on this a little more, it could be said that both Lonergan and Husserl are concerned in their philosophies with exploring and understanding the structure of intending, knowing, and objectivity. In the case of Husserl, this is exemplified by the fundamental question:

> How can we be certain of the correspondence between cognition and the object cognized? How can knowledge transcend itself [i.e. 'get beyond' itself] and reach its object reliably?[51]

Husserl calls his method for doing this his 'transcendental reduction' while Lonergan calls his the 'generalised empirical method'[52] or 'self-appropriation of interiority'. Both methods involve a type of 'intentionality analysis.'[53]

According to Ryan, one way of comparing the two theories of cognition, and

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[47] Bernard Lonergan, *Phenomenology and Logic,* p. 256.

[48] Bernard Lonergan, *Insight* (London: Longmans, 1957), p. 691.

[49] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 102.

[50] William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan", p. 173.

[51] Edmund Husserl, *The Idea of Phenomenology* (The Hague: Martinus Nijhoff, 1964), p. 15 .

[52] Bernard Lonergan, *Method in Theology*, p. 241.

[53] William F.J. Ryan, "The Transcendental Reduction According to Edmund Husserl and Intellectual Conversion According to Bernard Lonergan", Matthew L. Lamb (Ed.), *Creativity and Method, Essays in Honour of Bernard Lonergan* (Marquette University Press, Milwaukee, 1981), p. 401.

their underlying notions of intentionality, is to start with a comparison of Husserl's idea of 'intuition' and Lonergan's notion of assent or affirmation. For Husserl it is through 'intuition' that cognition attains what is real, whereas for Lonergan the real is grasped only after a polymorphic process of experience, understanding and judgment. Ryan explains Husserl's notion of intuition as follows: "All perception where the object appears in its self-giving presence is called intuition."[54] or, in other words, "intuition is the acceptance of the object offering itself to be looked at."[55] However, Husserl distinguishes between 'sense intuition' for empirical objects and 'categorical intuition' for ideal or mental objects. Thus both Husserl and Lonergan hold that there are levels of knowing brought about by the one primal, intending of the subject.[56] For both, the levels are functionally interlinked such that no one level by itself can give rise to full knowing. Thus while Husserl uses the term 'intuition' there is no way he can be justly accused of 'intuitionism'[57] . In other words, while his theory of knowing is based on a model of sense perception and particularly of seeing, for Husserl knowing is not simply a matter of having a good look at what is out there. He is not what Lonergan terms a "naive realist", even if Lonergan does describe Husserl's phenomenology as "a highly purified empiricism"[58].

For Husserl, then, knowledge of the real comes through a process of *Aunschauung*, translated as 'intuition', whereas for Lonergan, as will be shown in the next chapter, it comes as a culmination of a more complex process of experience, understanding, judgment and affirmation. That is, for Lonergan knowledge of objective reality is arrived at by a process of intelligent understanding and rational reflection. For Lonergan, knowing and intentionality are distinct but related concepts. Intentionality involves that first vital step in knowing, the outward thrust of the 'pure desire to know'.

For both Lonergan and Husserl, intentionality is an aspect of the transcendent nature of the subject. According to both philosophers, the human subject is self-transcendent; he is self-transcendent cognitively in reaching out to

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54 William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan", p. 173.

55 Ibid., p. 178

56 William F.J. Ryan, "The Transcendental Reduction According to Edmund Husserl and Intellectual Conversion According to Bernard Lonergan," Matthew L. Lamb (Ed.), *Creativity and Method, Essays in Honour of Bernard Lonergan* (Marquette University Press, Milwaukee, 1981), p. 410.

57 The Oxford School of intuitionism founded by H.A. Prichard (1871 - 1947) held that through direct perception in concrete cases we obtain knowledge of universals and of connections between them.

58 Bernard Lonergan, *Insight*, p. 415.

affirm or deny what is true or real. Lonergan would add that he is also self-transcendent morally in affirming or denying what is good or better. But by the latter the subject moves beyond pure and simple knowing. Lonergan says:

> Anything that we are above the biological level, and anything that we know is contained within a field of intentionality, a field that includes the sensitive, intellectual, judicial and voluntary.[59]

The culminating act of knowing for Husserl is the act of judgment which he calls a "complete satisfaction" of intentionality in its drive to come to a limited act of knowing upon a determined set of evidence. Thus he sees intentionality as sometimes being fulfilled, or coming to term, and sometimes as not. The culminating act for Lonergan is also the act of judgment. It too is a limited act of knowing, for it is the grasp of a 'fact', of something that happens to have a number of conditions fulfilled, 'the virtually unconditioned'.

So far the similarities between the theories of Lonergan and Husserl are quite significant. It has been shown that Husserl views perception and judgment as being functionally related, just as Lonergan's experience, understanding and judgment are also functionally related. However, according to Ryan, the question for Husserl is "how does the cognitional process get from perception to judgment?"[60]. It will be argued that Lonergan uses the 'operator'[61] of questioning to account for the progress of cognition from one level to the next. Without such an operator there would be no knowing process. He sees the questioning process as a manifestation of the inherent intentionality of the mind, and the 'pure desire to know'. Ryan says:

> The essential questioning, or intending of being, is the permanent grounding and the originating power that sets in motion the whole cognitional process.[62]

However, according to Ryan, "Husserl does not have an explicitly recognised operator ... to promote cognition from sensation to categorical activity."[63] The only comparable concept in the theory of Husserl is 'interest' *(Interesse)*. To Husserl, interest is an element in the very structure of intentionality and "*not just a*

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59 Bernard Lonergan, "Art", Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 210.

60 William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan", p. 178.

61 See the glossary in the appendix for a description of Lonergan's notion of 'operator'.

62 Ibid., p. 182

63 Ibid., p. 175.

psychologically describable advertance."[64] It is far from clear that one can regard questioning and interest as equivalent concepts. It is clear, however, from the two papers by Ryan quoted above that, once one has managed to break through the differences of terminology, the underlying similarities between the theories of cognition and intentionality of Lonergan and Husserl are quite significant and if either of them is lacking in anything, then it must be this absence of a definite operator in the theory of Husserl.

3.3.5 *Lonergan and Husserl - Further Considerations*

Does intentionality really exist? Does the concept of intentionality relate to a real capacity of mind?. "Is it really so"? Or is it, as philosophers like Dennett seem to maintain, just a simplistic or 'folk' way of describing something that will eventually be explained away by neuroscience? Intentionality is essentially an abstract philosophical concept. But then Lonergan would say that it is partly by means of such abstract concepts that we get to 'know' reality, that we get to the heart of the 'real'. Since intentionality relates to a capacity of mind its existence can only be construed and can never be observed directly. Anthony Kenny, for example, says:

> A capacity is not, in the ordinary sense of the word, something which occupies space at all..... My car's capacity to do 120 m.p.h. is something which it would be foolish to look for under the bonnet, as one might look for a carburettor under the bonnet.[65]

But this is not to deny the existence of such a capacity. One can never see sight, for example. One can certainly see the organ of sight, see the lens, the retina, the rods and cones, but these can tell one very little of the immense richness of the sense itself. One can certainly experience it in operation and in that way one can have limited empirical knowledge of it. To know it really, however, to objectify it, one has to think about ones experience of it, have insight into this experience, form abstract concepts of it and, finally, judge these concepts to be appropriate or not. Lonergan would say that we can similarly experience the intentional nature of the mind and can similarly think about it and rationalise about it. Besides, he would say, to deny the existence of intentionality is to deny the very process in which one is involved in thinking about it, for by the very act of focussing on the concept one is necessarily attending to it, and attending is already an intending.

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[64] Ibid., p. 180. Italics in original work.

[65] Anthony Kenny, *The Metaphysics of Mind* (Oxford University Press, Oxford, 1992), p.25 .

Lonergan, like Husserl quoted at the beginning of this section, deplores the disunity and confusion among contemporary philosophers:

> The scandal still continues that men, while they tend to agree on scientific questions, tend to disagree in the most outrageous fashion on basic philosophic issues. So they disagree about the activities named knowing about the relation of these activities to reality, and about reality itself.[66]

He singles out neglect of the 'subject' as the root difficulty of the present philosophical situation.[67] Lonergan would strongly disagree with the behaviourist trend in modern psychological methodology which, in the name of scientific objectivity, broke loose from philosophy in the late nineteenth century and sought, in Eidle's words,

> to eliminate the knowing subject from the study of the human subject who happens by virtue of his/her humanness to be a knowing subject.[68]

In general, normal scientific methodology is too reductionistic for a study of something as complex as the human person. On the other hand, the use of the more descriptive phenomenological scientific method, as applied to psychology, is still in its infancy. Eidle, however, has genuine doubts about its usefulness when he says:

> Although, it makes a giant step forward in countering the charge of reductionism levelled against experimental psychology, its approach blurs the subject/object distinction to the degree that makes it more difficult to mount a systematic examination of phenomena unique to the human subject.[69]

Lonergan also feels that "phenomenology fails to give due weight in its psychology and in its philosophy to rationality, to affirmation, to being as known through affirmation."[70]

Lonergan, like Husserl and Merleau-Ponty, does not accept that scientific ideas have any special status other than that of being abstractions from the 'real' world of everyday experience, which can thus be regarded as having ontological

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66 Bernard Lonergan S.J., *Method in Theology*, p. 20.

67 Ogden, Shubert M., "Lonergan and the subjectivist principle", p. 221.

68 William Reynolds Eidle, *The Self-Appropriation of Interiority* (Peter Lang Publishing, New York, 1990),p. 2.

69 Ibid., p. 4.

70 Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18* (Toronto, University of Toronto Press, 2001), p. 275.

priority over the scientific world. Lonergan, like Husserl, "does not aim to provide, by means of *a priori* philosophical arguments, the kind of knowledge of the world gained by the empirical sciences"[71] . The mathematical and scientific examples of knowledge which he employs in *Insight* and his other writings simply lend themselves to more accurate and unambiguous expression while at the same time giving clues to the dynamic structure immanent and operative in human cognitional activity, and providing a starting point for its investigation. F.E. Crowe says of Lonergan: "Science .... provided him with the most exact, accessible, and clear-cut illustration of what human knowing is." [72] Or, in the words of William Eidle, what Lonergan has done in *Insight*

> is to unravel a methodology inherent in the general process of human knowing that forms the undergirding substrate upon which all other more specialized methodologies for knowing have been constructed. These latter include the logical methods of common sense inference and specialised methodologies unique to the various natural, human and social sciences.[73]

The result of Lonergan's investigations was what he called his 'generalised empirical method' and which he later called his 'transcendental method'. This will be dealt with in detail in Chapter Five.

3.4 *The Philosophies of Lonergan and Marcel*

3.4.1 *Introduction - Gabriel Marcel (1889 - 1973)*

In comparing the theories of Bernard Lonergan with those of Edmund Husserl one was also inevitably gaining some insight into Lonergan's position in relation to that great philosophical movement of the twentieth century, Phenomenology. In this section, Lonergan's philosophy will be compared with that other major movement of the twentieth century, Existentialism. This will be considered from the viewpoint of the person and ideas of Gabriel Marcel. This section will attempt to show that there is a certain complementarity between the insights of Marcel and those of Lonergan, a complementarity which is important to the development of this work as a whole.

Gabriel Marcel, French philosopher, dramatist, and critic was born in Paris in

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71 Hammond, Howarth and Keat, *Understanding Phenomenology*, p. 38.

72 F.E. Crowe, *Lonergan*, (Geoffrey Chapman, London, 1992), p. 63

73 William Reynolds Eidle, *The Self-Appropriation of Interiority*, pp. 1,2

1889. His mother died when he was four. Raised in a home dominated by the cultured agnosticism of his father and the liberal, moralistic Protestantism of his aunt, and nurtured in a school system concerned only with intellectual achievement, he later sought refuge in a modified type of idealism. The shaking experiences of the First World War, during which he was an official of the Red Cross, "brought home to him the failure of abstract philosophy to cope with the tragic character of human existence."[74] Strauss and Machado comment that "such experiences only deepened his conviction that abstract thought misses the whole drama of existence."[75]

Marcel's conversion to Catholicism in 1929 was the culmination of years of patient metaphysical inquiry and the achievement of a personal quest. He remarked that his "life has been perpetually harrowed by a searching, often and for long stretches undertaken in darkness and anguish."[76] After his conversion, he continued to explore his major metaphysical and "metapsychical" concerns without feeling bound to conform to any finished philosophical system, or any prescribed habits of thought. In fact, throughout his career he had doggedly and courageously followed his own way. He was, for example, in the words of Seymour Cain,

> an existential philosopher decades before the term "existential" became fashionable, a phenomenological thinker long before phenomenology became a central concern of European philosophy, a religious thinker at a time when religion had not yet regained respectability in philosophical circles.[77]

Despite being a Catholic, he was not a Thomist. His philosophy is associated more with thinkers like Martin Heidegger, Jean-Paul Sartre, and Martin Buber. He regarded his philosophy as a " 'sensualistic' metaphysics"[78] . This means not only that themes such as embodiment, feeling, and sensation are integral to his thought, but that the theme of corporality or 'incarnation' lies at the very centre of his metaphysical quest.

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[74] Paul Edwards (Ed.), *The Encyclopaedia of Philosophy* Vol. 5 (New York: Macmillan Publishing, 1967), p. 153.
[75] Erwin Strauss & Michael Machado, "Gabriel Marcel's Notion of Incarnate Being" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle, ILL, Open Court Publishing Co., 1984), p. 124. Lonergan, to the contrary, would say that it is specifically through such abstract thought that one reaches the heart of the real, the heart of existence. Existence is a judgment one comes to regarding the reality of the being of an object.
[76] Gabriel Marcel, "An Autobiographical Essay" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), p. 3.
[77] Seymour Cain, *Gabriel Marcel* (London: Bowes & Bowes, 1963), p. 11.
[78] Gabriel Marcel, trans. Bernard Wall, *Metaphysical Journal* (London: Rockliff, 1952), p. 316.

Of principal interest to this study, however, is not only Marcel's approach to corporality but also his allied concept of 'having'. While the notions of corporality and having are dealt with only tangentially by Aquinas and Lonergan, both concepts must, one feels, be important to any philosophy of education which hopes to include in its ambit all aspects of the nature and development of the human person. The notion of habit, for example, and the allied notion of emotional or affective attachments or 'bonds' cannot, one feels, be adequately explained on a purely intellectualist model. Neither can Lonergan's cognitional operations function without the mediation of a material brain and central nervous system. Likewise a memory, whether intellectual, emotional, or both, cannot remain without being neurologically, and therefore physically, 'encoded'.

While a variety of texts will be referred to in this section, the main source of Marcel's thinking will be his book *Being and Having*[79] which he wrote partly in essay form and partly in the form of a diary or journal. It is a mode of exposition which appears to confirm Lonergan's opinion that "Marcel is not a systematic thinker."[80]

3.4.2 *Lonergan and Marcel*

To Marcel, it is with the real existing subject, the incarnate being who is in the world, that philosophy must begin. Strauss and Machado comment:

> The centrality of human embodiment was Marcel's unique discovery. It enabled him to to break new ground and turned him irrevocably in the direction of a concrete philosophy of existence.[81]

To Marcel, the experience of the inexhaustible concreteness of the existing world can be neither deduced, doubted, nor demonstrated. Existence is not a thing, a quality, or a discrete content of thought which can be isolated and pointed out; rather it is that in which the subject participates and from which thought begins its quest for meaning. Thus, one find's in Marcel the same emphasis on the subject as in Lonergan, the same insistence on concrete experience and data of sense as the starting point of cognition, and the same refusal to accept 'being' as an innate concept or idea, but rather as posited as something deeper, more immediate, more

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[79] Gabriel Marcel, *Being and Having* (Westminster: Dacre Press, 1949).

[80] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18,* p. 230.

[81] Strauss & Machado, "Gabriel Marcel's Notion of Incarnate Being" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), p.123.

immanent, more existential.

The difference of starting point, the fact that Lonergan bases the foundation of his philosophy on cognition while Marcel begins with the notion of existence, need not in itself pose a problem. After all, Lonergan and Aquinas also differ radically in their foundations - Aquinas begins with metaphysics while Lonergan starts with cognition, yet many would hold that their philosophies are highly compatible. To Lonergan, metaphysics and cognition are merely two points on the same circle, "the ontological and the cognitional are not incompatible alternatives but interdependent procedures."[82] One can chose whichever point one wants as a starting point for philosophising and still end up with the same philosophy and the same reality. Existence, one could say, is just another starting point on the same circle. Lonergan's cognitive scheme reaches existence at the point of judgment, and in answer to the question, *"an sit?"* It is reached in a cognitive assent to the real and the true. Marcel enters the circle at this point of existence and develops his metaphysics and his philosophy in general on this basis.

To Marcel, however, the assurance of existence which one has is not of the intellectual order but is an outcome of one's direct participation in the world via sensation and feeling. To Lonergan it is the fact that the human mind is made for being. To Lonergan, one's grasp of existence stems from what he terms the 'notion of being'. By this he means that, since the mind cannot possess the 'idea of being', which embraces all possible knowledge of all possible being, and yet, in a sense, is made to possess it (is 'grounded' in it), it is left with a struggle for, an orientation towards, an unfulfilled desire for, the 'idea of being' which he terms 'the notion of being'. This notion of being is empty of content, it is simply a thrust, an orientation. It "is not any product of the knowing process but is that knowing process in its pure heuristic intentionality."[83] To Lonergan, the human mind reacts to the presence of an objective being at two levels, giving rise to two types of knowledge. The first level man has in common with the animals and is purely experiential and instinctive. This corresponds to what Marcel terms his 'first level of reason'. Marcel's use of the word 'reason' for this level of human cognition is unfortunate as it would appear that what Lonergan and Marcel are describing are otherwise very similar on a

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82 Bernard Lonergan, "Insight: Preface to a Discussion", *Collected Works of Bernard Lonergan*, F.E. Crowe & R.M. Doran (Eds.), (University of Toronto Press, Toronto, 1988), p. 144.

83 Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Dublin, Gill & Macmillan,1974), P.100.

phenomenological level. Marcel, like Lonergan, also recognises a higher form of reasoning but Lonergan places greater emphasis on the role of assent in putting one in contact with the 'heart of the real', with being, with existence. Finally, Lonergan confirms his philosophical method by a process of 'self-appropriation of cognitive interiority', which is itself a type of existential grasp of the operations of one's mind.

Despite these latter differences of emphasis between the theories of Marcel and Lonergan, there are still clearly large areas of agreement between the two philosophers. For example, Marcel's contention that, because sensation and feeling are tied up with the body, one's knowledge of existence is closely tied up with the fact of one's being incarnate is a contention that would have to be accepted by Lonergan, since Lonergan's notion of cognition also has sensation and experience for its starting point. Lonergan himself affirms this when he says:

> You cannot account for perception without one's consciousness of one's body. In other words, the perceiving subject is spatiotemporal; we have a feeling of space and time, so to speak, in our bodies. This is what Marcel would call incarnation, the incarnate subject: not just the idealist subject or any merely observing subject, but the incarnate subject. The subject has to have a body to perceive. The body enters right into consciousness.[84]

For the same reason, Lonergan would have to be understanding with Marcel's claim that incarnation is the absolute starting point of an existential philosophy. Even when Marcel goes on to say that it is on the analogy of one's experience of one's body that the world is understood, and that the world exists for one only in the measure that one is related to it in the manner that one is related to one's own body, Lonergan would still not part company with him, since Lonergan views insight or understanding as being into data of sense mediated by imagery or *phantasm*. However, it is difficult to see how Lonergan's 'pure desire to know', the desire to know everything about everything, his 'notion of being', can arise solely out of experience of corporality. If, as appears probable, Marcel actually means that the lower form of reason is responsible for the activation of an already existent propensity to insight and critical judgment, then his difference with Lonergan would be only one of emphasis.

[84] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, pp. 271 - 272.

Marcel's stance has all the appearances of that of an empiricist rather than a critical realist. To Marcel, the body is the touchstone of existence. It is an existent "such that, if I were to deny it, any assertion by me that anything else existed would become quite inconceivable."[85] These apparent differences of emphasis, however, do not prevent one from borrowing from Marcel just those notions which are absent from Lonergan, provided they do not form part of the very limited area of disagreement between the two philosophers, and provided it can be demonstrated that no contradiction is thereby introduced into the philosophical scheme so far constructed in this study.

Marcel would say that, as one is not even ideally separable from one's body, one is likewise inseparable from one's situation. Those habitual surroundings and historical conditions which shape one's life actually form one's horizon and, as such, enter into the very fibre of what one is. Insofar as one recognises that one's situation enters into the constitution of one's being, and hence that one is not fully able to abstract oneself from it completely or view it with the objective detachment of a spectator, one may speak of the family which nurtured one, or the illness that shaped one, as having a certain intimate, personal character.

3.4.3 *Marcel's Notions of Being and Self*

In his *Metaphysical Journal,* Marcel spells out the meaning and bearing of his philosophical enquiries, saying: "We are concerned essentially with determining the metaphysical conditions of personal existence."[86] His main concern, in other words, is with "the personal", with the "fundamental experiences inscribed in the human condition." His is a metaphysics of the human condition of which the central question is "Who, or what, am I?". His aim is to identify "that in virtue of which we are what-we-are and without which we would not be what-we-are."[87] In other words, he seeks the metaphysical conditions of what it is to be human, what it is to be a person, what it is to be a self. All of which must include the recognition of the human being's ceaselessly self-transcendent orientation towards the world and towards truth, which is Lonergan's 'pure desire to know' or 'spirit of wonder and enquiry'.

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[85] Gabriel Marcel, *The Mystery of Being*, quoted from Schillp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (LaSalle, ILL: Open Court, 1984), p. 123.

[86] Gabriel Marcel, *Metaphysical Journal* (Chicago: Henry Regnery Co., 1952), p. 255.

[87] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), p.313.

Perhaps the best approach to Marcel is to consider what one means when one speaks of "My" self. Each individual can say that he is "a" self, "a" person, "a" human being. But what is a human being? To know that, one must ask the fundamental metaphysical questions "What is being?", "Does Being really exist?" One cannot bring one's mind to bear on such a question without raising the equally fundamental objection "But what is this "I" which is making the enquiry?" "Who am I, I who question Being? ... How can I be assured that I am?"[88] After all, unless the being of the asker is assured, nothing he understands, expresses, or judges can be of any relevance. But when what is being sought is self, more specifically "My" self, then the seeker and the sought-for are one and the same.

Thus, Marcel defines the fundamental, apparently inescapable, epistemological paradox which so many philosophers before him had sought to resolve. Like Lonergan, he simply incorporates the problem into his definition of what it means to be human: "we are beings who, in our very being, are in quest for ourselves."[89] Man is fundamentally a seeker. As a seeker, his condition is is that of not-knowing. Like Lonergan, then, he would say that man's quest is to know; man's central drive is the 'pure desire to know'. In Marcel's terms, each person is a 'being-on-the-way' *(être-en-route, être-en-marche),* whose condition, to use Pieper's term, is that of '*status viatoris',* a wayfarer, a voyager, a pilgrim. Thus Lonergan is able to express the existentialist stance as: "One is ever being a man or becoming a man; one does not achieve it."[90]

In one's very seeking, in one's quest, in one's questioning, one manifests oneself in what Marcel calls an "exclamatory consciousness of self ... of existing."[91] One's very framing of the question "Who am I?" fulfils the necessary conditions which allows one to affirm "I am a human being!"

> I who ask, "Who am I?" *am* that very quest for assuredness about myself. In order to utter the question, I must *be*, and thus I *am* this assuredness, this emphasis I give myself in the affirmation "I exist!"[92]

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[88] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), pp. 313 - 314.

[89] Ibid., p. 314.

[90] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18,* p. 224.

[91] Gabriel Marcel, quoted in Richard M. Zaner, "The Mystery of the Body-Qua-Mine," p. 314.

[92] Ibid.

Thus, in Marcel, as in Lonergan, one finds the centrality of the question, a question whose ultimate 'quest' is being in all its fullness. Lonergan would say that in the 'self-appropriation' of one's own interiority one affirms one's existence as a knower. But Lonergan's theory of knowing is really a theory of coming to know,[93] of seeking for knowledge, so one's affirmation of oneself as a knower is really an affirmation and assent to oneself as a seeker, as one on a quest, as a questioner, which is basically Marcel's position.

Pausing for a moment to summarise what has been said above: Lonergan starts from the standpoint of cognition and derives his metaphysics from there. Marcel like Aquinas starts with metaphysical considerations. Unlike Aquinas, however, Marcel's starting point is that which is first given, the human being, the embodied self, rather than the notion of 'being as being'. His would appear to be a typically existentialist stance. But because he starts with the human person as seeker and knower, he is of necessity, like Lonergan, also immediately immersed in cognition. However, because he starts with the first 'self' given, "My" self, it follows that he is also immediately immersed in considerations of embodiment, corporality, or "incarnation", the importance of which Lonergan, for all his innovation in the realm of affectivity, has in the opinion of this author underestimated or neglected.

As was already mentioned when comparing the theories of Lonergan with those of Husserl, the point of a comparison of the theories of two philosophers like Marcel and Lonergan is not to prove that Lonergan is right and Marcel wrong, nor even that Lonergan's method and approach is better than that of Marcel. Husserl, Marcel and Lonergan all take different approaches to philosophy (as did Lonergan and Aquinas) yet their findings may still be complementary. However, because the foundation of Lonergan's system lies in the 'appropriation' of the cognitive functioning of the individual philosopher himself, his may be said to be a 'philosophy of philosophies', a philosophy best positioned to act as unifier, integrator, and evaluator of the philosophies of others. Hence, Lonergan's is the template, the standard, the model, to which these others are necessarily to be compared.

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[93] See Section 5.2 of this study, and also Tom Daly, "Learning Levels", William Danaher (Ed.), *Australian Lonergan Workshop* (University Press of America, New York, 1993), p. 233.

3.4.4 *Body and Self*

Lonergan's definition: "The subject is a substance that is present to itself, that is conscious."[94] would be quite acceptable to Marcel. However, Marcel would add that when one attends to this self or subject given, "My" self, one finds that it has a physical aspect to it, it is embodied, it is 'incarnate'. Furthermore, this "body-subject ... is the point where I become rooted in the world." To quote Marcel more fully:

> What I see as most important is that the body-subject (this expression does not satisfy me completely, but I think it is unavoidable) is really the point where I become rooted in the world; I am in the world and not simply in front of it, as if the world were merely a spectacle.[95]

The problem then lies in the status to be attributed to this body: is this body "me" or is it "mine"? If the body is "me" then what is this "I" which is attending to the body and asking questions about it? If it is merely "mine", as my car is mine, then why can one not dispose of it as one can dispose of an old car? If somehow one does succeed in disposing of one's body, the "I" ceases to exist forthwith. To give another example, the child in class may complain to the teacher "He pinched my bottom." or, simply. "He pinched me." While the first complaint gives more information, the second statement is automatically implied in the first.

While it is easy to see that "mine" and "me" are quite separable for most senses of the word 'mine', and that a special status certainly seems to be attributable to the situation regarding one's body, nevertheless in the use of the word 'my' as applying to most external possessions there is an ascertainable hierarchy of what might be termed 'psychic distance'. Compare, for example, "He kicked my schoolbag" with "He kicked my friend". The objection may be made that "my" is here used in two different senses. In the first case, it denotes a possession, something that may be easily disposed of, whereas in the second case one is denoting a relationship. My friend cannot be viewed as a possession, although I can regard myself as 'having' the relationship of friendship with my friend. But there is a real sense in which one can say "He who kicks my friend, kicks me." In the case of my schoolbag, or my book, or my cassette player, I care for the object. In the case of my friend I care both for the object and the relationship. One can certainly agree

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[94] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 83.

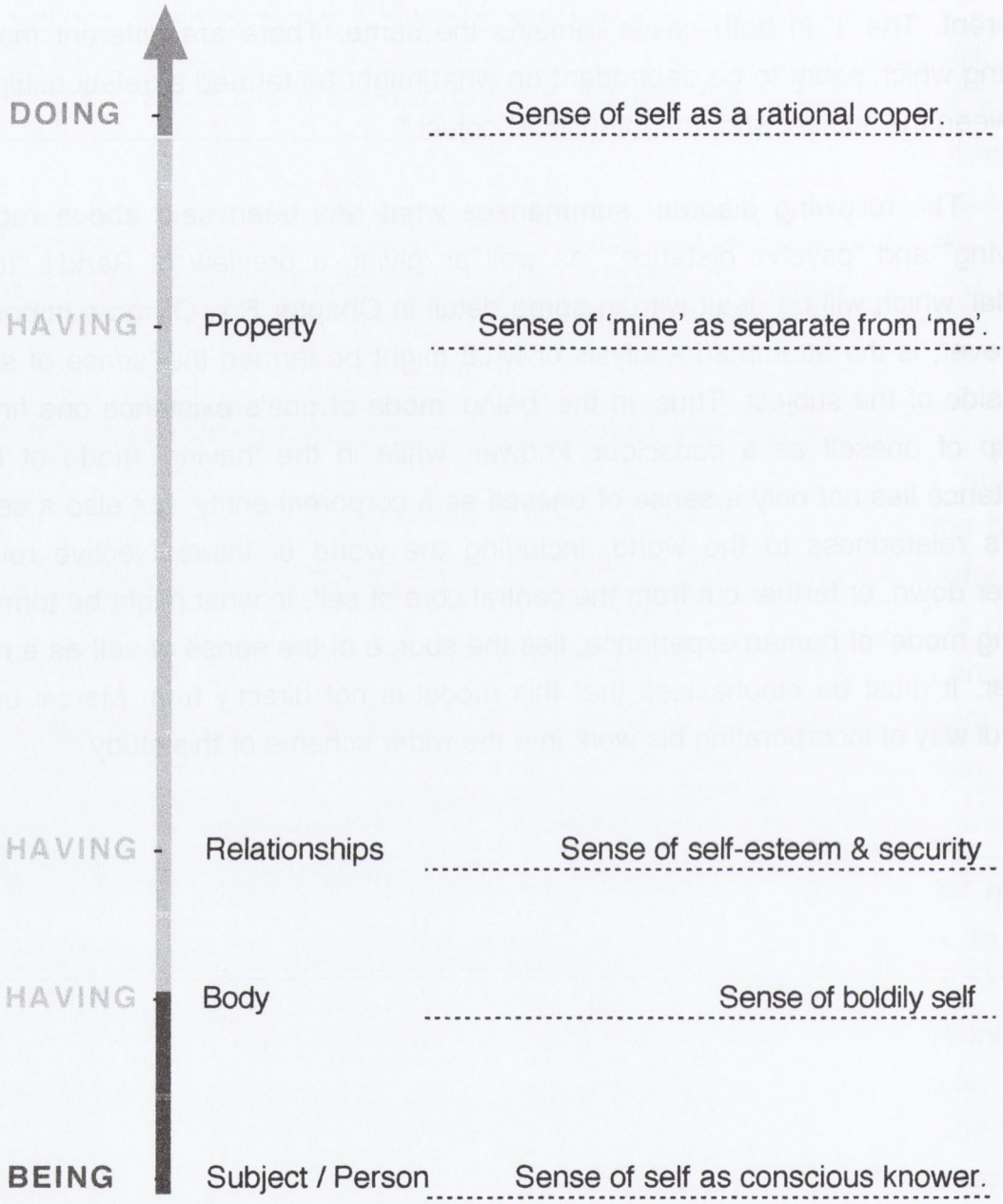
[95] Gabriel Marcel, "Reply to Garth J. Gillan", in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle, ILL, Open Court Publishing Co., 1984), p. 523.

with Martin Buber that 'I-it' is different from I-thou', but it is because the relation is different. The 'I' in both cases remains the same. There are different modes of having which seem to be dependent on what might be termed a 'relationship bond' between the subject and the intentional object.[96]

The following diagram summarises what has been said above regarding "having" and "psychic distance", as well as giving a preview of Rand's 'triarchic model' which will be dealt with in some detail in Chapter Six. Of more importance, however, is the attempted analysis of what might be termed the 'sense of self', on the side of the subject. Thus, in the 'being' mode of one's existence one finds the grasp of oneself as a conscious knower, while in the 'having' mode of human existence lies not only a sense of oneself as a corporeal entity, but also a sense of one's relatedness to the world, including the world of intersubjective relations. Lower down, or farther out from the central core of self, in what might be termed the 'doing mode' of human experience, lies the source of the sense of self as a rational coper. It must be emphasised that this model is not directly from Marcel but is a useful way of incorporating his work into the wider scheme of this study. [97]

[96] This notion of a relationship bond is developed in Section 17.9 of this study.

[97] This model of *being*, *having*, and *doing*, will be returned to again in Chapter Six, and from there it will be used throughout the later parts of this work.



3.4.5 *Marcel's Notion of Having*

All having reveals what Marcel terms a *qui-quid* relation; that is, having is essentially a relation between what is had *(quid)* and the haver *(qui)*, such that "the haver is the center of inherence for the had." [98] Marcel, moreover, asserts that where the *qui* refers to oneself as possessor, then the *qui-quid* relation is foundational or

[98] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), p. 319.

prototypical; that is, one's notion of Tom or Mary as having or possessing comes originally from the notion of *oneself* as possessor. He explains:

> This is all perfectly simple. The position becomes more complicated when we observe that any assertion about having seems to be somehow built on a model of a kind of prototypical statement, where the *qui* is no other than *myself*. It looks as if having is only felt in its full force, and given its full weight, when it is within 'I have'. If a 'you have' or a 'he has' is possible, it is only possible in virtue of a kind of transference.[99]

Marcel, then, views the *quid*, the something possessed, as contained or included within the sphere of *pouvoir* (having the power to) and *disposer de* (having the disposal of) and it is this sphere which constitutes the *qui-quid* relation of having. Unlike other possessions, one's dog for example, one has immediate control over one's body:

> My body is that by means of which my "I can" is most immediately actualized - that by means of which I "rule and govern" ... . If I want to pick up an object, I do so "with" my body.[100]

Other objects of possession, however, are external to me - spatiotemporally distinct from me - but my body is not. Still, the question of possession remains: my body is also mine, but in what further sense over other external possessions?

This containing or *contenir* is not merely a matter of spatiality, however, but more importantly one of potentiality: "to contain is to enclose; but, to enclose is to prevent, it is to resist, it is to be opposed to what can overflow, be spilled, escape, etc."[101] Thus, through this *pouvoir* we are able to detect a kind of "suppressed dynamism" at the heart of the having relation that clearly shows the meaning of the transcendence of *qui* over *quid*. Zaner explains:

> The relation is from *qui* to *quid*, and it is a relation effected by the *qui*; the pouvoir is inward to, or within, the *qui*.[102]

But to have is "to have to oneself" or "to keep to oneself". The *qui* has the *quid* to himself in opposition to the other as a potential haver. The relation of *qui* to *quid* is possible only if there is an "opposition of what is without and what is within."[103] Zaner

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[99] Gabriel Marcel, *Being and Having* (Westminster: Dacre Press, 1949), p. 159.

[100] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), p. 317.

[101] Gabriel Marcel, *Being and Having* (Westminster: Dacre Press, 1949), p. 159.

[102] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), p. 318.

[103] Gabriel Marcel, *Being and Having* (Westminster: Dacre Press, 1949), p. 160.

again explains:

> As such, there is an "inward dialectic" in all having, for something is had only so far as it can be exposed, given away, lost, or disclosed - but also only so far as the had is not actually disposed of.[104]

Marcel regards this tension between a 'within" and a "without" as essential, and he defines it by the disposability of what is had. The had can be shown or disposed of, but in order to remain a haver, the haver must keep the had while at the same time maintaining its disposability. Hence having is a relation that is always in need of being recognised or acknowledged by others who, though they do not maintain this relation to the *quid*, could do so. All havers who have a had, have in addition the possibility of getting rid of it, which means that havers have the had only in so far as they manifest themselves as havers before non-havers.

Having, then, is a tensioned reference to the other-qua-other. Dialectically this reference to the other is what constitutes the haver as haver. But the "other," Marcel points out, need not be another person; it may be oneself:

> In so far as I conceive myself as having in myself, or more exactly, as mine, certain characteristics, certain trappings, I consider myself from the point of view of another - but I do not separate myself from this other except after having first implicitly identified myself with him. When I say, for instance, 'I have my own opinion about that,' I imply, 'My opinion is not everybody's'; but I can only exclude or reject everybody's opinion if I have first, by momentary fiction, assimilated it and made it mine.[105]

Precisely to the extent that having is constituted by this tension between the *qui* and the *quid*, between a "within" and a "without," and, more fundamentally, between the self and the other-*qua*-other, the relation of having is essentially *threatened*. For so far as what is had is a "without" for a "within" and is maintained constantly as a "without" (as disposable), the had is essentially open to the possibility of being lost, stolen, destroyed, plagiarised, and the like. This threat is intrinsic to having, Marcel believes, and reveals itself as the "hold" of the other *qua* other:

> There is certainly a two-fold permanency in having: there is the permanency of the *qui*, and the permanency of the *quid*. But this permanency is, of its very nature, threatened. It is willed, or at least

[104] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle ILL, Open Court Publishing Co., 1984), pp. 318 - 319.

[105] Gabriel Marcel, *Being and Having*, Katharine Farrer (Trans.), (Westminster: Dacre Press, 1949), p. 161.

> wished, and it slips from our grasp. The threat is the hold exerted by the other *qua* other, the other which may be the world itself, and before which I so painfully feel that I am I. I hug to myself this thing which may be torn from me, and I desperately try to incorporate it in myself, to form myself and it into a single and indissoluble complex. A desperate, hopeless struggle.[106]

The domain of having thus appears to Marcel to be a domain of despair. That the had is essentially threatened means that the haver is caught up in constant anxiety over the had; the haver is for ever on the lookout for dangers to it and thus seeks to "insure" a permanent relation to it. Dialectically, however, the more the haver seeks to secure the had against threats, the more the haver both becomes cognisant of the threats and seeks to secure against them.[107] Thus, Marcel expresses on an ontological level what Bowlby deals with on an emotional and interpersonal level. The anxiety resulting from insecure childhood attachments or emotional bonds is fundamentally the same anxiety which the human being confronts on all levels of what this study terms 'the *having* mode of existence'. One must then ask, if all having is by nature "essentially threatened" or insecure due to this tension between "within" and "without", qui and quid, having and had; is there, one might ask, such a thing as a secure relationship at all? This will be dealt with in more detail in Chapter Fourteen.

Marcel also maintains that the possession of one's body is not the possession of a mere instrument:

> I am not treating my body as an object, or, to employ my own terminology ... , as an instrument; since this is connected with the fact that every instrument is actually the prolongation of a certain power of the body, then if this power itself is treated as instrument, we find ourselves caught in an infinite regress.[108]

Accordingly, Marcel concludes that one's body is not something one has in the normal sense of having. On the contrary, it is the "prototype of having" or of "instrumentality." One's "body-qua-mine" is precisely what makes any instrumental having at all possible. Zaner explains:

> It is by virtue of which, by means of which, there are "objects" (and hence instruments, and hence things possessed) in the first place.

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[106] Gabriel Marcel, *Being and Having*, Katharine Farrer (Trans.), (Westminster: Dacre Press, 1949), pp. 162 - 163.

[107] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle, ILL, Open Court Publishing Co., 1984), p. 319.

[108] Gabriel Marcel, "Reply to Garth J. Gillan", in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel,* p. 523.

Thus the having that pertains to my body-qua-mine is *primordial*.[109]

Although he is never quite satisfied with his conclusions, Marcel is forced to say that so far as there is a relation of having between oneself and one's body (however prototypical that relation may be), there must be some mediation involved, although not an instrumental mediation. 'Mineness' is essential, but it is not defined by instrumentality; the closest Marcel can come in his efforts to penetrate this phenomenon is to identify what he terms "sympathetic mediation."[110] By this Marcel means that there is in all possession a "felt kernel", a nucleus of feeling which is essential to any feeling of having. The origin and prototype of this feeling is one's relationship with one's own body: "this nucleus is nothing other than the experience, in itself non-intellectualizable, of the connection by means of which my body is mine."[111]

In conclusion, one can say that for Marcel one's body is not a possession in the normal sense of the word, but is the prototype of all possession. The bond with one's body is so central and so intimate that there is a sense in which one can say "I am my body;" there is a sense, in other words, in which the 'subject' is more accurately termed the 'subject-body'. This needs clarification, however:

> It can be seen straight away that *my* body is only *mine* inasmuch as , however confusedly, it is felt. The radical abolition of coenesthesia, supposing it were possible, would mean the destruction of my body in so far as it is mine. If I am my body this is in so far as I am a being that feels. It seems to me we can be even more exact and say that I am my body in the measure in which my attention is brought to bear on my body *first of all*, that is to say before my attention can be fixed on any other object whatsoever. Thus the body would benefit from what I may be allowed to call an absolute priority.
>
> I only am my body more absolutely than I am anything else because to be anything else whatsoever I need first of all to make use of my body.[112]

These theories of Marcel seem to be supported by neurological research on so called 'phantom limbs' and other organic conditions. Marcel's notion of 'incarnation' and his dependent notion of *having* seem to be what Sacks is seeking

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[109] Richard M. Zaner, "The Mystery of the Body-Qua-Mine" in Schilpp & Hahn (Eds.), *The Philosophy of Gabriel Marcel* (La Salle, ILL, Open Court Publishing Co., 1984), p. 321.

[110] Gabriel Marcel, *Metaphysical Journal* (London: Rockliff Publishing, 1952), pp. 246 - 247.

[111] Gabriel Marcel, *The Mystery of Being*, Vol. 1 (London: Harvill Press, 1951), p. 97. One might argue that there is inherent in Lonergan's 'notion of being' not only an orientation to know all there is to know, to grasp the 'idea of being', but also a drive or orientation to possess, to take hold of, to take in, all that is there to be assimilated, the fulness of being.

[112] Gabriel Marcel, *Metaphysical Journal* (London: Rockliff Publishing, 1952), p. 243.

in the following quotation:

> It was clear to me that we needed a 'neurology of identity', a neurology which could explain how different parts of the body (and their space) could be 'owned' (or 'lost'), a neurological basis for the coherence and unification of perception (especially after this has been disturbed by damage or disease). We needed a neurology which could escape from the rigid dualism of body/mind, the rigid physicalist notions of 'algorithm' and 'template', a neurology which could match the richness and density of experience, its sense of 'scene' and 'music', its personeity, its ever-changing flow of experience, of history, of becoming.[113]

"My" as related to "my body" denotes not a possession which may be disposed of but a relationship, a psychic and emotional bond. In fact it is the closest of all cognitive and emotional bonds. Is it this bond intentional? The answer must be yes; to the degree that it is conscious it is also intentional. But it differs from other intentional bonds in that the bond exists also at preconscious, unconscious and somatic levels, with the conscious level 'sublating' each of the others; thus it retains all of the characteristics of the others. Hegel's notion of 'sublation' as adapted and used by Lonergan can be very useful in clarifying the special relationship to one's body. Just as the different levels of cognition are each sublated or incorporated into the next, carrying with them all of the earlier characteristics of each of the lower levels, but in a form which is totally integrative or assimilated into the new level, so also the experienced reality of embodiment with all its sensory and somatosensory aspects is also sublated to each of the cognitive levels. It must be pointed out that this last paragraph deals with matters which were not addressed by Marcel, but which are important in the development of the notion of 'intentional bond', as used in this study.[114]

3.4.6 *Lonergan and Existentialism - A Summary*

Marcel contributes to this study his developed notions of corporality and of having. He also reinforces the existing notion of man as a being in *"status viatoris"*. However, according to Lonergan: "existentialism is a turning away from the universal, the necessary, and the abstract to the unique individual, the contingent,

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[113] Oliver Sacks, *A leg to Stand On* (London: Picador, 1991), pp. 177-178

[114] See Section 14.9

the concrete, the de facto."[115] Existentialists like Marcel do not emphasise concepts and judgments. Concepts and judgments are what you talk about; they are not what you *are*. Lonergan explains that "the Scholastics deal in concepts and judgments, in definitions and truths, and in what they can infer from them." Existentialists like Marcel, however, "are concerned with the man who is the source of the concept, the man who is the source of the judgment. They are concerned with foundations, with the ground, with the origin, with the source."[116] For this reason, Lonergan can say that "Marcel is no more concerned than the others with propositional truth."[117] Because of this, while Lonergan admits that there is much of real value in existentialist philosophies, like that of Marcel, "it cannot simply be taken over whole .. and put right into Scholasticism." To quote Lonergan more fully:

> While there is a great deal in existentialism on which we can and should practice the patristic maxim of despoiling the Egyptians, taking what is good in it and bringing it into our own work, we cannot just take it over wholesale without a critical appraisal and a revision in some fundamental points.[118]

Because of Lonergan's relative neglect of corporality and having in his own theories, this study will "take what is good" from Marcel by way of compensation. This last section has argued that with "a critical appraisal and a revision in some fundamental points," this can be done without injury to, or even distortion of, Lonergan's overall scheme.

3.5 *The Philosophies of Lonergan and Dewey*

3.5.1 *John Dewey*

John Dewey (1859 - 1952) ranks as one of the most influential of America's philosophers. Robert Dewey (no relation) explains that this influence stems in part from "the originality of his mind, the breath of his interests, and his capacity to synthesize materials from diverse sources."[119] In addition, he was blessed with a long life and extraordinary energy. He published more than 50 books, about 750

[115] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18* (Toronto, University of Toronto Press, 2001), p. 227.
[116] Ibid., p. 225.
[117] Ibid., p. 227.
[118] Ibid., p. 229.
[119] Robert E. Dewey, *The Philosophy of John Dewey* (The Hague: Martinus Nijhoff, 1977), p. ix.

articles, and at least 200 contributions to encyclopaedias.

Dewey received his early education in the public schools of Burlington, U.S.A., following which he entered the University of Vermont., where in the course of his undergraduate work he became acquainted with Professor H.A.P. Torrey, an exponent of a new realism common at the time. Following graduation in 1879 he taught for two years in a high school in Oil City, Pennsylvania, and one year in a country school in Charlotte, Vermont. After this three year introduction to educational practice, he returned to his alma mater for a year of private study in philosophy with Professor Torrey. The next year, 1882, he went to John Hopkins University to do graduate work, and by 1884 he had completed the requirements for a Ph.D. degree, presenting *The Psychology of Kant* as his dissertation.

Butler[120] claims that at John Hopkins University Dewey came under three different influences, in addition to the realism of Torrey. These influences constituted the matrix, or framework, in which the formative development of Dewey as a budding philosopher took place. The chief of these was George Sylvester Morris (1840 - 1889) who was an ardent disciple of Hegel and in close sympathy with English idealism. The next strongest influence was that of G. Stanley Hall with his experimental approach to the study of psychology. The third influence at John Hopkins "which strikingly did not apparently touch Dewey much at the time,"[121] was Charles Sanders Pierce who was lecturing in logic. In 1884 Dewey left John Hopkins, following Prof. Morris to the University of Michigan.

Dewey, at first, had strong idealist sympathies, but by 1894, when he became head of the Department of Psychology, Philosophy, and Education at the University of Chicago, he had forsaken the metaphysics of idealism and he

> was on his way to developing an empirical version of idealism in which the nonmechanical patterns of that point of view still persisted, but in which also there was no metaphysics of a Universal Mind, embracing all in a unity of being.[122]

Parallel to this, he came to hold that individual 'selfhood' could be described in a thoroughly behaviouristic fashion. He dropped the notion of the self as a spiritual

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[120] J. Donald Butler, *Four Philosophies and their Practice in Education and Religion* (New York: Harper & Row Publishers, 1968), p. 371.

[121] Ibid., p. 372.

[122] Ibid.

ego or soul, and no longer regarded the individual will as an efficient cause which produces changes in the events of the world. Instead, he began to think of the individual as a concrete social phenomenon whose acts are part of a social stream of interactivity, and not of individually caused free will. Thus, he placed a strong emphasis on the cultural environment as having pervasive influence in forming the ideas, beliefs, and intellectual attitudes of individuals.

Quite early on in his studies, Dewey, like Piaget, was attracted to the notion of the organic, and the consequent interdependence and interrelated unity of all things. In Hegel and in the idealists, he discovered the most profound philosophical expression of this emotional and intellectual craving. His lifelong rejection of dualisms, his search for mediating ideas, is sometimes traced to the remnants of this Hegelian influence. He later rejected not only the dualism of the mind and body, but he also rejected any but a functional distinction between fact and value, means and ends, thought and action, organism and environment, man and nature, individual and society. From this organic perspective, which emphasised process and change, all distinctions are functional and relative to a developing unified whole.[123] Hence, this perspective could be used to oppose the static and the fixed and to break down the hard and fast dichotomies and dualisms that he claimed had plagued philosophy for so long. Long after Dewey had drifted away from his early idealism, his outlook continued to be shaped by this intellectual bias for a philosophy based on change, process, and dynamic organic interaction.

Dewey remained at the University of Chicago for ten years, during which time he consolidated many of his diverse interests and ideas. As well as his academic responsibilities, he took a keen interest in the social and economic problems of his day. At Chicago, he helped found the famous laboratory school, commonly known as The Dewey School, which served as a laboratory for testing and developing his psychological and pedagogical hypotheses. Some of his earliest and most important books on education were based on lectures delivered at the school: *The School and Society* (1900) and *The Child and the Curriculum* (1902). The school, however, became a source of friction between Dewey and the university administration, and Dewey left Chicago for the University of Columbia in 1904, where he remained until his retirement in 1930.

[123] See the Glossary of this study for a consideration of the notion of functionalism.

Through the Columbia Teachers College, which was a training centre for teachers from many countries, Dewey's educational philosophy spread throughout the world. Between 1919 and 1921 he was invited to lecture in places as far afield as Tokyo, Peking, and Nanking. His most popular book, *Reconstruction in Philosophy*, is based on lectures delivered at the Imperial University of Japan.

3.5.2 *Dewey's Philosophy*

As already mentioned in the Introduction to this study, Dewey equates philosophy with educational theory, claiming that "the most penetrating definition of philosophy that can be given is ... that it is the theory of education in its most general phases."[124] He goes on to add that not only philosophy but the human sciences also are in some part intrinsic to educational theory and practice. This implies that philosophy and the human sciences themselves may also benefit from this engagement with education in the way of new ideas and insights that may accrue from that engagement. If educational theory needs to be responsive to developments in the sciences, then it follows that education in its turn is entitled to treat such developments critically and with circumspection. It is even entitled to suggest hypotheses and initiate developments of its own in these fields. Dewey saw this as being particularly true with regard to philosophy.

Dewey is generally classed as a pragmatist, as far as his philosophy is concerned. In common with other pragmatists - Francis Bacon, Charles Sanders Peirce, William James - he holds that "experience is the proving ground in which the worth of things is made plain."[125] Thus, the test of a good philosophy, for example, would be how well it translates into an effective pedagogy. In other words, he saw education as a laboratory for the testing of the human significance of philosophical theories and distinctions, as well as a privileged vantage point from which to engage in philosophising. Thus philosophising about education is central to the needs of both education and of philosophy itself, and is part of a process in which education may begin to take its rightful place among the natural sciences.

The key concept in Dewey's philosophy, then, is experience. He charged that

[124] John Dewey, *Democracy and Education* (Toronto: Macmillan, 1916), p.329.
[125] J. Donald Butler, *Four Philosophies and their Practice in Education and Religion,* p. 377.

the idealists, in their preoccupation with knowledge and knowing, distorted the character of experience. To Dewey, man is primarily a being who acts, suffers, and enjoys. He is a being of 'doing'. His definition of experience is much wider than that of Lonergan, including in its higher form the cognitional and the rational as well.

At the highest level of generality, Dewey's philosophical orientation can also be characterised as a kind of "naturalistic empiricism"[126]. It has already been mentioned that, like Piaget, he took an organic perspective which emphasised process and change. From this perspective all distinctions are functional and relative to a developing unified whole. This organic perspective, as was already said above, was also used to oppose the static and the fixed, and to break down the hard and fast dichotomies and dualisms that had plagued philosophy, like mind - body, means - end, fact - value.

While he clearly regarded himself as an empiricist, he was careful, again, to distinguish his notion of experience not only from that of the idealist tradition, but also from empiricism of the classical British variety. In contrast to these, Dewey fashioned a notion of experience wherein action, enjoyment, and what he called "undergoing" were integrated and regarded as equally fundamental. To him the felt immediacy of experience was basic and irreducible, somewhat akin to the stance taken by existentialists like Marcel and phenomenologists like Husserl. To Dewey cognitive experience both arose from and was conditioned by this first, more fundamental, and basic experience. For Dewey there is no intentionality of the mind, "no simple intersection of knower and object, from which direct knowledge results."[127] Butler explains:

> It is only as we are engaged in active experience with things that qualities come to light in such a way that we "know" them. This is not a purely subjective affair, however. We ourselves are in experience when this happens and the objects are also in experience; and it is because of experience and by means of experience that there is any meeting at all. Experience is a kind of ocean in which selves and objects are afloat, and which provides the medium for the meeting of all selves and objects.[128]

This is what the pragmatist means when he says above that "experience is the proving ground in which the worth of things is made plain." Such experience is

[126] Robert Audi (Ed.), *Cambridge Dictionary of Philosophy* (Cambridge: Cambridge University Press, 1995), p. 198
[127] J. Donald Butler, *Four Philosophies and their Practice in Education and Religion,* p. 380.
[128] Ibid.

neither private nor subjective; it is public and objective. One does not possess experience privately; it engages one; one is possessed by it.

3.5.3 *Lonergan and Dewey*

Lonergan makes no such distinction between types of experience. Dewey saw cognitive experience as the result of inquiry, which he viewed as a process arising from a felt difficulty, or a perceived problem, within experience, proceeding through the stage of conceptual elaboration of possible resolutions, to a final reconstruction of experience. He says that to frame a question or to face a problematic situation is a necessary precondition of cognitive operations or inquiry, saying that "it is not in itself intellectual or cognitive: it is a precognitive situation."[129] To Lonergan inquiry arises from the 'pure desire to know'. For both Lonergan and Dewey, inquiry is a natural human reaction to encountering a problem, or an unknown. To both Dewey and Lonergan, also, inquiry is essentially precognitive. To both it may also be seen as a type of 'operator'[130] .

However, unlike Lonergan, knowing for Dewey is a kind of 'doing', and the criterion of knowledge is what he terms "warranted assertability", corresponding roughly to what Lonergan means by reaching the 'virtually unconditioned'. Dewey felt that one of the cardinal errors of philosophy from Plato to the modern era was what he called "the spectator theory of knowledge", what Lonergan also condemns as "naive realism" and describes as regarding knowledge as "having a good look at what is already out there to be seen." Dewey viewed knowing as a constructive conceptual activity that anticipated and guided one's adjustment to future experiential interactions with one's environment. The purpose of knowing, then, is to effect some alteration in the experiential situation. Dewey avoids the notion of truth which he sees as too static, finalised, and overly metaphysical and instead, as mentioned above, uses the term "warranted assertability" to represent in a more dynamic way the resolution of a problematic situation resulting in a reconstructed experience or consummation.[131] For Lonergan also the whole process of coming to know is inherently dynamic. But it is his act of 'insight' which is the guarantee of the flexibility of knowing.

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[129] John Dewey, *Logic: The Theory of Inquiry* (London: Allen and Unwil, 1939), p. 35.

[130] See the Glossary of this study for a consideration of Lonergan's notion of 'operator'.

[131] Robert Audi (Ed.), *The Cambridge Dictionary of Philosophy* (Cambridge: Cambridge Univ. Press, 1995), p.199

Dewey does not have a transcendent view of the human person. He does speak of the child's "self-development," but his notion of development is essentially pragmatic. To him fundamental questions of value and human fulfilment ultimately bear on one's conception of the human community, and this in turn leads to issues of democracy and education. The ideal social order for Dewey is a structure that allows maximum self-development of all individuals. It fosters the free exchange of ideas and decides on policies in a manner that acknowledges each person's capacity to effectively participate in, and contribute to, the direction of social life.

The *being* notion of development as presented in this study does not play a part in Dewey's pedagogy as he has no place in his underlying theoretical system for any notion of 'interiority'. Despite definite areas of correspondence between the systems of Dewey and Lonergan, Dewey's notions of mind and knowing are fundamentally different from those encountered in what may be loosely termed 'philosophers of being', like Lonergan, Marcel, Fromm, and Rand. Dewey, for example, holds that

> the whole history of science, art and morals proves that the mind that appears *in* individuals is not as such individual mind. The former is in itself a system of beliefs, recognition, and ignorances, of acceptances and rejections, of expectancies and appraisals of meanings which have been instituted under the influence of custom and tradition.[132]

To Dewey, there is no mind or self antecedent to the formation of habit. The self, according to Dewey, is a dynamic complex of habits. It is an outcome, not an original existence. Mind consists of habits. Every idea is a habit of action; it is an anticipation of definite ways of behaving. The idea of a table, for example, consists of all the ways in which one can act with the object so designated. To have an idea of a table, then, does not necessarily involve having an image of the object, nor is it necessary to grasp the inherent essence of 'tablehood'. It is rather to be prepared to act with such objects in ways that bring about predictable outcomes. Such outcomes are originally learned by means of active participation with objects; hence, for Dewey, mind is derived solely from behaviour.[133]

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[132] John Dewey, "Nature, Mind and the Subject", in Jo Ann Boydston (Ed.), *The Later Works*, 1925 - 1953, Vol. 1 (Carbondale and Edwardsville: Southern Illinois University Press, 1981), p. 170.

[133] Edward Craig (Ed.), *Routledge Encyclopaedia of Philosophy* , Vol. 3 (London: Routledge, 1998), p. 44.

Dewey calls thinking "an explicit rendering of the intelligent element in experience." By this he means that thinking does not just begin with experience, but that it always has to do with some instrumental, practical end. Thinking, in other words, is essentially utilitarian and pragmatic. He explains:

> Mind appears in experience as ability to respond to present stimuli on the basis of anticipation of future possible consequences, and with a view to controlling the kind of consequences that are to take place.[134]

Thus, the intelligent element of one's experience has only to do with external activities which may or may not follow from thinking:

> Thinking ... is the intentional endeavour to discover specific connections between something which we do and the consequences which result, so that the two become continuous.[135]

To Lonergan, however, thinking is a process of experiencing, understanding, and judging, and the meaning found in experience points towards essence, the thing as it is in itself, and is not reducible to "the characteristic use to which the thing is put."[136]

While, on Lonergan's model, "characteristic use" can certainly be part of the meaning, part of the intelligibility immanent in the data of experience, human intelligence is capable of grasping and affirming much more than the merely potential instrumentality of things. The activities in which one engages in the process of coming to know, while they may begin with, or seek verification in, external action, are ultimately the conscious acts of the subject who experiences, understands, and judges. Writing in the journal *Method*, Christopher Gilbert asks the important question:

> If knowing is not experiencing, understanding, and judging, but is indeed experience in shared activity, formulation of hypothesis, and verification in action, how can Dewey account for his own theory of knowledge? By subtly eliminating from education (and, implicitly, from thought) the types of non-instrumental questions and insights required for an understanding of understanding, Dewey deprives himself of the possibility of grounding his own work. Because he fails to recognise the exigencies of conscious intentionality operative in his own quest to understand thinking, he has no criteria to which to appeal in justification of his conclusions.[137]

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[134] John Dewey, *Democracy and Education* (New York: Free Press, 1966), pp. 130 - 131

[135] Ibid., pp. 145 - 146

[136] Ibid., p. 29.

[137] Christopher Gilbert, "A Lonerganian Critique of the Pragmatic Method of Education", *Method: Journal of Lonergan Studies*, Vol. 11, No. 2, Fall 1993.

Dewey, in other words, cannot establish his own conclusions. Thus, his efforts to reduce meaning to mere use, and knowledge purely to action, undermine his parallel efforts to establish objective norms for education and epistemology.

However, Dewey's slogan "Learn by Doing" is not intended solely as a credo for anti-intellectualism; on the contrary, Like Maria Montessori, he was trying to draw attention to the fact that the child is naturally an active, curious and exploring creature. Like her, he believed that a properly designed education system must be sensitive to this active dimension of life and must guide the child so that through his participation in different types of experience his creativity and autonomy will be cultivated rather than stifled.

Dewey does not believe that the child is completely malleable. Nor, with Feuerstein, does he believe that the child's natural endowment is completely fixed and determinate. Like Aristotle, Dewey believes that the function of education is to encourage those habits and dispositions that constitute intelligence. Like Montessori's 'controlled environment', Dewey places great stress on creating the proper type of environmental conditions for eliciting and nurturing these habits. His conception of the educational process is therefore closely tied to the prominent role that he assigned to habit in human life.

Education as the continuous reconstruction and growth of experience also, according to Dewey, develops the moral character of the child. Virtue is taught not by imposing values upon the child, but by cultivating fair-mindedness, objectivity, imagination, openness to new experiences, and the courage to change one's mind in the light of further experience.[138] Thus Dewey talks of values such as fairness and courage but denies the reality of the human will which, in Lonergan's view, guarantees such values.

3.5.4 *Education and Society*

Dewey also thought of the school as a miniature society; it should not simply mirror the larger society but should be representative of the essential institutions of this society. The school as an ideal society he saw as the chief means of social reform. In the controlled social environment of the school, it is possible to

[138] Paul Edwards (Ed.), *The Encyclopaedia of Philosophy,* Vol. 1-2 (London: Collier Macmillan Pub., 1967), p. 384

encourage the development of creative individuals who will be able to work effectively to eliminate existing evils and institute reasonable goods. The school, therefore, is the medium for developing the set of habits required for systematic and open inquiry and for reconstructing experience that is funded with greater harmony and aesthetic quality.

Meynell claims that Lonergan also sees it as the school's function to prepare students for their place in society and that, clearly, "the beliefs common to members of a society draw on far wider range of experience, understanding and judgment than is available to any one individual by his own efforts."[139] Lonergan would view society as comprised of individuals in a relationship of 'mutual self-mediation'[140], whereas Dewey views the social environment as the source of individuality, and all development as being socially determined. In *Democracy and Education*, for example, he says:

> It is the office of the school environment to balance the various elements of the social environment, and to see to it that each individual gets an opportunity to escape from the limitations of the social group in which he was born, and to come into living contact with the broader environment.[141]

Dewey also perceived acutely the threat posed by unplanned technological, economic, and political development to the future of democracy. The natural direction of these forces, he believed, was to increase human alienation and to undermine the shared experience that is so vital for the democratic community. For this reason, Dewey placed great importance on the function of the school in the democratic community. He believed that the school was the most important medium for strengthening and developing a genuine democratic community, and that the task of democracy is forever the creation of a freer more humane experience in which all share and participate.[142]

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139 Hugo A. Meynell, "On the Aims of Education", *Proceedings of the Philosophy of Education Society of Great Britain,* Vol. X, (July 1976), p. 87.

140 See Section 15.5.4 of this study.

141 John Dewey, *Democracy and Education* (Free Press, New York, 1916), p. 20.

142 Paul Edwards (Ed.), *The Encyclopaedia of Philosophy*, Vol. 1-2 (London: Collier Macmillan Pub., 1967), p. 384

3.5.5 *Dewey's Contribution to this Study*

Dewey's unique contribution to the educational model being developed in this work is a much more dynamic view of that sphere of sense perception and imagery which Lonergan terms experience. To Dewey, as for Piaget, the human organism is not a passive recipient of sense impressions, nor does it simply actively respond in the presence of data of sense, but prior to the presence of any object, it is actively, instinctively, searching for 'aliments' to enhance its existing schemes of operation (to use a Piagetian description). This primordial reaching out to embrace the world and all it has to offer is more than just 'assimilation' and 'accommodation', but has connotations of Lonergan's 'spirit of wonder and inquiry' and 'pure desire to know'. Unlike Lonergan, however, Dewey sees it in dynamically physical and corporeal terms; Lonergan takes a more typically intellectualist view of its emergence. It is, no doubt, little more than a matter of emphasis. There is no experience, one can say, without human activity, even if it is just the tracking of the eyes across a page of print. Lonergan himself appears to be moving in this direction when he speaks of human seeing in the following "stream of consciousness" terms:

> Seeing occurs within a context of other conscious acts. There is an emotional context, a conative context, an intellectual context, an imaginative context, as well as the total context of the movements of the body. If we want to see something, we bend over, turn it over, look at it this way, and so on. Correlated with the seeing there occurs a whole number of other movements in the body, and in the eyes especially - focusing the eyes. And there are other more recondite things such as emotions, desires, conations, a purely intellectual and volitional elements. Consequently, instead of speaking of single acts, one has to consider the flow of consciousness, the orientation of consciousness.[143]

Another contribution which Dewey makes to the development of this study is what he terms the 'principle of continuity', which will be dealt with in Chapter Eight. This principle has to do with Dewey's notion of habit. Clearly acquisition of habits, whether cognitional, volitional and attitudinal, or dexterity of skill, is a matter of central importance in education. Clearly also habits may be bad as well as good. However, a habit may be regarded as truly educational only in so far as its acquisition widens the scope for further development. This is what Dewey means by the 'principle of continuity'. In *Experience and Education* he explains:

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[143] Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism,* in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18,* p. 285.

> Growth, or growing as developing, not only physically but intellectually and morally, is one exemplification of the principle of continuity.[144]

and in the same place he says that *"only* when development in a particular line conduces to continuing growth does it answer to the criterion education as growing."[145] For Dewey, this category of continuity is one of the factors which discriminates those experiences which are likely to be truly educational. What he means by 'habit' is precisely habit viewed in this positive, growth-producing sense.

In brief, Dewey's philosophy certainly projects a rather limited, superficial, and determinist view of the human person. Despite this, he has much of interest to say about the field of education, and many of his concepts are of direct practical value. Just as Marcel added the all important considerations of corporality to the developing model, so the theories of Dewey add an extra emphasis to the importance of activity and movement in human learning.

3.6 *Chapter Conclusions*

This chapter set out to introduce some of the main supporting, as well as competing, philosophical theories which will be alluded to throughout this study. They are, by all accounts, a very disparate group, ranging over practically the whole spectrum of philosophical theory. Phenomenology is represented in the person and work of Edmund Husserl. It was shown that lack of a clear 'operator', an equivalent to Lonergan's 'pure desire to know' or 'spirit of wonder and inquiry', is his main failure in presenting a practical, usable, cognitive theory for use in an educational philosophy. As will be shown in later chapters, however, he does make a valuable contribution to this study, not only as a contrast, or counterpoise to Lonergan, but also as contributor of some very valuable insights, as well as some useful phenomenological illustrations and exercises.

Existentialism is represented in the person and work of Gabriel Marcel. Not only do his theories add much needed 'body' to those of Lonergan (pun intended), but the addition of Marcel's insights to those of Lonergan is important to the development of this study as a whole. It allows, for example, the addition of 'corporality' to Lonergan's notions of 'person' and "subject' in Chapter Seven. It

[144] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.36.
[145] Ibid.

also allows the addition of the notions of *having* and 'the primary modes of human existence' in Chapter Six, and it facilitates the ontological basis for the notion of 'intentional bond' in Chapter Seventeen. It will be shown further that in no way can the marriage of these two theories of Lonergan and Marcel be regarded as either of the 'shotgun' variety or the 'of-convenience' type, but that they merge quite seamlessly at the point at which Lonergan himself deals with the notion of 'existence'. While they both adopt quite different starting points, both approaches and both bodies of theory are, in the opinion of this author, quite legitimate, and tend to complement one another in a way that facilities the enlargement of Lonergan's overall system.

The presentation of the theories of John Dewey force the study to confront the world of pragmatism, the one area one would expect to have least in common with the philosophical stance of neo-Scholasticism. Yet, because Lonergan does not begin from a "stance", nor from a set of *a priori* assumptions, one is allowed to compare the two theories from the point of view of the human mind and its operations. This is in line with Lonergan's aim of producing a philosophy of philosophies, a secure base, from which different philosophies can be compared and contrasted with one another, "a philosophy that is capable of performing an integrating function with regard to knowledge in general."[146] Dewey widens Lonergan's notion of experience by adding to it considerations of 'doing', and the 'principle of continuity'. This addition is perfectly acceptable and, one might say, even essential when considering human development as a 'cycle of growth', in Chapter Eight.

The question must be asked at this stage, Is it really possible to reconcile so many apparently conflicting philosophies? The full answer to that question is best left to the end of the study, by which time the answer should be apparent. Suffice it to say at this juncture that there are already emerging strong areas of support and agreement among these theories, areas that allow not only an enlargement and expansion of the foundations on which this study is to be built, but which also point towards, or 'intend', other possible loci of convergence.

[146] Bernard Lonergan, *Understanding and Being,* p. 102.

Chapter 4

Lonergan's Place in Modern Psychological Thought

4.1 *Introduction*

Having examined the theories of Lonergan in relation to some of the major philosophers of the twentieth century, it remains to introduce some of the key psychological thinkers who make an important contribution to the development of this study. In the process, it is hoped to show how the thinking of psychologists like Piaget, Vygotsky, and Feuerstein relate to the work of Bernard Lonergan.

Lonergan became familiar with the works of Piaget after he completed *Insight* and commented on his theories from time to time in his subsequent writings, particularly in his "Cincinnati Lectures," which make up Volume 10 of his *Collected Works*. It is not certain, however, whether Lonergan knew anything of Vygotsky's writings. Vygotsky's seminal work, *Thought and Language,* was first translated from Russian into English only in 1962. However, it is fairly certain that Lonergan knew little or nothing of the work of Reuven Feuerstein, who's theories leaned very heavily on the thinking of both Piaget and Vygotsky.

This following chapter is intended as a fairly detailed introduction to the lives and theories of these three great thinkers, while at the same time pointing out parallels and tentative areas of agreement and convergence with the thought of Bernard Lonergan.

4.2 *The Theories of Lonergan and Piaget*

4.2.1 *Jean Piaget*

Jean Piaget was born in Neuchâtel, Switzerland, in 1896. He studied Zoology at the university there, and in 1918 he was awarded his doctorate for his work on the subject of land molluscs in the Valais Alps. He then explored Psychology for a year at Zurich, and from 1919 to 1921 he studied abnormal

psychology, logic and the philosophy of science at the Sorbonne, in Paris. While at the Sorbonne, he was offered the opportunity to work in Binet's laboratory at a Paris grade school.[1] Flavell comments:

> Although Piaget undertook this project without enthusiasm, his interest grew when he began the actual testing. He found himself becoming increasingly fascinated, not with the psychometric and normative aspects of the test data, but with the processes by which the child achieved his answers - especially his *incorrect* answers. ... he was soon using the "clinical method" which was later to become a kind of Piagetian trademark.[2]

From 1921 to 1925, he was Director of Studies at the Institut J.J. Rousseau in Geneva. In 1925 he was appointed Professor of Philosophy at the University of Neuchâtel, and in 1929 he became Professor of the History of Scientific Thought at the University of Geneva. In 1955 Piaget became Professor of Child Psychology at the Sorbonne while at the same time holding the post of Director of the Centre International de l'Epistémologie Génétique in Geneva. Around this time, he also acted as Assistant Director General of UNESCO.

Although Piaget is usually considered a developmental psychologist working in the field of child thought, his interests have always been, broadly speaking, philosophical. Even his earliest works, which appeared between 1925 and 1932, dealt with such topics as thought, causality, moral judgment, and the development of language. His logical and epistemological interests show themselves particularly in his later studies, from about 1937 onwards. By means of his "clinical method", which consisted of simple but highly ingenious experiments on children, in which he not only observed them but actively interacted with them, Piaget set out to make a detailed investigation of the way in which logical, mathematical, and physical concepts develop in the individual. Thus he studied experimentally many of the concepts and principles that philosophers had discussed in the past on a purely *a priori* basis. Piaget was to say that what he was really doing in his work was re-examining the whole question of the Kantian 'categories'[3]. This 're-examination' formed for him the basis and foundation for the new discipline which he termed

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[1] Binet is regarded as the father of psychometrics or quantitative psychological testing. The Standford-Binet test is still employed in the clinical assessment of children.

[2] John H. Flavell, *The Developmental Psychology of Jean Piaget* (New York: Van Nostrand Reinhold Company, 1963), p. 3.

[3] In his *Critique of Pure Reason*, Kant gives a table of categories. This represents a complete and exhaustive list of what he terms "pure concepts of understanding." While these *a priori* concepts or categories are twelve in number, they can be reduced to four subheadings: quantity, quality, relation, and modality. These, in turn, were adopted by Kant from Aristotle's categories in his *Metaphysics*.

"genetic epistemology".

4.2.2 *Piaget's Philosophy and Psychology*

The ancient Greeks as well as seventeenth and eighteenth century philosophers like Descartes and Kant believed that ideas could be innate in the human mind. Others, like Locke, insisted that the baby's mind was a "tabula rasa" and that all knowledge came from the environment through the senses. This latter stance is close to the behaviourist positions of many contemporary psychologists who believe that knowledge stems from the response of an organism to a stimulus from the environment.

Like Lonergan, Piaget rejects both of these positions. He does not believe in innate ideas, but believes that knowledge is constructed by each individual in interaction with his environment. Piaget does not view the environment as something that "happens" to the child, not as a stimulus that elicits a response, like a conditioned reflex. On the contrary, as Lonergan explains:

> The conditioned reflex is simply an accidental elaboration of a scheme, one that lasts just as long as it gives satisfactory results. According to Piaget, conditioned reflexes do not produce permanent differences.[4]

Habits for Piaget are not impressed passivities, but acquired modes of activity developed out of previous modes of activity. The child seeks out those features of the environment to which it can meaningfully respond, both by assimilating them to existing mental structures and by changing or accommodating these mental structures to make continued assimilation possible. The initiative belongs to the child; it is the child who sees in each experience that which he can draw upon for his growth as it must be at that moment.[5] One can say that if the behaviourist stimulus/response model is represented by the formula

$$S \rightarrow R$$

where **S** represents the stimulus, and **R** the response, then Piaget's model or system could be represented by the formula:

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[4] Bernard Lonergan, "Piaget and the Idea of a General Education", Robert Doran & Frederick Crowe (Eds.) *Collected Works of Bernard Lonergan - Book 10: Topics in Education* (Toronto: University of Toronto Press, 1993), p. 197.

[5] Jean Piaget, in Howard Gruber & Jacques Vonéche (Eds.), *The Essential Piaget* (London: Routledge & Kegan Paul, 1977), p. xxxvi.

$$S \rightarrow O \rightarrow R$$

where 'O' represents the mediating activity of the human organism itself.

Piaget's genetic epistemology may be described as an "embryology of intelligence" that attempts to throw light on the problem of the relation between the acting and thinking subject and the objects of his knowledge. He explains:

> I try to show the isomorphisms [analogies] between organic regulations and cognitive processes, the processes of knowledge. There are structures of organisms and structures of intelligence. I try to show that the latter spring from the former and that logic, for example, originates in the general coordination of actions and that the general coordination of actions is based on coordinations of the nervous system, themselves supported by organic coordinations.[6]

Piaget, Lonergan and, it will be argued, Feuerstein also, do not accept intelligence as an "amount" that can be measured. Piaget sees intelligence rather as a structure that must be described and whose functioning must be understood. He also sees heredity and environment as dual vectors whose developmental significance changes incessantly, depending on the cognitive structures already achieved.

Piaget has sometimes labelled his position 'constructivism'[7], to capture the sense in which the child must make and re-make the basic concepts and logical thought-forms that constitute his intelligence. Piaget prefers to say that the child is inventing rather than discovering his ideas. This distinction separates him from both empiricism and *apriorism*. The ideas in question do not pre-exist out there in the world (they have no *a priori* existence), only awaiting their discovery by the child; rather, each child must invent them and construct them for himself.[8] Again, one can see here the consistency (one could say the 'isomorphism') between Piaget's position and Lonergan's 'critical realism'[9].

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[6] Jean Piaget, in Jean-Claude Bringuier, *Conversations With Jean Piaget,* Basia Miller Gulati (trans.), (Chicago: University of Chicago Press, 1980), p. 3.

[8] Jean Piaget, in Howard Gruber & Jacques Vonéche (Eds.), *The Essential Piaget,* p. xxxvii.

[9] Lonergan adheres to the middle ground between the extremes of Kantian idealism on one side and what he terms the 'naive realism' of Suarez on the other. By what he terms 'critical realism' he manages to integrate the positive insights of both. He holds that an authentic subjectivism is the only way to get to the heart of the real and, by doing so, achieve authentic objectivity. He would agree with Kant that the world in which we live and move and have our being is a world of our own construction, a world mediated by meaning. However, this world of meaning is constructed by a process of experience, understanding and judgment, and what is achieved by this process is not a completely subjective, idealist, or idiosyncratic world, but a concrete grasp of objective being. In fact, only by such a process can true objectivity be achieved. With the realists he would hold that the primary object of knowledge is the independent physical world. But to truly know this world requires much more that merely empirical knowledge, more than simply having a good look at what is there, one must also gain insights into it and, having done so, test these insights through critical reflection and judgment. Only thus is knowledge of the independent, objective world achieved.

Piaget's 'constructivism' goes beyond mere logicism, or the attempt to characterise each stage of development by a logical model. He proposes that the functioning of the logic of each stage actually determines the structure of the stage that follows. For this reason, some authorities suggest that the label 'logical determinism' could be applied to Piaget's genetic epistemology.[10] If learning was very fast, he would say, and if one's resulting image of the world was a very accurate copy of an unambiguous reality, then one would be an empiricist. On the other hand, if there were no learning at all, whatever intelligence one possessed could be due only to pre-formed structures, and then one would be an *apriorist*. Piaget's position, however, takes learning to have only a limited role within the larger process of the functioning and growth of structures; maturation also plays a central part. He also insists that learning of specific behaviours or contents can take place only within existing structures; the individual's action upon the world is itself the operation of a structure, and in the process the individual assimilates new information to that structure, which sometimes, as was said, also requires changes or accommodations in the structure itself. Finally, Piaget insists that structures grow and develop according to laws which are not given in the behaviouristic associationism of stimulus-response psychology, or in the Gestalt laws describing the direct perception of an organised world. In other words:

> The function of cognitive growth is not to produce structures which are more veridical copies of reality, but to produce more and more powerful logical structures that permit the individual to act upon the world in more flexible and powerful ways.[11]

This is also similar to some aspects of Feuerstein's 'mediated learning experience' (MLE), the aim of which is to produce what he terms 'cognitive modifiability'. Cognitive structures are modifiable precisely because they are capable of growing and developing, as Piaget suggests. Feuerstein was a disciple of Piaget and he worked with him for a time in Geneva. As a consequence, his theories and practical methodology are strongly influenced by the work of Piaget.

Piaget defines psychology as the science "of behavior in general." The difference in the case of human psychology, however, is that it also involves behaviour which is not determined by heredity but rather reacts to external

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[10] Jean Piaget, in Howard Gruber & Jacques Vonéche (Eds.), *The Essential Piaget* (London: Routledge & Kegan Paul, 1977), p. xxxvii: "Interactionism, constructivism, logical determinism - to summarise the entirety of his position Piaget has come to call it genetic epistemology."

[11] Ibid.

situations with problem solving strategies:

> When the organism behaves with regard to external situations and solves problems, from the moment such problem solving isn't programmed by heredity, as instinct is, it's a psychology that closely resembles human psychology. The case of instinct is a specialized animal psychology, a subject like any other.[12]

By the term "behavior" he means any action directed by organisms towards the outside world in order to change conditions therein or to change their own situation in relation to these surroundings. Examples could be searching for food, building a nest, or using a tool. At the lowest level, behaviour amounts to no more than sensorimotor actions (combinations of perceptions and movements); at the highest, it embraces ideational internalisations, as in human intelligence, where the action extends into the sphere of mental operations. At this point, behaviour may be termed intentional. On the other hand, internal movements of the organism, such as the contraction of muscles or the circulation of blood are purely reflex movements and do not qualify as behaviour in this sense, even though they may condition, mediate, or modify, behaviour.[13] In summary, Piaget says that

> behaviour is teleological action aimed at the utilization or transformation of the environment and the preservation or increase of the organism's capacity to affect this environment.[14]

Despite his interest in behaviour, Piaget cannot be termed a behaviourist, even though he does share with behaviourists an interest in action. Also, like them, his theories begin with simple reflexes, and, like them, he tries to explain development by studying the developmental fate of these reflexes. But, unlike behaviourists, his units of behaviour, or schemes of action, are always seen as evolving structures. Thus, for Piaget, complex behaviour is built up, not out of simple 'stimulus-response' elements that retain their identity (as the behaviourists maintain), but of structures that grow and develop.[15]

4.2.3 *Lonergan and Piaget*

Lonergan's interest in the work of Jean Piaget is not simply academic. Nor is it merely a concern to complement his own theoretical position with a more

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[12] Jean Piaget, in Jean-Claude Bringuier, *Conversations With Jean Piaget,* Basia Miller Gulati (trans.), p. 4.
[13] Jean Piaget, *Behaviour and Evolution* (London: Routledge & Kegan Paul, 1979), p. ix
[14] Ibid., p. x.
[15] Jean Piaget, in Howard Gruber & Jacques Vonéche (Eds.), *The Essential Piaget,* p. xxxii.

'genetic', or developmental, approach. Nor is he looking for experimental confirmation of his own existing theories of cognition; Lonergan's theories, after all, depend on a process of 'self-appropriation of interiority', or a 'generalised empirical method', by way of confirmation, and it was not Lonergan's way to seek support from other authorities. It is not sure that Lonergan's thinking was influenced by Piaget's work, even though many of Piaget's terms and concepts such as 'schemes', 'operations', and 'structures' appear throughout Lonergan's writings with much the same meaning as that used in the works of Piaget himself. One can say that Piaget's theories compliment those of Lonergan in much the same way, it can be argued, as do the theories of Langer and von Hildebrand in the different spheres of the arts and the emotions.

As already mentioned, Lonergan, like Piaget, claims that his theories occupy the border area between philosophy and psychology, two jealously guarded disciplines. Psychology claims to be an empirical science. Psychologists like Piaget make careful observations, perform experiments and claim to discover things (from empirical data) about the real world of people. Philosophers, on the other hand, generally do not have any special observation techniques; they do not perform experiments and they generally do not claim to discover hitherto unsuspected facts about the real world. They generally claim only to draw out logical and conceptual connections between ideas and beliefs by *a priori* analysis of those ideas and beliefs. Just as Piaget, the psychologist, claims, surprisingly, that his apparently empirical discoveries based on apparently empirical data can illuminate questions about the nature of knowledge, an area claimed as their own by philosophers, so Lonergan, the philosopher, claims for himself a 'generalised empirical method' whereby he attends to and observes data of consciousness, and draws psychological conclusions on the basis of these. More importantly, he claims that such experiments and conclusions can be repeated and validated by others.

Because he does not confine himself to what is traditionally regarded as psychology and includes in his brief the philosophical field dealing with the nature and origin of human knowledge, Piaget prefers to call himself a "genetic epistemologist" rather than a psychologist. One can say that genetic epistemology is an intrinsically developmental theory of human knowledge; it is about two things: what knowledge consists of, and the ways in which knowledge develops. Genetic

epistemology, then, deals with both the meaning and the formation of knowledge.[16]

Piaget, like Dewey, has a notion of intelligence which is influenced greatly by his study of biology. This does not mean that he sees the intellect itself as purely organic, but that, as Atkinson explains:

> Its development is best understood as the development of a sophisticated and highly successful adaptation device. This device enables human beings to organise and structure their experience according to concepts and ideas which eventually form the complex system of objective human knowledge.[17]

Piaget rejects the view of many philosophers who regard epistemology as the study of knowledge as it exists at the present moment - that is, the analysis of knowledge for its own sake and within its own framework, without regard for its development. He says:

> Genetic epistemology attempts to explain knowledge, and in particular scientific knowledge, on the basis of its history, its sociogenesis, and especially the psychological origins of the notions and operations upon which it is based.[18]

For Piaget, knowledge is not a matter of pictures, or sentences, or symbolic data structures in the mind that correspond to structures in the world, as, roughly speaking, the Scholastic notion of form would indicate. For Piaget, as for Dewey, knowledge is basically pragmatic or action-oriented. Knowledge is fundamentally 'operative'; it is knowledge of what to do with something under certain possible conditions. Or it is knowledge of what the thing will do under different conditions.[19] This is radically different from Lonergan's theory of knowledge, and from the view held by Neo-Scholastics in general.

Both Lonergan and Piaget, however, see knowledge in inherently dynamic terms. Lonergan talks of the dynamic structure of coming to know as being both materially and formally dynamic, and about insight leading to ever higher viewpoints. Piaget sees it as a process of continual construction and reorganisation: "knowledge" Piaget says "is currently coming to be considered more and more as a process rather than as a state,"[20] and Lonergan would concur with this viewpoint.

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[16] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 12.

[17] Christine Atkinson, *Making Sense of Piaget: The Philosophical Roots* (London: Routledge & Kegan Paul, 1983), p. 1.

[18] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 1.

[19] Jean Piaget, *Studies in Reflecting Abstraction*, Robert L. Campbell (Ed. & Trans.), (Sussex: Psychology Press, 2001), p. 2.

[20] Jean Piaget, *Psychology and Epistemology* (London: The Penguin Press, 1970), p. 2

Piaget also emphasises that

> the current state of knowledge is a moment in history, changing just as rapidly as the state of knowledge in the past has ever changed and, in many instances, more rapidly.[21]

This "current state" is far from definitive or even stable. To Piaget, this means that historical and psychological factors in these changes must be of interest in the attempt to understand the nature of scientific knowledge. Lonergan, again, would have no difficulty in agreeing with this.

Also, like Lonergan, Piaget would accept that only in studying what scientists actually do can one come to an understanding, or an insight, into the nature of scientific knowledge:

> Only in the real development of the sciences can we discover the implicit values and norms that guide, inspire, and regulate them. Any other attitude ... reduces to the rather arbitrary imposition on knowledge of the personal views of an isolated observer.[22]

Similarly, Lonergan in *Insight* uses scientific examples in order to identify his fixed, invariant cognitional operations. As he explains in *Method in Theology:*

> First, we shall appeal to the successful sciences to form a preliminary notion of method. Secondly, we shall go behind the procedures of the natural sciences to something both more general and more fundamental, namely the procedures of the human mind. Thirdly, in the procedures of the human mind we shall discern a transcendental method, that is , a basic pattern of operations employed in every cognitional enterprise. Fourthly, we shall indicate the relevance of transcendental method in the formulation of other, more special methods appropriate to particular fields.[23]

Piaget maintains that it is not only helpful, but "indispensable"[24] to make use of psychological data when one is considering the nature of knowledge. One must remember that Lonergan also champions a 'generalised empirical method'[25] as a means of confirming his theoretical notions, although it is doubtful if Piaget would accept this as part of his 'clinical method'. On the contrary, he complains that, while many epistemologists actually do make use of so-called psychological data, in practice they tend to use their own psychological intuitions rather than the results of

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[21] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 2.
[22] Ibid., p. 4, foot note.
[23] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 4.
[24] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 7.
[25] See Chapter Nine of this study.

solid psychological research. "Every man considers himself a psychologist,"[26] he complains; he gives the example of the untenable position of the logical positivists, who hold that even logic and mathematics are nothing but specialised linguistic structures, without any empirical evidence to support their position. He explains his own position in this regard as follows:

> We can look to see whether there is any logical behavior in children before language develops. We can look to see whether the coordinations of their actions reveal a logic of classes, reveal an ordered system, reveal correspondence structures. If indeed we find logical structures in the coordinations of actions in small children even before the development of language, we are not in a position to say that these logical structures are derived from language.[27]

He claims that even Naom Chomsky, in the face of empirical evidence, changed his mind and accepted that language is based on logic, on reason, and not the other way round. However, Piaget still complains that Chomsky goes too far in maintaining reason to be innate and in holding to the existence of deep linguistic structures or "universal grammar" in the brain.[28]

Piaget's genetic epistemology, however, is not based exclusively on psychology. For Piaget, logical formalisation, or the expression of psychological structures using logical symbolism, is also necessary as an attempt to formalise or define those psychological structures discovered in his research. However, logic, if taken by itself without the aid of psychology, would also be inadequate. After all, as Piaget explains, the question would still remain as to what logic actually formalises. Besides, knowledge is simply not purely formal; there are other aspects to it. Piaget, alluding to the inadequacy of logical formalisation as the fundamental basis for understanding knowledge, speaks of

> the necessity for considering thought itself as well as considering axiomatized logical systems, since it is from human thought that the logical systems develop and remain still intuitive.[29]

In epistemology, then, both logic and psychology should be taken into account, since it is important to deal with both the formal aspects and the empirical aspects of human knowledge. Genetic epistemology uses both in its attempt to answer the question: "by what means does the human mind go from a state of less sufficient

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[26] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 8.
[27] Ibid., pp. 8 - 9.
[28] See Section 11.10.2 of this study.
[29] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 11.

knowledge to a state of higher knowledge?"[30] It follows that the best field of study in which to explore all of this would be the development of children. Piaget explains:

> It is with children that we have the best chance of studying the development of logical knowledge, mathematical knowledge, physical knowledge, and so forth.[31]

4.2.4 *Assimilation and Lonergan's General Education.*

Lonergan maintains that Piaget's idea of the gradual differentiation between assimilation and accommodation "provides a formulation for the idea of general education."[32] General education may be regarded as development in assimilation while problems of accommodation are be left for a later age and a different situation. Just as the child develops through the assimilative power of symbolic play, so too he can develop by studies and activities that increase his assimilative powers but, as yet, do not raise questions of the adjustments or accommodations that must be made to deal with the real world.

Lonergan gives the example of the importance of literature and languages:

> There is a development in assimilative power in the study of languages and literature. That study does not commit one to any study of fact, but it is developing in a power to assimilate on the most general level, because everything ultimately is communicated through language.[33]

In the same way and for the same reason Lonergan would like to see the study of mathematics precede that of the natural sciences, and the study of philosophy and history precede that of the human sciences. According to Lonergan, it is in subjects like mathematics, philosophy, and history that the assimilative power of the student is developed best, giving him a flexibility of mind, and thus enabling him to do whatever he may chose in any particular field later on. The student may also avoid in this way the risk of becoming a "crackpot" through premature specialisation. Lonergan explains:

> Insofar, then, as Piaget's notion of the differentiation or separability of assimilation and adjustment is correct, there is a validity to the notion of a general education that studies language, art, literature, history, and philosophy rather than the human sciences, and

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[30] Ibid., pp. 12 - 13.

[31] Ibid., pp. 13 - 14.

[32] Bernard Lonergan, "Piaget and the Idea of a General Education", Robert Doran & Frederick Crowe (Eds.) *Collected Works of Bernard Lonergan - Book 10: Topics in Education,* p. 205.

[33] Ibid.

> mathematics rather than the natural sciences. Give the student a preparation, a development of his assimilative powers, his ability to move about. The big men today are not specialists; they move about.[34]

4.2.5 *Piaget and Evolution*

Like Lonergan, Piaget rejects the notion that intelligence, or even a biological organism, is a product of chance. In his view, selection of accommodations on the basis of experience or of environment must also play a pivotal role and not "mere so-called natural selection, as gauged solely by survival and by the relative rate of reproduction."[35] In other words, one cannot consider behaviour solely as a *product* of evolution, it must also be treated as one of its determinants.

Piaget rejects the extreme Lamarckian view, which looks upon behaviour in the form of acquired characteristics, as the central factor in evolution and also, at the other extreme, he rejects the neo-Darwinian approach which deems any new genotypical trait, including any change in hereditary behaviour, to be the outcome of chance variations whose adaptive nature emerges only after the fact of natural selection, with acquired characteristics playing no part whatsoever.[36]

4.2.6 *Operations, Structures, and Cognitive Development*

It has been mentioned already that Lonergan adopted, or appropriated, Piaget's notions of operation and structure to his own theories. The following are the four fundamental characteristics which, for Piaget, define what an operation is:

> 1. An operation is any action which can be internalised, that is, can be carried out in thought as well as executed externally and materially.
>
> 2. An operation is a reversible action. For example, addition is a reversible action as it has the reverse action, subtraction. This is said to be reversible by inversion or negation. An operation may also be

[34] Bernard Lonergan, "Piaget and the Idea of a General Education", Robert Doran & Frederick Crowe (Eds.) *Collected Works of Bernard Lonergan - Book 10: Topics in Education,* p. 206.
[35] Jean Piaget, *Behaviour and Evolution* (London: Routledge & Kegan Paul, 1979), p. xi
[36] Ibid., p. xii

reversible by 'reciprocity', where reciprocity does not consist of a negation but simply a reversal of order.

3. An operation always supposes some conservation, some invariant. It is of course a transformation, since it is an action, but it is a transformation that does not transform everything at once, or else there would be no possibility of reversibility.

4. No operation exists alone. Every operation is related to a system of operations, or to a total structure, as Piaget terms it.

The following characteristics define what a system or structure is for Piaget.[37] Piaget uses the terms interchangeably.

a) A structure is a totality; that is, "it is a system governed by laws that apply to the system as such, and not only to one or another element in the system."[38] If one takes the system of whole numbers as an example, the rules of associativity, commutativity, transitivity and closure all hold for their addition.

b) These laws or rules that apply to a system are also transformations; they are not static characteristics. In the addition of whole numbers, for example, one can transform one number into another by adding something to it.

c) A structure is self-regulating; that is, "in order to carry out these laws of transformation, one does not need to go outside the system to find some external element."[39] Similarly, once a law of transformation has been applied, the result does not end up outside the system. Piaget terms this "closure". This does not mean, however, that a structure as a whole cannot relate to another structure, or structures, as wholes.

d) Any structure can be a substructure in a larger system.

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[37] Lonergan claims to distinguish between the terms 'structure' and 'system'. In *Understanding and Being* (p. 54) he defines a system as "the expression of a cluster of insights" while that aspect of objective reality which is made intelligible by such a system is what he terms a structure. In general practice, however, he also appears to use the terms interchangeably.

[38] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 22.

[39] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 23.

For Piaget, operative knowledge consists of 'cognitive structures' or 'schemes'. The most basic type of structure, already available to infants, is the sensorimotor action scheme[40] . The sensorimotor scheme involves elements of both the biological and the psychic levels. A typical early scheme, for example, is one that specifies for a baby how to get the mobile that hangs over his crib moving, by shaking the crib or kicking it, for instance. During the course of development, more powerful and sophisticated kinds of structures become possible, such as the structures of concrete operations that, during middle childhood, permit children to engage in elementary kinds of reasoning about classification, number, and putting things in order. Piaget invested a good deal of effort in describing structures mathematically, using systems of abstract algebra or the symbolism of mathematical logic.[41]

In the book, *Genetic Epistemology*, Piaget asks himself the question whether such "structures" have real, objective existence or are simply useful mental constructs which one designs in order to help analyse reality. He answers:

> This problem is only a special case of a more general question: do relations have objective independent existence? Our answer will be that it is nearly impossible to understand and justify the validity of our knowledge without presupposing the existence of relations.[42]

This raises a philosophical problem. Piaget, from his structuralist and materialist stance, sees this as raising the implication that the word 'existence' would have to be taken to have a multiplicity of meanings. This is because Piaget disowns metaphysics and does not have Lonergan's notion of assent to a truth or a good which puts one in contact with existence and being.

If knowledge consists of cognitive structures, then any treatment of development entails an understanding what these structures do. According to Piaget, operative structures never just sit there, they demand to be applied. When a knowing subject applies a cognitive structure to the environment, or 'assimilates' the environment to the structure, the structure may work without modification; it may fulfil the knower's goals as expected. But in some cases assimilation may be unsuccessful. In those cases, applying the scheme will not lead to attaining the goal

[40] Piaget used the word 'schéme' for basic operative structures like this. This translates as scheme in English and not "schema" which is a frequent mistranslation. Piaget reserved the word schéma for something quite different.
[41] Jean Piaget, *Studies in Reflecting Abstraction,* Robert L. Campbell (Ed. & Trans.), p. 3.
[42] Jean Piaget, *Genetic Epistemology,* p. 23, footnote.

as expected. Instead, the child is forced to modify the scheme in order to 'accommodate'[43] it to the environment. Lonergan gives the following example:

> A child has a sensorimotor structure that enables it spontaneously to feed at the breast, and feeding in a number of instances makes the child much more efficient at the operation. The sensorimotor scheme involves elements from both the biological and the psychic levels. The scheme fundamentally is hereditary, but it develops with practice, and it can be differentiated. When the child gains sufficient control over its arm, it is able to stick its thumb into its mouth and suck again. It is performing the same scheme but on a different object, and performing it on a different object involves a certain amount of adjustment.[44]

Piaget uses the term 'adaptation' for assimilation and accommodation (Lonergan prefers to use the word 'adjustment' instead of 'accommodation') operating together. Lonergan explains that "there is adaptation in so far as the preexisting scheme is functioning in a modified way upon a different object."[45]

The notions of assimilation and accommodation are notions that are 'functional'; they can apply equally well to areas that are different in content but are functionally analogous. For example, the organic development of the human organism, the psychic development of the child, and the intellectual development of the scientist at work are all functionally analogous. Lonergan explains that Piaget's theory "can be applied analogously to different levels - to the biological, to the sensitive psyche, and to intellectual activity."[46]

If operative structures or schemes demand to be applied, then assimilation and accommodation must happen naturally. Piaget regarded development as driven by processes that tend toward a balance, or equilibrium, between assimilation and accommodation. Hence, his general account of development was an account of what he termed 'equilibration'. Basic equilibration pertains to interactions with the physical environment; more refined forms of equilibration pertain to internal adjustments and integrations within the knowing subject. However, the question still remains of how one builds new cognitive structures that are actually about old structures, as when one constructs formal operations, which

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[43] Lonergan prefers to translate the French word *accommodation* as 'adjustment'.

[44] Bernard Lonergan, "Piaget and the Idea of a General Education", Robert Doran & Frederick Crowe (Eds.) *Collected Works of Bernard Lonergan - Book 10: Topics in Education,* p. 196.

[45] Ibid.

[46] Ibid., p. 197. See also 'Functionalism' in the Glossary of this study.

Piaget regards as operations on concrete operations.[47]

This is where Piaget's notion of 'reflecting abstraction' *(abstraction réfléchissante)* comes in. Its special function is abstracting aspects of one's processes of knowing, or one's action coordinations at a lower level. This involves firstly projecting a structure at a lower developmental level onto a higher level where the coordination may now be known consciously and explicitly. The act of knowing at this higher level is not a mere copy of the previous cognitive structure. The act of integrating it into other structures at the higher level is effectively an act of understanding which reorganises the new projected structure in order to assimilate it into existing higher structures. These structures, in turn, may end up accommodating themselves to the new structure.[48] This appears to be a kind of understanding of one's own mental operations in practice, akin to Lonergan's 'insight into insight'. The following, second example of reflecting abstraction comes from the introduction to Piaget's book *Reflecting Abstraction:*

> Multiplication looks like "just" repeated addition, yet children find it much more difficult than addition. The reason for this difference ... is that in order to understand multiplication, children have to do two things. Of course, they have to be able recognize how much they are adding each time. This is *empirical abstraction* - roughly speaking, abstraction of dimensions that children can observe in the environment. It is easily done by all of the children in [the] sample; they have no trouble realizing that they are adding three poker chips at a time to their row. To multiply successfully, however, children must also attend to the number of *times* that they add the same amount. This requires them to abstract a property of their own action coordinations; it is a job for *reflecting abstraction.* [49]

Viewed in Lonergan's terms, Piaget's 'reflecting abstraction' involves a shift of perspective from the object to the subject. It demands the ability to critically self-reflect. Initially, the operation is simple addition of perceivable objects. Multiplication demands the ability to see that one is indeed adding and that this same operation must now be iterated on the original operation.

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[47] Jean Piaget, *Studies in Reflecting Abstraction,* Robert L. Campbell (Ed. & Trans.), (Sussex: Psychology Press, 2001), p. 4.

[48] Ibid. This process of accommodation may be regarded as somewhat analogous to Lonergan's notion of 'sublation' which he borrowed from Hegel and which has already introduced in previous chapters. It will dealt with in more detail in Chapter Five below.

[49] Jean Piaget, *Studies in Reflecting Abstraction,* Robert L. Campbell (Ed. & Trans.), pp. 4 - 5.

4.3 Lonergan, Piaget, and Vygotsky

4.3.1 *Lev Vygotsky*

Lev Semyonovitch Vygotsky was born November 1896 in the town of Orscha in Belarus, northeast of the capital Minsk, to a middle-class Jewish family. His education was unconventional. He studied with a private tutor for many years, and enrolled in a Jewish gymnasium only for the junior high school level. Kozulin states that "by the age of eighteen, Vygotsky had already become an accomplished intellectual."[50] His essay on Hamlet, which later became part of *The Psychology of Art* (1925), was written at that time. In 1913 he completed gymnasium in Gomel with a gold medal and went to study at Moscow University. This was the heyday of Wilhelm Wunt, founder of experimental psychology, and of William James the American pragmatist. Vygotsky's scientific contemporaries also included the Russians Ivan Pavlov and Vladimir Bekhterev, and the American John B. Watson, all popularisers of stimulus-response theories of behaviour, as well as Wertheimer, Köhler, Koffka, and Lewin, who were founders of the Gestalt psychological movement. Kozulin, who is both a recognised authority on Vygotsky and his translator, comments:

> Moscow in the 1910s was quite an exciting place for a young intellectual. Unorthodox and innovative trends in science, the humanities, and the arts were emerging, and it seems that Vygotsky pursued them all. Theatre, among other things, became the focus of his interests.[51]

In 1917, after graduating from Moscow University with a specialisation in literature, he began his literary research. From 1917 to 1923 he taught literature and psychology in a school in Gomel, where he also directed the theatre section of the adult education centre and gave many speeches and lectures on problems of literature and science. Kozulin comments:

> A prodigal reader, he felt equally at home with commentaries on Shakespeare's tragedies, the philosophy of Hegel, and clinical studies of the mentally retarded. ... Vygotsky carried an aura of almost Mozartian giftedness. And yet he lived in times that were hardly favourable to Mozarts.[52]

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[50] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language* (Cambridge, MASS: The MIT Press, 1986), p. xii. Kozulin is a recognised authority on the works of Vygotsky. He taught for may years in the Massachusetts Institute of Technology. He revised the English translation of Vygotsky's *Myshlenie i Rech* and edited the 1986 edition for MIT Press. He is currently working with Reuven Feuerstein at his clinic in Jerusalem.

[51] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language,* p. xiii.

[52] Ibid., p. xi.

Kozulin claims that "Vygotsky entered professional psychology impetuously, and one may say in an onslaught." On 6 January 1924 the Second Psychoneurological Congress was held in Leningrad. Vygotsky delivered a talk on "The Methodology of Reflexological and Psychological Studies." His thesis was that scientific psychology cannot ignore the fact of consciousness. He argued that while the basic reflexes certainly provide the foundation for behaviour, one can learn nothing from them about the "construction" erected on this foundation. The notions of consciousness and unconsciousness simply could not be ignored. This challenged the position of the leading Soviet behavioural scientists of the time. The noted Russian neurologist Alexander Luria comments:

> Instead of choosing a minor theme, as might benefit a young man of twenty eight speaking for the first time to a gathering of greybeards of his profession, Vygotsky chose the difficult theme of the relation between conditioned reflexes and man's conscious behavior. ... Although he failed to convince everyone of the correctness of his view, it was clear that this man from the small provincial town in western Russia was an intellectual force who would have to be listened to.[53]

In 1924 Vygotsky moved to Moscow and, with Luria's help, began to work first at the Institute of Psychology and then in the Institute of Defectology[54] , which he founded. At the same time he directed a department for the education of physically defective and mentally retarded children in Narcompros (The People's Committee on Education), and taught courses in the Krupkaya Academy of Communist Education, the Second Moscow State University, and the Hertzen Pedagogical Institute in Leningrad. Between 1925 and 1934 Vygotsky gathered around him a large group of young scientists, including Luria, working in the areas of psychology, defectology, and mental abnormality. An interest in medicine led Vygotsky simultaneously to undertake medical training.

In 1932, Vygotsky delivered a series of lectures in Leningrad, and in 1934 his seminal work *Thought and Language*[55] was published. From his first speeches and publications in Moscow, Vygotsky made it clear that he regarded neither of the contending schools of the day, Behaviourism and Gestalt Psychology, as a satisfactory basis for providing a unified theory of human psychological processes.

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[53] Alexander Luria, *The Making of Mind* (Cambridge, MASS: Harvard University Press, 1979), pp. 38 - 39.

[54] This was the first official Russian institute for the study of handicapped children.

[55] Lev Vygotsky, *Thought and Language* (Cambridge, MASS: MIT Press, 1986). In the introduction, Alex Kozulin maintains that *Thinking and Speech* would represent a more accurate translation of the Russian title.

Like his Gestalt contemporaries he believed that a crisis existed because established theories (primarily Wunt's and Watson's behaviourism) could not explain complex perceptual and problem solving behaviours. But he also accused the Gestalt psychologists of failing to go beyond the description of complex phenomena to the explanation of them.[56]

Vygotsky's theories deal with what might be termed "the social formation of the mind." This inevitably involved him in a wide range of disciplines - philosophy, psychology, sociology and, given the conditions in the Russia of his day, political thought. His work was a "creative fusion and development of many perspectives and persuasions,"[57] which, given his comparative youth and ill health, gave rise to the opinion on the part of some theorists that he was "working on the edges of disciplines with which he was only partially familiar."[58]

4.3.2 *The Similarities Between the Theories of Piaget and Vygotsky*

Both Piaget and Vygotsky made their first significant contributions to psychology in the 1920s. English speaking countries had to await proficient translations, however, and true world-wide renown did not come until the 1960s for Piaget, and as late as the 1980s for Vygotsky.

The theories of Piaget and Vygotsky are often presented as being mutually antagonistic. However, there are also many points of agreement and similarity between them, and it is precisely these points which, according to Kozulin, "have become the cornerstones of the cognitive revolution we are now experiencing."[59] Acknowledging Piaget's revolutionary impact on child psychology, Vygotsky says:

> Like many another great discovery, Piaget's idea is simple to the point of seeming self-evident. It had already been expressed in the words of J.J. Rousseau, which Piaget himself quoted, that a child is not a miniature adult, and his mind is not the mind of an adult on a small scale.[60]

If a child's behaviour is qualitatively different, then linear extrapolation from simple responses is misleading and invalid, and, as Kozulin explains it, "it is erroneous to

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[56] Lev S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes* (Cambridge MASS: Harvard University Press, 1978), p. 5.
[57] Harry Daniels (Ed.), *An Introduction to Vygotsky* (London & New York: Routledge, 1996), p. 2.
[58] Ibid., p. 3.
[59] Alex Kozulin, *Psychological Tools: A Sociocultural Approach to Education* (Cambridge, MASS: Harvard University Press, 1998), p. 35.
[60] Lev Vygotsky, *Thought and Language* (Cambridge, MASS: MIT Press, 1986), p. 13.

look for small scale copies of adult behavior in children."[61]

Another issue on which the theories of Piaget and Vygotsky are in general agreement concerns the relationship between action and thought. Classical mentalistic psychology presumed the priority of thought over action in such a way that action was perceived only as realised thought. In Lonergan's view, for example, action follows decision, which follows judgment, which follows insight. Little explains:

> In deciding, one commits oneself to implement a set of actions which address the reality one faces to achieve a set of benefits one seeks within a context of values one holds.[62]

Or, as Crowe expresses it: Judgment "contributes the decision that turns a cognitional into a performative process, that involves the action properly following upon knowledge of fact."[63]

For Lonergan, thought or knowing is a highly complex process. It is not simply representational after the analogy of ocular vision. There is more to knowing than just looking. It is not intuitive, in other words. Rather, Lonergan sees thought and knowing as progressive. It is "the structured pattern of conscious and intentional operations involving the three successive levels of experience, understanding and judgment."[64] For Lonergan, then, there is clearly a primacy of thought over action in such a way that action is perceived as a realisation of thought. An individual is first supposed to have an idea of a certain solution and only then to realise it in a chosen act.

In his theory of sensory-motor intelligence, on the other hand, Piaget tried to show that thought itself has an operational structure derived from actual behaviour performed by children. For example, by physically putting objects together or by separating them, a child, in a form of action, performs what will later be internalised as the mental operations of addition and subtraction. Thus, the key to the child's thinking, according to Piaget, lies in his practical activity which in the course of his development becomes internalised and transformed into cognitive operations.[65]

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[61] Alex Kozulin, *Psychological Tools: A Sociocultural Approach to Education,* p. 35.

[62] John Little, "Insight, Strategic Thinking and Control", *The Practising Manager* 17:1 (October 1996), p. 23.

[63] F. E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, Georgia: Scholars Press, 1985), p. 7.

[64] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 169.

[65] Alex Kozulin, "Creating Powerful Thinking in Teachers and Students", in John M. Mangieri & Cathy Collins Block (Eds), *The Cognitive Revolution in Learning: Piaget and Vygotsky* (1994), p. 271. This article was obtained from Alex Kozulin as an offprint, and this author has been unable to discover the publisher of the original book.

Vygotsky would be in general agreement with Piaget regarding the formula "from action to thought." However, Vygotsky made an important amendment to it. In Piagetian theory, action appears first and foremost as a spontaneous physical interaction between the child and physical objects in his environment. Later in life the child becomes capable of substituting words and symbols and of developing logical formulae for these physical interactions, and in this way arrives at symbolic operational thought. Vygotsky, however, argues that such a picture does not correspond to the reality in which child development takes place. The child's interaction with objects is only one element in a much wider activity that is socially and culturally influenced. Kozulin explains that, according to Vygotsky,

> the formula "from action to thought" should take into account the sociocultural nature of action and how actions develop and are internalized by children.[66]

Both Piaget and Vygotsky, then, sought for a systemic explanation of cognitive functioning. In Piagetian theory, systemic explanation is based on two major notions: the notion of internalised groups of operations and the notion of the developmental stage. Individual operations always appear as elements of the whole, and their nature is determined by the nature of this whole system. Lonergan would describe them as mutually mediating elements in a system in which the system as a whole mediates the contribution of each element to the others.[67] Operations, then, do not act alone. Kozulin explains that "an isolated operation is an abstraction."[68] And Piaget explains more fully:

> A single operation could not be an operation, because the peculiarity of operations is that they form systems. Here we may well protest vigourously against logical atomism, whose pattern has been a grievous hindrance to the psychology of thought.[69]

The same idea of a system guided Piaget in his concept of the developmental stage. Piaget distinguished four major stages: sensory-motor, preoperational, concrete operational, and formal operational.[70] At each of these stages, which, according to Piaget, appear in strict developmental order, the child acts in a way characteristic of the particular level of cognitive development which he has achieved. For example, all the different schemes of preoperational thought belong

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[66] Ibid.

[67] See Section 12.5.2 below.

[68] Alex Kozulin, "Creating Powerful Thinking in Teachers and Students", p. 271. ... See not on previous page.

[69] Jean Piaget, *Psychology of Intelligence* (Totowa, NJ: Littlefield, Adams & Co., 1969), p. 35.

[70] These stages are dealt with in more detail in Section 8.14.2.

to one system, and the child's thinking and reasoning at this level have a certain consistency and homogeneity as a result.

Vygotsky approached this same problem of the systemic organisation of child thought from the point of view of the relationships between different psychological functions. He pointed out that while some psychological functions such as perception, memory, or logical reasoning in themselves may change very little during childhood, their mutual relationships do. For example, in younger children reasoning may play a subordinate role to memory. In adolescents, on the other hand, this relationship is often reversed. The same appears to apply to the relationship between imagery and language explored by Robertson.[71] Of central importance to the work of Vygotsky, however, is his proposal that the development of both thinking and speech in childhood depends primarily on the changing relationships between these two functions, which enter into different types of systemic relationships as the child develops. In summary, Vygotsky states:

> It was shown and proved experimentally that mental development does not coincide with the development of separate psychological functions, but rather depends on changing relations between them. The development of each function, in turn, depends upon the progress in the development of the interfunctional system.[72]

Psychological development, therefore, is envisaged by Vygotsky as a construction of ever more complex systems of different psychological functions that work in cooperation with one another, and which may be said to 'mediate' each other. This appears similar to the position taken by Piaget in regard to his cognitive operations. Kozulin adds that "the failure to form an interfunctional system manifests itself as a learning disability even, in more severe forms, as cognitive retardation."[73] This will be dealt with in greater detail when considering Feuerstein's notion of 'deficient cognitive functions' in Chapter Ten.

4.3.3 *The Differences Between the Theories of Piaget and Vygotsky*

In his book *Psychological Tools* Kozulin states:

> Piagetian theory ... leaves many questions either unanswered or answered in ways that are not entirely satisfactory. There are two major problems with the Piagetian cognitive approach. First, the sociocultural aspect of learning remains largely beyond the scope of Piaget's theory. Second, the learning process that Piaget

[71] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002). This is discussed in Section 10.3.3 below.
[72] Lev Vygotsky, *Thought and Language* (Cambridge, MASS: MIT Press, 1986), p. 167.
[73] Alex Kozulin, "Creating Powerful Thinking in Teachers and Students," p. 272.

> proposed occurred as direct interaction of the child with the environment. Human mediators were largely excluded from the exchange.[74]

Probably the most essential difference, then, between Piaget and Vygotsky lies in their respective understanding of the nature of the human subject. For Piaget, the subject is an individual child whose mind, through interaction with the physical and social world, arrives at the mature forms of reasoning associated with formal operations. For Vygotsky, the human subject is not a lone discoverer of logical rules, but a child who masters his own psychological process through tools offered by a given social milieu and culture, which Lonergan refers to as "the vastly larger world mediated by meaning."[75] Lonergan explains further:

> As the child learns to speak, he moves out of the world of his immediate surroundings towards the far larger world revealed through the memories of other men, through the common sense of community, through the pages of literature, through the labors of scholars, through the investigations of scientists, through the experience of saints, through the mediations of philosophers and theologians.[76]

Another major area of difference between Piaget and Vygotsky involves the role of language in cognition. Despite the fact that Piaget made his name early on in his career with books dedicated to child speech[77], nevertheless in his mature works he tended to avoid the issue of language. Kozulin comments:

> Some of his followers in the field of education even make attitude towards language into a litmus test separating Piagetians who emphasise thinking from "traditionalists" who focus on verbal development.[78]

For Vygotsky, on the other hand, "language in its different forms constitutes the central theme of cognitive development. For him, cognitive development can be imagined as a dynamic pattern of engagements and separations between intellectual and verbal functions. Kozulin explains:

> Rather than a merger of two "strings" the relationships between language and thought look more like a nodical line with some threads from one string being interwoven into the other after each node.[79]

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[74] Alex Kozulin, *Psychological Tools* (Cambridge, MASS: Harvard University Press, 1998), p. 59

[75] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), pp. 28 - 29.

[76] Ibid.

[77] Jean Piaget, *The Language and Thought of the Child* (New York: Harcourt Brace Jovanovich, 1926)
Jean Piaget, *Judgment and Reasoning in the Child* (New York: Harcourt Brace Jovanovich, 1928)

[78] Alex Kozulin, "Creating Powerful Thinking in Teachers and Students", in John M. Mangieri & Cathy Collins Block (Eds), *The Cognitive Revolution in Learning: Piaget and Vygotsky* (1994), p. 274.

[79] Ibid.

Another point of difference between Piaget and Vygotsky will be shown in greater detail in the next section: while the theories of Piaget are to do primarily with what he termed the "genetic development" of the child, Vygotsky concentrates mainly on what might be termed the socially determined aspects of development. Piaget's orientation may be termed development from 'inside-out', or from 'below-upwards', while the approach adopted by Vygotsky may be termed (albeit somewhat simplistically) development from 'outside-in', or from 'above-downwards'. It will be argued in Chapter Fourteen that Lonergan manages to unite these two views in his treatment of what he terms "the two ways of human development."

4.4 *An Introduction to the Theories of Reuven Feuerstein*

4.4.1 *Reuven Feuerstein*

Reuven Feuerstein, the fifth of nine children, was born into a devout Jewish family in Botosani, Romania, on August 21, 1921. By the age of nine, Feuerstein was a member of the Bnei Akiva youth movement, a religious Zionist organisation. From then on, Zionism was to play an important part in his life. It was as a member of the Youth Aliyah movement, however, that his passion for education had a chance to merge with his equally passionate Zionism. Despite the anti-Semitism of the times and the inevitable trouble which his interests attracted, he managed to graduate from a teachers seminary in Bucharest and attend Ionescu College. Finally, he escaped to Israel before the worst excesses of Nazism.

In 1944, he was directed by Youth Aliyah to a religious kibbutz in the Hebron hills and then, in 1948, he became a lecturer in Israel's first teacher training college on Mount Scopus in Jerusalem. Here he promptly rejected the behaviourist model of learning then in vogue. He explains:

> Already I was too sophisticated and had too many successful experiences as a mediator to accept such things. I knew humans were not simply registers of things ... Certainly behaviorism did not provide long-term positive possibilities.[80]

On the contrary, Feuerstein considered that human learners had the potential for inner modification when nurtured by active, involved 'mediators' who cared enough

[80] Reuven Feuerstein, quoted from an interview with Ruth Vassar Burgess and published in: Kozulin & Rand (Eds.), *Experience of Mediated Learning: An Impact of Feuerstein's Theory in Education and Psychology* (Oxford: Pergamon, 2000), p. 6

to transmit their heritage. He argued that human beings were not static, but rather they were dynamic in the sense that they could reach towards unlimited positive (or negative) potentials. Already, one can identify the inherent transcendent nature of Feuerstein's underlying philosophy.

Around this time Feuerstein joined his brother Shimshon at Mikve Yisra'el, an agricultural community near Holon, outside Tel Aviv. Here he met young Jews who had survived extermination camps in Europe. Most of them were from Poland and had seen their families massacred. A group of these children, "the children from Teheran", had walked eastward through southern Russia and southward into Iran where, for a time, they were quartered in tents outside Teheran. These had now arrived in Jerusalem, and were aged and traumatised by the horrors of the Holocaust. It was clear to Feuerstein that a very special programme of education would be required if these children were to overcome their various handicaps and integrate into Israeli society.

Feuerstein's work was interrupted by a severe attack of tuberculosis. Providentially, Youth Aliyah decided to send him to a sanatorium in Davos, Switzerland. In late 1949, despite his illness, he began studying with Karl Jaspers in Basle, and Carl Jung in Zurich. Eventually, Feuerstein came to Geneva to study with Jean Piaget. He had decided that it was time to focus his field of study much more, and he opted for cognitive psychology. He explains:

> I was constantly moving between philosophy, psychology, and Biblical sciences ... It took me years to put shutters on my eyes, to focus on one thing.[81]

4.4.2 *Feuerstein, Piaget, and Vygotsky*

In Geneva, Feuerstein came to a better understanding of cognition and its basic processes. He became exposed to both scientific and clinical methods for investigating these processes. In particular, Piaget's scientific manner and modes of questioning, his 'clinical method', provided a protocol for systematic inquiry that significantly influenced Feuerstein's own methods. In addition, Piaget provided Feuerstein with a research design model. This included collaborative inquiry in

[81] Reuven Feuerstein, quoted from an interview with Ruth Vassar Burgess and published in: Kozulin & Rand (Eds.), *Experience of Mediated Learning: An Impact of Feuerstein's Theory in Education and Psychology* (Oxford: Pergamon, 2000), p. 6

which the old master posed a question and then sent his students out to test the experimental hypothesis. Subsequently, they reported back to Piaget who synthesised their findings. As a consequence of Piaget's influence, Feuerstein came to see cognition mainly in terms of problem solving.

However, because Piaget was committed to the notion of a fixed succession of discontinuous stages of child development, he was not open to Feuerstein's concept of 'cognitive modifiability'. Piaget insisted that children could not jump over these stages. In contrast, Feuerstein contended that the order and timing of cognitive development is set not by maturation, but by mediated social experiences. As a result, Feuerstein opted to work instead with Prof. André Rey, who shared his opinions. Significantly, Piaget had been aware since the late 1920s that Vygotsky in Russia also held similar ideas to those of Feuerstein, but he "chose not to share Vygotsky's work with his students."[82]

In Piaget's theory, as already mentioned, one can say that cognitive development proceeds largely 'from inside out', through maturation. Environments may foster or impede development, but Piaget emphasised the biological, and hence the maturational, aspects of development. In contrast to Piaget's inside-out approach, Vygotsky emphasised the role of the social environment in children's intellectual development. He proposed that development proceeds largely 'from the outside-in', through 'internalisation', a process of cognitive development in which an individual absorbs knowledge from an external environmental context. Thus, social rather than biological influences are key in Vygotsky's theory. In Sternberg's words, one might say:

> Every day, at home, in school, and on the street, children listen to what people say and how they say it, and watch what people do and why they do it. Then they internalize what they see, making it their own. They recreate within themselves the kinds of conversations and other interactions they see in their world.[83]

Feuerstein would be in agreement with this view of things. According to Vygotsky and Feuerstein, much of a child's learning occurs through his or her interactions with the environment, which largely determines what the child internalises. Feuerstein, however, adds the special notion of 'mediated learning experience' as the key to what he terms 'cognitive modifiability', or mental flexibility.[84]

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[82] Ibid., p. 8.

[83] Robert J. Sternberg, *In Search of the Human Mind* (New York: Harcourt Brace College Publishers, 1998), p. 406

[84] See Section 15.7 of this study.

To summarise what has been said in a more systematic fashion, one can consider the four major groups of theories of human development distinguished by Vygotsky:[85]

1) For the first group, development precedes learning. The two processes are perceived as being independent with learning following the process of development and benefiting from it. Teaching can only follow the process of development without being able to influence it in any significant way. Vygotsky considered this to be Piaget's stance. Neither Feuerstein, nor Lonergan would subscribe to such a view.

2) In the second group of theories, learning coincides with development. In other words, learning is development itself. The laws of development are the natural laws which cannot be changed by teaching. Both processes develop simultaneously. For every advance in one dimension there is a corresponding advance in another.

3) In the third group of theories, though the two processes are considered to be independent, they are nevertheless mutually conditioned. There is an interaction between maturation and learning. Maturation leads the way facilitating learning, while learning stimulates and causes maturation to progress. One can say that the two interact by a process of 'mutual mediation', to use Lonergan's terminology.

4) In Vygotsky's own view of the interaction of maturation and learning, learning actually activates development. This, to some extent, is what Crowe means by the "need for gift to precede achievement,"[86] and what Lonergan means when he says that development from 'above downwards' is the "chronologically-prior phase."[87]

Thus, it can be argued that Lonergan's own view of the relationship between learning and development is closer to that of Vygotsky than of Piaget. This notion of learning activating development also colours Vygotsky's notion of general mental capacity. He considers that there are two levels of cognitive development to be

[85] L. Vygotsky, "Le probléme de enseignement et du developpement mental á l'âge scolaire" In Schneuwly & Bronckart *Vygotsky Aujourd'hui* (Paris: Delachaux et Niestlé, 1935)

[86] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 15

[87] Bernard Lonergan, "Theology and Praxis" in Frederick E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan, S.J.* (New York: Paulist Press, 1985), p. 196.

considered: (a) the child's current development, which corresponds to a level of performance which the child is capable of reaching alone, and (b) the child's potential development, which is implied by the performance level attained with the help of adult intervention (with the help of outside mediation, in other words). The distance between (a) and (b) is defined by Vygotsky as the 'zone of proximal development' (ZPD). Feuerstein is in complete agreement with this view[88] and his now famous Learning Propensity Assessment Device (LPAD) claims to measure not just the child's current level of performance, as IQ tests do, but also, as the name implies, the potential or propensity of the child for future growth and development, given help in the form of what he terms 'mediated learning experience'.

It has been implied above that Lonergan's scheme of development has elements in common with both the third and fourth theories cited by Vygotsky. This is in accordance with the complementarity of Lonergan's two ways of human development. His two ways - from below upwards and from above downwards - correspond roughly with Piaget's notion of development 'from inside out' and Vygotsky's notion of maturation 'from outside in'. Lonergan, it can be argued, manages to unify both theories in one. For Lonergan the 'pure desire to know' is the origin of all cognition and all learning. But the pure desire to know is activated only in the presence of an intentional object. While the environment is an essential condition for learning to take place, and while both Lonergan and Crowe agree that "development from above downwards" or "the way of heritage" is a prior condition for learning and development, it will be argued in Chapter Fourteen that it is more accurate to regard human development as an interaction, or a 'mutual mediation', of the two ways. Thus it can be argued that the true picture may be said to lie somewhere between theories of type 3) and those of type 4) above.

However, the above supposed distinction between the theories of Piaget and Vygotsky is not as sharp as it may appear at first glance. Piaget's dual functions of assimilation and accommodation may be seen as keeping the internal unfolding of organic potential in balance with external environmental influences, including the social and cultural. Feuerstein's main complaint with Piaget, as will be shown, was that he relegated the role of adult human intervention in the child's life to the level of just another environmental influence. It is also worth noting at this stage that cross-

[88] Charles Hadji, "Science, Pedagogy and Ethics in Feuerstein's Theory and Applications" Published in: Kozulin & Rand (Eds.), *Experience of Mediated Learning: An Impact of Feuerstein's Theory in Education and Psychology* (Oxford: Pergamon, 2000), pp. 22 - 23.

cultural studies into Piaget's theories appear to support the existence of his stages of psycho-physical or cognitive development, as well as the general developmental sequence of these stages. However, they also tend to support theories of type 3) above, as well as indicating that children may pass through Piaget's stages at different ages in different cultures and in different language groups, perhaps because of variations in the environmental influences. Ghuman states:

> Firstly, though biological bases are necessary for the growth of cognitive structures ... , the environmental factors, such as socialization practices and cultural and educational factors, are equally important in the actualization of these structures; secondly, the time-lag found in non-Western children is largely due to their differential experiences with the physical and social worlds.[89]

Again, this latter position is similar to Vygotsky's third group of theories, and, in the opinion of this author, is also similar to that held by Lonergan. Theories 3) and 4) are simply not mutually exclusive, as Vygotsky seems to imply. Once one accepts the fact that man is not pure intellect and that developmental problems of many kinds - emotional, organic, social, or medical - can and do arise, then it becomes necessary to add theory 4) to 3), just as the present study seeks to add the clinical findings of Feuerstein to the more comprehensive and detailed philosophical theory of Lonergan.

Together, Rey and Feuerstein collaborated on a landmark research project in Morocco. Youth Aliyah was having difficulties integrating Moroccan Jewish children into Israel and asked Feuerstein to research whether these Moroccan children could be educated and so qualify for entry to Israel. Feuerstein and Rey discovered that many of the referred Moroccan children, who would be classified as mentally retarded by conventional psychometric measures, were suffering from overwhelming 'cultural deprivation'[90] . Many of the Jewish families experienced oppression and difficult living conditions when they moved from rural Morocco to various urban slums in both Morocco itself and in France.

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[89] Paul Ghuman, "An Evaluation of Piaget's Theory from a Cross-cultural Perspective". In Sohan & Celia Modgil (Eds.), *Jean Piaget: Consensus and Controversy* (New York: Holt, Rinehart and Winston, 1982), p. 280.
[90] See Section 11.5 below.

4.4.3 *The Development of the Feuerstein System*

In 1954 Feuerstein was invited to return to Israel to work with immigrant children and adolescents, facilitating their entry into Israel and their adaptation to a new life there. This he did through his directorship of a new Child Guidance Clinic in Jerusalem. In 1957 a research unit was added to the clinic. From 1954 to 1970 Feuerstein developed the standard set of 'instruments' of his now widely respected 'Instrumental Enrichment' (IE) programme. The programme is not merely a set of mental exercises to teach what is generally termed 'thinking skills; it is not a set of 'mental gymnastics', in other words, to teach mental discipline. Its aim is 'metacognitive', to get children "thinking about thinking,"[91] or what Lonergan would term inducing 'understanding of understanding'.[92] As such, it effects a much more radical change in the human subject than that normally associated with the word 'skill'. This is an important point of convergence between the thinking of Lonergan and Feuerstein. Lonergan's system aims at 'self appropriation of interiority', a sort of vital, experiential grasp of the workings of one's own mind which puts one more firmly in the 'driver's seat', as it were, of one's own mental functioning, thus bringing the considerable potential of one's mind under 'propriate' control, to borrow a term from Allport. Feuerstein's 'mediated learning experience' (MLE), Instrumental Enrichment programme (FIE) and Learning Propensity Assessment Device (LPAD) all work through giving the child a practical insight into, or understanding of, the operations of his own mind, through what Lonergan would term "insight into insight". Feuerstein explains:

> FIE is most simply described as a strategy for learning to learn. It uses abstract, content-free, organizational, spatial, temporal, and perceptual exercises that involve a wide range of mental operations and thought processes. The exercises do not substitute for, but supplement the traditional content materials of the regular classroom. [93]

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[91] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore: University Park Press, 1980), p. ix.

[92] While Lonergan initially used the term "insight into insight," he realised after completing *Insight* that, because insight is always into phantasm and insights are unimaginable, then one cannot properly speak of an insight into insight.

[93] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. xv.

4.4.4 *The Instrumental Enrichment Programme*

Feuerstein's Instrumental Enrichment programme (FIE) attempts to compensate for lack of early mediated learning experience in the family and social milieu. Its goal is to modify the cognitive structure of the individual and thus to produce and set in motion his further cognitive development. It is based on many components of the theories of Piaget and Vygotsky, as well as on the more clinically based insights of André Rey.

Feuerstein introduces Instrumental Enrichment as a strategy for the redevelopment of cognitive structures in a 'retarded' performer. In his book on the subject he explains:

> It is designed as a direct and focussed attack on those processes that, because of their absence, fragility, or inefficiency, are responsible for poor intellectual performance, irrespective of underlying aetiology.[94]

Thus the aim of the IE programme is to change the underlying mental structures of the retarded performer. This it does "by transforming his passive and dependent cognitive style into that characteristic of an autonomous and independent thinker."[95] The programme is addressed not to any specific skill or content area but to the process of learning itself, using what Feuerstein terms his "instruments" which are content-free pen-and-paper exercises. It is argued in this study that Feuerstein's aim in IE is the same as Lonergan's aim in *Insight*, that is to give the student a grasp, or understanding of his own mental processes through 'self-appropriation of interiority'.[96]

4.4.5 *The Learning Propensity Assessment Device*

The basic Learning Propensity Assessment Device (LPAD) has been in place since 1969. This test led to "a radical shift from a static to a dynamic approach to testing in which the test situation was transformed into a learning experience for the child."[97] Feuerstein credits André Rey and Jean Piaget with inspiring the development of this revolutionary assessment method. However, in many respects,

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[94] Ibid., p. 1.

[95] Ibid.

[96] Feuerstein's Instrumental Enrichment programme is discussed in more detail in Section 16.8 dealing with "Questioning and Mediation in the Work of Feuerstein."

[97] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore: University Park Press, 1980), p. viii.

it appears to owe almost as much to Vygotsky's notion of 'the zone of proximal development' (ZPD). As already mentioned,[98] the ZPD may be defined as the range of ability between a person's observable manifest level of mental functioning at a particular time and his latent capacity, which is not at first directly observable, but which may be detected by providing a mediated learning context in which this latent capacity may be revealed and expressed.

Vygotsky argued that we need to reconsider not only how we think about children's cognitive abilities, but also about how we measure them. Instead of the usual 'static assessment environment', in which an examiner asks a series of standardised questions, as in the Wechsler Intelligence Scale for Children (WISC), offering no hints or guidance even if the test-taker makes incorrect responses, Vygotsky recommended a 'dynamic assessment environment' in which the examiner gives the child guided and graded hints to facilitate problem solving.[99] Thus the child's performance after a period of mediated learning is compared with his prior unaided performance; the difference between the two corresponds to the ZPD, and gives a measure of the child's potential or propensity to learn.

Like Vygotsky, Feuerstein considers that most psychometric measures do not provide a framework for meaningful cognitive change. He insists that the notion of modifiability must be included among assessment's standards. The aim of his LPAD is to measure the degree to which a person can be developed or modified. The emphasis is on follow up intervention with 'Mediated Learning Experience' as part of the assessment to determine the degree to which the individual may be changed or modified. In Feuerstein's conceptual framework, children from economically and psychologically impoverished homes perform poorly on standardised intelligence tests because they have been denied appropriate 'mediated learning experience' (MLE) in their formative years. The LPAD has proved to be a successful approach to assessing what a child *can* learn, and can therefore provide an estimate of his learning capacity, or propensity to be modified, as well as identifying 'deficient cognitive functions' or areas in which remedial intervention might be needed.

With all the work that this entails, it is not surprising to find that Feuerstein did not complete his doctoral thesis until 1970. Since 1970, he has served as Professor of Education at the Bar Ilan University's School of Education. From 1978 he has

[98] See Section 4.4.2

[99] Robert J. Sternberg, *In Search of the Human Mind* (New York: Harcourt Brace College Publishers, 1998), p. 406

also held the position of Adjunct Professor at Vanderbilt University's Peabody College of Education. In 1991 he was awarded the *Chevalier dans l'Ordre des Palmes Academique* in France.

4.4.6 *Feuerstein's Theories*

Feuerstein's theoretical framework is essentially a functionalist information processing model of mental behaviour in which he describes the various mental functions according to their places at the 'input', 'elaboration' or 'output' stages of mental operation. Like Lonergan, he is interested not merely in the content of the mind, but in the formal structure of thought. Also like Lonergan, he views this structure as an inherently dynamic one. The input-elaboration-output 'model' is merely a simplistic metaphor, or analogy, which cognitive psychologists in general have found useful in describing the working of the human mind. While it is functionalist, it does not imply a behaviourist or mechanistic attitude or stance on Feuerstein's part.

While Feuerstein considers that his various mental operations or functions do develop over time, nevertheless, they may not develop uniformly. It is possible for a student to be lacking or 'deficient' in some mental processes and not others. He is concerned generally with the child's ability to learn and solve problems, and with the reasons why this ability fails to develop in the absence, during early childhood, of systematic learning mediated by a caring adult. He is also concerned with the discovery of how such cognitive defects can be remedied by formal instructional programmes. It will be contended, however, that the significance of his work extends well beyond its implications for remediation of retarded performers.

Freudian psychoanalysis accorded emotional factors a primary role in determining individual conduct. Behaviourism ruled out internal factors and concentrated attention on inputs and outputs, that is, on stimuli and response related environmental contingencies, to account for behaviour. Psychometrics was concerned with increasingly precise and quantitative descriptions of static states, or of the end-products of development and learning to enhance the predictability of the applied measures. These three traditions gave insufficient attention to the most distinctly human of all human attributes, the ability to think and to be 'modified'. For Feuerstein, as for Lonergan, cognition is the focal point of successful adaptation.

4.4.7 *Structural Cognitive Modifiability*

Reuven Feuerstein insists that

> except in the most severe instances of genetic and organic impairment, the human organism is open to modifiability at all ages and stages of development.[100]

He claims that all human beings need to be considered as open systems, liable to be meaningfully modified by environmental intervention. Such a view contrasts sharply with the general hereditary view of achievement potential, which, in its extreme form, considers that the ultimate level of an individual's functioning is determined solely by his genetic endowment.[101] One can say, in this regard at least, Feuerstein has an inherently transcendent view of the human mind.

Feuerstein refers to the modifiability of cognitive structures. His notion of a structure appears to be very similar to that of both Piaget and Lonergan. Like Lonergan he views a cognitive structure as something inherently dynamic in which the parts relate to the whole and the whole to the parts, as in what Lonergan would describe as mutually mediating elements in a 'self mediating' system.[102] Feuerstein explains:

> A psychological structure can be viewed as a system composed of a number of elements that are interconnected and that mutually affect each other. Moreover, psychological structures are linked with a variety of other systems of the individual's personality.
>
> As opposed to physical structures, which are static by nature, psychological structures contain dynamic components that are expressed through several characteristics: [103]

The characteristics of such a dynamic system may be described as follows:

> 1. Firstly, a structure according to Feuerstein is characterised by strong cohesion between the whole - that is, the structure itself - and its components. Consequently, experiences that relate to one or more components of a structure will affect not only the ones involved directly but also all the other components.[104] Feuerstein gives the example of the cognitive structure of memory. This may include perceptual components (such as focusing), intellectual components (such as understanding the content), motivational components (such as interest in the content to be memorised), and many others. All of these components are interconnected and influence one another. Moreover, changes introduced in one of these components, such as raising the level of the individual's interest in the content to be memorised, may affect all the other components considerably. In time, attention will be

[100] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. viii.
[101] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 5.
[102] Lonergan's notion of mediation is discussed in some detail in Chapter Fifteen of this study.
[103] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), pp. 9 - 10.
[104] Ibid., p. 10.

significantly enhanced and comprehension increased.[105]

2. Secondly, a structure is characterised by what he terms 'transformism'. This refers to the tendency of a structure to change its ways of functioning. Such changes may for example, be reflected in the rhythm of an activity. Tasks that previously required much more time may, through teaching, be accomplished much more rapidly. Children may also show higher levels of intensity and flexibility in performing a task. These changes will ultimately affect the functioning of the structure.

3. Owing to its energetic components, the psychological structure tends to act in a self-regulating, self-perpetuating, and, Lonergan would add, a 'self-mediating' way. This is expressed by its repeated use whenever the individual considers that the activation of such a structure may be helpful in solving a certain problem or in coping with a given situation. Feuerstein gives 'precision' as one example of such a structure, saying:

> An individual who has integrated precision within his psychological system will tend to act in a precise and accurate way in all of his activities. He will collect relevant data in a precise way; he will register them (in a written and oral form) in an organised and systematic manner; he will communicate the accumulated information to others with a high degree of accuracy.[106]

4.4.8 *Mediated Learning Experience (MLE)*

For Feuerstein, 'mediated learning experience' (MLE) is the means by which 'structural cognitive modifiablity' is produced. He defines MLE as follows:

> MLE is defined as a quality of interaction between the learner and the world of stimuli he/she is coping with, when this interaction is mediated by an adult or a more competent or initiated individual who selects, emphasises, changes, and interprets the stimuli for the learner.[107]

Feuerstein proposes that it is by the flow of information transmitted to the individual by this process of mediation through channels produced by the same mediation that higher mental functions or operations are developed in the child.

Mediated learning experience, as opposed to learning by way of direct exposure to stimuli or 'immediate' learning, in Lonergan's terminology, is the principal avenue by which the individual may undergo meaningful transformation and become 'structurally modified'. Mediated learning experience is the normal process used by a mother, for example, interacting with her child, a carpenter

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[105] This is a typical example of what Lonergan would describe as 'mutually mediating elements in a self-mediating system'. This will be explained more fully in Chapter 15 of this study.

[106] Feuerstein, Rand & Rynders, *Don't Accept me as I Am,* pp. 10 - 11. The apparent isomorphism between such cognitive structures and what are termed 'neural networks' in modern-day cybernetics is worth noting. It is possible that such structures have equivalent 'hard-wired' neural networks on the level of brain structure.

[107] Alex Kozulin & Yacov Rand (Eds.), *Experience of Mediated Learning* (Oxford: Pergamon, 2000), p. xi.

training his apprentice, or a student helping a friend with his homework. By identifying and isolating the characteristic processes involved in mediation, one can attempt to develop a theory of this most central of all human educational instruments. This will be dealt with in some detail in Chapter Fifteen.

The purpose of mediation is to assist in the transition from exterior to interior 'locus of control', which results in what Feuerstein labels 'autoplasticity'. An individual controlled by externals (the 'alloplastic') is more compliant, more dependent, and fragmented over time, as reinforcers satiate or disappear. In other words, alloplastic individuals tend to base their social behaviour on present considerations, and live predominantly in a sensorial bound existence. The autoplastic individual, on the other hand, displays a greater flexibility of thinking, and a greater capacity or propensity to become 'modified' or developed.

According to Feuerstein, in both the **S-R** scheme of the narrow behaviourists and the **S-O-R** scheme of the Geneva School, the emphasis is on direct exposure to stimuli and "there is a relative neglect, or at least an underestimation, of the role played by the adult, initiated fellow human being and the culturally determined intentions of this mediator, in the process of unfolding growth and change which characterizes human development"[108].

Feuerstein and Lonergan both accept the importance for the development of the child of 'direct exposure to stimuli'. However, for Piaget there is nothing else but direct learning; the rest of human kind is simply part of the environment to be assimilated and accommodated by the developing organism, rather than having a special role to play in mediating the growth and development of the child. Following the terminology so far used, Feuerstein would characterise his own view of 'mediated learning experience' (MLE) by the formula:

$$S \rightarrow \mathbf{H} \rightarrow O \rightarrow \mathbf{H} \rightarrow R$$

where H stands for the human mediator interposing himself not only between the stimulus (S) and the learning organism (O) but also mediating and helping the production of the correct learned response (R). Thus, it will be shown, Feuerstein's S-H-O-H-R scheme corresponds well to what Lonergan defines in his theories of intersubjectivity as 'mutual self-mediation', as considered in Chapter Fifteen, below.

[108] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 9

4.4.9 *Lack of MLE and Cultural Deprivation*

Feuerstein and his group have initiated many cross-cultural studies into the causes of what he terms 'cultural deprivation'. Most of these studies involved Jewish families from different countries and cultures who were migrating to Israel. Some, however, involved native American communities, like the Navaho, and the 'First Nation' peoples of Canada. Feuerstein found that "the more a group has preserved its cultural values (often through the preservation of its language), the more it has been able to maintain a high level of cultural cohesiveness, and, more importantly, the greater has been its capacity to cope successfully with the unfamiliarity and complexity of a new environment."[109]

Cultural deprivation, however, may apply to deprived children anywhere, even in relatively wealthy societies. In Feuerstein's opinion, it is one of the most central reasons for the failure of children to achieve in school. He says:

> Don't we regularly witness ... "flitting" behaviors with children and adults who exhibit retarded performance? How many teachers are puzzled by certain children's inability to become affected by the learning processes to which they are exposed? Some children with retarded performance seem to repeat the same errors and show the same incapacity for learning even after having been exposed to cause-and-effect conditions many times. [110]

The ingredients necessary to turn an experience into a source of learning, and to provoke a more active and disciplined way of reacting to the world, are the ingredients of 'mediated learning experience' - perceiving, labelling, comparing, grouping, categorising, inferring, and giving meaning to the present experience as it relates to former experiences, or to the child's 'horizon', as Lonergan would term it.

4.5 *Chapter Conclusions*

In this chapter, the addition of Piaget's insights add not only the notion of organic development to Lonergan's cognitive scheme, but also provide much needed clarification of Lonergan's notions of 'structure' and 'operation'. The theories of Piaget and Vygotsky together also provide the necessary foundation for a consideration of the work of Reuven Feuerstein. Feuerstein, in turn, expands the foundation of the study enormously, providing a practical educational illustration of

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[109] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 69.
[110] Ibid., p. 55.

the theory of mediation with which Lonergan deals primarily on a theoretical level.[111]

Feuerstein also indicates a possible practical pedagogical methodology for Lonergan's theories in the form of his Mediated Learning Experience (MLE) and his Instrumental Enrichment (IE) programme. Feuerstein's Learning Propensity Assessment Device (LPAD) has been identified as a practical illustration of Vygotsky's Zone of Proximal Development in application. These notions will be returned to periodically throughout the following chapters of this work.

This chapter has also suggested that, while the theories Lonergan and Piaget are certainly consistent and as such tend to compliment one another, nevertheless the theoretical stance adopted by Lonergan appears to be more consistent with the theories of Vygotsky than those of Piaget. This will be particularly apparent when dealing with "The Complementarity of the Two Ways of Human Development" in Chapter Fourteen.

[111] See Chapter 15 below.

Part II

The Intrasubjective Nature of the Human Person

Chapter 5

Lonergan's Cognitional Philosophy

5.1 *Introduction*

It has been argued already that Aquinas relegated psychology to a secondary position after metaphysics, even though, in Lonergan's opinion, he "did practice psychological introspection and through that experimental knowledge of his own soul arrived at his highly nuanced, deeply penetrating, firmly outlined theory of the nature of human intellect."[1] Lonergan, on the other hand, began with cognition and developed his philosophy from there, saying that

> our preliminary concern with psychological fact will lend a sureness, otherwise unattainable, to the interpretation of the metaphysical categories; for the Thomist application of metaphysics to the task of psychological analysis cannot be studied in some preliminary vacuum. That application exists only in psychological contexts: and it is easier to interpret metaphysics as applied to psychology when one is aware of the psychological facts involved.[2]

This chapter deals not only with the more psychological aspects of Lonergan's cognitional theory and his 'generalised empirical method', but also with those deeper aspects of his philosophy which are derived from, and grow out of, his psychological foundation. This is also the first chapter of Part Two of the study which deals with the 'intrasubjective nature of the human person'. This section of the study might equally well be termed 'the dynamics of interiority', or 'the dynamic structure of human subjectivity'. Many of the terms and concepts used in this section will already be familiar, having been introduced in Part One.

5.2. *Coming to Know - Three Basic Questions*

Lonergan has been criticised for his use of the term 'knowing' when his theory is in reality a theory of 'coming to know'. Daly says that Lonergan's theory is

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[1] Bernard Lonergan, *Verbum: Word and Idea in Aquinas* (Notre Dame: Univ. of Notre Dame Press, 1967), p. 94.
[2] Ibid., p. 95.

"a theory of learning - in a serious sense of the word, a theory of coming into the possession of knowledge"[3]. For Lonergan, the words knowing and learning can be used interchangeably. One can also say that his theory of knowing or learning is a dynamic one. And underlying this dynamic structure of knowing or learning is the intentional nature of the human mind itself, and of its constituent operations.

In a paper titled "Theories of Inquiry,"[4] Lonergan introduces his theory of knowing or learning by asking three basic questions:

1) What am I doing when I am knowing (learning)?

2) Why is doing that knowing (learning)?

3) What do I know (learn) when I do it?

The first question is concerned with how the human mind works, and how it comes to know anything about anything, and so it is a question for cognitive science and psychology. The second question, however, is on a higher plane and has to do with the nature of knowledge itself, and so it is an epistemological question. The third question is on a higher plane still; the answer will indicate the nature of that reality which is the object of man's knowing, and so the question is one for metaphysics. Evident in these three questions is Lonergan's inversion of the normal Thomistic order: he takes cognition as his starting point and moves from there to his notion of being, and metaphysics. On the other hand, as already mentioned above and as argued in Chapter Two, Aquinas himself and most neo-Thomists start from the *a priori* assumptions of metaphysics and develop their cognitional theory from that metaphysical basis.

5.3 ***What am I doing when I am knowing?***

5.3.1 *Cognitional Structure*

According to Lonergan, human knowing involves many disparate and distinct activities: "seeing, hearing, smelling, touching, tasting, inquiring, imagining, understanding, conceiving, reflecting, weighing the evidence, judging."[5] Distinct as

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[3] Tom Daly, "Learning Levels", William Danaher (Ed.), *Australian Lonergan Workshop* (University Press of America, New York, 1993), p. 233.

[4] Bernard Lonergan, "Theories of Inquiry: Responses to a Symposium," *A Second Collection* (Toronto: University of Toronto Press, 1996), p.37. While he mentions only two questions in *Insight,* where he combines the epistemological question with the cognitional, reference to the three basic questions are to be found throughout *A Second Collection* - pp. 37, 86, 138, 203, and 241.

[5] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 6.

these activities are, any one of them cannot constitute human knowing by itself; the activities cannot operate independently of one another. Lonergan has been quoted as saying, for example, that the activity of seeing would hardly qualify as a human act at all if it didn't have at least a glimmer of understanding. Rather, these activities operate as interdependent elements in a unified, dynamic structure.[6] This cognitional structure is dynamic in its very nature and its dynamism stems from what Lonergan calls the "pure desire to know."[7]

Looking at the cognitional structure "materially,"[8] as it is capable of change, or as potency determinable by form, it is dynamic; and it is dynamic because the content, the individual parts of the structure are themselves dynamic operations. These disparate operations may be categorised under the headings of experience, understanding, and judgment. Looking at the structure "formally" (that which it is in its essence) it is also dynamic; it is formally dynamic because by its very nature "it is self assembling, self constituting. It puts itself together, one part summoning forth the next, till the whole is reached."[9] This form of the cognitional structure is also invariant, or unchanging, and represents the intellect bringing itself to act, now to inquire or reason, now to reflect or judge, and now to deliberate or choose. Again, as was said, the dynamism of the whole structure stems from Lonergan's "pure desire to know" or from what he sometimes calls the "Eros of the mind," or "the spirit of wonder and enquiry." This may be described as a natural innate, inherent questioning attitude of the mind, or "the wonder which Aristotle claimed to be the beginning of all science and philosophy." [10]

Lonergan would say that as a question always intends an answer so the mind is formally intentional. In other words, the 'pure desire to know' is inherently or intrinsically intentional. The mind is also materially intentional because each one of its parts, each of its dynamic operations, is intentional in itself. After all, experience is always experience *of* something, insight is always insight *into* something, rational judgment is always *about* something.

According to Lonergan, then, knowing, coming to know, or learning, are all

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[6] Lonergan would also term them mutually mediating elements in a self-mediating structure. See Section 15.5.

[7] Bernard Lonergan S.J., *Insight,* p. 74.

[8] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection* (London: Darton Longman & Todd, 1967), p.17.

[9] ibid.

[10] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (Longmans, London, 1964), p. 9.

the same thing, and they are both materially and formally dynamic, in the sense used above. But it is also a recurring dynamic structure. The main operations or activities of experience, understanding, judgment, and decision which form the parts of this dynamic structure, though distinct and different, are functionally related to one another; they operate in a continuous and coordinated way in the operation of the conscious mind. They are also recurring in the sense that they operate cyclically: the decision and action in one cycle constituting, or at least influencing, the experience for the next. This, it will be argued, is consistent with Dewey's 'principle of continuity'[11] whereby

> the new facts and the new ideas thus obtained become the ground for further experiences in which new problems are presented. The process is a continuous spiral.[12]

Lonergan speaks of these operations or activities involved in the process of coming to know or learning as distinct but related "levels". Sometimes he mentions three levels, experience, understanding, and judgment, but in *Method in Theology* he distinguishes four by adding 'decision' and 'doing' as an extra level. By right, decision is a volitional level involving a deliberate act of the will. However, as each of Lonergan's levels subsumes or 'sublates' the ones below it, retaining their characteristics at a new higher level of organisation, so decision may be said to retain all the characteristics of the cognitive levels below it. In effect, decision may be said to be both cognitional and volitional.

Sometimes Lonergan appears to speak of seven or even eight levels or operations, as in the quotation from *Method* at the beginning of this section. But in practice he tends to reduce them all to the same four levels: experience, understanding, judgment and decision. The first three of these may be regarded as purely cognitional, while the fourth is both cognitional and volitional. This study will further elaborate on this division by sometimes considering imagery, conception, and assent, and doing as if they were separate mental operations or levels of the cognitional and volitional process.[13] However, in Lonergan's theory, coming to know something, or learning, more properly requires the coordinated activity of just three different operations, experience, understanding and judgment. These

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[11] See Section 8.5 of this study.

[12] John Dewey, *Experience and Education* (New York: Collier Macmillan Publishers, 1938), p. 79.

[13] As in Chapters 10 to 13 below.

operations constitute three levels in the process of coming to know.[14] In his article, "Learning-Levels", Daly compares this coordination between operations to the act of swimming:

> In swimming you must move your legs , and move your arms in a different way, and also move your head in a different way again. If you fail to move your neck you won't continue swimming much longer. The neck movement makes a quite different contribution from those of the legs and the arms.[15]

Firstly, Lonergan proposes that through attention one experiences data of sense so that one hears, sees, feels, tastes, and smells. Thus Lonergan's system is based on a foundation of the senses and so is based on the corporeal. This "sensible presentation" stimulates intelligent inquiry through questions of the form "what is it?". The senses are one's capacities to receive sensible presentations or data of sense. Joe Fitzpatrick explains: "Data in the first instances we might think of as deliverances of sense, of acts of sensations, of seeing, hearing, touching, tasting, smelling."[16] Lonergan's understanding of 'data' is quite different from the empiricist notion of 'sense data'. For the empiricists data are the building blocks of reality "already out there" to be 'seen'. For Lonergan data are what we ask questions about. They are what we experience but do not yet understand. They constitute the puzzle or the problem that sparks the question "What is it?" or "Why is this happening?". Data, in other words, give rise to questions. To answer the question, to fill in this gap in his knowledge, the child must call on all his available resources. His existing fund of knowledge, his memory, cues or clues present in the data, his imagination or *phantasm*, all contribute to give him the answer to the problem, to give meaning to his experience, to give him insight into the data.

Meaning, then, takes place when one makes sense of one's experience, when one achieves an understanding of one's data, as in the following dramatic instance from the life of Helen Keller, who was deaf and dumb:

> She brought me my hat, and I knew I was going out into the warm sunshine. This thought, if a wordless sensation may be called a thought, made me hop and skip with pleasure.
>
> We walked down the path to the well-house, attracted by the fragrance of honeysuckle with which it was covered. Someone was drawing water, and my teacher placed my hand under the spout. As

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14 Tom Daly, "Learning Levels", William Danaher (Ed.), *Australian Lonergan Workshop,* p. 234.

15 Ibid

16 Joe Fitzpatrick, "The Structure of Cognition", *Lonergan Internet Home Page* (http:// our world. compuserve.com/homepages/pmrodden/joefitz.htm), p. 1.

> the cool stream gushed over one hand she spelled into the other the word *water*, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten - a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that "w-a-t-e-r" meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! There were barriers still, it is true, but barriers that could in time be swept away.
>
> I left the well-house eager to learn. Everything had a name, and each name gave birth to a new thought. As we returned to the house every object which I touched seemed to quiver with life. That was because I saw everything with the strange, new sight that had come to me.[17]

The type of meaning established will depend on the type of data and the type of question one asks. The question "What is it?" might give rise in the first instance to a 'description'. Description helps one to understand data by relating them to one's senses, as the cold stream flowing over one's hand may be termed a description of water. If the child asks "Why?", however, she is looking for an 'explanation'. Why is the teacher, for example, making these funny tracings on my upturned palm. In this case she must also relate things to one another in order to achieve an answer. Joe Fitzpatrick points out that "explanation consists of relating things to each other, description of relating things to our senses."[18] Thus, it was when Helen realised the connection between the symbols her teacher was tracing on her hand and the cold fresh water rushing over her other hand that full realisation or insight ensued. However, what makes this instance even more dramatic is the fact that she appears to have grasped at that instance not just the relation between the written symbol for water and the real thing but, more importantly, she appears to have suddenly and simultaneously gained insight into the very nature and potential of abstract symbols in general.

Lonergan maintains that science needs understanding or meaning of both types; it needs both explanation and description, answering the question "Why?" as well as well as the question "What?". Especially for the child, accurate sensory observation is crucial to learning. Through description he must learn to relate how things look, their colour, their texture, their shape. But description does not provide an explanation, and the child wants an explanation. Why do things look like that? Why do they behave like that? It will be argued later, however, that these "What"

[17] Helen Keller, *The Story of my Life* (London: Hodder & Stoughton, 1956), p. 28.

[18] Joe Fitzpatrick, "The Structure of Cognition", *Lonergan Internet Home Page* (http:// our world. compuserve.com/homepages/pmrodden/joefitz.htm), p. 2.

and "Why" questions are in fact closely related to one another.[19]

To achieve his object in intelligent grasp, or insight, a subject must also use imagination, or what the Scholastics term *phantasm.* This can be regarded as a representation of matter, and a first level of abstraction. For Lonergan, this abstraction is merely the ordinary operation of the intellect as it judges and accepts the data that are relevant for imagery and discards the data which are judged irrelevant. Being attentive, then, in the form of selecting relevant data, is an important skill, or virtue, at this first level of mental functioning. An image, however, is not a faithful reproduction of data but rather an interpretation and a representation of it. Thus, Lonergan would, no doubt, agree with Langer when she says:

> Images have all the characteristics of symbols. If they were weak sense-experiences, they would confuse the order of nature for us. Our salvation lies in that we do not normally take them for bona fide sensations, but attend to them only in their capacity of *meaning* things, being *images* of things - symbols whereby those things are conceived, remembered, considered, but not encountered.[20]

Lonergan sees imagination or *phantasm* as playing a vital role in the process of cognition. A whole chapter of his book *Insight,* for example, is devoted to illustrating how the concept or definition of a circle can arise from the experience of a cart wheel presented to the intelligence in the form of an image as something to be understood. Insight or understanding grasps the intelligibility of (or relations within) the imagined object. A two-way interaction between insight and imagination ensues. Thus, for example, "insight grasps imagined equal radii in a plane surface as the necessary and sufficient condition of an imagined uniform curve; imagination presents terms which insight relates or unifies."[21] Once this insight is grasped, according to Lonergan, it is expressed in an 'inner word' *(verbum)* or definition *(quiditas);* this corresponds to Lonergan's notion of 'concept', or conception.

From the above it follows that understanding is an insight into *phantasm* and not directly into the data of sense. According to Lonergan's scheme, from insight or understanding proceed concepts - acts of defining, theorising, or hypothesising. Such concepts are attempted expressions of one's insight, but they are not the

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19 See Section 16.2.

[20] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), pp. 144 - 145. Italics in original.

21 Bernard Lonergan, *Verbum*, p179 quoted from Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Gill & Macmillan, Dublin 1974), p86

insight itself, nor as yet are they the answer to the question, "What is it?". They are merely possible answers; they are suggested answers; they are hypotheses. Lonergan also views understanding as being characterised by "a release to the tension of inquiry."[22]

The act or operation of reflection, which is a function of reason rather than of intelligence, and which includes weighing of evidence, questioning and judging, is now brought into effect by the innate questioning disposition of the mind or the 'pure desire to know'[23]. This "reasonable reflection" must confront the question "Is it so?", followed by judgment "Yes" or "No". What one is doing at this point of judgment, according to Lonergan, is affirming that one's understanding fits the original data. This for a child might entail taking a second look at something. In scientific explanation, however, judgment often requires more complex procedures, but it essentially involves meeting the same demand for confirmation of hypothesis.[24] An answer "No!" necessitates a return to basics for further inquiry. An answer "Yes!" to the question for reflection is a confirmation of reality or, in Lonergan's words, an "affirmation of being". The following is a summary account of this dynamic structure in Lonergan's own words:

> Experience stimulates inquiry, and inquiry is intelligence bringing itself to act; it leads from experience through imagination to insight, and from insight to the concepts that combine in single objects both what has been grasped by insight and what in experience or imagination is relevant to the insight. In turn, concepts stimulate reflection, and reflection is the conscious exigence of rationality; it marshals the evidence and weighs it either to judge or else to doubt and so renew inquiry.[25]

Experience represents the first or lowest level of consciousness. Insight is more complex and demands a higher level of consciousness again. Reflection or reflective understanding represents yet a third and even higher level of consciousness. This mental level requires calling on all the evidence assembled prior to it, from experience, imagination and insight, to answer the questions presented to it in its final act of judgment, "Is this so?, "Is this fitting?", "Is this accurate?" or even "Is this probable?". Clearly these are "final" questions, and the

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22 Bernard Lonergan, *Insight*, p3

23 See Section 5.6 below.

24 Joe Fitzpatrick, "The Structure of Cognition", p. 3.

25 Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection*, (London: Darton Longman & Todd, 1967), p. 17.

required weighing of the evidence demands a return to basics, a *'resolutio ad principia',* in order to answer them. In this way one attempts to confirm that the proposed hypothesis is in fact consistent with the original data or, in other words, that the conditions necessary for the judgment to be true and valid have in fact been fulfilled.

Again, one can say that at the level of hypothesis or concept, or what Lonergan calls *'verbum'* or 'inner word', the answer is only a possibility. In attempting to confirm this hypothesis and so turn a possibility into at least a probability, one must relate it to original data of experience. Fitzpatrick says that "Judgment is, in effect, a synthesis of the data and their meaning". This means that one has already in mind certain conditions which the hypothesis must fulfil if it is to be accepted as true or even probable. When these conditions are fulfilled, when predictions are realised, or when one is able to confirm facts by having a second look, one no longer has a conditioned but rather a conditioned whose conditions have been fulfilled, as far as one can ascertain. Lonergan calls this the 'virtually unconditioned'. Mathews explains more fully:

> To raise the question "is it so?" of a proposition or a hypothesis implies that the judgement "Yes" is conditioned, that is depends on certain conditions vis-a-vis the given data being fulfilled. What these conditions are depends both on the given data and the hypothesis under judgement. To conclude with the judgement "yes!" means that not only are the conditions fulfilled but there are no outstanding conditions left unfulfilled. We have reached the virtually unconditioned. The word 'virtually' is necessary since only God truly fulfils all conditions for existence.[26]

In other words, the very asking of the question "Is it so?" implies that the question can be answered. This implies that there are some criteria by which one can know if the proposed solution is satisfactory or not. The real test of the solution is whether it satisfactorily accounts for, or solves, the original problem. The conditions to be fulfilled might be whether or not the concept or 'inner word' represents a true grasp of the original problem, solution, situation, or data. Thus, the need to judge is as natural a human instinct as the need to understand. In many situations it is difficult to differentiate the two, so closely are they bound up together in mental activity. An act of judgment, one can say, entails yet another insight, only this time the insight entails an affirmation or denial in place of a conception or hypothesis.

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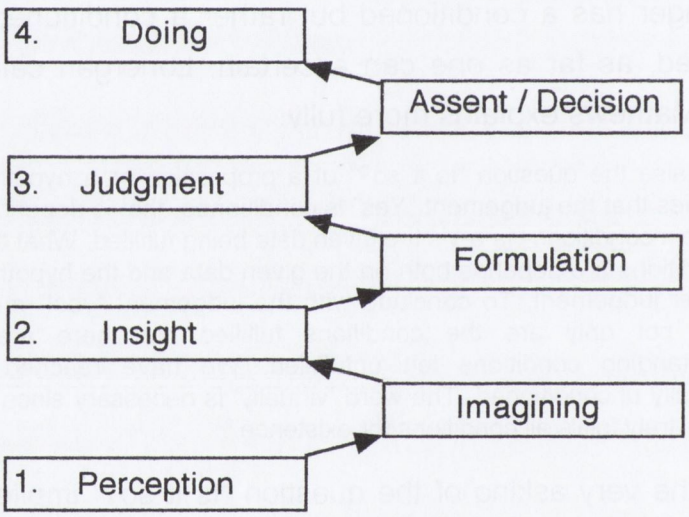
[26] William A. Mathews, *Questioning and its Object* (University of Leeds, Dept. of Philosophy, Ph.D. Thesis, 1980), p. 97.

In order to gain an understanding of, or Insight into, Lonergan's cognitional structure, it is useful to give a diagrammatic representation of his dynamic structure as an aid to one's own imagination. This is to follow Lonergan's own example. In his book, *Insight* , for example, the first eight chapters are devoted to examples or what he terms "five finger exercises"[27] to help the reader gain "insight into insight", an understanding of his own cognitional processes in operation, and thus "appropriate," or take ownership of, his own "cognitional interiority." The diagram seeks to illustrate how imagery, or mental representation, is an abstraction from original data, and how the central mental operation of insight, or direct understanding, interacts with imagery in order to grasp relation, or order, or rule, or intelligibility, in the original data. It also attempts to show that judgment is not derived from reflection on the original insight itself, but into that insight as it is conceived, or expressed, or formulated, or defined in some way.



5.3.2 *A Dramatic Instance*

A dramatic episode from the life of Helen Keller has already been given above by way of illustration of Lonergan';s dynamic operations in action. The following practical example would also be instructive as an introduction to a more detailed treatment of the work of Bernard Lonergan. At the same time, it is a concrete way of weighing up, reflecting on, and judging the validity of his theory. The term "dramatic instance" is employed by Lonergan in *Insight* and refers to

27 Bernard Lonergan, "Insight Revisited", F. J. Ryan and B.J. Tyrrell (Eds.), *A Second Collection - Papers by Bernard Lonergan S.J.* (Darton, Longman & Todd, London, 1974), p. 269.

concrete, everyday examples of the occurrence of insight or understanding. In most cases, they are dramatic mainly to the subject experiencing them. This example is taken from *Dr. Montessori's Own Handbook* [28] in which she describes the learning activity of a young child in one of her schools:

> But how is the child to find the right place for each of the little cylinders which lie mixed up upon the table? He first makes trials; it often happens that he places a cylinder which is too large for the empty hole over which he puts it. Then, changing its place, he tries others until the cylinder goes in. Again, the contrary may happen; that is to say, the cylinder may slip too easily into a hole too big for it. In that case it has taken a place which does not belong to it at all, but to a larger cylinder. In this way one cylinder at the end will be left out without a place, and it will not be possible to find one that fits. Here the child cannot help finding his mistake in concrete form. He is perplexed, his little mind is faced with a problem which interests him immensely. Before, all the cylinders fitted, now there is one that will not fit. The little one stops, frowning, deep in thought. He begins to feel the little buttons and finds that some cylinders have too much room. He thinks that perhaps they are out of their right place and tries to place them correctly. He repeats the process again and again, and finally he succeeds. Then it is that he breaks into a smile of triumph.

The child's sense experience of the didactic materials, the data supplied by touch and sight, stimulates wonder and inquiry and calls for understanding with questions (expressed or unexpressed) of the type "What is it?" or "What am I supposed to do?" or "What is the rule here?" or "Why won't it fit?". Intelligent inquiry is "motion towards understanding"[29] or Insight and "terminates in understanding."[30] Inquiry, in this case, has the child using a combination of crude trial and error experimentation with certain learned strategies that have already proven successful, calling on what he remembers from previous experiences and previous insights. The child pauses and brings his imagination into play, both to conjure up hypothetical situations as well as to form an attempted mental picture of the magic rule or concept he is trying to grasp. Finally the job is complete. Or is it? He thinks he has it. But the stray cylinder with nowhere to go tells his reflective judgment (judgment based on questions of the type "Is it so?" or "Is it a fit?" or "Can I be happy with this?") that he must try again. He moves each cylinder in its place; some move, others don't. Then he thinks of another hypothesis: "If it's loose, if it moves, it doesn't

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28 Maria Montessori, *Dr. Montessori's Own Handbook* (Schocken Books, New York, 1965), pp. 69, 70.

29 Bernard Lonergan S.J., *Verbum: Word and Idea in Aquinas* D. Burrell (Ed), (Notre Dame: University of Notre Dame Press, 1967), p. 55.

30 Ibid. p. 56.

fit." All the ones that shift too easily are repositioned. Finally, he has it. All the cylinders fit. His hypothesis is confirmed. With excitement and relief he has grasped the rule. He has gained insight into the task at hand, an insight which comes as a "release to the tension of inquiry"[31]. He smiles, the "spirit of wonder and inquiry" that drove him onwards is at last fulfilled. To prove it to himself, and to satisfy his critical reflective judgment, he repeats the task over and over until his increment of knowledge becomes, in Lonergan's terms, a well established *'habitus'*, or what Piaget would call ' an established sensori-motor scheme'.

William A. Mathews in his doctoral thesis, *Questioning and its Object*, summarises the situation very succinctly as follows:

> Human wonder does not reach its goal in a nice smooth programmed way. Rather there is involved much trial and error, false starts, slow build ups, periods of being stuck, and so forth. .... Human wonder does not find its term in hypotheses or theories. Rather they in turn become objects of critical questioning. Critical wonder through rooting out errors in what we think has an essential role to play in the growth of knowledge.[32]

Only when he has completed the last step to his satisfaction, does the child give assent to the concept which, up to that point, had been only a possibility or a hypothesis. The concept involves not just a rule for the task at hand, but carries with it, one can conjecture, also a tentative notion of volume, a vague impression of three dimensional space. He has added it to his store of knowledge, knowledge which he can now go on to use in future tasks. This concept is all the more powerful, concrete, and immediate, in that it holds in one memory, or *habitus,* not only the insight achieved but also a memory of the mental image used (the *phantasm*), and, in addition, a kinaesthetic memory trace or remembered 'feel' of the cylinders themselves. In addition, one may speculate, there is the memory of the emotional satisfaction of a job well done, what Feuerstein would term 'a feeling of competence,' a feeling which, as will be argued later, is also an 'intentional response to a value'.[33]

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31 Bernard Lonergan, *Insight*, p.3.

32 William A. Mathews, *Questioning and its Object* (University of Leeds, Dept. of Philosophy, Ph.D. Thesis, 1980), p. 4.

33 See section 10.7.2. below.

5.3.3 *The Pivotal Role of Insight*

Lonergan defines insight as the "supervening act of understanding"[34]. He continues: "its function in cognitional activity is so central that to grasp it in its conditions, its working, and its results, is to confer a basic yet startling unity on the whole field of human inquiry and human opinion."[35] Through insight, understanding and meaning are achieved. The whole focus or objective of intelligent inquiry is to achieve insight or understanding. To gain insight into sensible data, however, the mind must use an image, or *phantasm,* as an intermediary. This assertion of Lonergan's is supported not only by common experience, but by Aristotle himself when he says: "To the thinking soul images serve as if they were contents of perception. That is why the soul never thinks without an image."[36] And, in his *Summa Theologica*, Aquinas speaks of "the intelligible image through which the reality is known."[37]

Insight is the crucial link between the sensible and the intelligible. Lonergan says in *Verbum* that "the act of understanding leaps forth when the sensible data are in a suitable constellation."[38] This word "constellation" implies a structure, or form, or relation, grasped and projected by the mind on otherwise disparate elements, as when one looks at the starry sky to pick out the 'Big Dipper' or the 'Great Bear', thus attempting to give order, structure, meaning, and form to what one sees. Indeed, Lonergan also identifies insight with form in its metaphysical sense. He calls the content of such an insight an "idea,"[39] and says that such an idea is identical with form: "What is sought by inquiry is never just another datum but the idea or form, the intelligible unity or relatedness, that organises data into intelligible wholes."[40] It must be remembered that the Thomistic notion of form is that which makes, or causes, something to be what it is, its formal cause. It is also that in an object which makes it intelligible. Lonergan explains that

> an insight, an act of understanding, is a matter of knowing a cause. ..... that stands between the sensible data and the concept whose definition is sought ..... the cause in question is the formal cause.[41]

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34 Bernard Lonergan S.J., *Insight*, p. ix.

35 Ibid.

36 Aristotle, J.L. Ackrill (Ed.), *De Anima*, 431a, 7., (Clarendon Press, Oxford, 1974), p. 233.

37 Thomas Aquinas, *Summa Theologica*, I, 12, 2.

38 Bernard Lonergan S.J., *Verbum*, p. 14

39 Bernard Lonergan S.J., *Insight*, p. 644.

40 Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p.10.

41 Bernard Lonergan S.J., *Verbum*, p. 14

Samuel Beckett, while he does not use the term 'form' in his writings, yet is clearly describing something similar when in *Proust* he speaks of "the mystery, the essence, the Idea, imprisoned in matter", and he sees it rather poetically as reaching out or soliciting "the bounty of a subject passing by."[42]. The term 'ontological intentionality' is sometimes used by Scholastic philosophers to describe this inherent intelligibility of all creation, to which Beckett appears to be alluding in his last quotation.[43]

It is by grasping the form, or the design, or the plan, or the "idea", that is in something, and that is part of the essence of that thing, that one understands the kind of thing it is. The idea does not merely represent the thing, but is that in the thing which makes it a substance, a particular thing. This is not 'idealism' because when one grasps the idea one grasps not something in the mind, but rather something in the object; the idea one has intentionally in one's mind is identical with that which exists causally in the thing. This idea or form belongs to the being of the thing, it is a cause of being.[44]

A physical object is perceived through its accidents - colour, shape, texture, weight. The light of agent intellect *(intellectus agens)* or "spirit of wonder and inquiry" forms a representation of this *materia sensibilis* by a process of abstraction. This process of abstraction is not some aspect of mind apart from the intellect, but is the intellect itself in action, identifying what is essential and what is irrelevant for the representation of the object. This representation or image or *phantasm* in turn provides an object for further abstraction to yield insight or understanding, whose content is the form of the object of perception. The content of an insight is the structure of a set of interrelationships between things. William A Mathews explains that

> when understanding grasps a rule it doesn't single out some one feature given in direct experience. Rather in an instance its grasps the elements of a structure and their interrelation. These elements cannot be perceived by the senses.[45]

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42 Samuel Beckett, *Proust* (London: John Calder, 1965), p. 76.

43 In personal conversation with this author, Prof. Norris Clarke S.J. of Fordham University described how he had tried to convince Bernard Lonergan that the concept of the inherent intelligibility of all creation, 'ontological intentionality', is to be found in the writings of Thomas Aquinas. Clarke's theories are referred to in some detail in Chapter Seven of this study.

44 Joe Fitzpatrick, "Lonergan's Structure of Cognition", *Lonergan Homepage* on the internet. pp. 4 - 5

45 William A. Mathews, *Questioning and its Object*, p. 46.

As such, the act of insight is private or incapable of being communicated, since the very fact of expressing it would change it from being an insight to being a conception, a formulation, a concept, definition, or "inner word." Lonergan states: "Grasping the cause is..... an insight into the sensible data. Grasping the universal is the production of the inner word that expresses that insight."[46]

According to Aquinas, the expression or the formulation of the idea or the form of an object in words, or in any other symbolic mode of expression, is its concept, or definition, or *verbum,* or *quiditas* , or what Lonergan terms an "inner word". Just as the form of any material object is individualised by its matter, so also the more elementary knowledge of the form of the object through sense perception is always of the individual. So the image or *phantasm*, though at a first level of abstraction, is a representation of individual matter. The concept, however, when it is formed is always of the universal. While the concept or definition may be regarded as public in that it can be communicated, the act of insight which precedes it is, according to Lonergan, essentially private and incapable of being communicated.

As explained already, unlike other neo-Scholastics Lonergan views abstraction not as an automatic or innate operation of the mind, not as a mere metaphysical "sausage machine" that operates unconsciously, but as an activity of the intellect itself. He explains in *Insight* that

> to abstract is to grasp the essential and disregard the incidental, to see what is significant and set aside what is irrelevant, to recognise the important as important and the negligible as negligible.... abstraction is the selectivity of intelligence.[47]

It is precisely through this "selectivity of the intelligence" that first *phantasm*, then insight, and then concept are grasped and formulated by the mind. A good example of this is the development of the concept of the plane circle introduced by Lonergan at the beginning of *Insight* . This was taken up by him again in his consideration of "The New Learning: Mathematics" published as part of Volume 10 of *The Collected Works*. In the latter he explains:

> The parts of the form are the center, the radii, a plane curve and the equality of the radii ... the elements necessary for this to be a circle; they are what intelligence selects out of the merely sensible

46 Bernard Lonergan, *Verbum*, p. 14

47 Bernard Lonergan, *Insight*, p. 30.

presentation and puts into the definition.[48]

By the same token, the parts of the matter would be, for example, the colour of the circle, whether it is drawn in chalk or ink and whether it is big or small, characteristics which are clearly irrelevant to the form.

But insight, according to Lonergan, even in its expression as concept, does not provide complete knowledge. The form does not say everything there is to say about the object. As has been mentioned already in this chapter, when one understands (or thinks one understands), a further question still remains, "is it really so?". The fact that something can be understood, expressed in concept, or is intelligible, merely means that it is possible, that it is an hypothesis: "Intelligibility is the ground of possibility"[49]. Formulation of an insight, or understanding, in other words, prompts further questions for reflection of the form "Is its so?". Such reflective questions can only be "answered by *resolutio ad principia"* [50] , by a return to the original data, and to one's elementary form of knowledge based on *materia sensibilis* . One may also turn to memory of previous knowledge from previous insights.

To paraphrase Fitzpatrick, "If" is an important word as one attempts to move from understanding to judgment. Feuerstein talks of "What if ..." and "If ... then" type thinking, which is part of the reasoning process.[51] The proposed meaning, hypothesis, or solution to the problem, is 'a conditioned', by which one means that for it to be true, certain conditions have to be fulfilled and it is assented to as a truth only "if" those conditions are fulfilled. When one sees that these conditions have been fulfilled, as when one's predictions are realised, or one is able to confirm certain facts, one no longer has a conditioned, but a conditioned whose conditions have been fulfilled. As already stated, Lonergan calls this the 'virtually unconditioned'.

This weighing up of the evidence, or testing of an hypotheses, involves the reasoning process of the mind and leads to further acts of understanding or 'reflective insight' which, in turn, leads on to judgment, to affirmation or denial, to "yes" or "no", to "true" or "false". The expression of the reflective insight as an

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48 Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 113.

49 Bernard Lonergan S.J., *Verbum*, p. 43.

50 Ibid. p. 66.

51 See Section 12.6.B of this study.

affirmation or negation of an actuality, an "*Est*", is, according to Lonergan, a second inner word or *verbum* . Only with assent at this stage can one say that one has finally attained an increment of knowledge, a grasp of thr being and of the reality of the object or the situation under investigation.

It will be argued in greater detail later that Lonergan holds that the increased complexity of mental functioning and the consequent increased mental effort required as one moves from perception, through understanding to judgment, through ever higher levels of abstraction, necessarily also demands an ever increasing level of awareness or consciousness on the part of the subject.

Reflective insight, according to Lonergan, is akin to Newman's "illative sense" and the act of assent is similar to Newman's "unconditional assent". To reach this stage of assent or denial, the intellect uses all relevant evidence and information available to it. Certainty, according to Newman, comes from the "the cumulation of probabilities, independent of each other"[52]. Lonergan calls this a "heuristic structure", a structure of cues, clues, and probabilities, which give an inquiring subject a preliminary outline, an anticipated form to be filled by the eventual answer, like the 'x' for the unknown in algebra, for example. The notion of a 'heuristic structure' can be exemplified by the following quotation from Conrad in which he speaks about the accumulated knowledge of the ship's pilot who

> sees better than a stranger, because his local knowledge, like a sharper vision, completes the shapes of things hurriedly glimpsed; penetrates the veils of mist spread over the land by the storms of the sea; defines with certitude the outlines of a coast lying under the pall of fog, the forms of landmarks half buried in a starless night as in a shallow grave. He recognises because he already knows. It is not to his far-reaching eye but to his more extensive knowledge that the pilot looks for certitudes.[53]

In practice, one may have a whole series of insights in a particular field of knowledge. With time and reflection, these insights may combine and coalesce into a single insight. When a certain level of insight or understanding has been achieved, one may apply one's insight to practical applications, matching what one knows to what one does. It is possible also that a single insight may give rise to many different concepts. New insights may give rise to a revision of previous ones, as one becomes aware of inadequacies or shortcomings in an original conception.

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52 Newman, John Henry, *An Essay in Aid of a Grammar of Assent* (New York: Image paperback,1955), p 288.

53 Conrad, Joseph, *The End of the Tether* (London: Orion Publishing Group, 1974), p. 188.

In this way there emerges what Lonergan terms a "higher viewpoint."

Lonergan's restoration of Aquinas' notion of insight[54] as the central act and source of understanding, as opposed to the Scotist interpretation which regarded 'concept' as central[55], is of immense importance here. Only insight, according to Lonergan, has the vitality, the variability, and the flexibility, to lend itself to the formation of higher viewpoints. Concepts, on the other hand, have all the finality and rigidity of 'definitions' which cannot possibly be the basis, or source, of growth in understanding. As Lonergan explains, "Abstractions do not move, do not develop, do not change."[56] All this is of immense educational significance, as it provides a model for the development of understanding in the child in which old insights or concepts or 'schemes' are subsumed into new more accurate and more all-embracing viewpoints.

Just as the formulation or conception of direct understanding gives rise to what Lonergan terms concept or "inner word", so also the act of reflective understanding gives rise to a second "inner word", which is a "Yes" or a "No", an assent or otherwise to the question asked about the truth proposed by the first "inner word". Thus, only at this level of reflective understanding and assent does one finally reach a truth, an increment of knowledge, a grasp of being.

5.3.4 *A Second Dramatic Instance*

In *Insight,* Lonergan explains that

> a teacher cannot undertake to make a pupil understand. All he can do is present the sensible elements in the issue in a suggestive order and with a proper distribution of emphasis. It is up to the pupils themselves to achieve understanding, and to do so in varying measures of ease and rapidity.[57]

This idea is illustrated in the next 'dramatic instance' whose elements are taken from a book called *Pre-University Physics.* [58] What follows is basically a physics lesson, and the underlying assumption is that there is no better way of conveying an

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[54] As mentioned already (p. 44), 'insight' is not of mediaeval or Scholastic term, but is a Middle English word, possibly of Scandinavian or Low German origins.

[55] See Section 5.5 below.

[56] Bernard Lonergan in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 83.

[57] Bernard Lonergan, *Insight*, p. 5.

[58] Seán McDermott, *Pre-University Physics* (Dublin: Cedar Publications, 1975), pp. 11, 12.

insight from one mind to another than by bringing the subject (the student) into contact with the same data, and the same steps of experience, *phantasm*, insight and reflection, as the protagonist of the story. The idea, in other words, is that a process of identification between the student and the hero is a more effective pedagogical tool than a mere transmission of facts. The idea is not a new one, but is a time-honoured method employed intuitively by educators the world over. According to Jostein Gaarder, the method was also the one employed by Socrates himself:

> Socrates, whose mother was a midwife, used to say that his art was like the art of the midwife. She does not herself give birth to the child, but she is there to help during delivery. Similarly, Socrates saw his task as helping people 'give birth' to the correct insight, since real understanding must come from within. It cannot be imparted by someone else. And only the understanding that comes from within can lead to true insight.[59]

The following story also has another purpose: having used a diagrammatic representation as an aid to imagination and having gained a number of insights into Lonergan's theory as a result, one must now examine the concepts which one has formed, by the triple action of experience, imagination and understanding, in order to judge their validity in the light of critical reflection.

The first dramatic instance involved a child, this one involves a scientist, Sir Isaac Newton. This begs the immediate question, Is it really possible that a forty-five year old scientist and a two-and-a-half year old child can think, reason, and make discoveries, in ways which are largely similar? Lonergan would say yes, since "all acts of understanding have a certain family likeness."[60] The setting for this story is not, like Lonergan's own dramatic instance, the public baths of ancient Syracuse, but is a typical English garden towards the end of the seventeenth century. The hero is not the impulsive Archimedes, but the grave figure of Sir Isaac Newton, seated beneath an apple tree. The moon shines faintly in the evening sky. It is October and their is a look of concentration on his face. He has just formulated his laws of motion. He is happy with them. But they raise an important question, an unresolved problem. For what must be the hundredth time he mutters Galileo's formulation to himself:

> Every body will continue in a state of rest or of uniform motion in a straight line unless compelled by the action of an external force to change that state.

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59 Jostein Gaarder, *Sophie's World* (London: Phoenix House, 1995), p. 56.

60 Bernard Lonergan S.J., *Insight*, p188.

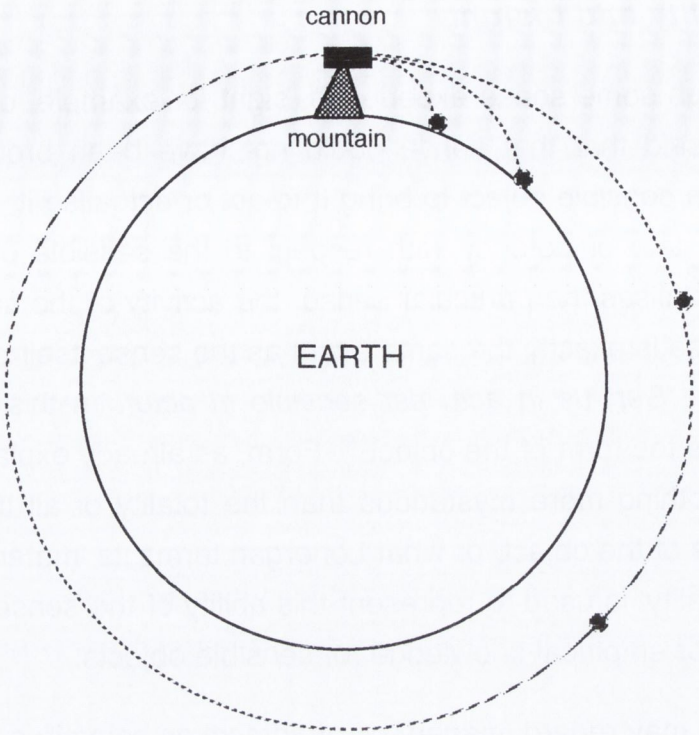
He was happy with this, even though it now seemed so obvious. He goes on:

> The rate of change of momentum is proportional to the impressed force and takes place in the direction in which the force acts.

Great! He remembers the feeling of triumph and satisfaction he got from simply formulating the definition. But his brief glow of satisfaction is quickly replaced by a look of deep unrest. He glances towards the moon. What is the use in having formulated laws of linear motion when all the celestial bodies in the observable universe move in orbits which are essentially circular or elliptical? Kepler had already demonstrated this very clearly. But, more importantly, what is the nature of this force which constrains the heavenly bodies out of their natural straight-line paths. His contemplation is interrupted by the sound of a large apple crashing from the tree. With a start he looks at the apple on the ground, then at the moon. For a fleeting moment he returns to his mental image, and when he again looks at the moon his face is lit by a complex, yet familiar emotion - relief, joy, satisfaction, love; he loves the moon, he loves the ground on which he stands, he loves the apple that just a few seconds before caused him such irritation. Now they belong together in his mind; the mundane and the celestial, the old and the new, the concrete and the abstract all embrace, to open a new window onto the universe.

But he has to be sure. He has to try out his new idea. He needs to experiment in the only laboratory large enough to encompass the whole solar system, and the universe beyond, the human mind itself. An image forms in his mind, a simple illustration on a blackboard and, as so often in such circumstances, he pictures to himself the attentive rows of learned faces at the Royal Academy:

> Suppose, gentlemen, we shoot a cannon horizontally from the top of a mountain so high that it rises above the atmosphere. The projectile will follow a curved trajectory and hit the surface of the earth some way from the base of the mountain. The greater the muzzle velocity the further away from the base of the mountain the projectile will fall. At a sufficiently high initial velocity the projectile will come to earth at a point directly opposite the mountain; at a still higher velocity it will never hit the earth but will continue to revolve around the earth like a little moon. If it is possible in this way to make an artificial moon, why not assume that the motion of the natural moon is also in free fall? And if the moon revolves around the earth because of the earth's gravitational attraction, is it not logical to assume that the earth itself is held in orbit around the sun by the force of the sun's gravity. Then is this not also true for all the other planets or moons.



Newton, by a process of experience, understanding and reflection had conceived a new insight, a higher viewpoint in fact. This insight allowed him to bring together two former insights, one to do with the nature of force and circular motion, the other the simple every-day experience of gravity. His higher viewpoint allowed him to see that the force of gravity which brought the apple crashing out of the tree was exactly the same force that kept the moon in its orbit around the earth, and the earth in its orbit around the sun. It simply remained for him to combine his own insight with that of Kepler to form a higher insight still, allowing him give it final mathematical expression to his Universal Law of Gravitation.

Newton published his findings in his *Principia Mathematica* in 1687. But what is of interest here is not so much in his actual findings, as the mental processes by which he, and scientists like him, arrive at their conclusions. Lonergan proposes that these same mental processes are not confined to scientists, however, but can be found just as well in the commonsense experience of the ordinary man in the street, as well as the ordinary child in her cot. Thus, Lonergan in *Insight* , by taking many examples from many diverse sciences and disciplines, sought to discover and confirm these central processes of cognition common to them all.

5.4 *Intentionality and Insight*

When through some sense experience, sight for example, one perceives an object, it can be said that that sense could not have been brought to act[61] or actualised without a sensible object to bring it to act or actualise it. This means that the sense is in a state of potency with respect to the sensible object. When the sensible object actualises the particular sense, the activity of the sensible object in actualising the sense is exactly the same event as the sense itself being actualised. In Aquinas' words: *"Sensus in actu est sensible in actu".* In this way, the sense experience receives the form of the object.[62] Form, as already explained in Chapter Two, represents nothing more mysterious than the totality of all the sensible and intelligible elements of the object, or what Lonergan terms its 'material dispositions'. The term 'intentionality' is used to represent this ability of the sense organs to form sense knowledge, or empirical knowledge, of sensible objects.

So also, one may regard imagery or *phantasm* as being in a state of potency with respect to sensible data, and the intellect as being in a state of potency with respect to *phantasm*. In this way, the form of the perceived object finds its way from the purely sensible data, to *phantasm*, and on to insight by means of this capacity of the intellect which is termed 'intentionality'. *Phantasm* is always an image *of* sense data, insight is always insight *into* imagery or *phantasm*. Thus, the concept of intentionality lies at the very heart of the dynamic structure of knowing, or of coming to know, or of learning, and its aim is the grasping of the real and the true. Lonergan would say that what one grasps with one's mind is more real than what one perceives with one's senses. Or, in Beckett's more poetic words, what one grasps with one's mind is

> more because less, more because it abstracts the useful, the opportune, the accidental, because in its flame it has consumed Habit and all its works, and in its brightness revealed what the mock reality of experience can and will never reveal - the real.[63]

Insight and intentionality are, thus, intimately related. It is in the act of insight in particular, Tyrrell says, that "a certain identity of knowing and known is achieved."[64]

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61 See Section 2.4.6 above.

62 See Section 2.7.3 above.

63 Samuel Beckett, *Proust* (London: John Calder, 1965), p. 33.

64 Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Dublin: Gill & Macmillan, 1974), p. 81.

5.5 *The Intellectualist and Conceptualist Views of Cognition*

It has been mentioned already that Lonergan complained that many neo-Thomists have a conceptualist rather than an intellectualist interpretation of Aquinas. He traces this conceptualist bias to the Scotist influence on the thinking of these philosophers. To explain this conceptualist or Scotist position rather briefly, Stewart says:

> Confronted with an object, the intellect forms a concept. Intellect's first conscious activity is looking at the content of that concept. Then intellect perceives the nexus between concepts and forms a judgment. In turn it perceives the nexus between judgments and makes an inference which is expressed in a syllogism.[65]

In other words, such philosophers view knowing as simply having a good intellectual 'look' at what is out there to be seen. They are "naive realists", in Lonergan's terminology. They even view introspection as a "having a look within oneself" and, in the process, making an object of the knowing subject. According to Lonergan, the conceptualists' concern is with what intellect *does* to the neglect of what it *is*, and, as is apparent from the quotation above, their view is greatly influenced by the study of logic.

Lonergan's intellectualist interpretation, on the other hand, is concerned with grasping what intellect *is* more than what it does and produces. It notes the inquiring critical trust of the intellect and its attendant moments of understanding which occur prior to any formulation of ideas, judgments and inferences. Lonergan has brought the private act of understanding or insight to centre stage. Because the act of insight is essentially private and is prior to conceptualisation one can experience it, one can even attempt a description based on this experience but, ultimately, it remains inner and private. One will even fail in any effort to communicate a particular insight. As already mentioned, communication involves formulation, and such formulation or expression is already conceptual.[66] Lonergan has no doubt that the Intellectualist interpretation is closer to the mind of Aquinas than is that of the conceptualists.[67] This, it will be argued, is no mere theoretical consideration; it has a definite practical bearing on the realm of education. Later on, for example Lonergan's related statement that "teaching concepts is not the same

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65 William A. Stewart, "Abstraction: Conscious or Unconscious? The Verbum Articles", an offprint from an as yet unidentified publication, p.109. For a brief account of the theories of Duns Scotus see Section 2.8 of this study.

66 Ibid., p.114.

67 See Section 2.6 above.

as sharing vital knowledge"[68] will be explored in some detail.

5.6 *Intentionality and the Pure Desire to Know*

Lonergan's view of intentionality, as was already argued, involves an inner thrust of the mind by which it reaches out to an object in order to come to know it. It was also intimated that intentionality is inherent in each one of Lonergan's three operations or levels of mental functioning, experience, understanding, and judgment. But, in Lonergan's view, it is also present in the mind at a deeper, more basic, more fundamental, more 'immediate' level, the level of the 'motive power' by which the potency of the intentional mind itself is brought to act. It is for this essential or 'formal' level of the mind that Lonergan uses the terms 'spirit of wonder and inquiry' and 'pure desire to know'. He explains that

> before we look for answers, we want them; such wanting is the pure question.... the pure question is prior to insights, concepts and words.... It is the wonder which Aristotle claimed to be the beginning of all science and philosophy.[69]

As this 'pure desire to know' is a central concept in Lonergan's 'generalised empirical method' and because it is central also to an understanding of his theory of intentionality, its existence must be established, and its implications must be investigated in some detail.

5.7 *The Pure Desire to Know - a Prevalent Concept*

Aristotle, in his *Metaphysics*, says that "all men by nature desire to know."[70] A little farther on in the same book, he continues:

> For it is owing to their wonder that men both now begin and at first began to philosophize; they wondered originally at the obvious difficulties, then advanced little by little and stated difficulties about the greater matters, e.g. about the phenomena of the moon and those of the sun and the stars, and about the genesis of the universe. And a man who is puzzled and wonders thinks himself ignorant.[71]

For Plato, the need to understand was a reflection of the soul's yearning for its home in a 'noetic' heaven where the sensible is transcended and all Forms (ειδε)

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68 M.T. Carley, *Bernard J. F. Lonergan S.J.: On Teaching* (Harvard University, Ed.D. Thesis, 1989), p. 29

69 Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (Longmans, London, 1964), p. 9.

70 Aristotle "Metaphysics", I,1. 980a, Richard McKeon (Ed.), *Aristotle* (Chicago: University of Chicago Press, 1973), p. 274.

71 Aristotle, *Metaphysics*, 982b, 13-18. (Oxford: Clarendon Aristotle Series, 1974), p. 281.

have their being in a realm apart. Plato also identified this need with the spirited part of the soul[72] (το θυμοειδεζ) which Copleston describes as "the passion for truth, Eros, which is also the rational counterpart of the physical Eros."[73] Lonergan himself also uses the term "Eros" in this context, as when he states: "For there is an intellectual desire, an Eros of the mind. Without it there would arise no questioning, no inquiry, no wonder." [74] It has been shown already that Lonergan identifies this drive, or thrust, or "Eros," as the 'spirit of wonder and inquiry' or, more often, as 'the pure desire to know'. In *Insight* he goes on to explain, rather poetically:

> Deep within us all, emergent when the noise of other appetites is stilled, there is a desire to know, to understand, to see why, to discover the reason, to find the cause, to explain. Just what is wanted has many names. In what precisely it consists, is a matter of dispute. But the fact of inquiry is beyond all doubt. It can absorb a man. It can hold him for hours, day after day, year after year in the narrow prison of his study or laboratory.[75]

What Lonergan is describing here appears to be similar to Viktor Frankl's "will to meaning."[76] Frankl was a phenomenologist greatly influenced by Husserl, Scheler and Heidegger. He used the phenomenological method to establish certain basic principles of his 'logotherapy'[77]. Ryan claims that, like Husserl and Lonergan, "Frankl asserts .... the central importance of the notion of intentionality."[78] The 'will to meaning' for Frankl refers to "the premoral orientation of the person or a priori structure, to the transcendent reality of any known, felt, or chosen object."[79] As such, it appears to be at least similar to Lonergan's 'Eros of the mind', or 'pure desire to know'. Lonergan himself maintains with regard to the pure desire to know that it "is not any product of the knowing process but is that knowing process in its pure heuristic intentionality."[80]

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72 Plato, *The Republic*, Part 5 [Book 4]. (Penguin Classics, London, 1987) p. 217.

73 Frederick Copleston, *A History of Philosophy* Vol. I, (Image Books, New York, 1962), p. 234.

74 Bernard Lonergan, *Insight*, p. 74.

75 Ibid. p. 644.

76 Viktor Frankl, *The Will to Meaning.* (New York: Plume Books, 1970)

77 Logotherapy is a psychotherapeutic technique involving existential analysis. What comes to consciousness in this existential analysis "is not drive or instinct, neither id drives nor ego drives, but self. Here it is not the ego that becomes conscious of the id but rather the self that becomes conscious of itself." Viktor Frankl, *Man's Search for Ultimate Meaning* (Cambridge, MASS: Perseus Publishing, 2000), p. 29.

78 W.F.J. Ryan, "Viktor Frankl's Notion of Intentionality", T.P. Fallon and Phillip Boo Reilly (Eds.), *Essays in Honour of Bernard Lonergan S.J.* (State University of New York Press, Albany, 1987), p. 80.

79 Ibid.

80 Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Dublin, Gill & Macmillan,1974), P100.

Frankl's 'will to meaning' is, in turn, somewhat similar to F.C. Bartlett's "effort after meaning."[81] In his book, *Remembering* , Bartlett writes that

> it is legitimate to say that all the cognitive processes...., from perceiving to thinking, are ways in which some fundamental 'effort after meaning' seeks expression. Speaking very broadly, such effort is simply the attempt to connect something that is given with something other than itself.[82]

While Bartlett is more an empirical psychologist than a philosopher, and does not use the term 'intentionality' in his writings, it seems clear from the above that what he has in mind as regards his "effort after meaning" is, once again, that basic intentional thrust identified by Lonergan and Frankl, and which underlies the intentionality of the various cognitive activities or operations of the mind "from perceiving to thinking."[83]

Again, Lonergan maintains that, while this desire or thrust to know is manifested through the propensity to ask questions, nevertheless it is prior to language and expression:

> It is not the verbal utterance of questions. It is not the conceptual formulation of questions. It is not any insight or thought. It is not any reflective grasp or judgment. It is the prior and enveloping drive that carries cognitional process from sense and imagination, to understanding, from understanding to judgment, from judgment to the complete context of correct judgments that is named knowledge.[84]

Similar sentiments are reflected in the contemporary writings of John Searle[85], albeit in more biological and neurological terms:

> The philosophy of language is a branch of the philosophy of mind. The capacity of speech acts to represent objects and states of affairs in the world is an extension of the more biologically fundamental capacities of the mind (or brain) to relate the organism to the world by way of such mental states as belief and desire, and especially through action and perception. .... any complete account of speech and language requires an account of how the mind/brain relates the organism to reality.[86]

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81 F.C. Bartlett, *Remembering: A Study in Experimental and Social Psychology* (London: Cambridge University Press, 1967), p. 20.

82 Ibid., p. 227.

83 Ibid.

84 Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (Longmans, London, 1964), p. 348.

85 Searle is best known for his book *Speech Acts* (1969)

86 John R. Searle, *Intentionality: an Essay in the Philosophy of Mind* (Cambridge, MASS: Cambridge Univ. Press, 1983), p. vii.

One also finds in the writings of Maria Montessori an equivalent idea to Lonergan's 'pure desire to know'. She says, for example:

> That which moves the child to this manifestation of activity is evidently a primitive internal impulse, almost a vague sense of spiritual hunger; and it is the impulse to satisfy this hunger which then actually directs the consciousness of the child to the determined object and leads it gradually to a primordial, but complex and repeated exercise of the intelligence in comparing, judging, deciding upon an act, and correcting an error.[87]

This "spiritual hunger" and the explanation she gives of its fulfilment appears to put it on a par with Lonergan's 'Eros of the mind' and Frankl's 'will to meaning'.

This 'pure desire to know', or 'spirit of wonder and inquiry', both initiates and sustains the cognitional process.[88] One can say of this drive that before one looks for answers, one wants them; such wanting is the pure question.[89] The data of sense experience and the presentations of the imagination, as already mentioned, provide the material that awaken and sustain this drive to understand. The fulfilment or satisfaction of the 'desire' lies in the act of knowing. This 'desire', however, is not to be confused with other desires which have an aspect of physiological or endocrinal pleasure to them. Granted, knowing can sometimes have a definite emotional satisfaction to it, but this is not what Lonergan means by "pure desire to know". The objective of the desire to know is the content of correct understanding and this understanding is prized, not because it gives satisfaction, but because its content is correct and the mind by its very nature prizes and values what is true.

One can say that the 'pure desire to know' is "disinterested"[90] in the sense that it is independent of any factors which could act as reinforcement, unlike other desires which eagerly seek reinforcement and lend an aspect of reinforcement to cognition, sometimes only to end up by diverting or restricting it in the process. By the same token, it is also "detached" in that it seeks its objective irrespective of the "inhibitions of cognitional process that arise from other desires."[91] The pure desire to know is also "unrestricted"[92] in the sense that it desires to know the whole

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87 Maria Montessori, *The Advanced Montessori Method* (London: Heinemann, 1919), pp. 153 - 154

88 Bernard Lonergan S.J., *Insight*, p. 349.

89 Ibid., p. 9.

90 Ibid, p. 380.

91 Ibid.

92 Ibid.

universe of being; there is no limit to the number of questions that one can ask.[93] Lonergan comments in *Method in Theology* that "it is only because we can ask more questions than we can answer that we know about the limitations of our knowledge."[94]

The pure desire to know is intentional. Without objects in the world around to wonder at, the child would never frame the questions which motivate her thinking. As Alice Walker, in *The Colour Purple,* puts the following words in the mouth of her young negro heroine:

> I think us here to wonder, myself. To wonder. To ast. And in wondering bout the big things and asting bout the big things, you learn bout the little ones, almost by accident. But you never know nothing more about the big things than you start out with. The more I wonder, ... the more I love.[95]

The pure desire to know, in other words, relates the questioning subject to the objects of wonder, the intended objects, as in the following rather moving quotation, again from the autobiography of Helen Keller:

> One beautiful spring morning when I was alone in the summer-house, reading, I became aware of a wonderful subtle fragrance in the air. I started up and instinctively stretched out may hands. It seemed as if the spirit of spring had passed through the summer-house. "What is it?" I asked, and the next minute I recognised the odour of the mimosa blossoms. I felt my way to the end of the garden, knowing that the mimosa tree was near the fence, at the turn of the path. Yes, there it was, all quivering in the warm sunshine, its blossom-laden branches almost touching the long grass. Was there ever anything so exquisitely beautiful in the world before![96]

It follows that the 'pure desire to know' cannot be regarded as a completely private, internal, personal affair, but at least in its effects on human actions, it belongs to the public domain, where it can be made an object of study and speculation. This does not mean that we can observe the 'desire to know' within ourselves in the same way as we observe normal objects of empirical study. We can be conscious of it and even bring it from a background "street noise" level to the foreground of our attention, but nevertheless the only real "proof" of its existence stems from personal experience and the presence of similar concepts in the theories of so many prominent philosophers, psychologists and educationalists. Mathews explains:

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93 Ibid., p. 349.

94 Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 24.

95 Alice Walker, *The Colour Purple* (London: The Women's Press, 1992), p. 239.

96 Helen Keller, *The Story of my Life* (London: Hodder & Stoughton, 1956), p. 31.

> Though the human spirit of inquiry might seem an obscure and intangible human attribute, the rather striking manner in which it can affect the life and behaviour of the whole person is, in these instances, quite transparent and there for all to observe.[97]

Contemporary psychological research into what is termed the "need for cognition" seems to lend some scientific support for the existence of just such an 'instinct' or drive which, as Mathews says above, "can affect the life and behavior of the whole person." A sizeable empirical literature has developed over the past twenty years[98] particularly, but the concept goes back to 1955 when A.R. Cohen conceptualised the 'need for cognition' as "a need to understand and make reasonable the experiential world."[99] One feels that this definition could compare quite well with Lonergan's 'pure desire to know'. In a review of the literature of the previous, twelve years Cacioppo, Petty, Feinstein and Jarvis concluded that not only does it appear that a 'need for cognition' does exist in the individual as a kind of "life force" but that "the evidence supports the existence of stable individual differences in people's tendency to engage in and enjoy effortful cognitive activity."[100]

It seems quite clear that what these researchers have been measuring is not the basic underlying drive which both Lonergan and Frankl acknowledge as the 'pure desire to know' and the 'will to meaning' respectively, but the manifestation of this drive in and through the conscious intentional operations of experience, understanding and reflection. Intentionality for Lonergan exists at a deeper and more basic level than the psychological and, as such, can be grasped only in oneself, through data of consciousness. Such intentionality working in and through the psychological, however, should be observable in its effects, which in turn could be subject to influence by psychological differences between individuals. That there would be individual differences in the manifestation of this drive will come as no surprise to educators, neither will the explanation proposed by the researchers:

> The differences between individuals low and high in need for cognition appear to be derived in large part from past experience, to be buttressed by accessible memories and behavioural

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97 William A. Mathews, *Questioning and its Object,* p. 3.

98 Cacioppo, Petty, Feinstein, and Jarvis, "Dispositional Differences in Cognitive Motivation: The Life and Times of Individuals Varying in the Need for Cognition", *Psychological Bulletin,* 1996, Vol. 119, No. 2, 197- 253.

99 Cohen ,A.R., Stotland, E. & Wolf, D.M., "An experimental investigation of the need for cognition", *Journal of Abnormal and Social Psychology*, 51, pp. 291 - 294.

100 Cacioppo, Petty, Feinstein, and Jarvis, "Dispositional Differences in Cognitive Motivation", p. 247.

histories, to manifest in current experience.[101]

Of concern to educators also must be the rather depressing fact that the outward manifestation of the 'pure desire to know' as it effects actual classroom performance also seems to fade with age. Jostein Gaarder, for example, says:

> The world itself becomes a habit in no time at all. It seems as if in the process of growing up we lose the ability to wonder about the world. And in doing so, we lose something central - something that philosophers try to restore. For somewhere inside ourselves, something tells us that life is a huge mystery. This is something we once experienced, long before we learned to think the thought.[102]

5.8 *Lonergan's Notion of Being*

While the main concern of this investigation must be with Lonergan's theory of knowing and its relevance to education, this cannot be dealt with adequately without some introduction to his 'notion of being'. Not only is the notion of being central to the philosophy of Bernard Lonergan but, as mentioned already, his concepts of being and knowing are intertwined with one another. He maintains that "the ontological and the cognitional are not incompatible alternatives but interdependent procedures,"[103] echoing the Scholastic dictum: *"Ens et verum convertuntur*", which Pieper translates as: "'To be' and 'To be true' are equivalent."[104] This is also reflected in Aquinas' statement: *"Omnes res est vera et nulla res est falsa,"*[105] meaning that all existent things are true and nothing that exists is false

As was argued already, Lonergan takes cognition as his starting point. Clearly also he believes in the existence of God. With Newman, for example, he would no doubt say: "I rest in the thought of two and two only absolute and luminously self-evident beings, myself and my Creator."[106] The best place to start an exploration of Lonergan's 'notion of being', then, is with his 'idea of being', which is an idea or insight so all-embracing that it can exist only in the mind of the Creator. Indeed, Lonergan identifies it with God as "an unrestricted act of

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101 Sic, Ibid.

102 Jostein Gaarder, *Sophie's World* (Phoenix House, London, 1995), p. 16.

103 Bernard Lonergan, "Insight: Preface to a Discussion", in F.E. Crowe & R.M. Doran (Eds.), *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 1988), p. 144.

104 Josef Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 13.

105 Thomas Aquinas, *Quaestiones disputatae de veritate* 1, 10.

106 John Henry Newman, *John Henry Newman Autobiographical Writings*, P.150, quoted from C.S. Desain *John Henry Newman*, (1966), p. 5.

understanding ... (which) ... understands itself."[107] Aquinas, on the other hand, approaching the issue from a purely metaphysical point of view would say that the essence of God is to 'to be'. For God, being and essence are identified; God is pure *esse*. Since being is 'unrestricted', the act of understanding being and the content of this act, or Lonergan's 'idea of being', must likewise be unrestricted. Lonergan states: "Knowledge of what being is cannot be had in anything less than an act of understanding everything about everything."[108] Clearly, then, this 'idea of being', or insight into being, is beyond man's capacity to comprehend. It follows that one cannot attribute to man any concept of being as being, "for such a concept would have to express the content of the all-inclusive act of understanding."[109]

However, as already mentioned, traditional Scholasticism does hold that such a concept of being exists in the human mind. Even Aquinas himself says that "being is that which the intellect first discovers as most known and into which it resolves all its other conceptions."[110] But how, in Lonergan's philosophy, can man be said to have any knowledge of being at all? Not only is the grasp of God's essence[111] beyond him, but "it is only rarely, imperfectly, doubtfully that we know material essences."[112] And Lonergan maintains that it is precisely apprehension of essence that characterises intellect. This means that it is necessary to conceive of knowing less as an achievement and more as a dynamic process which *aims at* knowledge of essence as an end, as "the objective of a natural desire,"[113] a natural desire which reaches out to include even God. Lonergan summarises his position as follows:

> Our natural intellectual desire to know ... (is) ... a natural intellectual desire to know being. The desire, precisely because it is intelligent, is a notion. But the notion is not any innate idea, or concept or knowledge. It is a desire for ideas, for concepts, for knowledge but, of itself, it is merely discontented ignorance without ideas, without concepts, without knowledge.[114]

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107 Bernard Lonergan, *Insight*, p.658.

108 Ibid., p.643.

109 Desmond Connell,"Father Lonergan and the Idea of Being", *The Irish Theological Quarterly*, 37 (1970), p. 118.

110 Aquinas, *Quaestiones Disputatae de Veritate*, 1.1

111 The essence of an object may be identified with the concept which the mind forms of it, that is with the "inner word", the expression or formulation of its form, which is seized in the act of insight.

112 Desmond Connell,"Father Lonergan and the Idea of Being", *The Irish Theological Quarterly*, 37 (1970), p. 119.

113 Bernard Lonergan, *Insight*, p. 157.

114 Ibid, pp. 520 - 521.

Just as in his cognitional theory he replaces the static 'concept' with the more flexible and richer notion of understanding or insight, so Lonergan replaces the static 'concept of being' with a dynamic 'notion of being' which he identifies with the 'pure desire to know'. One might say that, since the human mind cannot possess the 'idea of being' and yet, in a sense, is made to possess it (is 'grounded' in it), it is left with a struggle for, an orientation towards, an unfulfilled desire for the 'idea of being', which he terms 'the notion of being'. This notion of being is empty of content; it is simply a thrust, an orientation. It "is not any product of the knowing process but is that knowing process in its pure heuristic intentionality."[115] Lonergan, rejects the idea that we are born with an in-built or innate concept of being, in Aquinas' sense, or even an intuition of being, in Husserl's sense of 'empirical and categorical intuition'; Lonergan's 'notion of being' is empty of content. However, he maintains that the mind is made for the 'idea of being' and, as such, has an orientation towards it.

Since one cannot know what being is as being, one must then be content to define it indirectly by saying that it is the objective of the pure desire to know. Whatever we know, or ever will know, in consequence of the operation of the pure desire to know, is being. Thus being is whatever is to be known through those intellectual operations whereby the pure desire to know moves towards fulfilment, namely, intelligent grasp and reasonable affirmation.[116]

Thus, for Lonergan cognition precedes being; his metaphysics is derived from his cognitional theory. For Aquinas, however, starting from the standpoint of metaphysics, being comes first. It is to this fundamental difference of priority that Desmond Connell is referring when he writes: "Whatever the intrinsic merits of this view, there is little doubt that it contradicts the teaching of St. Thomas."[117] Lonergan would not necessarily disagree with him. His object, after all, was to develop Aquinas, to go beyond him.

5.9 *The Notion of Being and Intentionality*

Constitutive of the 'notion of being' is the intention of being. One could say that, through the notion of being imminent in its structure, the mind responds to the

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115 Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Dublin: Gill & Macmillan,1974), P.100.

116 Bernard Lonergan, *Insight*, p. 642.

117 Desmond Connell,"Father Lonergan and the Idea of Being", *The Irish Theological Quarterly*, 37 (1970), p. 122.

presence of an objective being with an intentional 'embrace', or an intention of being. This intention of being is an essential or fundamental questioning which is the permanent grounding and the originating power that sets in motion the whole cognitional process. As Lonergan explains succinctly, "the dynamic structure of human knowing intends being."[118] This relationship of the mind to being, however, while 'immediate' in the notion of being is only 'mediate' in the various activities or operations of knowing. It depends on (or is mediated by) how far these activities of perceiving, understanding and judging actually achieve their goal.[119]

To approach the same idea from a slightly different angle, one can say that while one can never know being as being, nevertheless there is an 'isomorphism' (an identity of structure and form) between being and knowing.[120] Both the mind and the object after all belong to the realm of being. The structure of the mind is such that it has an innate orientation towards being, the 'notion of being'. This 'notion of being' becomes an 'intention of being' in the presence of an objective being. Through this intentional thrust the mind grasps the form of the object. The mind takes on the form of the object and, in a sense, becomes itself the object. This isomorphism between the structure of knowledge and the structure of being is the core of Lonergan's notion of intentionality. And, since it is also the way in which he defines being, this is also the foundation on which he grounds his metaphysics.

> For knowledge and known, if they are not an identity, at least stand in some correspondence and, as the known is reached only through knowing, structural features of the one are bound to be reflected in the other.[121]

The above quotation from Lonergan does not imply that his notion of intentionality is in any way different from the Scholastic notion which recognises an identity of form between knower and known. However, Lonergan's words: " ... if they are not an identity ..." appears to cast some doubt on Aquinas' very emphatic *"Intellectus in actu et intellectum in actu sunt unum,"*[122] and *"Anima quasi transformata est in rem per speciem,"*[123] meaning that the soul becomes, so to

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118 Bernard Lonergan S.J., "Cognitional Structure", p. 22.

119 What lonergan means by mediation is dealt with in some detail in Chapter Fifteen of this study.

120 Bernard Lonergan, *Method in Theology*, p. 21.

121 Bernard Lonergan, *Insight*, p. 115.

122 Thomas Aquinas, *Summa Contra Gentiles*, 2, 59.

123 Thomas Aquinas, *De natura verbi intellectus*. Quoted from Josef Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 127.

speak, transformed into the real object. It is apparent contradictions like the above which raised the objections from Kenny, already mentioned in Chapter Two, that Lonergan's notion is different from the traditional Scholastic idea. However, Casey has no doubt that in the works of Lonergan there is a "formal identity of knower and known in the act of knowledge,"[124] and most quotations from Lonergan appear to bear this out.

5.10 *Being as Object of the Pure Desire to Know*

This study has already attempted to answer Lonergan's first question, quoted at the beginning of this chapter: "What am I doing when I am knowing (learning)". To answer his third question: "What do I know when I do it?" it is necessary to look at what the object of coming to know or learning is. It could be said that one learns in order to come to know truth as opposed to falsehood, to know reality as opposed to illusion, to know fact as opposed to fiction and, Lonergan would add, to know being as opposed to non-being. Tom Daly explains:

> Reality, fact, truth and being are roughly equivalent. They are what we reach through proper learning. Our learning activities lead us to a positive acquisition, which is knowledge of reality, possession of truth, knowledge of fact in which we are not misled by fiction. In this way we are in touch with being.[125]

'Being', then, is not just a philosophical term or a meaningless abstraction. As has been intimated already, it corresponds to the broadest possible conception of the real. Even viewed linguistically it is the most central of terms because, as Daly explains, "it refers to what we mean when we use the words, Is, Are, Am, Was, Were, as well as Be."[126]

For Lonergan, then, being is also what we 'intend' when we ask the questions "What is it?" *(Quid est?)* and "Is it so?" *(An sit?)*. Thus, it is connected with insight and assent. Being is what we possess when we have gone through the whole learning process from experience, through understanding to judgment. Lonergan explains that "the dynamic structure of human knowing intends being."[127] This isomorphism of being and knowing, the equivalence of the ontological and the

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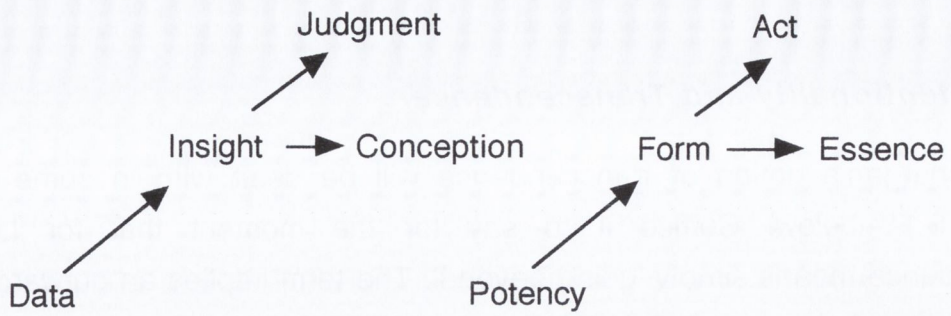
124 Gerard Casey, "Immateriality and Intentionality", Fran O'Rourke (Ed.), *At the Heart of the Real* (Dublin: Irish Academic Press, 1995), p. 100.

125 Tom Daly, "Learning Levels", William Danaher (Ed.), *Australian Lonergan Workshop* (University Press of America, New York, 1993), p. 244.

126 Ibid.

127 Bernard Lonergan S.J., "Cognitional Structure".

cognitional, can be expressed schematically as follows:



All cognitional operations from experience, through inquiry to insight, and on to reflective judgment have being for their object. Through experience of data one comes to a basic knowledge of potency; through insight one comes to grasp form or intelligibility, which "is the ground of possibility"[128]; through judgment or assent to rational reflection one comes to know existence; through conception, one comes to a formulation of essence. All the operations of the mind have being for their object. Working or operating together as one, they put one in touch with being. Being viewed in this sense is identical with reality.[129] It can be said to be "the totality of true judgments"[130] , the complete set of answers to a complete set of questions. It is all-inclusive: "Apart from being there is nothing."[131] The 'pure desire to know' is unrestricted; it is the desire to know everything about everything, so its object must include everything, "all that is known and all that remains to be known."[132]

Thus, the answer to Lonergan's third question, "What do I know (learn) when I do it?" is "Being in all its fullness." But furthermore, being is the object of the pure desire to know, the object of the 'spirit of wonder and inquiry'. Being, when it is reached, is the "fulfilment of wonder."[133] . Thus the object of coming to know, the object of learning, the object of education itself, can be expressed simply as 'the fulfilment of wonder'. This brings one back to the quotation from Alice Walker:

> I think us here to wonder, myself. To wonder. To ast. And in wondering bout the big things and asting bout the big things, you learn bout the little ones, almost by accident. But you never know

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128 Bernard Lonergan S.J., D. Burrell (Ed), *Verbum: Word and Idea in Aquinas* (Notre Dame: University of Notre Dame Press, 1967), p. 43.

129 Bernard Lonergan S.J., "Cognitional Structure",*Collection*, F.E. Crowe(Ed) (London: Darton Longman & Todd, 1967), p. 22.

130 Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans, 1964), p. 350.

131 Ibid.

132 Ibid.

133 Tom Daly, "Learning Levels", William Danaher (Ed.), *Australian Lonergan Workshop,* p. 244.

> nothing more about the big things than you start out with. The more I wonder .... the more I love.[134]

5.11 *Intentionality and Transcendence.*

Lonergan's notion of transcendence will be dealt with in some detail in Section 8.11 below. Suffice it to say for the moment that for Lonergan, transcendence means simply 'going beyond'. The term implies an outward, object-centred orientation, an intending. But, beyond what?. Ultimately, beyond this central core of mind which we call the self, or the subject. Lonergan roots man's basic orientation towards transcendence in the 'pure desire to know', the 'Eros of the mind', 'the notion of being'. He also calls this inner drive the "transcendental intending of the intelligible, the true and the good" which he identifies with "the unifying intentionality dynamically operative and immanent within the diverse levels of human consciousness."[135] Thus one can argue that, for Lonergan, the notions of transcendence and intentionality are inherently interwoven with one another. Briefly, the human person is inherently transcendent because the human mind with its coordinated operations is intentional. Furthermore, it will be argued in Chapter Seven that the human person himself is inherently transcendent because, according to Norris Clarke, all being shares in this transcendent nature.

Transcendence is opposed to 'immanence'; it is opposed to the notion that knowing is simply a matter of having a good look at what is out there, opposed, in other words, to the 'intuitionism' of the 'naive realists'. Implicit in this notion of immanence is not just the rather obvious fact that knowledge ontologically occurs within the knower, but also the epistemological conclusion that "nothing is known except the content immanent in the act of knowing"[136]. Kant, for example, maintained that we know only appearances, colours, sounds and the like, never the thing-in-itself, claiming, for example, that "our nature is so constituted that our *intuition* can never be other than sensible; that is, it contains only the mode in which we are affected by objects."[137] He held that true knowledge cannot transcend or go beyond experience. For Lonergan, on the other hand, it is not immanence but transcendence which characterises the operations of the human mind and the

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134 Alice Walker, *The Colour Purple* (London: The Women's Press, 1992), p. 239.

135 Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Gill and Macmillan, Dublin, 1974), p.72

136 Bernard Lonergan, *Insight*, p. 635.

137 Immanuel Kant, *Critique of Pure Reason*, Norman Kemp Smith (Trans.) (London: Macmillan, 1968), p. 93.

human mind can, through its coordinated operations, reach to and grasp the heart of the real.

5.12 *Being and Objectivity in Knowing*

To express the above ideas in slightly different terms, one can say that the critical question in epistemology, that branch of philosophy which deals with the nature of human knowledge, concerns the objectivity of human knowing, or the relation between objects of human knowing and reality. Does human knowledge actually reach the real world, or is it limited to knowing appearances only? Husserl, for example, asks:

> How can we be certain of the correspondence between cognition and the object cognized? How can knowledge transcend itself and reach its object reliably?[138]

This is an apparently straightforward question and, as intimated above, it has been given a straightforward answer by Kant. Reality, he says, is presented to the senses only, and, as already quoted above, he says "our nature is so constituted that our *intuition* can never be other than sensible; that is, it contains only the mode in which we are affected by objects."[139] The apparent order perceived in the world is, according to Kant, not in the given, not in the real, but it is imposed by the mind. All that we can know is a phenomenal world of our own making. Thus, to try to reason from the world of phenomena to the principles of being, or reality, (i.e. to engage in metaphysics) is, according to Kant, to indulge in an illusion. He maintained that the intelligibility which we grasp with our minds is not part of the given, it is simply a construct of the human intellect. There is no immediate insight into data, no grasp of relations in the given, not even an intellectual or 'categorical' intuition, and so there is no intellectual knowledge of reality. Lonergan dismisses this claim as inherently contradictory:

> There is an explicit contradiction in the reflective statement, I am stating what really and truly is when I state that we are really under an illusion whenever we claim to know what really and truly is so.[140]

Another mistaken stance according to Lonergan is that taken by the "naive

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138 Edmund Husserl, *The Idea of Phenomenology* (The Hague: Martinus Nijhoff, 1964), p. 15.

139 Immanuel Kant, *Critique of Pure Reason*, p. 93. Italics in original.

140 Bernard Lonergan, "Metaphysics as Horizon", F.E. Crowe and Robert Doran (Eds.), *Collection* (University of Toronto Press, Toronto, 1988), p.193

realists." Pieper explains what is meant when he says:

> Not only the Greeks in general - Aristotle no less than Plato - but the great medieval thinkers as well, all held that there was a purely receptive "looking," not only in sense perception, but also in intellectual knowing.[141]

This stance Lonergan terms "naive realism", the illusion that reality is what is already out there to be seen. He categorises it as follows:

> Knowing can be conceived as intrinsically or essentially a matter of confrontation, taking a look, seeing what is there, intuition. Since knowing, on this account, comes from the look, anything that comes from the subject is not knowing at all; and if it comes from the subject, that just means its not knowing. Knowing is what is given in the look, and what is known is what is out there to be looked at and seen when one looks.[142]

But clearly, according to Lonergan, "looking is not the essence of knowing." He continues: "We have knowing when we have experience, understanding, and grasp of the unconditioned."[143]

In Lonergan's opinion, the root of Kant's misunderstanding also is his equation of knowing with some kind of 'seeing'. Thus, one finds the same problem of understanding which gave rise to "naive realism" now being responsible for yet another, apparently opposite misconception, that of "critical idealism". If the sense of reality rooted in the immediacy of sensation is allowed to become the criterion of our knowledge of reality, then an empirical or idealist position becomes inevitable. But, according to Lonergan, "By our senses we are given, not appearance, not reality, but data."[144] The essential difference between both of the above positions (naive realism and critical idealism) and Lonergan's is not just the misconception about the analogy of seeing, but also that they have overlooked the fact that human knowing is polymorphic; human knowing involves many distinct and irreducible activities. "No one of these activities, alone and by itself, may be named human knowing, rather they are components in a functional structure of knowing, a structure which, as has already been argued, is also dynamic, both materially and formally.

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141 Josef Pieper, *Leisure, the Basis of Culture* (South Bend, Indiana: St. Augustine's Press, 1998), p. 11.

142 Bernard Lonergan, *Understanding and Being,* p. 159.

143 Ibid.

144 Bernard Lonergan, "Cognitional Structure", *Collection,* p.29.

Lonergan maintains a position of what he terms "critical realism." While he is labelled a 'subjectivist' by some, Lonergan still believes in an objective reality prior to, and independent of the knowing subject. He is a realist in that sense. However, he prefers the label "critical realist" because he would say that the world in which we live and move and have our being is the world as we conceive it or know it. He would say that that which one grasps with one's intellect and reason is more real than what is grasped merely by the senses. Briefly, the critical realist maintains that objectivity is intrinsic to human cognitional activity and that this intrinsic objectivity is its intentionality. This intrinsic relation of human knowing to reality is "the originating drive of human knowing."[145] Lonergan continues:

> It is the active principle that calls forth in turn our several cognitional activities and, as it assembles them into a single instance of knowing, so it assembles their many partial objects into single total objects.[146]

Goethe appears to agree with this analysis when he says:

> For merely looking at an object cannot be of any use to us. All looking goes over into an observing, all observing into a reflecting, all reflecting into a connecting, and so one can say with every attentive look we cast into the world we are already theorising.[147]

One could say that Kant, the "critical idealist", sought to transfer the philosophical centre of gravity away from the metaphysics of being, away from the object, and position it squarely at the subject. Neo-Scholastic "naive realists", on the other hand, see it as virtuous to attempt "a transfer of the centre of gravity from the subject back to the object, to objective reality."[148] But the proper position for a centre of gravity is neither one extreme nor the other. Thus, one finds Lonergan, the "critical realist", re-establishing the centrality of the subject, and what he terms an "authentic subjectivity", for the sake of authentic objectivity.

What does Lonergan mean by an objectivity based on an "authentic subjectivity?" It has already been argued that according to Lonergan "the dynamic structure of human knowing intends being," and that all the cognitional structures from experience and inquiry, which must answer the questions "What is it?", "Why is it so?", through insight and on to reflection or rational understanding, which must

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145 Ibid., p.22.

146 Ibid.

147 Goethe, quoted in Paddy Walsh, *Education and Meaning: Philosophy in Practice* (London: Cassell Educational Limited,1993), p. 71.

148 Josef Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 142.

answer the question, "Is it so?", all have being for their object. Being in this sense is identical with reality. But, both intentional object and intending subject belong to the sphere of being:

> Being is divided from within; apart from being there is nothing; it follows that there cannot be a subject that stands outside being and looks at it; the subject has to be before he can look; and once he is, then he is not outside being but either the whole of it or some part.[149]

Objectivity in human knowing, then, must take into consideration not just the being which is the object of knowing, but the being also who is the subject of knowing.

To return for a moment to Aquinas' notion of intentionality as outlined in section 2.7 of this work, Lonergan maintains that Aquinas' notion of knowledge goes beyond a mere identity of form between knower and known. To the notion of the object of thought existing in nature with *esse materiale,* and existing in the mind with *esse immateriale*, which was from Aristotle, Aquinas added the further requirement that in the mind the object exists also with *esse intentionale*. He accepts than an identity in act is a requirement for knowledge since "as long as faculty and object are in potency to knowing and being known, there is as yet no knowledge." However, "knowledge by identity is incomplete,"[150] since it does not rise to knowledge of other as other. In other words, such knowledge by identity cannot really account for the child's achievement of the elementary distinction between 'me' and 'not me'. For Aquinas and Lonergan "rational reflection has to bear the weight of the transition ... to knowledge as of the other."[151]

It is by reflection and judgment that we transcend this central core of self to grasp the other as other. By reflection we not only come to know the object but we also come to know the knowing subject: "We know by what we are; we know we know by knowing what we are."[152] Thus two judgments follow naturally: "The object exists" and "I am a knower of the object." A third judgment follows naturally from the first two, although in the child's case bitter experience must also play its role: "I am not the object." This, Lonergan maintains, when combined with the identity in act, solves the problem of transcendence and objectivity of knowledge.

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149 Bernard Lonergan S.J., *Insight*, p. 377.

150 Bernard Lonergan, *Verbum: Word and Idea in Aquinas* (Notre Dame: Univ. of Notre Dame Press, 1967), p. 72

151 Ibid., p. 73.

152 Ibid., p. 88.

5.13 *Chapter Conclusions*

This last chapter has taken a broad and detailed sweep through Lonergan's cognitional philosophy. Whereas Aquinas, according to Lonergan, offers an analysis of cognitional activity that presupposes a whole metaphysical system, Lonergan would say that "what we want is to take the same fact, the same psychological fact and express it without the metaphysics."[153] In this way, he hoped to build up his metaphysics 'critically', on the basis of an exact account of the nature of human knowing.

In this last chapter an attempt has also been made to follow the same route as Lonergan's own thinking, from his dynamic structure of coming to know, through a consideration of his 'pure desire to know' and intentionality, to a consideration of his 'notion of being' and his definition of being as object of the pure desire to know, and ending with his notion of objectivity as "authentic subjectivity." The classic statement of this programme is given in Lonergan's well known dictum with which *Insight* begins and ends:

> Thoroughly understand what it is to understand, and not only will you understand the broad lines of all there is to be understood but also you will posses a fixed base, an invariant pattern, opening upon all further developments of understanding.[154]

What is striking about this statement is its identification of the task and method of philosophy as precisely self experience, self understanding, and self knowledge or, as he also terms it, "the personal appropriation of one's own rational self-consciousness". This certainly has more than a hint of subjectivism about it, but, as has already been said, it is subjectivism with a very distinct difference. And as will hopefully be established by the end of the study, it is also a subjectivism with very real implications for the field of educational theory and practice.

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153 Bernard Lonergan, *Insight*, p. xxvii.

154 Ibid., p. xxviii.

Chapter 6

The Primary Modes of Human Existence

6.1 *Introduction*

It was argued in the last chapter that Lonergan claims that it is experience, understanding, and finally the act of assent to a judgment that puts one in contact with the real, with existence, with being. This is in line with Aquinas' assertions: "*Omnis res est vera et nulla res est falsa*,"[1] confirming the equivalence of the ontological and the cognitional, and "*ens et verum convertuntur*," confirming the equivalence of being and truth. As a verb, "to be" or *"esse"* is special because it expresses the simple metaphysical truth that everything *is*, or that there is no reality which is not. However, it has also been mentioned[2] that according to Aquinas no reality except God can claim to *be* in the pure and unlimited sense of "simply being", because all things are particular modes of the act of being *(esse)* and are not *esse* itself. "It is therefore more proper to say that a thing has *esse* (as its property), than to say that a thing is pure and simple *esse*."[3] In one sense, there are as many modes of existence, ways of having *esse*, as there are existent things. This chapter deals with what might be termed the primary modes of human existence.

Within Lonergan's cognitive scheme existence and being are not the same thing.[4] Being is deeper and more fundamental than existence; being is what places something in existence in the first place; a thing exists because it has being. However, a thing which exists is capable of *being* with greater or lesser degrees of perfection. One encounters matter or potency in experience; one grasps form in the act of insight; one knows existence or act in judgment. Through judgment one may grasp existence, and so through judgment one may also grasp being or that which places something in existence. One might say that existence is a judgment about a

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[1] Thomas Aquinas, *Questiones disputatae de veritate*, I, 10.

[2] Section 2.4.4

[3] Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-Tala Publishers, 1991), p. 20.

[4] It seems to the author that this difference between being and existence is implicit in much of Lonergan's work, and particularly in Lecture 9 of *Understanding and Being* which deals with "metaphysical analysis," the object of which is to bring cognitional analysis to bear on such "traditional metaphysical questions," and so clarify them.

being which exists prior to the judgment. Existence is an assent of reason, on the side of the subject - "This thing really exists," or "It is." Being, on the other hand, is the most central act of a thing, on the side of the object. Through experience one perceives an object and forms an image of it. Through insight one grasps its form. Through conception one expresses its essence, one gives it meaning and expresses it - 'human', 'man', 'person'. Through judgment one reaches the particular - 'Jim', 'Mary', a 'stranger', a particular existent being. Judgment, then, first grasps existence and then works from existence to the being of that which exists.

This chapter is concerned with the modes of existence available to the human person viewed as an intelligent, embodied, feeling, intersubjective 'thing', capable of consciousness. While there may be as many modes of human existence as there are persons, nonetheless it is possible to identify what might be termed the 'primary' modes of human existence, where primary is used in the sense of 'basic, or 'foundational'. As regards the terms used to describe these various modes, this study will adopt the convention of italicising them as in *'being'*, *'having'*, *'doing'*. This is to denote that these words are being used not with their common, everyday meaning, but in a more narrowly defined and specialised, but related, sense.

6.2 *Being, Having, and Doing*

The existential question "What is a man?" can be rephrased as "What is a human being?" Clearly the first thing one can say is that he is a 'being' and that, consequently, he exists. As a person, one can say that man is an intelligent, embodied, "unity, identity, whole"[5] , which situation remains unchanged throughout his life. Viewed as a subject, however, man can exists on different planes or levels of consciousness. From moment to moment he can *be* more and more, as he ascends from one level of consciousness to the next. Similarly, in the section dealing with human development it will be argued that man's being unfolds with time. Man can become more and more as he learns and develops over time. Man viewed as existing either "is" or "is not"; man viewed according to being can always *be* "more" or "less". Thus, existence and being are not equivalent terms. With these changes, man's 'mode' of existence can change, but obviously not the truth or reality of his existence. The man at forty-five may be the same person as he was at five, but his horizon and, consequently, his world, his *Lebenswelt*, may have

[5] See Chapter 6, above. See also Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans,1964), p. 246

expanded enormously, or even declined. His mode of being in the world has changed; he may have more knowledge, more experience, more autonomy, and a greater sense of responsibility; or he may just as well be sliding into senility.

The second thing that can be said about all human beings, or persons, is that in order to *be* they must *have*. They must *have* a body, for example, and for this body they must *have* food and shelter. To be fully human they must *have* an intellect and will. But it is important to note that this *having* is in order that they might *be*, not the other way round. *Having* is vital to man's nature, it is a response to his basic human needs and desires. But *having* is secondary to *being*; *having*, one can say, is in order to *be*. It has been argued already in the section dealing with the philosophy of Marcel[6] that one's embodiment, possession of a body, is the archetypal form of *having*.

The third general thing one can say about the human person is that in order to *be* and to *have*, he must *do* many things. Man is perpetually active. Some of these activities are automatic, the result of simply being alive - breathing, pumping blood to the brain, for example, both activities of what is called the autonomic nervous system. Other activities may be learned automatic reflexes. Probably most of what a man does every day is in this category - opening and closing doors, the mechanics of writing, waiting for traffic lights to change, for example. Other things he does deliberately in order to enhance his *being* or *having* modes of existence; these are termed *work*, according to the definition used in this study. Ultimately, one can say that one *does* in order to *have* and to *be*. *Doing* is therefore secondary to both *being* and *having*.

In considering *being*, *having*, and *doing* in this way one is not dealing with being as being, or *esse*, nor is one considering *essence*, that which makes a thing to be what it is. Essence merely puts one in touch with 'humanity', or human nature, rather than with real, living, individual persons, and it is only individual persons who have modes of existence. The modes of existence may be part of the essence of man, but do not themselves constitute that essence.

What is being considered in this chapter are modes of existence according to three distinguishable, but interrelated parameters: *being*, *having*, and *doing*. However, these are not the only modes of human existence which can be

[6] Section 3.4

distinguished. One can also identify a 'feeling' or 'affective' mode of human existence, for example, and also an 'intersubjective' mode of existence. These will be dealt with separately in other chapters of this study. These five together constitute the 'primary' modes of human existence, in that all other modes that one can think of - 'aesthetic', 'playful', 'studious', 'creative', 'religious' - can be shown to be simple derivatives of these five, in various combinations.

The fourth thing that one can say about the human person is that he is a composite nature. One can notionally differentiate mind from body, for example. However, clearly they are not separable aspects of the human person. If the body ceases to function, so also does the mind as we know it. Clearly mind and body are interdependent. No doubt Lonergan would agree with Mercier when he says that "the corporeal, sentient subject and the rational soul do by their union form one single substance, one nature, one person."[7] In the conscious person, the body for the most part moves in response to an act of the intellect. In turn, it is the body which provides the data of sense through which the mind comes to know things in the environment. One can say that the body mediates the person's approach to the world. In turn, the mind mediates all the deliberate activities of the body. Even Dewey maintains that the body is clearly not a passive recipient of external stimuli but an active agent interacting with the environment and "development of experience comes about through (this) interaction."[8]

From the theories of Marcel, it has already been argued that it is by virtue of corporality that the *having* mode comes into play. Corporality, or embodiment, or 'incarnation', implies both change and growth. Corporality, as will be argued, also means inertia or resistance to change.[9] Thus the *having* of a body provides both continuity and stability on the one hand, and change, insecurity, and uncertainty on the other. It can be argued that it is because of corporality that stages of growth become established achievements. Some growth is due to a natural unfolding of genetic propensity. Most growth is due to an interaction of both genetic unfolding and learning, according to Vygotsky's fourth model.[10] It is because he is capable of *having* that a man can translate his *doing* into the permanent achievement of habit. Without *having*, without possessing the fruits of development, there can be no real

[7] Mercier, *A Manual of Modern Scholastic Philosophy,* Vol 1 (London: Routledge and Kegan Paul, 1916), p. 281.
[8] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p. 58.
[9] See Section 7.10.6, below.
[10] Section 4.7.2

sustainable development. It can be argued that all growth and development, all permanent achievement in man, as well as much resistance to growth and development, are due to his corporeal nature. Neither could there be habit or *habitus*, or by extension memory, without a permanent neurological 'encoding' of some kind, which in turn depends on brain and so on corporality.

It is worth noting in passing that each one of Lonergan's levels of the dynamic process of coming to know has what might be termed its 'rest point of achievement', or its stage of *having*. Thus, the *doing* of experience or attention reaches its term in the *having* of imagery, and the *being* mode is enhanced accordingly. Likewise insight is insecure until it is expressed in the *having* of conception; judgement likewise is ineffective and incomplete until it reaches the *having*, or 'rest point', of assent. At each step it may be said that the *being* mode of existence is also progressively enhanced.

On the level of language, *being*, *having*, and *doing* may be said to represent a set of verbs which might be termed 'foundational,' since one or other of them must appear, at least implicitly, in all other verbs. For example, *being* appears in all instances of the verb 'to be' - "is," "am," "are," "was," for example. *Having* represents not only possession, as in "I think I've got it", but also achievement or completion: "I have read it", or "I have finished", for example. Similarly, *doing* lies at the foundation of all practical activities: "I work" is equivalent to "I do work"; similarly one can say: "I do sports" or "I do mathematics" or "I do the cooking". Thus *being*, *having* and *doing* may be regarded, not so much as basic verbs in themselves, but as underlying the meanings of all other verbs. Steven Pinker, professor of psychology at MIT, suggests that "the English past tense ending *-ed* may have evolved from the verb *do: He hammered* was originally something like *He hammer-did."* [11]

There is a sense of *being*, *having*, and *doing*, however, which is deeper and more 'foundational' than language, deeper even than Chomsky's so called 'innate' concepts. *Being*, *having*, and *doing* correspond to three early experiences of the child which give rise to what may be termed pre-cognitive 'notions'. The first, the deepest, the most primordial is Lonergan's 'notion of being'. Similar but not equal in depth to the 'notion of being' is the notion of *having*. It is also pre-cognitive and primordial since it derives from the child's experience of the proto-reality of being embodied, incorporated, or 'incarnated', to use Marcel's term. Next in depth comes

[11] Steven Pinker, *The Language Instinct* (London: Penguin, 1995), p. 35.

the child's experience of acting with, and on, his own body. Thus *doing* is also a pre-cognitive 'notion' derived from the neonate's experience of physically acting on his world and having the world act physically on him. It is unnecessary and unhelpful to postulate the existence of underlying 'innate concepts', as Chomsky would propose, nor of a basic form of learning, as Piaget would assert. Instead, these notions are laid down at a level prior to learning and prior to concept formation, in the sense that they underlie all one's experience of the world, all one's insights, all one's conceptions, and all one's judgments. The notion of being clearly remains deepest, first, and most special in the psychic structure of the child.

According to the Scholastics, even being in the metaphysical sense may be subdivided into *ens (having)* and *esse (doing)*. They would say that only in God are *ens* and *esse* undifferentiated. In the terms of this study one could also say that only in God are *being*, *having*, and *doing* undifferentiated.

All situations of human existence may be viewed in terms of *being*, *having* or *doing*. Likewise, *being*, *having*, and *doing* may represent three basic human attitudes and orientations to life. What is true for the person may also be true for a culture, or a society; what is true of cultures and societies may also be true of a society's attitudes towards education. Thus, this chapter will also consider different approaches, attitudes, and philosophies of education according to what Rand calls the 'triarchic model' of human existence.

6.3 *Being and Having in the Philosophy of Gabriel Marcel*

Lonergan regards himself as an 'intellectualist' in that he places understanding or insight before conception.[12] As has been mentioned already, he tackles the notion of corporality only tangentially and superficially. It is not surprising, therefore, that he neglects the notion of *having* almost completely. Gabriel Marcel has shown that *having* and corporality are closely linked to one another. It can be argued, however, that, despite the fact that Marcel 's approach to philosophy is distinctly existentialist, there is nothing in Lonergan's theory which contradicts this notion of *having*. On the contrary, is is a contention of this study that, like the notion of corporality outlined in Chapter Three, Marcel's notion of *having* adds something to Lonergan's theory, widening its scope and forming a more satisfactory foundation for a philosophy of education.

[12] Bernard Lonergan, *Insight: A study of Human Understanding* (London: Longmans, 1957), pp. 695 - 696.

In his *Metaphysical Journal,* Marcel introduces his notion of corporality and emphasises that self and body are a unity, but not an identity. He sees corporality or embodiment as the prototypical form of having.[13] It is the "absolute having", the basis of all having, which cannot itself be had, annexed, or disposed of, because it "encroaches" on one's self, on one's being. This "encroachment" of one's having on one's being is basic to the human situation. To Marcel, one's being is hidden in the depts of one's corporal or incarnate existence; one's being is shut off from consciousness by the vibrant presence of one's living body which cannot be objectified, and cannot become an empirical datum in the normal sense. One cannot stand outside one's corporality and have a good look, as Lonergan's 'naive realists' would claim. Yet one's bodily self is not identical with one's being. Cain explains:

> More exactly, corporality is on the frontier between being and having; "my body" does and does not belong to me; I can and cannot dispose of it, for I can dispose of it absolutely only by making it absolutely "indisposable" (unavailable) by committing suicide.[14]

To Marcel, one's body is essential to one's having, to one's possession of what is outside of one. It is through one's body that one 'has'. But having implies being, as possession implies a possessor, and contents a container. Thus having and being, while distinct from one another, are interdependent modes. It is their distinction that allows one to consider them separately as distinct 'modes of existence', 'modes of experience', and 'spheres of development' of the human personality, on the one hand, and as distinct parameters of the education process on the other. Marcel insists that we may come to an understanding of being through an understanding of having: "It might be that a phenomenological analysis of having would constitute a useful introduction to a renewed analysis of being."[15] This is the analysis that Marcel attempts in *Being and Having*. In the process of that analysis he discovers that having is always obsessed with the other as 'it', not as 'thou'. The basic intention of having is to take in what is other, to hold on to it, to keep accumulating, and never to let go.

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[13] The convention of italicising is dropped while dealing directly with the theories of Marcel as Marcel himself did not use such a convention. This does not imply that his definitions of being and having are different from those employed in the greater part of this chapter.

[14] Seymour Cain, *Gabriel Marcel* (London: Bowes & Bowes, 1963), pp. 62 - 63.

[15] Gabriel Marcel, "Outlines of a Phenomenology of Having", *Being and Having* (Westminster: Dacre Press, 1949),

6.4 *Being and Having in the Work of Erich Fromm*[16]

Inspired by Marcel, Erich Fromm deals with being and having within a psycho-social frame of reference. Fromm concerns himself with the daily life of the individual and develops his philosophy from there. His illustrations are taken from easily observable behaviours, and are reinterpreted in the light of the 'to be - to have' model. Rand and Tannenbaum explain:

> Fromm presents a combination of empirical observations with a humanistic-optimistic view of life. The purpose is to create through knowledge and insight, a new person and a new society.[17]

Fromm is quoted quite extensively throughout the remainder of this study.

6.5 *Being, Having, and Doing in the Work of Yaacov Rand*

Yaacov Rand has been a lifetime collaborator of Feuerstein and has co-authored some of Feuerstein's main works. For many years he was professor of education at Bar-Ilan University in Israel. Using the *having* and *being* modes of existence as starting concepts, Rand and Tannenbaum proposed that a third category should be added, namely, *doing*:

> It seems to us that both orientations (being and having) do not cover essential aspects of human behavior. It seems to us warranted to add an additional major aspect to these choices, namely the To Do orientation, since its fits justifiably into the paradigm.[18]

This contention of Rand's is supported by Gordon Allport when he states that human "Personality" not only " *is* something" but that also "personality *does* something"[19] .

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[16] Erich Fromm (1900 - 1980) was a noted social scientist and author of several bestsellers including *The Art of Loving, To have or to be, The Fear of Freedom,* and *The Art of Being.* He was also a practising psychoanalyst who applied his experience to the interpretation of social phenomena.

[17] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning: An Impact of Feuerstein's Theory in Education and Psychology* (Oxford: Pergamon, 2000), p.88.

[18] Ibid.

[19] Gordon W. Allport, *Personality: A Psychological Interpretation* (New York: Holt, 1937), p. 48.

6.5.1 *The Modes of Existence as Psychological Constructs*

For Rand, *being*, *having*, and *doing* form what he terms a 'triarchic Mode of Existence' or 'MoE'. He uses this as a type of model of human personality:

> All three Modes of Existence exist concurrently in each human being. Individual differences in this respect stem from the predominance of one of the three MoEs and the structure of their relative potency, resulting in the development of personality character traits, and largely determining one's behavior and manner of coping with reality.[20]

Rand's three Modes of Existence may be shown to represent three fundamental attitudes, character traits, or characteristic ways of behaving according to which the individual responds to the world of external and internal experience. These refer to a wide variety of behavioural dimensions and spheres of activity. They do not refer to any specific 'content', but to 'process'; they refer to 'how' rather than 'what'. For Rand, 'Modes of Existence' may be regarded as stable, self-perpetuating, self-regulating, self-mediating structures that have their origins "in early life stages, showing relative stability over life, and ... expressed over a wide spectrum of life conditions."[21] As such, "they may serve as an important parameter to describe human beings and systematically differentiate between them, as well as to predict their behavior."[22]

6.5.2 *The Being Mode of Living*

Rand explains:

> The term *Being* refers to a basic propensity of the individual to enhance self-knowledge, and to adhere to beliefs and value systems that make life meaningful. It refers to the inner authentic existence of the individual which governs all, or most, of his/her feelings, thoughts and deeds, reflecting a consciousness of one's fundamental orientation towards life, self, and the world.[23]

Rand also insists that *Being* reflects an aspiration to 'become', in the sense of realising oneself and one's potential through the process of cultivating productive inner capacities, "beyond specific domains of activity in which the individual may

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[20] Yaacov Rand and Rivka Reichenberg, "Reflective Teaching and its Relation to Modes of Existence", in Kozulin & Rand (Eds.), *Experience of Mediated Learning,* p. 117.

[21] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning,* p.89.

[22] Yaacov Rand and Rivka Reichenberg, "Reflective Teaching and its Relation to Modes of Existence", p. 118.

[23] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", p.89.

become involved." It can be argued that it is to this *being* Mode of Existence that Lonergan is referring to when he uses the term 'authenticity', when the organic, the corporal, the animal natures of man are sublated to the intellect and will, and marshalled towards the attainment of higher goals mediated by meaning. Thus it can be argued that what Lonergan refers to as 'self-appropriation of interiority', and which he regards as the route to personal authenticity, is also related to Rand's *being* mode of existence.[24]

6.5.3 *The Having Mode of Living.*

Rand defines the *having* mode as follows:

> The term Having reflects a basic motivation and major aspiration of the individual to possess and accumulate things, as reflected, for instance, in a strong desire to earn money and accumulate wealth.[25]

For Rand, however, *having* refers not only to material possessions but also to other 'things' which are approached in a possessive manner, such as *having* a family, accumulating knowledge, gaining qualifications, and attaining positions of respectability and esteem in the community.

It has already been argued that Marcel maintained that the *having* mode of existence is a natural consequence of man's corporality. In fact, he regarded the *having* of a body as the prototype or model of all having. The mode of *having*, considered by itself, cannot be regarded as an intentional state or activity. The orientation to possess, however, is always directed towards what one does not yet have, always oriented towards the outside world and, so, may be regarded as intentional, but only to the degree to which the desire is conscious. Where the *having* mode refers to the having of knowledge, on the other hand, that *having* mode must be regarded as intentional, since knowledge is itself intentional, relating the mind to something in the real world, Likewise, when the *having* relates to a relationship or affectional bond that orientates one consciously towards some desired object, then here also *having* must be regarded as intentional.[26]

Remembering also what Marcel had to say about the basic insecurity of all

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[24] This contention will be dealt with in more detail in Chapter 9 below, dealing with consciousness and 'self-appropriation.

[25] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning,* p.89.

[26] For a more detailed treatment of the notion on intentionality, refer to Sections 2.7 and 3.3.4 of this study.

having, it follows that those who approach life, including their relationships and learning, from a largely *having* perspective will experience in themselves a deep sense of uncertainty and insecurity. Erich Fromm explains:

> The cautious, the having persons enjoy security, yet by necessity they are very insecure. They depend on what they have: money, prestige, their ego - that is to say, on something outside of themselves. For what becomes of them if they lose what they have? ... *If I am what I have and if what I have is lost, who then am I?*[27]

Those motivated, however, by an intense practical interest in, and curiosity about, life and their own position within it, those motivated by the 'pure desire to know', for example, are of the *being* mode, and experience no such insecurity. Fromm explains:

> The anxiety and insecurity engendered by the danger of losing what one has are absent in the being mode. If I am who I am and not what I have, nobody can deprive me of or threaten my security and my sense of identity. My centre is within myself; my capacity for being and for expressing my essential powers is part of my character structure and depends on me....
>
> While having is based on some thing that is diminished by use, being grows by practice. ... The powers of reason, of love, of artistic and intellectual creation, all essential powers grow through the process of being expressed. What is spent is not lost, but on the contrary, what is kept is lost. The only threat to my security in being lies in myself: lack of faith in life and in my productive powers; in regressive tendencies; in inner laziness and in the willingness to have others take over my life. But these dangers are not *inherent* in being, as the danger of losing is inherent in having.[28]

6.5.4 *The Doing Mode of Living*

The fact that the human person is an embodied or incarnate subject means that he is also a being who interacts physically with his environment, causing it to be changed for good or ill and, in turn, being changed by it, positively or negatively. The human person is a being for whom activity or *doing* plays a vital role. Rand and Tannenbaum explain the *doing* mode as follows:

> The *Doing* mode of existence contrasts with the mode of *Being*, in which the individual shows a powerful preference for a rich, meaningful inner life. It also differs from *Having*, in which the individual's capacities and resources are strongly focused upon acquisition of material wealth, or of knowledge, or of social status. Doing, on the other hand expresses the individual's tendency towards playing an active role, and acquiring satisfaction, in

[27] Erich Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.111.
[28] Ibid., p.112.

transforming the environment.[29]

Lonergan also agrees with the importance of the *doing* mode in education when he says: "Bringing up the child, educating the boy, the adolescent, the young man, is a matter of gradually enlarging the field in which he does things for himself, finds out for himself."[30] However, the *doing* mode as applied to education has its limitations and its dangers. Maritain explains:

> To have made education more experiential, closer to concrete life and permeated with social concerns from the very start is an achievement of which modern education is justly proud. Yet in order to reach completion such a necessary reform must understand, too, that to be a good citizen and a man of civilization what matters above all is the inner center, the living source of personal conscience in which originate idealism and generosity, the sense of law and the sense of friendship, respect for others, but at the same time deep-rooted independence with regarded to common opinion.[31]

In short, he is making the same affirmation of the primacy of education for *being* over education for *doing* which Rand, Marcel and Fromm also make. It has already been argued that, except for the case of reflex action, *doing* is intelligent and consciously directed towards and object and so also may be termed intentional.

On the intersubjective side, the 'Doing Mode of Existence' also prompts the individual to engage with other people in productive action, "mostly geared towards materialization of goals beneficial to themselves, to broader groups of people, and even to society at large." In order to tie this in with Lonergan's notions of 'community of feeling' (sympathy) and 'fellow feeling' (empathy), this active co-operation with others will be termed 'synergy' for the purposes of this study.

6.5.5 *Doing as Praxis*

It is quite clear that, while giving pride of place to the *being* mode of living, Rand and Tannenbaum do not intend to denigrate either the *doing* or the *having* modes. All three modes must be regarded as natural and necessary for human growth and well-being. Rand's and Tannenbaum's definition of *doing* put it in the same position as Lonergan's 'doing' as the final fruit of intelligent insight, rational

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[29] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning,* p.89.

[30] Bernard Lonergan, *Collected Works of Bernard Lonergan , Volume 6 - Philosophical and Theological Papers 1958 - 1964* (Toronto: University of Toronto Press, 1996), p. 171.

[31] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 16.

reflection, and assent to a perceived value. This may be termed *doing* for the sake of *being*. This is also what Paulo Freire terms a 'praxis': "the action and reflection of men and women upon their world in order to transform it."[32] The *doing* mode under consideration, in other words, is not activity for the sake of activity, nor is it mindless routine, because, as Freire insists, "action is human only when it is not merely an occupation but also a preoccupation, that is, when it is not dichotomized from reflection."[33] Lonergan would certainly concur with this. *Doing* is productive, adding to the *being* mode of existence, in so far as it is intelligent and rational, the fruit of inquiry and reflection. As Freire explains: "reflection - true reflection - leads to action."[34]

Thus, one must draw the conclusion that activity for the sake of activity has no place in education. As will be shown elsewhere, even in the development of skills, even in PE class, one must enlist the aid of rational reflection if the exercise is to be educationally productive. Freire says that

> apart from inquiry, apart from the praxis, individuals cannot be truly human. Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world, and with each other.[35]

But Freire means much more in the above quotation: he is clearly stating that all knowledge, if it is to be productive human knowledge, if it is to produce the desired development of the individual and his world, must find its term in reflective action, in *doing*, in 'praxis'. Even when the *doing* is purely intellectual, it must find expression

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[32] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 60. Praxis has also been variously termed "The exercise of a theory", and the doing of something intelligently.

Paulo Freire was born in the Brazilian coastal city of Recife in 1921. His middle-class family soon experienced the debilitating poverty that followed the great American depression of 1929. "This had a profound influence on his life as he came to know the gnawing pangs of hunger and fell behind in school because of the listlessness it produced." [Richard Shaull, Forward to *Pedagogy of the Oppressed,* (Penguin Books, 1996), p. 12.] Confronted by the problem of poverty in a very existential way, Freire turned his attention to the fields of educational practice and philosophy. According to himself, he studied Sartre and Munier, Erich Fromm and Louis Althusser, Ortega y Gasset and Mao, Martin Luther King and Che Guevara. In the opinion of this author, however, once one has penetrated the revolutionary rhetoric, there remains something very profound in Freire's writings, something with inescapable echoes of Aquinas and Scholasticism.

He did his doctoral dissertation at the University of Recife in 1959 and became Professor of the History and Philosophy of Education at the same university. He developed a methodology for teaching illiterates which was used with great success throughout North East Brazil. This was regarded as such a threat that Freire was jailed soon after the military coup in 1964. He was later released and exiled to Chile where he worked with UNESCO and the Chilean Institute of Agrarian Reform on programmes of adult education. He later worked at Harvard University's School of Education and as a Special Consultant to the Office of Education of the World Council of Churches in Geneva.

[33] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 35.

[34] Ibid., p. 48.

[35] Ibid., p. 53.

in what he terms "the word", which is equivalent to Lonergan's notion of conception, or of the 'inner word', or '*Verbum*'. He sees the individual's 'word' also as a 'praxis' or *doing* and as having the power to change the individual and his world:

> Within the word we find two dimensions, reflection and action, in such radical interaction that if one is sacrificed - even in part - the other immediately suffers. There is no true word that is not at the same time a praxis. Thus, to speak a true word is to transform the world.[36]

Finally, to complete the equation, Freire sees 'praxis', 'word', 'reflective action', all as work. It is in the above sense that the word *work* will be used throughout this study. It is italicised to show that it also, together with *being*, *having*, and *doing*, is employed with a special meaning or definition.

6.6 *Work*

6.6.1 *Work as a Mode Doing*

No treatment of the human person would be complete without some consideration of the world of work and its effects on the various modes of man's existence. There are many and varied forms of work just as there are many and varied forms of *doing*. Purely physical activity and purely intellectual activity, as well as the whole spectrum of human *doing* in between, may qualify for the appellation '*work*'. Seamus Heaney, for example, draws parallels between physical work and intellectual endeavour in the following extract from his poem "Digging":

> By God, the old man could handle a spade.
> Just like his old man.
>
> Nicking and slicing neatly, heaving sods
> Over his shoulder, going down and down
> For the good turf. Digging.
>
> The cold smell of potato mould, the squelch and slap
> Of soggy peat, the curt cuts of an edge
> Through living roots awaken in my head.
> But I've no spade to follow men like them.
>
> Between my finger and my thumb
> The squat pen rests.
> I'll dig with it.[37]

[36] Ibid., p. 68.

[37] Seamus Heaney, "Digging", *The Death of a Naturalist* (London: Faber & Faber, 1999), p. 3

From a philosophical point of view, the challenge is to formulate an acceptable and useful definition of *work* which will, at the same time, fit in with the overall theoretical scheme of this study. The Chambers English Dictionary agrees with Heaney when it defines work as: "Physical or mental effort directed towards making or achieving something." That work is a type of intelligent *doing* or praxis seems obvious from the above consideration of Freire's theories. That the above definition is quite inadequate for a scientific treatment of work, however, may be illustrated by examining Rand's and Tannenbaum's much more careful and comprehensive definition of *doing*:

> This Mode of Existence emphasizes a basic propensity of the individual to become involved in active accomplishing, in the broadest sense of the term, in order to materialize his/her aspirations. It reflects a basic orientation to do things that will meaningfully change the quality and nature of one's life, as well as the environmental conditions that have to be coped with.[38]

This adds to the notions of *doing* a response to man's "aspirations", and its effect in changing meaningfully "the quality and nature of one's life" as well as the environment in which one lives. Again, this is Freire's notion of 'praxis', action and reflection both clearly finding their place in Rand and Tannenbaum's definition, as well as finding their term in the development of the human person and his environment.

Is this, then, all there is to *work*? Are *work* and *doing* simply one and the same thing? John Locke proposes that work consists of an additional element that is present only implicitly in the above definition of *doing*. That additional element is something which Lonergan has explored explicitly and at some length in *Method in Theology* - the notion of 'value'. To express his philosophy in the terms so far defined in this work, one can say that Locke suggests that work is a form of *doing* which adds value to things: "For 'tis *Labour* indeed that *puts the difference of value* on every thing."[39] This notion of added value is certainly implicit in Rand and Tannenbaum's definition above. But what, one might ask, can this value be which work is supposed to add to things? To answer this one must turn to Lonergan's notion of value, which he frequently terms the 'human good' and which will be dealt

[38] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning,* p.89.

[39] John Locke, in P. Laslett (Ed.), *Two Treatises of Government* (Cambridge: Cambridge University Press, 1960), p. 296. Italics in original.

with in more detail later in this study.[40]

Lonergan maintains that 'the human good' is not abstract but concrete in that it exists in things. He explains that "true and false are in the mind but good and evil are in things."[41] It is also concrete, however, in the sense that the good is not ideal or utopian but must be both tangible and attainable. Using Lonergan's system we can say that a piece of work might add 'particular goods' or values to things. Thus a carpenter might produce fine furniture from a felled tree. Work can also produce a 'good of order' as in the organisation and administration of a school. Such a 'good of order' guarantees the flow of 'particular goods' to the individuals concerned. Similarly, a child's school work might add value to 'the good as subject', the child himself in the *being* mode of his existence; or the child's school work might add value to the 'good as object', to society at large.[42]

6.6.2 *Work as a Mode of Having*

Locke goes one step further, however, claiming that it is because of one's work or labour that one achieves an entitlement to private ownership. Or, to express the same idea in terms used in this study, one can say that a natural result of adding value to a thing through *work* is that one attains an entitlement to *have*, that is to *have* either of the thing itself or of a share of the value added to that thing. John Locke explains, taking the practical, and somewhat prosaic, example of ownership of wild apples and acorns:

> He that is nourished by the Acorns he pickt up under the Oak, or the Apples he gathered from the Trees in the Wood, has certainly appropriated them to himself. No Body can deny but the nourishment is his. I ask then, When did they begin to be his? When he digested? Or when he eat? Or when he boiled? Or when he brought them home? Or when he pickt them up? And 'tis plain, if the first gathering made them not his, nothing else could. That *Labour* put a distinction between them and common. That added something to them more than Nature, the common Mother of all, had done; and so they became his private right. And will any one say he had no right to those Acorns or Apples he thus appropriated, because he had not the consent of all Mankind to make them his? Was it Robbery thus to assume to himself what belonged to all in Common? If such a consent as that was necessary, Man had starved, notwithstanding the Plenty God had given him. We see in *Commons*, which remain so by Compact, that 'tis the taking of any

[40] Section 13.7, below.

41 Bernard Lonergan , *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education*, p. 29.

[42] Again, Lonergan's notions of 'good' and 'value' are dealt with in greater detail in Chapter 13.

> part of what is common, and removing it out of the state Nature leaves it in, which *begins the Property*; without which the Common is of no use. And the taking of this or that part, does not depend on the express consent of all the Commoners. Thus the grass my Horse has bit; the Turfs my Servant has cut; and the Ore I have digg'd in any place where I have a right to them in common with others, become my *Property*, without the assignation or consent of any Body. The *labour* that was mine, removing them out of that common state they were in, hath *fixed* my *Property* in them.[43]

The philosophical treatise from which this rather lengthy quotation is taken was first published by Locke in 1690 under the title *Two Treatises of Government.* It was published in a simpler age, before the ravages and complications of the Industrial Revolution, and it is written with the language, similes, and analogies of a cultured landowner and country gentleman. Nevertheless, his notion of ownership, while incomplete, appears both valid and valuable in this more complex world and, with additions, is quite compatible with the larger model of the human person adopted by this study.

6.6.3 *Work and Mediation*

Work gives one an entitlement to *have.* But what one *has* may be used or shared or both. This implies that *work* has a social dimension. This dimension of work has been explored particularly by Hegel. Kozulin explains Hegel's philosophy of work as follows:

> Human beings satisfy their needs indirectly through work with end products which are intended not for the producer but for others. The being that acts to satisfy its *own* instincts, which - as such - are always natural, does not rise above Nature: it remains a natural being, an animal. [44]

According to Kozulin, "the notion of mediation constitutes one of the cornerstones of the Hegelian system." Work is itself a mediated activity and involves a whole series of mediating agents:

> First, work presupposes material tools interposed between the human individual and the natural object. These tools, though directed at natural objects, also have a reciprocal influence on the individual, thus changing his or her type of activity and cognition. Second, because work is always work for somebody else, then the social and psychological characteristics of the other person enter the equation. Finally, because work is impossible without symbolic representations, these symbols and the means of their

[43] John Locke, *Two Treatises of Government* (Cambridge: Cambridge Univ. Press, 1960), pp. 287 - 289.
[44] Alex Kozulin, *Psychological Tools* (Cambridge, MASS: Harvard University Press, 1998), p. 61

transmission become two additional mediatory agents.[45]

The notions of mediation, tools, and what Kozulin terms "psychological tools" will be explored later in this study.[46]

6.6.4 *Work as a Mode of Being*

In order to complete the notion of *work* outlined so far in this chapter and, in the process, to flesh out more fully Rand's 'triarchic model' of the human person's modes of existence, the study now turns to the theories of Frederick Hertzberg. Hertzberg may be described variously as a social or industrial psychologist. His research findings, however, are highly relevant and useful to education. In his book *Work and the Nature of Man* Hertzberg draws the following general conclusions from his research:

> 1) "A human being ... seems to be impelled to determine, to discover, to achieve, to actualize, to progress and to add to his existence."
>
> 2) "His overriding goal as an animal is to avoid the pain inevitable in his relating to the environment. This avoidance nature is determined by man's biological inheritance."
>
> 3) "The most essential understanding that emanates from these essays is not only the fact that man exists as a duality but also that the two aspects of man are essentially independent; furthermore, each aspect has a system of needs that operate in opposing directions. Meeting the needs of one facet of man has little effect on the needs of the other facet. When we think of man, we must ask two questions. First, how happy is he?. Then a distinctly separate question: How unhappy is he?"[47]

In the above quotation, Hertzberg does not mean "duality" in the Cartesian sense. What he is saying is that what makes a man happy about his work, and so constitutes a positive motivation, is essentially different from what makes him unhappy and so acts as what he terms a 'dissatisfier'. What makes him unhappy, in other words, is not the absence of what will satisfy him but rather the presence of something that actively dissatisfies him. These two (satisfiers and dissatisfiers), he argues, belong to two completely different spheres of a man's life. These two spheres, this duality in man, corresponds to the 'human' and the 'animal' elements

[45] Alex Kozulin, *Psychological Tools* (Cambridge, MASS: Harvard University Press, 1998), p. 61

[46] The notion of mediation is dealt with in some detail in Chapter 15 of this study.

[47] Frederick Hertzberg, *Work and the Nature of Man* (London: Staples Press, 1968), pp. 168 - 169.

in his nature, and so correspond to same spheres as Lonergan's duality of human knowing.

The really significant part of Hertzberg's research findings, however, are the factors which he discovered to be the real determiners of job satisfaction, his 'satisfiers' or motivators:

> Five factors stand out as strong determiners of job satisfaction - *achievement, recognition, work itself, responsibility* and *advancement* - the last three being of greater importance for lasting change of attitudes.[48]

All these have to do with inner attitudes all of which contribute to the *being* mode of existence. His 'dissatisfiers', on the other hand, were *"company policy and administration, supervision, salary, interpersonal relations* and *working conditions*." For "company" one can read school and for "salary" any system of material rewards. All of these seem to relate equally well to the worker's and to the child's environment. Hertzberg's point is that these five factors are significant only when they are absent or unsatisfactory, in which case they cause discontent. They do not, in themselves, have the power to motivate as such.

> Rather than describe man's relationship to what he does, the "dissatisfier" factors describe his relationship to the context or environment in which he does his job.[49]

Of real significance to the development of this study, however, is Hertzberg's conclusion:

> To generalize from job attitudes to mental attitudes, we can think of two types of adjustment for mental equilibrium. First, an adjustment to the environment, which is mainly an avoidance adjustment; second, an adjustment to oneself, which is dependent on the successful striving for psychological growth, self-actualization, self-realization or, most simply, being psychologically more than one has been in the past. [50]

This desire to be "psychologically more than one has been in the past" is as good a definition as one can find for Rand's *being* mode of living, which has been related above to Lonergan's notion of 'authenticity' and 'self-appropriation of interiority'. Hertzberg's findings confirm that the *being* mode of existence, much more than the *having* or *doing* modes, is the primary motivator or motivational

[48] Frederick Hertzberg, *Work and the Nature of Man* (London: Staples Press, 1968), pp. 72 - 73.
[49] Ibid., p. 74.
[50] Ibid., p. 78.

mode in humans. This finding is of particular note when one considers that educators of the calibre of John Dewey or Jean Piaget do not appear to give due recognition to this in their writings. Neither, as a consequence, does the whole thrust of modern utilitarian pedagogy which has been derived from their theories.

6.6.5 *The Work of the Child*

Work, then, is a *doing* which adds value to 'things'[51] . Such things may already be viewed as having value. But if a thing is not already valued, or seen as a good in itself, it may still be valued for what it can potentially become. Thus a child is valued not only for what he is in himself, an irreplaceable individual with all the rights and dignity of a human person, but also because of what he is capable of becoming, albeit with a lot of work and effort. Similarly, a giant redwood tree is valued not just for its beauty and majesty but also for the very many things that can be made from its wood, adding value to nature through labour, as Locke would say.

The difference between the work of an adult and that of a child is that, for the adult, the added value occurs principally in the external world, the adult adds value mainly to external 'things'. In the case of the child, however, the added value is almost completely an internal thing, an inner change or development in the child herself; the child adds value to 'self', in other words. For most adult work, it can be argued that there is firstly an enhancement of the *having* mode and only secondarily an enhancement of the *being* mode; for the young child, on the other hand, there is mainly an enhancement of the *being* mode of his existence. Only in later years, with the advent of schooling, does the *having* of qualifications, for example, rightly or wrongly take precedence. Maria Montessori explains:

> Here we discern a great difference between the work of the adult and the work of the child, which we can express thus: the adult works with an external aim, to accomplish some change in his environment - in this case to fill the cart with sand for building purposes. But it is not so with the child's work. If his real aim was to fill his barrow with sand, why does he empty it again as soon as it is filled - to begin the 'work' all over again?[52]

In other words, Montessori is saying that the adult aims at 'closure' or completion of the work at hand in the quickest possible time; his aim is normally 'efficiency', and

[51] The word thing is used here in Lonergan's philosophical sense of a "unity-identity-whole" which will e explored in the next chapter (Chapter 7). This notion of 'thing' includes the human person.

[52] E.M. Standing, *Maria Montessori Her Life and Work* (London: Collis and Carter, 1957), p. 122.

he generally does not relish the possibility of having to repeat the particular job over again. The child, on the other hand, often revels in repetition, in pure 'assimilation' which, according to Piaget, is also the essence of play. He repeats the task over and over again for the sheer enjoyment and satisfaction of the work itself and, perhaps, for the enjoyment of the inner mastery or growth of internal freedom that he experiences. In the case of the child, closure is less obvious and more subtle, involving, perhaps, command of some 'sensori-motor scheme' or some interiorised 'concrete operations'.

The term 'play school', however, is not one that Montessori would be comfortable with. While play in the Piagetian sense of pure 'assimilation' is certainly present, she nevertheless views the activity of the child as the most serious of all work, the work of 'self building'. The word 'play', on the other hand, conjures up notions of frivolity and lack of seriousness which characterises more the modern adult notion of leisure rather than the activity of the child. In fact it is a matter of general observation that a child's play activity can demand very high levels of effort and concentration.

Thus, work is a *doing* which adds value to a 'thing' and, according to Locke, enhances the individual's entitlement to *have* of its fruits. For a child it is similar, except that the *having* involved is a *having* of a more or less direct enhancement of the *being* mode. Standing explains:

> The aim of the child's work is not external but internal. He works in order to grow. You cannot therefore see visibly the end for which he is expending all these labours. It is something remote, hidden in the obscurity of the future. Indefatigably, irresistibly, unceasingly, joyfully, the child is working to create the adult, the man-that-is-to-be.[53]

Does this enhancement of *being* through work apply, then, only to children or can it also be a characteristic of adult work? Can this study, in other words, agree with E.M. Standing when he says that "the adult - just because he is an adult - is no longer developing; he has reached the norm of the species."[54] Clearly, this assertion contradicts the theories of Hertzberg. Hertzberg was dealing mainly with research into motivation and work in adults. Likewise, Rand and Tannenbaum are followers of Feuerstein and, like him, are dealing mainly with adolescents and young adults. The model of education which is being developed in this study is one

[53] Ibid., p. 123.
[54] Ibid., p. 14.

which should apply equally well to adult education and education of children. The adult can, and should, through his *work*, be adding value to self, as well as his environment.

6.6.6 *Work and Lonergan's Cognitive Operations*

Work is a way of *doing* which adds value to 'things'. However, as argued, it adds value not only to the object of the *doing* but also to the subject himself. It adds value to the subject by giving him the title to *have* but, more importantly, by enhancing his *being* mode of living. It will be shown that the essential value-added steps which enhance the *being* mode relate primarily to the cognitive sphere. The following work activities, for example, would be familiar to anyone regardless of the field in which he earned his living:

Type of Work	Equivalent Mental Operation
° attending to and gathering data	- Experience
° grasping, understanding	- Insight
° interpreting and explaining meanings	- Conception
° judging the truth or certainty, estimating probabilities	- Judging, Evaluating
° taking decisions, embracing the good	- Deciding, Assenting
° acting responsibly and with skill	- Deciding, Acting
° approaching all these with persistence and openness	- Being Conscious

This list of activities applies equally well to any human form of *work*, whether it is the *work* of the child in the nursery, or the daily activity of the managing director of a large company. It has been adopted from an article by John Little in *The Mount Eliza Business Review* in which he concludes:

> Each of these acts constitutes 'work'. Each of the things we do in the world, as work, with people or with things, has the full richness of these mental acts behind and beneath them. [55]

Some or all of the above activities are to be found in most forms of work. It has been argued already that experience, understanding, and judgment do not stand alone but form a unity which is both formally and materially dynamic. They reach their term only at the moment of assent to a good or a truth. Only at this point

[55] John Little, "Mindfulness at Work", *Mount Eliza Business Review* 3:1 (Winter/Spring 2000), p. 27.

is there truly an increment of knowledge achieved. At the end of the process of experience, understanding and judgment Lonergan places decision and doing as the next logical step. This doing of Lonergan's is a type of act or activity which is physically or mentally directed towards the outer world. But it does not deny the reality of an inner work already completed, a *work* which adds value to the subject; rather it presupposes such inner work and such interior added value. Nor does this inner *work* deny the further possibility of an external *work* through this practical *doing* adding value in, through, and to the external world.

Only this inner *work*, however, adds value to or enhances the *being* mode of existence directly. External *work* is not always accompanied by such inner development and so may fail to add value to the *being* mode of existence. Indeed, *doing* may not necessarily express itself in *work* at all. The minimum requirement for *doing* to qualify as *work* is that it be accompanied by inner intelligent and rational activity and adds value. Many routine jobs, for example, do little or nothing for the inner growth of the individual. Likewise, rote learning unaccompanied by understanding and rational reflection, is learning for *having,* which does little to enhance the *being* mode of the child. The *having* that results from an assent to a truth, or knowledge, or good, or beauty, however, is more properly the end product of an inner *work* which, at the same time, enhances *being*. This added value in turn affects the future experience of the child and more readily prepares or disposes the individual for the next cycle of insight, judgment, and assent, according to Dewey's 'principle of continuity'.[56] This latter is something that neither the *having* nor the *doing* modes can achieve directly.

There are occasions, however, when repetitive or routine *work* may enhance the *being* mode directly. Thus, for example, the repetition of an activity, or group of activities, in order to acquire a particular skill or habit, like piano playing, can be regarded as adding value and enhancing the *being* mode. This is the essence of the pure 'assimilation' found in children's play, for example. But it is also a characteristic of such *work* that no sooner has the skill been acquired than the child loses interest in the activity and moves on to the higher learning opened to him by this prior mastery of a necessary skill, in accordance with Dewey's 'principle of continuity'. In this case also, the growth achieved is an inner one that enhances the

[56] This notion of a 'cycle of growth' based on Dewey's 'principle of continuity' will be dealt with in greater detail in Chapter Eight, below.

being mode. It has also been argued[57] that Lonergan views such pure development in assimilation as a necessary foundation for general education. He says:

> There is a development in assimilative power in the study of languages and literature. That study does not commit one to any study of fact, but it is developing in a power to assimilate on the most general level, because everything ultimately is communicated through language.[58]

It can be argued that such a development in the power of assimilation must also be regarded as enhancing the *being* mode of the young person.

6.7 *The Primary Modes of Existence & Education*

6.7.1 *Education Viewed in Terms of Being, Having, and Doing*

Just as one may view the development of the human person from the points of view of *being*, *having* and *doing*, so it may be argued that one should also be able to usefully view the education process itself under these same headings. In other words, it should be possible to distinguish the various different philosophical attitudes to education, whether of individual philosophers or embraced by whole cultures, along the same 'triarchic' lines. The modern Western preoccupation with materialistic capitalism has meant that people are living more and more in the *having* mode of existence, for example. It is inevitable that this would have an impact on educational policies and philosophies adopted by such societies. Add to this the advent of child-centred, project-based, *doing* approaches to education, as advocated by educators like John Dewey, Maria Montessori and Froebel, and one can see the usefulness of Rand's model as a mode of categorising and classifying the various educational systems employed.

The sections which follow will attempt to show that the optimal approach to education is one in which all three *(being*, *having*, and *doing)* play their part and are held in balance with one another. As in most areas of life, the difficulty lies in striking the correct balance between the three different attitudes, or approaches, or methodologies. The triarchic paradigm or model will be examined in the light of some key philosophies of education in the hope of highlighting the universal nature

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[57] See Section 2.4.2

[58] Bernard Lonergan, "Piaget and the Idea of a General Education", Robert Doran & Frederick Crowe (Eds.) *Collected Works of Bernard Lonergan - Book 10: Topics in Education* (Toronto: University of Toronto Press, 1993), p. 205.

of the model, and hence its usefulness in clarifying the most appropriate aims and methods of education for the twenty first century. The purpose is not to dismiss the approaches of certain educators in favour of that of others. On the contrary, the purpose is to show how undue emphasis on one mode over the others has caused a distortion, a lack of balance, which can be rectified only by identifying the true position of each mode in the natural scheme of things.

It must also be emphasised again that it is difficult, if not impossible, to attribute one, and only one, of these attributes to any particular form of education. All forms of education involve action or *doing* of some kind. And the very fact that an increment of knowledge or enhancement of a skill is part of all learning means that the *having* mode is never altogether absent. Thus, for example, there is no type of education which can be exclusively termed the *being* mode of education. There are however, aspects of the educational process which tend to exaggerate one mode over the others. It is for this reason that the study will examine the education process separately under each one of the three modes of living: *being*, *having* and *doing*. It is hoped that in the process more light may be thrown on a variety of important aspects of the educational process itself.

6.7.2 *The Being Aspect of Education*

In *Education at the Crossroads*, Maritain highlights what he claims is the "primary rule" of education:

> The primary rule is to foster those fundamental dispositions which enable the principal agent to grow in the life of the mind. It is clear, in this connection, that the task of the teacher is above all one of liberation. To liberate the good energies is the best way of repressing the bad ones.[59]

This growth "in the life of the mind" and the resulting "liberation" is close to what has been defined as the *being* mode of existence. For example, in his book, *To Have or to Be*, Fromm describes the characteristics of the *being* mode of existence as follows:

> The mode of being has as its prerequisites independence, freedom, and the presence of critical reason. Its fundamental characteristic is that of being active, not in the sense of outward activity, of busyness, of inner activity, the productive use of our human powers. To be active means to give expression to one's faculties, talents, to the wealth of human gifts with which - though in varying degrees - every human being is endowed. It means to

[59] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 39.

> renew oneself, to grow, to flow out, to love, to transcend the prison of one's isolated ego, to be interested, to 'list', to give. [60]

While he points out that "none of these experiences can be fully expressed in words", and that, consequently, "being is indescribable in words", nonetheless he gives some pointers as to how the *being* mode can be developed:

> Any attempt to increase the sector of being means increased insight into the reality of one's self, of others, of the world around us. ... The way to being lies in penetrating the surface and grasping reality.[61]

This "increased insight into the reality of one's self, of others, of the world" demands not just an awareness of oneself as a subject, but also a heightening of one's consciousness in order to come to an understanding of oneself. This, though incomplete, is close to what Lonergan means by 'self-appropriation of interiority,' the most concise definition of which is given by Naickamparambil in his doctoral thesis for the Gregorian University in Rome:

> In essence, self-appropriation involves a self-discovery and a self-transcendence. One discovers one's true self, one consciously possesses one's dynamic self to the extent that such conscious self-possession transforms one's very life and effects a self-transcendence.[62]

To see how this compares with the ideas of Rand, it is necessary to revisit his original definition:

> The term *Being* refers to a basic propensity of the individual to enhance self-knowledge, and to adhere to beliefs and value systems that make life meaningful. It refers to the inner authentic existence of the individual which governs all, or most, of his/her feelings, thoughts and deeds, reflecting a consciousness of one's fundamental orientation towards life, self, and the world.[63]

It will be argued that such enhancement of "self knowledge", adherence, or assent, to the "beliefs and value systems that make life meaningful," the achievement of "authentic existence," and "consciousness of one's ... orientation towards life" is as clear a description as one can get of Lonergan's 'self-appropriation of interiority,' defined above. This will be described in more detail in Chapter Nine. It will also be shown in Chapter Fifteen that one practical method for its achievement within the

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[60] Erich Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.92.

[61] Ibid., p.102.

[62] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 45. Naickamparambil is from Kerala in southern India.

[63] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning*, p.89.

school situation is offered by Feuerstein's Mediated Learning Experience (MLE).

6.7.3 *The Having Aspect of Education*

The orientation towards *having* is deeply rooted in man's nature and, according to Marcel, arises from the basic fact of embodiment or 'incarnation'. In other words, to *have* is itself a 'good' or a 'value' for man and, as has already been contended, is a natural reward stemming from the added value which naturally comes from his *work*. Such added value may be internal as well as external. Internal added value may be a simple acquisition of knowledge, for example, or the development of a particular virtue. Such an acquisition of knowledge may, in turn, enhance the *being* mode of living of the individual, or it may simply remain as an acquisition, as a possession, which enhances the *having* mode alone.

Whether a system of education is designed and oriented in such a way that the acquisition of knowledge, which is what much of education and learning entails, enhance primarily the *being* or *having* orientations and dispositions of the students, determines whether that system can be termed education for *being* or for *having*. From what has been said above, it is clear that if education is to be viewed as human development, then the *having* mode cannot be its most central aspect. Maritain, for example, explains:

> The utilitarian aspect of education - which enables the youth to get a job and make a living - must surely not be disregarded, for the children of man are not made for aristocratic leisure. But this practical aim is best provided by the general human capacities developed. And the ulterior specialized training which may be required must never imperil the essential aim of education.[64]

On the other hand, very many parents and teachers would agree readily with Broudy as he gives a very convincing, common-sense, pragmatic case for education for *having:*

> If there is anything about schooling that goes without saying, it is that what cannot be remembered has not been learned. Much of what has been said on the subject, therefore, concerns ploys and devices to guard against forgetting. Teaching the young leaves little room for fugitive learnings. Teachers, pupils, parents, school administrators, and the public at large play out the drama of testing. And dramatic it is, involving danger of failure, a confrontation between the performer and the task, and the suspense of the final reckoning.[65]

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[64] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 10.

[65] Harry S. Broudy, *The Uses of Schooling* (New York: Routledge, 1988), p. 7.

If what Broudy is referring to is what might be termed 'book learning' or learning for examination purposes, then he belongs to the limited, *having* camp of educators. But, if most schools' mission statements are to be believed, education is about promoting the development of the child in all aspects of his being. However, all too often one finds the *having* camp winning out in the face of an overwhelming examination ethic.

Freire dismisses the extreme *having* orientation to education as "the banking concept of education":

> In the banking concept of education, knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing.[66]

No doubt Frederick Crowe has Freire in mind when he asks:

> Should education be a kind of banking procedure in which the teacher hands over parcels of information that the pupil duly stores in the safety deposit box of the mind, and draws out as occasion demands, especially the occasion of examinations? Or should education be a freely developing evolution of inner resources, where the pupil is put in a sandbox and left to grow in self-realization with the expectation that he or she will advance steadily from sandbox to, say, a laboratory for nuclear physics?[67]

And Ivan Illich has no doubts about which side on the *being/having* divide he comes down on when he says:

> The pupil is ... "schooled" to confuse teaching with learning, grade advancement with education, a diploma with competence, and fluency with ability to say something new. His imagination is "schooled" to accept service in place of value.[68]

Illich, however, takes a rather extreme position and, as the title of his book *Deschooling Society* implies, he sees the whole utilitarian approach to education as beyond redemption, leaving no alternative but to discard the whole system and start all over again. Crowe, however, takes a more balanced view when he summarises:

> Is there a school in which a disproportionate emphasis is put on self-development of the pupil, on one's thinking and deciding for oneself? Then tradition will suffer; pupils will be deprived of a great deal of their rightful inheritance; they will reach the adult stage (I do not say "maturity"), with sharply trained minds that can go to the

[66] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 53.
[67] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), pp. ix - x.
[68] Ivan Illich, *Deschooling Society* (London: Marion Boyars, 1996), p. 1.

> jugular in debate, but with impoverished and underdeveloped views and values. Is there, on the contrary, a school where information is handed out in packages, where the questions of budding intelligence are nipped off, where no exercise of responsibility is allowed? Then the school is attempting to turn out Yes-persons; Yes-persons have a habit of becoming violent No-persons, and in any case the graduate is ill-fitted to take his or her place in a changing and overdeveloped world where intelligence, judgment, and responsibility are called for.[69]

In other words, both the *having* and the *being* modes of education are necessary for a balanced approach, but a definite priority must be given to the *being* mode.[70]

6.7.4 *Education for Having Versus the 'Liberal Arts'*

What is being investigated here under the topic of the *having / being* dichotomy in education has much in common with the old controversy of the utilitarian approach to education against what is sometimes termed the 'liberal arts' approach. That this controversy has a long history is best illustrated by the following quotation from Aquinas:

> Every art is called *liberal* which is ordered to knowing; these which are ordered to some utility to be attained through action are called *servile* arts.[71]

What Aquinas denigrates as "servile" is nothing other than the *having* of some knowledge or skill for the sake of practical utility. He explains further:

> For he who seeks one thing on account of something else, has greater love for that on whose account he seeks than for that which he seeks.[72]

In other words, when one searches for knowledge for the sake of some practical end like passing an examination, getting a job, or earning money, then it is clearly not the love of knowledge one has in mind, but the *having* mode or attitude. Thus, while the 'servile' arts are clearly good in that they serve a practical and even necessary purpose, nevertheless a 'liberal' education is better in that it develops the person interiorly and thus enhances his *being* mode of existence. Pieper speaks for Aquinas when he explains:

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[69] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 27

[70] It will be argued later that the *being* mode corresponds well with Lonergan's notion of 'self-appropriation of interiority' and that the best way to implement such development is Feuerstein's 'mediated learning experience'.

[71] Thomas Aquinas, *Commentary on Aristotle's Metaphysics,* Book I, Lesson 3 (Notre Dame, Indiana: Dumb Ox Books, 1995), p.20.

[72] Ibid.

> Training is distinguished by its orientation towards something partial, and specialized, in the human being, and toward some one section of the world. Education is concerned with the whole: whoever is educated knows how the world as a whole behaves. Education concerns the whole human being, insofar as he is *capax universi*, "capable of the whole," able to comprehend the sum total of existing things.[73]

Liberal education, according to Pieper, is preferable because it gives a wider, deeper, and less partial development of the individual, thus equipping him better for life.

And what subject matter, what content, should such a liberal form of education have? Newman would mention literature with it duel aims: "accuracy of mind, and clarity of expression," but ultimately, he would say: "Knowledge is most truly free when it is philosophical knowledge."[74] And again he says:

> I know well that knowledge may resolve itself into an art, and seminate in a mechanical process and in tangible fruit; but it may also fall back upon that Reason, which informs it, and resolve itself into Philosophy. For in one case it is called Useful Knowledge; in the other, Liberal.[75]

Liberal education, in other words, is ultimately education in philosophy, and education in philosophy, according to Lonergan, hinges upon 'self-appropriation of interiority.' This aspect of Lonergan's thought will be returned to when considering the essential nature of education for *being*.

6.7.5 *Lonergan's Neglect of Having*

Since Lonergan treats of corporality only in a tangential way, it is not surprising that one can find no concept of 'having' in his theories. Yet, for a philosopher who explored the field of economics so thoroughly in his later writings, it is surprising to find little or no attempt to integrate the notions of having and work into his philosophical system. However, as has already been argued, Lonergan's strong intellectualist bias does not preclude the addition of considerations of both corporality and *having*. It can even be argued that such additions are altogether necessary if Lonergan's theories are to play a full part in formulating a philosophy of education.

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[73] Josef Pieper, *Leisure, the Basis of Culture* (South Bend, Indiana: St. Augustine's Press, 1998), p. 24.
[74] John Henry Newman, *The Idea of a University Defined and Illustrated* (London: Longmans, Green, and Co., 1929), p. 6.
[75] Ibid

6.7.6 *The Doing Aspect of Education*

To many people, educators, policy makers, and laymen alike, their working definition of education appears to be: "education is what schools do." Any discussion, or exploration, or research, or argument thereafter tends to be built on that underlying assumption. In general, this confusion of the aim of the work of an institution with the limited product it manages to achieve may be as comfortable as it is widespread, but it is self-defeating and leads to the fallacy highlighted by Ivan illich:

> Medical treatment is mistaken for health care, social work for the improvement of community life, police protection for safety, military poise for national security, the rat race for productive work. Health, learning, dignity, independence, and creative endeavour are defined as little more than the performance of the institutions which claim to serve these ends, and their improvement is made to depend on allocating more resources to the management of hospitals, schools, and other agencies in question.[76]

In this way society itself is deluded into confusing "teaching with learning, grade advancement with education, a diploma with competence, and fluency with ability to say something new." In many people's minds, in other words, the aims of education are nothing more than what a school actually *does*.

From this mind-set, it follows that improvements in education are a matter of building more schools, adding to or taking from the school curriculum, training teachers in more efficient teaching methods, raising the level of examination results and/or the numbers of students attaining university entrance each year. While each of these aspirations may be quite laudable in itself, the overall *doing* attitude misses the point completely; education, if it is to be effective, must be primarily about the authentic development of the human person. The core of the contrast between the *being* attitude to education and this *doing* mentality may be highlighted by the following quotation from Crowe:

> The appeal, then, is not to any possible integration of content in the curriculum, and not primarily to any possible complementarity of technical methods of education; it is primarily to the interiority of the educand, to the subjectivity of the human subject who is learning, not to the academic subject which is being taught.[77]

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[76] Ivan Illich, *Deschooling Society* (London: Marion Boyars, 1996), p. 1.

[77] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 23

6.7.7 *Dewey's Pedagogy of Doing and His Neglect of Being*

As already mentioned in Chapter Three, Dewey is generally classified as a pragmatist as far as his philosophy is concerned.[78] One could also label Dewey a philosopher of *doing*, as regards his approach to education. At the highest level of generality, Dewey's philosophical orientation can be characterised as a kind of "naturalistic empiricism."[79] To Dewey, cognitive development both arose from and was conditioned by experience. For Dewey also there is no intentionality of the mind, "no simple intersection of knower and object, from which direct knowledge results."[80] Butler explains the pragmatist stance as follows:

> It is only as we are engaged in active experience with things that qualities come to light in such a way that we "know" them. This is not a purely subjective affair, however. We ourselves are in experience when this happens and the objects are also in experience; and it is because of experience and by means of experience that there is any meeting at all. Experience is a kind of ocean in which selves and objects are afloat, and which provides the medium for the meeting of all selves and objects.[81]

This is what the pragmatist means when he says that "experience is the proving ground in which the worth of things is made plain." Such experience is neither private nor subjective; it is public and objective. One does not possess experience privately; it engages one; one is possessed by it.

The *being* mode of existence as presented in this study does not play a part in Dewey's pedagogy in that it has no place in his underlying theoretical system. To Dewey, at least in regard to his theoretical writings, there is no mind or self antecedent to the formation of habit. The self, according to Dewey, is a dynamic complex of habits. It is an outcome, not an original existence. Mind consists of habits. Every idea is a habit of action; it is an anticipation of definite ways of behaving. On this view, knowing for Dewey is a kind of *doing*. It must be emphasised again that it is Dewey the philosopher and his theoretical writings which is being considered here, not Dewey the schoolman.[82]

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[78] See J. Donald Butler, *Four Philosophies and their Practice in Education and Religion* (New York: Harper & Row Publishers, 1968)

[79] Robert Audi (Ed.), *Cambridge Dictionary of Philosophy* (Cambridge: Cambridge University Press, 1995), p. 198

[80] J. Donald Butler, *Four Philosophies and their Practice in Education and Religion,* p. 380.

[81] Ibid.

[82] It is a contention of this study that Dewey's philosophy or theoretical structure is not up to the job of explaining the commonsense observations and experiences he describes in regard to education and child development. See below.

However, as was said already, Dewey's slogan "Learn by Doing" is not intended as a credo for total anti-intellectualism. On the contrary, like Maria Montessori, he was trying to draw attention to the fact that the child is naturally an active, curious and exploring creature. Like her, he believed that a properly designed education system must be sensitive to this active dimension of life and must guide the child, so that through his participation in different types of experience his creativity and autonomy will be cultivated rather than stifled. This is why he proposes that " the empirical sciences now offer the best type of intellectual organization which can be found in any field."[83] Dewey certainly speaks of the child's "self-development" but his notion of development is essentially pragmatic. To him fundamental questions of value and human fulfilment ultimately bear on a pragmatic conception of the human community, rather than on any interior or spiritual motivating factors.

However, it is a contention of this author that there a fundamental contradiction at the core of Dewey's work. What Dewey *describes* is a common-sense, even idealistic, view of the child and his development, almost on a par with that of Rousseau. This, in some ways, accounts for his popularity. What Dewey *explains*, however, depends on a narrow, limited, behaviouristic model which cannot, without considerable simulation and manoeuvre, account adequately for what he describes. The fact that the two simply do not fit is not always apparent without careful scrutiny. Dewey the schoolmaster is highly quotable for his faithful descriptions of the child and his development; Dewey the scientist, however, is simply inadequate. Using his own model or philosophy as a guide, Dewey, in the opinion of this author, would be very hard pressed to establish his own conclusions.[84]

6.8 *Being, Having and Doing in the Christian Tradition*

Traditional Christian thought reflects a combined *being* and *doing* orientation. While the *doing* aspect reflects the emphasis on the practical exercise of virtue as a means to personal progress, nevertheless the primary emphasis is on the *being* orientation associated with grace and spirituality. The *being* mode of existence as applied to Christian education is best exemplified by what Jacques

[83] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.31.
[84] See Section 3.5.3.

Maritain describes as "The Conquest of Internal Freedom."[85] :

> Thus the prime goal of education is the conquest of internal and spiritual freedom to be achieved by the individual person, or, in other words, his liberation through knowledge and wisdom, good will, and love.[86]

Rand and Tannenbaum conclude that: "Having ... is less emphasised in Christian doctrines, in spite of reflecting one of the basic human aspirations."[87] In this author's experience, however, this merely reflects the Christian 'ethic' or 'ethos' as contained in the programmes, policy documents, and mission statements of many schools. The reality on the ground is often very different, with the same overemphasis on the *having* mode, as in the *having* of knowledge for examination purposes, at the expense of more foundational and idealistic development associated with the *being* mode.

6.9 *Being, Having, and Doing in the Chinese Oriental Tradition*[88]

During the years of the 'Asian tiger' economies, the educational systems of Japan, China, and Singapore where looked upon by Western governments as examples to be emulated. However, in this author's experience, this was based on an ignorance of oriental practice and philosophy of education. For example, the philosophical approach of Confucius which originated in ancient China is deeply influential in that society's way of life today. By comparison with Buddhism and Christianity, Confucianism is mainly geared towards practical, daily life situations. While it emphasises the exercise of virtues like loyalty and obedience, it tends to be quite materialistic and anti-metaphysical and anti-spiritual. Confucius, for example, advises his followers that

> to give oneself up earnestly to the duties incumbent upon men, and while respecting spiritual beings, to keep aloof from them, may be considered wisdom.[89]

To Confucius, human development is important only in so far at it is socially

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[85] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 10.

[86] Ibid., p. 11.

[87] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning,* p.93.

[88] One of the aims of this study is to act as an exercise of 'self-appropriation of interiority' on the part of the author himself. Part of such an exercise involves bringing together and making conceptual sense of his own personal knowledge and experiences.

[89] Confucius quoted in A.L. Beck, *The Story of Oriental Philosophy* (New York: New Home Library, 1942)

useful and expedient. As Hessler points out, this can lead to an impoverishment of one's sense of personal identity:

> Your self-identity came from the group, which was respected even if it became deranged, and thus your sense of self could fall apart instantly. There wasn't a tradition of anchoring one's identity to a fixed set of values regardless of what others thought, and in certain periods this had contributed to the country's disasters. The Cultural Revolution showed how Chinese society could become completely unhinged.[90]

Hessler spent two years as a teacher in a teacher training college in a provincial town in central China. What he appears to be describing is a lack of education in the *being* mode of human existence. A partial consequence of Confucianism, then, is that the *having* mode of existence predominates in Chinese culture, while the *being* mode, with its emphasis on the deep personal, interior, cognitive development of the individual, plays very little part. This is also reflected in schools by an overemphasis on *having* knowledge for examination purposes and on 'rote learning' as the favoured practical pedagogical method. In this author's experience, the *doing* mode is also reflected quite poorly in Chinese schools where it can result in, for example, a poor grasp of physical and mechanical concepts.

This does not imply a total lack of understanding or respect for the *being* mode in education, however. There is enormous emphasis on the practical acquisition of virtues in Chinese education as exemplified in the following quotation from Mencius, a disciple of Confucius:

> When Heaven is about to confer a great responsibility on a man, it will exercise his mind with suffering, subject his sinews and bones to hard work, expose his body to hunger, put him to poverty, place obstacles in the path of his deeds, so as to stimulate his mind, harden his nature, and improve him wherever he is incompetent.[91]

The problem is simply one of emphasis. As in modern Western education, the emphasis is on examination results, earning a living, and material security, on the *having* mode, in other words. This is what Jacques Maritain describes as the "utilitarian aspect of education - which enables the youth to get a job and make a living."[92] The idea that greater emphasis on the *being* mode can provide all of these to a much greater degree, whilst at the same time enhancing considerably the quality of the child's life is, in practice, either denied or, most often, simply forgotten

[90] Peter Hessler, *River Town: Two Years on the Yangtze* (London: John Murray, 2001), p. 282.
[91] Mencius, VI B. 15
[92] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 10.

or ignored in the frantic race to *have*.

6.10 *Chapter Conclusions*

As was explained in Chapter Five, Aquinas in his writings began from a foundation in metaphysics and developed his theory of cognition from that standpoint. Lonergan, on the other hand, beginning from a basis of cognition, was still able to complete the cycle of philosophy, arriving finally at a full exposition of Aquinas' metaphysics. Lonergan explained that "One will be completing the same circle, except that one will be starting at a different point."[93] So also it must be possible to make a beginning, or join the circle, at the point of existence, from an existential viewpoint, and complete the cycle of metaphysics and cognition from there. Again, Lonergan explains: "As long as one completes the circle, the same thing will be said, but it will be said at different points along the line."[94] This is precisely what Marcel and his fellow existentialist thinkers have attempted to do and, in theory at least, the process must be regarded as quite legitimate and consistent with, or at least not contradictory to, the thinking of Lonergan.

The 'modes of existence' represent a set of primary or 'cardinal' approaches to life and practical living. They are necessarily coloured by the norms of the human condition, particularly the drives, values, and attitudes associated with being fully human. One's natural drives or urges or loves - representing what one genuinely needs but does not have - determine one's values, or what one values most in life.[95] These in turn determine one's primary modes of existence: *being*, *having*, *doing*, *feeling*, and *relating* (intersubjective mode). *Being*, *having*, and *doing*, then, are not the only modes of human existence, but Rand's 'triarchic model' supplies a very useful scheme by which to compare, assess, or weigh up, the various approaches to education, just as Lonergan's philosophy claims to do for the wider field of comparative philosophy.[96]

One of the great temptations today is to seek to implement in the world of education the same methodologies and theories that appear to have been successful in the world of business and industry. Thus, one problem that one finds

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[93] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), pp. 177 - 178.

[94] Ibid., p. 178.

[95] See section 10.7.7.

[96] See Sections 3.3.3, 3.4.3, and 18.7 of this work

in the field of education is the unwritten rule that since one cannot control what one cannot measure, one is wasting one's time doing anything that cannot be reduced to a set of statistics. Because the *being* mode belongs to the psychic and spiritual depths of the human person, it is largely beyond the reach of the various measuring instruments which schools traditionally use, and so it is always 'at risk', one might say. Much more serious, however, is the fact that this rather trite and simplistic truism from the world of business represents the unwarranted intrusion of the business ethic, with its *having* mode, into the school situation, a situation which is very different both in its product, which is human development, and its aim, which is human development.

One central question which must be addressed in this regard is: "Is a school even remotely like a factory or a place of business?" and, "If it is, should one be worried?" Take as an example the following quotation from an issue of *The Economist* magazine of March 2002, relating to the world of business:

> Emerson's system of control and follow-up depends on having accurate measurements of various aspects of its business. The engineers who run the company take for granted that: "You can't control what you can't measure." there is a small number of key business ratios that Emerson follows closely year in, year out - in particular, free cash flow and its own measure of return on capital.[97]

One can transcribe this into educational terms, as follows:

> The school's system of control and follow-up depends on having accurate measurements of various aspects of its business. The educators who run the school take for granted that: "You can't control what you can't measure." there is a small number of key measurements that the school follows closely year in, year out - in particular, examination results and the numbers getting into university.

Most school principals, and even parents, one feels, would be in total agreement with the above transcription related to the school situation. As in business, so also in education, a school must decide what its purpose and aims are, what it is trying to produce or achieve. It must then have some key measures which will tell it periodically how it is doing in meeting these central goals. However, a school is different from commercial businesses in that one of its key products (perhaps *the* key product) is human development. Human development, unlike an industrial product, or even a service, is an end in itself; it is its own justification and not simply a means towards some other end; it is not simply a vehicle to attain something else.

[97] "The spirit of St. Louis" in *A Survey of Management*, *The Economist* , Vol. 361, Number 8263, March 2002, p. 15

It is education viewed in this sense of human development that Dewey is referring to when he says: "the educational process has no end beyond itself; it is its own end."[98] Education certainly has goals and ends other than human development; one may mention the pragmatic need for qualifications and skills so that one can better earn one's living, for example. However, human development, as development, is always a good, something to be valued, no matter how it is achieved, "since in reality there is nothing to which growth is relative save more growth, there is nothing to which education is subordinate save more education."[99]

Certain problems still remain, however: (1) how does one define human development? and (2) how does one measure it, once it has been satisfactorily defined? Most schools define success in terms of the *having* of accumulated knowledge as measured by examination results. Some small effort has been made in recent years to add a *doing* element in terms of a project work grade or practical examinations. The most central of all areas, however, the *being* element, is also the most difficult to measure, because it is more difficult to define. So in practice it tends to be ignored almost completely by educators, or have lip service paid to it at special school events, where it is invariably described in terms of EQ (so called 'Emotional Intelligence') or Gardner's 'Multiple Intelligences', both of which, it may be argued, are very vague and deceptive notions.

[98] John Dewey, *Democracy and Education* (New York: The Free Press, 1966), p. 50.
[99] Ibid., p. 60.

Chapter 7

The Person and the Human Subject

"Man is an abyss so profound as to be
hidden in him to whom it is."

St. Augustine[1]

7.1 *Introduction - What is a Human Person?*

One of the key objectives of this study is to devise and formulate a philosophical model of the educational process based on Lonergan's cognitional philosophy. But education involves change;[2] it is concerned primarily with human development.[3] However, before one can view the human organism in the light of its development one must first consider man as he is in himself; one must speak of *Existenz*, or what it is to be a truly authentic or genuine human being;[4] then and only then can one decide what constitutes his development. One can also argue that such a study of man and of his development should be as varied and many-faceted as man is in himself. It should involve consideration not only of philosophy and psychology, but also of sociology, biology, history and even of theology. However, beneath all of these various disciplines, as object of their study and research, there is, first and foremost, the question of man as he is in himself, man the human person and human subject. It is this consideration of man which will be the primary concern of this chapter.

What does it mean to be a human person? This is a complex question to which it is very difficult to give a clear straightforward answer. Most people would agree that they are the same person today as they were at the age of four or five. The term person, in other words, applies to something permanent, something

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[1] Saint Augustine, commentary on Psalm 49, *Ennarationes in Psalmos* (391 - 420), quoted in David Walsh, *After Ideology* (Washington D.C.: The Catholic University of America Press, 1990), p. 14. Walsh is professor and chair of the department of politics at the Catholic University of America.

[2] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 10.

[3] John Dewey says that "education is a development within." John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.28.

[4] The term *Existenz* is a contemporary philosophical term used by philosophers like Karl Jaspers in a specific technical sense. Lonergan tends to couple the term with the notion of 'being oneself', or 'being authentic', or 'being all that one can be', as when he says: "It is up to each one, therefore, out of the potentiality each one has, to achieve his or her own *Existenz*." in *Collected Works of Bernard Lonergan , Vol 7 - The Onthological and Psychological Constitution of Christ,* p. 21.

unchanging, something substantial, even as the individual human being himself grows and develops and matures. It is, in other words, something central to the very essence of what it means to be human. One can certainly speak about the personality of a dog or a monkey, but one does not relate to them as one would to other persons. Yet, even when one is not relating to other human beings, when one is in a coma, for example, the law still recognises one's status as a human person, and still attributes definite rights accordingly. Actual consciousness, in other words, is not an essential aspect of what it means to be a person, although a potential or potency for consciousness might certainly be. After all, one can argue that one is still the same person when one is asleep, as when one is wide awake. To be a person who never wakes however, is clearly to be a defective person.

What about intellect? Is it man's intellect that makes him a person? Possibly, but one must carefully distinguish intellect from intelligence, otherwise one would be claiming that the mentally retarded are lesser persons. Again, what about the person who is in a coma or asleep? He may have an intellect, but it is not operative at that particular time. So, if one were to use the criteria of intellect viewed as a propensity, or potency, or potential, but not necessarily as effectively operative, then intellect can certainly be a characteristic of personhood. So again, a person whose intellect is not effectively operative must still be regarded as a person, albeit a defective one.

The next thing one can say about the human person is that he is corporeal, he is embodied. He is then, one can say, a unity of intellect and body with a propensity for consciousness. The nature of that unity appears to be such that it is impossible to say where the intellect begins and the body ends. It is a unity, in other words, which is so intimate that the body and intellect act as one. Yet, one is no a less a person because one has a defective body than when one has a defective intellect. It follows that brain alone cannot be the seat of personhood. After all, one can be brain damaged and still be a human person. The noted neurologist Oliver Sacks, for example, speaking of one of his brain damaged patients, says: "One felt that Greg, though damaged, still had a personality, an identity, a soul"[5]

The seat of personhood, then, goes much deeper than the physical. Later in the same book, for example, Oliver Sacks attempts to clarify what he means by the

[5] Oliver Sacks, *An Anthropologist on Mars* (Picador, London, 1995), p. 64.

term 'soul'. He says:

> There is a cohering and unifying power ... that integrates all the separate faculties of the mind, integrates them, too, with our experiences and our emotions, so that they take on a uniquely personal cast. It is this global or integrating power that allows us to generalize or reflect, to develop subjectivity and a self-conscious self.[6]

In this quotation Sacks identifies three other aspects of the human person - the notion of identity, its integrative power, and the capacity for self reflection or self-consciousness. The capacity for self-reflection, it will be argued, belongs by right to man the human subject, even though one feels intuitively that the person with greater capacity for self reflection is also, in some sense, realising more fully his capacity to be a person. Clearly, this is a complex chapter, demanding careful scrutiny and analysis.

The most satisfactory approach from the point of view of this study is to explore the nature of the human person, or the nature of 'personhood', from the standpoint of the metaphysical and cognitive foundations already laid down in the first six chapters. Lonergan would, no doubt, prefer to start with purely cognitional considerations. It suits the structure of this study better, however, to emphasise the inherent unity of the human person in which the physical and corporeal are sublated to the intellect and so manifest themselves on a whole new level of organisation on the plane of personhood.

7.2 *Lonergan's Notion of 'Thing'*

For Lonergan a 'thing' is *'id quod est'*, literally 'that which is', an entity, an *ens.* To say that an object is a thing, is to make a statement not so much about the nature of one's perceptions of the object, but about the *reality* of what one perceives. It has been argued already that what one reaches at Lonergan's third level of cognition, when one answers the question *"an sit?"* with a "yes!", is the virtually unconditioned, the real, the true, an affirmation of being. Or, as Lonergan explains, one can say that "existence may be defined as what is known in as much as an affirmative answer is given to the question - Are there things?"[7] The noted Lonergan scholar, Kevin Doran, is his book *What is a Person?* explains:

[6] Oliver Sacks, *An Anthropologist on Mars* (Picador, London, 1995), p. 216.
[7] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans,1964), p. 248.

> It is possible to experience data, but these data even when taken collectively, are not the thing. It is equally possible to have a concept, but this concept is not the thing either.[8]

The truth, reality, the 'thing', the existent, is reached only at the level of confirmation of existence, of affirmation of being, at Lonergan's third level.

Fundamental to Lonergan's notion of 'thing' is that no thing can be understood in isolation from its possibilities, its potential, its potency, what it can do, and what can be done with it and to it. For Lonergan, everything that exists is perpetually on a line somewhere between potency and act. Being, in other words, is inherently dynamic: Lonergan says that "finality is the dynamic aspect of the real. To affirm finality... is to affirm movement, fluidity, tension, approximateness, incompleteness."[9] As was already argued in Chapter Two, everything is in act to the degree to which its potency or potential has been reached or achieved, or realised, but remains in potency to the extent that some of its possibilities still remain open and unactuated.

One tends to think of achievement of potential in terms of success only, but Lonergan makes the point that the notion of finality includes all possibilities, even failure:

> It is no less the sadness of failure than the joy of success. It is to be discerned no less in false starts and in break-downs than in stability and progress. It is as much the meaning of aberration and corruption and decline, as of sanity and honesty and development.[10]

The ground or source of finality lies in potency or unrealised potential. This is clear once one understands finality as a property of the real (i.e. as something immanent in things themselves), and not something exerted from outside. Lonergan says:

> For the real is dynamic in as much as it is incomplete, in as much as it is less than it can be. But act constitutes its achievement; form determines what that achievement is; only in potency can one discern the principle that refers determinate achievement to some indeterminate betterment.[11]

Just as the act of knowing a thing gives rise to two questions, one for essence *(quid est?)* and the other for existence *(an sit?)* it follows that the notion one has of a thing, its explicit concept, must also be composed of essence and existence:

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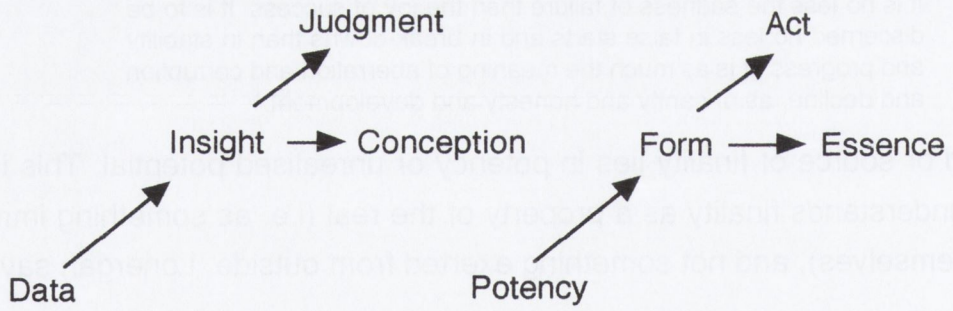
[8] Kevin Doran, *What is a Person?* (Lewiston, NY: The Edwin Mellen Press, 1989), p. 73.
[9] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans,1964), p. 446.
[10] Ibid., p. 448.
[11] Ibid., p. 450.

> Since the process by which we gain knowledge of each thing involves two questions which follow one another, namely 'what is it?' and 'is it?', the conception of being must be the conception of some composite made up of essence and existence.[12]

It is useful at this stage to be reminded that for Lonergan the cognitional and the ontological are equivalent spheres. Potency resides in data of perception. The act of insight grasps any relation or form which inheres in that data. This is already an act of abstraction since the mind focuses on just that data which makes it meaningful or brings its form to the fore. An attempt to express that insight is a further refinement or abstraction; it is an expression or conception of the insight in some symbolic form and corresponds to a mental grasp of the essence of the object. This conception might or might not be true. The mental act of judgment weighs the evidence for and against and decides whether this mental conception, this grasp of essence, is valid or not. If the answer is 'yes', 'it is so', then a relation of assent is formed between the mental grasp of the being of the object and the object itself. That relation is one of truth, the truth of the objective existence of the object. The following schematic has already been used in this study in formulating this relation for the cognitional and the ontological:



Existence is a notion of the mind; it is a judgment as regards the ontological status of a thing. 'Being', however, inheres in objects; it is a characteristic of an object whereby it exists. What is termed 'truth' is an affirmation of being, a relation between existence as affirmed by the mind and the being of the object itself.

The second thing that one can say about a 'thing' is that it is grasped by the mind as not only existing, but as existing as a concrete unity: "By a thing is meant an

[12] Bernard Lonergan, *De Constitutione Christi, Ontologia et Psychologica* (Rome: Gregorian University Press, 1964), p. 11.

intelligible concrete unity."[13] What the act of insight grasps in the case of a 'thing in itself' is that relations exist between the data of sense to which the thing gives rise. But the grasp of a thing as a unity-identity-whole demands that one examine these relations and weigh up the evidence to determine and judge that the data do in fact constitute a unity under all the circumstances and conditions that one can think of. This demands a higher, reflective insight. Lonergan explains:

> Now the notion of a thing is grounded in an insight that grasps, not relations between data, but a unity, identity, whole in data; and this unity is grasped, not by considering data from any abstractive viewpoint, but by taking them in their concrete individuality and in the totality of their aspects. For if the reader will turn his mind to any object he names a thing, he will find that object to be a unity to which belongs every aspect of every datum within this unity.[14]

When he speaks of unity, in other words, what Lonergan has in mind is not just *praedicamental unity*, whereby the perceptions immediately distinguish one, two, or three separate objects; nor is it a mere *natural unity* whereby data which appear in close temporal or spatial proximity tend to be grouped together. What Lonergan has in mind goes beyond these to a unity which is grasped as such by the intellect, and which he terms *transcendent unity.* This highest form of unity requires not only the act of insight but also the act of human reason whereby judgments are made regarding "identity and contradiction", *"compositio et divisio"*, affirmation and denial, differentiation and integration, similarity and difference. Again, Lonergan explains:

> The transcendental unit is something undivided in itself (identity) and divided off from everything else (contradiction). This unit is first known in the second operation of the intellect in that the object of judgement is necessarily subject to the principles of identity and contradiction. Whatever is reasonably affirmed or denied, must be identical within itself and not confused with anything else.[15]

This concept of unity brings closer an understanding of what a thing is. As mentioned already, Lonergan defines a 'thing' as an "intelligible concrete unity". A plant, or an animal or a man are just such 'things' and each exhibits all three types of unity. But while a biological organism as a whole qualifies as a thing, its individual parts (cells etc.), *in so far as they are parts*, do not. Again, Lonergan

[13] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans,1964), p. 253.
[14] Ibid., p. 246
[15] Bernard Lonergan, *De Constitutione Christi, Ontologia et Psychologica* (Rome: Gregorian University Press, 1964), p. 20.

explains:

> To arrive at conjugates, abstractive procedures are normal; one considers events under some aspects and disregards all other aspects of the same events. But to arrive at a thing, one must consider all data within a totality and one must take into account all their aspects. It follows that one can not consider the aggregate of events ... in so far as they satisfy the laws of the lower order, and then conclude to the existence of the lower order. For this would be to abstract from the aspect of the aggregate that cannot be accounted for on the lower viewpoint, and that justifies the introduction of the higher viewpoint and the higher genus. Accordingly, if there is evidence for the existence of the higher genus, there cannot be evidence for things of lower genera in the same data.[16]

Put simply, Lonergan's point is that in the aggregate of the lower order we do not have a thing because there is absent from its concept whatever aspect makes it tend towards the higher order. For example, a gene, which is a segment of DNA, can be isolated and examined biologically, but it is not a thing of the biological order in so far as it can only be explained or accounted for at the level of the entity of which it forms a part. A thing must enjoy transcendent unity which negates internal division and also negates identification with anything other.[17]

> That unity, by definition, adds nothing to the thing other than negation, I agree. The unit is undivided in itself and distinct from anything other. But undivided in itself means nothing except the negation of internal division; and 'distinct from anything other' means only the negation of identification or confusion with anything other.[18]

Lonergan goes on to conclude that the word 'thing' is properly used to describe what, not alone is conceived and affirmed to be one, but what is also, in its ontological reality, indivisible and separate from other things. Minerals, plants, animals, men, and angels are all 'things' and are all distinct in relation to each other, and each enjoys its own separate existence. For Lonergan, in other words, a thing is an intelligible unity-identity-whole. He says: "You have a thing when you have a unity-identity-whole which insight grasps, some identical unity that is comprehensive of a whole in individual data."[19]

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[16] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans,1964), p. 258.

[17] Kevin Doran, *What is a Person* (Lewiston, NY: The Edwin Mellen Press, 1989), p. 81.

[18] Bernard Lonergan, *De Constitutione Christi, Ontologia et Psychologica* (Rome: Gregorian University Press, 1964), p. 20.

[19] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 103.

7.3 *Being as the Ground of Unity*

Is there a single aspect of a thing which accounts for its unity? What is it that for us makes a thing complete and individual, and guarantees that it can never be anything else? Firstly, accidents can have no value in this regard since they cannot constitute the unity of a thing because, by definition, they are incomplete by themselves. One cannot speak of a 'redness', for example, without referring to an apple or a bus or some other concrete reality to which the redness belongs, or to which it is at least attributed by analogy (e.g. a red alert, or a red letter day). Secondly, composite parts of a thing cannot be a source of its unity because they have no real identity apart from the thing itself. The part can never be the whole. Thirdly, anything which is a possibility or a propensity inheres in a substance and cannot be considered as other than the potency of such a substance. For example, there exists material which can dissolve in water and material which cannot, but there is no such concrete thing as an ability to dissolve. Such a capacity or 'potency' is always associated with a particular material. In the same way, the ability to think clearly and the capacity for consciousness are both potencies and as such cannot be the source of unity of the human person viewed as a 'thing'.

Finally, essence cannot be a source of unity in the strict sense. True it can be said that essence is held in common by all things of a particular kind. All One-Euro coins are essentially the same, for example; but this is precisely the problem: to the degree to which they are all essentially the same, they are essentially indistinct from one another; so it cannot be the essence which makes each coin internally distinct, unified, and complete.[20]

This leaves only one possible source of the unity of a thing, and the source of that which causes it to have its own separate existence, and that is its being. It is in its distinct being that accidents, parts, possibilities, and essences are all brought together to form what we know as a particular thing. Lonergan calls this a 'subsistent', defining it as "that which is; a being in the strict sense; one in the strict sense; that which is simply both undivided in itself and divided from everything else."[21]

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[20] Bernard Lonergan, *De Constitutione Christi, Ontologia et Psychologica* (Rome: Gregorian University Press, 1964), p. 21.

[21] Bernard Lonergan, Michael G. Shields (Trans.), Frederic E. Crowe and Robert M. Doran (Eds.),*Collected Works of Bernard Lonergan - Vol. 7 - The Onthological and Psychological Constitution of Christ* (Toronto: University of Toronto Press, 2002), p. 59.

It was explained already[22] that matter and form, substance and accident, potency and act, all may be termed 'principles of being'. However, all of these principles "are bound together and actualized by a single act, namely, the act of being,"[23] *esse*. So, being considered in its complex unity, as a whole composed of these principles, as a whole that subsists as a composite unity, is termed in Metaphysics a 'subsisting subject' or *'suppositum'*. It designates the particular being with all its 'perfections'.

7.4 *The Person as a Rational Thing*

Being is all pervasive; there are no things to which the notion of being does not apply. It has been argued above that it is their separate existence, their separate being that characterises things precisely as things, distinct from and not confused with other things. In this sense, then, being is what all things have in common.

But there are basic distinctions, as well as more superficial ones, between things. There are things of different kinds to be found within things of the same species. While such things function at the same level of being because they are the same species, they vary according to characteristics like colour, shape, texture, and individual reaction to circumstances. There are also things of different genera and species, operating at different levels of being. These different levels may be defined as physical, chemical, biological, psychological (sensitive), and psychological (rational). What accounts for these different genera and species is not existence, since they all exist. It follows that distinctions of genera and species are accounted for by the essences or the natures of things that exist.

'Person' is a name traditionally given to particular kinds of things. A person can reasonably be defined as a thing of a kind that has a rational nature. To Aquinas, for example, a person is *"subsistens distinctum in natura intellectuali,"*[24] which Lonergan translates as "a distinct subsistent in an intellectual nature."[25] To explain the terms *"subsistens distinctum"*, it must be remembered that a subsistent is a 'thing' in the strict sense of the term. Lonergan explains that, "in created nature,

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[22] See Section 2.4.8.

[23] Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-Tala Publishers, 1991), p. 117.

[24] Thomas Aquinas, *Summa Theologica*, I, 29, 3,

[25] Bernard Lonergan, Michael G. Shields (Trans.), Frederic E. Crowe and Robert M. Doran (Eds.),*Collected Works of Bernard Lonergan - Vol. 7 - The Onthological and Psychological Constitution of Christ,* p. 59.

what subsists, subsists distinctly." i.e. is a distinct subsistent. To clarify the notion *"natura intellectuali "* it is useful to remember that the Thomistic understanding of 'nature' is "the substantial essence as related to operations." Thus, nature is related to essence. Following from this, Lonergan defines 'intellectual nature' as a "nature which can operate over the whole range of being, by understanding and willing."[26] From this, one can give the following expanded definition of a person: A person is a thing in the strict sense of the term (an intelligible unity-identity-whole), complete and distinct, which can operate over the whole range of being, by understanding and willing.[27]

Since a person is a thing in the strict sense of the word, then only things (which subsist distinctly) can be persons. It follows that personhood cannot reside in the brain because it has no meaning apart from the full human organism of which it is a working part and so is not a thing, strictly speaking. The same applies to any other part of the body one cares to consider. Similarly, a potency cannot be a person because, as a constitutive cause, it is of itself incomplete but is always orientated towards an act. At this point it is important to make a distinction between a potency on one hand, and a thing on the way to fulfilment on the other. Doran explains:

> While a potency cannot be a thing, a thing with potential is no less that thing simply because all its potential is not yet realised. Indeed, common sense tells us that no thing can ever realise all of its potential because the actuation of some aspect of that potential may in practice exclude the actuation of some other, e.g., an infant has the potential to live until he is eighty or die at six months. What he actually does may be determined by factors beyond his control but, whatever happens he cannot actuate both these aspects of his potential.[28]

Thus, potency does not constitute a person, but it can be one aspect of a person.

Since a person is a distinct subsistent in an intellectual nature, it follows that only that which is intellectual can be a person, and not that which is non-intellectual, e.g., brute animals, plants, and minerals. An intellectual nature is substantially or essentially distinct from other natures. Both Aquinas and Lonergan hold that things which are of an intellectual nature function on a different, higher level of being than other, non-intellectual beings. They belong to a species of their own because their

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[26] Bernard Lonergan, Michael G. Shields (Trans.), Frederic E. Crowe and Robert M. Doran (Eds.),*Collected Works of Bernard Lonergan - Vol. 7 - The Onthological and Psychological Constitution of Christ,* p. 59.

[27] Kevin Doran, *What is a Person* (Lewiston, NY: The Edwin Mellen Press, 1989), p. 85.

[28] Ibid., pp. 86 - 87.

nature places them in a relationship with other things such as enable them to operate over the whole range of being by understanding and willing.

The source of unity within each and every thing, including the human person, is its distinct being. It follows that a closer examination of the nature of being should enable one to cast more light on what might be termed the ontological foundations of personhood. The sections that follow lean heavily on the work of W. Norris Clarke of Fordham University who, while he collaborated with Lonergan in producing the final draft of *Insight,* nevertheless adds a richer dimension to Lonergan's conception of being, a dimension which, it may be argued, is extremely important for a proper understanding of the human person.

7.5 *The Self-Communicative Nature of all Being*

According to Clarke, Aquinas' notion of person is fundamentally "a dynamic and relational"[29] one. This is not surprising since the notion of person was developed in the first place in order to cast philosophical and theological light on the mystery of the Blessed Trinity, which has always been viewed and understood in dynamic and relational terms. Rahner, for example, says:

> The theological and philosophical concept of person remained unknown to ancient pagan philosophy, and first appears as a technical term in the early Christian philosophy of the Trinity and incarnation.[30]

Joseph Ratzinger further comments that, in the relational notion of the person developed within the theology of the Trinity, "lies concealed a revolution in man's view of the world." He explains:

> The undivided sway of thinking in terms of substance is ended; relation is discovered as an equally valid primordial mode of reality ... and it is made apparent that being that truly understands itself grasps at the same time that *in* its self-being it does not belong to itself; that it only comes to itself by moving away from itself and finding its way back as relatedness to its true primordial state.[31]

This concept of relation is also clearly an important one in a study such as this which seeks to understand the development of the human person not only from

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[29] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 1.

[30] Karl Rahner, *The Teaching of the Catholic Church* (New York: Mercier Press, 1975) p. 1207

[31] Joseph Ratzinger, *Introduction to Christianity* (New York: Herder & Herder, 1970), p. 132. Quoted in W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), pp. 2 - 3.

an intrasubjective viewpoint, but also in intersubjective and hence in relational terms. However, for Lonergan as for Ratzinger, man becomes his true authentic self only by transcending self. This may be seen as implying that the human person is also a truly relational being even in his deepest, most intrasubjective core of self.

Clarke sees the notion of relation as already implicit in Aquinas' highly dynamic notion of *esse*. This study has already termed *esse* as 'being as becoming'; but it could also be termed 'being as unfolding'. Norris Clarke describes *esse* "as act and as intrinsically ordered toward self-communication." If all being is so ordered, then it follows that the human person must also be ordered toward self-communication. Clarke is not the only Thomist to hold this view of the human person. In their book entitled *Metaphysics,* for example, Alvira, Clavell, and Melinda appear to be saying much the same thing when they state that

> neither consciousness nor free-will, neither responsibility nor inter-personal relations can constitute a person. All these perfections are merely accidents whose being is derived from the act of being, the only real core of personality.[32]

Clarke goes on to explain that Aquinas did not develop this relational aspect of the person in a full and explicit manner because the preoccupation of his time was with the fundamental incommunicability or "uniqueness of each person as distinct from the common nature they shared."[33] In attempting to formulate an explicitly relational view of the human person, Clarke joins company with Heidegger, Marcel, Buber, Lavinas, Frankl, and many other noted contemporary philosophers and psychologists. However, Clarke claims that most of these have disavowed the equally important and complementary pole, the notion of person as *substance,* and so they have lost sight of "that dimension of person as abiding self-identity, interiority, and in-itselfness."[34] Instead, Clarke turns to the "dynamic, relational aspect of being ... with its indissoluble complementarity of substantiality, the *in-itself* dimension of being, and relationality, the *towards-others* aspect." He then seeks to apply this to the person "as the highest manifestation of being itself, with the resulting characteristics of the person as self-possessing, self-communicative, and self-transcending."[35]

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[32] Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-tala Publishers, 1991), p. 124.
[33] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 3.
[34] Ibid., p. 4.
[35] Ibid., p. 5.

In support of his stance, Clarke quotes Aquinas extensively, as when he says for example: "It is the nature of every actuality to communicate itself in so far as it is possible. Hence every agent acts according as it exists in actuality,"[36] and "Communication follows upon the very intelligibility of actuality. Hence every form is of itself communicable."[37] Thus, reverting to Lonergan's equivalence of the cognitional and the ontological, one can say that the data of sense in the subject are in part a consequence of the being of the intentional object in act. Or again, to use the Scholastic formulation at the core of the notion of intentionality *Sensus in actu est sensible in actu,* one can say that the sensible in act and the sense in act are identical. Thus the sensible by its nature tends towards self communication, meeting the organ of sense, as it were, half way. Expressing this slightly differently, one can say that the sense takes on the form of the intentional object. More fully, Aquinas says:

> For natural things have a natural inclination not only toward their own proper good, to acquire it, if not possessed, and if possessed, to rest therein; but also to diffuse their own goodness among others as far as is possible. Hence we see that every agent, insofar as it exists in act and possesses some perfection, produces something similar to itself.[38]

According to Clarke, Aquinas goes even further by maintaining that self-expression through action "is actually the whole point, the natural perfection or flowering of being itself, the goal of its very presence in the universe," and that "there is an immense innate dynamism in the very nature of actual being as such ... to pour over into self-expression, self-communication of its own inner perfection or goodness."[39] In support of this contention he quotes Aquinas again: "Each substance exists for the sake of its operation,"[40] and "operation is the ultimate perfection of each thing."[41] In other words, this is not just a drive to self-fulfilment; *esse* is not merely a "striving force, carrying each being *(ens)* forward, from within the depths of its own reality to its full self-achievement;"[42] rather it is an intrinsic dynamism to be self-communicative, to share its own goodness with others, "to pour

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[36] Thomas Aquinas, *De potentia* q. 2, art. 1, quoted in W. Norris Clarke, *Person and Being,* p. 6.
[37] Thomas Aquinas, *Summa contra Gentes* III, ch. 64, quoted in W. Norris Clarke, *Person and Being,* p. 7.
[38] Thomas Aquinas, *Summa Theologiae* I, q. 19, art. 2, quoted in W. Norris Clarke, *Person and Being,* p. 7.
[39] W. Norris Clarke, *Person and Being,* p. 8.
[40] Thomas Aquinas, *Summa Theologiae* I, q. 105, art. 5, quoted in W. Norris Clarke, *Person and Being,* p. 8.
[41] Thomas Aquinas, *Summa contra Gentes* III, ch. 113, quoted in W. Norris Clarke, *Person and Being,* p. 8.
[42] Gerald Phelan, "The Existentialism of St. Thomas," *Selected Papers* (Toronto: Pontifical Institute of Mediaeval Studies, 1967), p. 77, quoted in W. Norris Clarke, *Person and Being,* p. 9.

over into production of another actuality in some way like itself."[43] Norris Clarke insists:

> For Aquinas, finite, created being pours over naturally in action for *two* reasons: (1) because it is *poor*, i.e. lacking the fullness of existence, and so strives to enrich itself as much as its nature allows from the richness of those around it; but (2) even more profoundly because it is *rich*, endowed with its own richness of existence, however slight this may be, which it tends naturally to communicate and share with others.[44]

Again, one can appreciate the added clarity which this development of the notion of *esse* provides for an understanding of the intentional give-and-take between sense and sensible, and between intellect and intelligible, two complementary but opposed relations, giver and receiver. Clarke is implying that all being by its very nature is not just intelligible, but is also intentional. He has termed this "ontological intentionality."[45] Thus, "self communication is written into the very heart of all beings."[46]

To *be* in the fullest sense of the term is not just to be present, but to be *actively* present. To be actively present means to be self-manifesting, self-communicating. But to act implies to act *on* something, to self-manifest *to* something else, to self-communicate *with* something else. If being were not to be actively present, in other words, there would be no way for anything else to be influenced by its presence, let alone experience its existence; "it might just as well not be at all - it would in fact be indistinguishable from non-being."[47]

7.6 *Being as Relational*

While all of the above are clearly explicit in Aquinas' writings, the notion that "*relationality* is a primordial dimension of every real being, inseparable from its substantiality, just as action is from existence,"[48] is to be found only implicitly in his works. If a being naturally flows over into self-communicating action towards others, and also receives from them, "then it cannot help but generate a network of

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[43] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 9.
[44] Ibid., p. 10.
[45] In private conversation with this author Clarke, who helped Lonergan with his final draft of *Insight*, related how he had tried to convince Lonergan, with some success, of the validity of this latter point.
[46] W. Norris Clarke, *Person and Being*, p. 12.
[47] Ibid., p. 13.
[48] Ibid., pp. 13 - 14.

relations with all its recipients."[49] But, as mentioned already, the notion of substance is also essential. Clarke explains:

> But since "every substance exists for the sake of its operations," as St. Thomas has told us, being as substance, as existing *in itself*, naturally flows over into being as relational, as turned *towards others* by its self-communicating action. *To be* fully is to be *substance-in-relation.*[50]

Thus, Clarke insists that, for Aquinas, "relationality is ... an equally primordial dimension of being as substantiality,"[51] even if Aquinas never developed this aspect to the same degree. He says that substance provides "the abiding unifying centre for all the being's relations and other attributes," and, in a rare mention of Lonergan, he adds:

> This aptness to exist in itself, not as part of any other being (the classical definition of substance), is what makes a being, in Bernard Lonergan's words, to be "a unity-identity-whole."[52]

Thus Lonergan's notion of a thing as a "unity-identity-whole" never gets beyond the in-itself notion of substance and fails to reach to the notion of "substance-in-relation."

Pieper appears to support this view of the dual relational and substantial aspects of being when he says:

> To have (or to be) an intrinsic existence means "to be able to relate" and "to be the sustaining subject at the centre of a field of reference." [53]

And again he says:

> Only in reference to an inside can there be an outside. Without a self contained "subject" there can be no "object." Relating-to, conforming-with, being-oriented-towards - all these notions presuppose an inside starting point. [54]

And, in words that have profound resonances in the realm of human development and education, he continues:

> The higher the form of intrinsic existence, the more developed becomes the relatedness to reality, also the more profound and comprehensive becomes the sphere of this relatedness: namely, the world. And the deeper these relations penetrate the world of

[49] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 14.
[50] Ibid.
[51] Ibid., p. 15.
[52] Ibid., p. 16.
[53] Josef Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 83.
[54] Ibid., p. 82.

> reality, the more intrinsic becomes the subject's existence.[55]

Clearly Pieper holds, as does Clarke, that if the substance, or *in-itself* pole of being, is ignored, there is no room for the unique interiority and privacy of the person who becomes little more than "an extroverted bundle of relations, with no inner self to share with others,"[56] which, according to Clarke, is the case in the philosophies of Dewey, Heidegger, Sartre, and Marcel.

7.7 *Being as Receptivity and Community*

It has already been implied above that if self-communication is a fundamental aspect of real being, so too must receptivity, the complementary pole of self-communication. Clarke states that

> without receptivity no communication can become actual and complete itself. It must therefore be a primordial dimension of reality as a whole, even though it follows upon the substantial and self-communication aspects of being in the ontological order.[57]

Such receptivity is not necessarily a sign of poverty or imperfection in the receiver, but viewed as an essential complementarity in the natural world, as one pole in a relation of being, it attains an essentially positive meaning. This compares, for example, with the essential complementarity of 'care' and 'need' in relations between parent and child, and teacher and student.[58] Thus one finds the notion of 'reciprocity', which Feuerstein maintains is the key element in what he terms 'Mediated Learning Experience',[59] at the core of Clarke's notion of being.

Thus, each being then tends to spin out with the beings around it a system of interactive relationships of communicating and receiving. Clarke attributes to such systems the notion of some kind of community in its widest sense:

> Real being, as intrinsically self-communication and relational through action, tends naturally towards modes of being together that we can justifiably call the mode of community. To be, it turns out, means *to-be-together*. Being and community are inseparable.[60]

This expresses on an ontological plane the intersubjective notion of 'intentional

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[55] Josef Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 82.
[56] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 19.
[57] W. Norris Clarke, *Person and Being,* p. 20.
[58] See Section 13.5.9 of this work.
[59] See Section 15.8 below.
[60] W. Norris Clarke, *Person and Being,* p. 23.

bonds' developed in this study to explicate the concepts of human community and intersubjective attachments.[61] This level of intersubjectivity, however, is the level of personal being where social consciousness enters the equation. At this level "the ontological community of beings turns into conscious social community in the full sense, as a natural expression and fulfilment of the self-communicating dynamism of being."[62] But at a deeper, more profound level, the level of substance, these conscious relations form deeper, more permanent relational and intentional bonds. This is the level at which a community of beings becomes a communion of beings. Clarke explains that "at its deepest and most intimate level the conscious bonds of human togetherness turn into *communion*."[63]

To explicate this difference between community and communion still further one must examine first what is meant by the term community. Lonergan says:

> The community reveals itself to itself by its living, by the way it meets its problems, by its revisions of its common sense, its common meaning, its common commitment, by the way things work out in development and breakdown, by growth and disintegration. [64]

A community then arises from shared insights, beliefs, values, and tasks. It derives also from a sense of community. But there is also what Lonergan would term "community of feeling" and "fellow feeling." From such empathy and sympathy permanent emotional and psychic ties or bonds can grow;[65] community, in other words, becomes communion, and such communion in turn becomes, according to Pope John Paul II, "the foundation and soul of the *community*."[66] Just as community in its broadest sense is the aim of all being, according to Clarke, so he also maintains that "personal being ... *tends ultimately towards communion* as its natural fulfilment."[67]

7.8 *Person and Being*

For Norris Clarke, to be a person

> is really nothing but the fullness of being itself, existence come into its own, allowed to be fully what it is by "nature" when not restricted

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[61] See Section 16.9 of this work.

[62] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 23.

[63] Ibid. Italics in original.

[64] Bernard Lonergan, *Collected Works of Bernard Lonergan, Book 6 - Philosophical and Theological Papers 1958 - 1964* (Toronto: University of Toronto Press, 1996), p. 173

[65] See Chapter 17 of this study.

[66] John Paul II, *Familiaris Consortio* (London: Incorporated Catholic Truth Society, 1981), pp. 34 - 35.

[67] W. Norris Clarke, *Person and Being,* p. 24. Italics in original.

by the limitations proper to the material mode of being.[68]

In other words, if being is allowed to be fully itself as "active presence," and if it is "not restricted by the limitations proper to the material mode of being," then it turns into "self-consciousness in the order of knowledge and self determination in the order of action." These, according to Clarke, are precisely the essential attributes of the person. He concludes that "to *be* fully, without restriction, therefore, is to be personal."[69]

It was concluded above that Lonergan's notion of person could be described as a thing in the strict sense of the term (an intelligible unity-identity-whole), complete and distinct, which can operate over the whole range of being, by understanding and willing.[70] The first serious attempt to define the notion of 'person' is to be found in the work of Boethius: "*persona est individua substantia rationalis naturae*": "a person is an individual substance with a rational nature."[71] For Aquinas, on the other hand, to be a person it is not enough merely to possess a complete individual intellectual nature. To be fully a person in its own right such a nature would have to possess, or 'own', or *have* its own act of existence *(esse)*. Thus for Aquinas the person could be defined as "an intellectual nature possessing its own act of existence, so that it can be the self-conscious, responsible source of its own actions."[72] A person is an intellectual nature which possesses "its own act of existence," distinct from all others. It is a distinct existent according to Aquinas' formulation: *subsistens distinctum in natura rationali* - a distinct subsistent in a rational nature. Lonergan's notion of 'subsistent' has been explained above. According to Clarke, Aquinas means by "subsistent" an actual existent, existing in itself (in the mode of substance) with its own act of existence. In this the emphasis is on the act of existence rather than on the nature as in the classical formula of Boethius, "an individual substance in a rational nature." According to Clarke, one can then "transfer all the attributes characteristic of existence itself over into the person as such, where they will be found at enhanced degrees of intensity."[73]

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[68] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 25.

[69] Ibid.

[70] Kevin Doran, *What is a Person* (Lewiston, NY: The Edwin Mellen Press, 1989), p. 85.

[71] Boethius (480 - 525) was not strictly speaking a Scholastic philosopher. Neither did he really belong to what is generally accepted as the medieval period. Rather he is regarded as the great translator who safeguarded the major philosophical works of the classical period by translating them into Latin, just as the classical world was on the brink of collapse. He was born a Roman, the son of a senatorial family, one of the last of his class to finish his education in Athens. He was employed in the court of Theodoric the Goth in Rome.

[72] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 27.

[73] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), pp. 29 - 30.

7.9 *The Person as Subject*

While Aquinas certainly dealt with the notion of person in his philosophy, he did not expressly use the related term 'subject', although Clarke obviously believes that the notion is implicitly present in Aquinas' definition of a person as "an intellectual nature possessing its own act of existence, so that it can be the self-conscious, responsible source of its own actions."[74] According to Lonergan, the notion of subject is a relatively modern term. He explains the notion as follows:

> When one is sound asleep, one is actually a substance and only potentially a subject. To be a subject, one at least must dream. But the dreamer is only the minimal subject: one is more a subject when one is awake, still more when one is actively intelligent, still more when one actively is reasonable, still more in one's deliberations and decisions when one actively is responsible and free.[75]

Hence, for Lonergan a subject is "a substance that is present to itself, that is conscious."[76] In the same place, Lonergan addresses the related existential question of primary concern to philosophers like Marcel and Heidegger:

> Who is man? Who is to be a man? The answer is 'I', 'We'. That use of the first person supposes consciousness. What has to be a man is not just any instance of rational animal. It is one that is awake. Moreover, in so far as he is concerned with being a man, he is aware of potential triumph or potential failure, and aware of his own freedom and responsibility[77]

Thus, man, the human being, can be viewed from two distinguishable but related perspectives. The first perspective takes man from the viewpoint of his intellect, in which case the focus is on the man the person; the second perspective views man from the standpoint of consciousness, in which case the focus is on the human subject. For Lonergan, a man is first and foremost a conscious subject. The notion of man as a rational animal he finds to be more vague and imprecise, leaving no room for a consideration of his development:

> If you consider man as a rational animal, where the word 'rational' is understood potentially, then there is no development; it is eternally true of every man no matter what he does, how intelligent or stupid he is, how wise or silly, how saintly or wicked.- he is a rational animal

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[74] Ibid., p. 27.

[75] Bernard Lonergan, "*Existenz* and *Aggiornamento*" In Frederick E. Crowe and Robert Doran (Eds.), *Collected Works Of Bernard Lonergan, Vol. 4* (Toronto: University of Toronto Press, 1988), p. 222.

[76] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 83.

[77] Ibid., p. 81

> in that sense. But there is another sense, being actually rational...[78]

How then is one to study and investigate what it is to be a human person? One cannot use the method of the empiricists like Locke or Hume, who will accept only the world of immediate experience as valid, because

> if he tries to find himself as subject, to reach back and, as it were, uncover his subjectivity, (he) cannot succeed. Any such effort is introspecting, attending to the subject, and what is found is, not the subject as subject, but only the subject as object;

According to Lonergan, what is essentially private and subjective in the person or the subject can be grasped only by his 'generalised empirical method' in which data of consciousness are regarded as equally valid objects of study as data of sense. He explains that "it is the subject as subject that does the finding. To heighten one's presence to oneself, one does not introspect; one raises the level of one's activity."[79] And again, elsewhere he explains:

> It is what the Germans call a *Besinnung*, a becoming aware, a growth in self consciousness, a heightening of one's self-appropriation, that is possible because our separate, unrevealed, hidden cores have a common circle of reference, the human community, and an ultimate point of reference, which is God ..[80]

The notions of "self-appropriation" and "self-consciousness" as used in the above quotation will be dealt with in greater detail later in Chapter Nine of this study.

The notion of man the human subject as a substance capable of reflexive self-consciousness sets it apart from the notion of man as person held by Aquinas. According to Lonergan, a person is still a person whether conscious or not. A person is no more a person when he is actively intelligent than when he is asleep. However, to be a person means that one must have at least a propensity for consciousness, just as one can still be a person and have a deficient intellect. For Lonergan, as already argued above, a person is a rational 'thing', where a 'thing' may be defined as an "intelligible concrete unity."

To be a person is to be an intelligent 'thing', to be an intelligent and

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[78] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 81.

[79] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection* (Darton Longman & Todd, London, 1967), pp. 20 - 21.

[80] Bernard Lonergan, "*Existenz* and *Aggiornamento*" In Frederick E. Crowe and Robert Doran (Eds.), *Collected Works Of Bernard Lonergan, Vol. 4 - Collection* (Toronto: University of Toronto Press, 1988), p. 222.

intelligible unity-identity-whole. To be humanly intelligent means to be capable of experiencing, understanding, and judging. But the action of the intellect heightens consciousness. "A person is conscious by being the *principium quod* of acts of sense or intellect." One becomes more and more aware of an underlying self, or subject of operation, as one mounts from experience, through insight and judgment, and on to assent. To be a person means to be intelligent, to be intelligent means to be capable of being a conscious subject. One can say briefly that "a subject is a conscious person."[81] Lonergan explains more fully:

> A subject is a conscious person. A person is conscious by being the *principium quod* of acts of sense or intellect. In so far as there is in man a *sensible actu*, there is by that very act a *sensus actu* and a *subiectum actu*; insofar as there is an *intelligible actu*, there is by that very act an *intellectus actu* and a *subiectum actu*. Finally, the *subiectum actu* is the *principium quod* of the act.[82]

Lonergan declares that the notion of subject is "difficult, recent, and primitive"[83] . It is "difficult" in that, while everyone knows that he is a subject, not everyone knows the nature of the subject, and so there are a variety of opinions. It is "recent" in that, as already said, Aquinas and other medieval philosophers never treated the subject explicitly and systematically. The notion is "primitive" in that "It cannot be reached merely by combining other, better known concepts. It can only be reached by directing one's attention to the facts and to understanding them correctly."[84] Despite these difficulties, Lonergan does attempt to grasp Aquinas' *implicit* notion of subject and transpose this "into the classical categories of scholastic thought." [85]

Unlike Lonergan's notion of person which, like that of Aquinas, is related to intelligence, Lonergan's notion of subject is a function of consciousness. According to Lonergan, many things which are classified as 'accidents': big or small, intelligent or dumb, hard-working or lazy, awake or asleep, make no difference to the human substance. Human nature is always the same; a man is a man regardless of these 'accidental' characteristics. As regards man the subject, however, they are not accidental "for the subject is not an abstraction; he is a concrete reality, all of him, a

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[81] Bernard Lonergan, "Christ as Subject: A Reply", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 182.
[82] Ibid.
[83] Ibid., p. 162.
[84] Ibid., p. 163.
[85] Ibid.

being in the luminousness of being."[86]

The being of a subject is in a state of becoming. One becomes oneself over time. The person one is, however, remains essentially the same.

> When I was a child, I was a subject; but I had not yet reached the use of reason. ; I was not expected to be able to draw reasonably the elementary distinctions between right and wrong, true and false. When I was a boy, I was a subject; but I was a minor; I had not reached the degree of freedom and responsibility that would make me accountable before the law.[87]

The being, or self, or subject one is today is qualitatively (not quantitatively) different from the self one was as a child. When Dewey complains that: "the ideal of using the present simply to get ready for the future contradicts itself"[88] he misses the point. One's potential or potency is part of what one is today. To fail to take this into consideration is to neglect something foundational to the very notion of education itself.

Over time, the subject has more and more to do with his own becoming. Lonergan explains that "development is a matter of increasing the number of things that one does for oneself, that one decides for oneself, that one finds out for oneself." [89] Adults frequently underestimate a child's developmental potential and try to do for the child what the child can do for himself, giving to rise to what Feuerstein denigrates as a 'passive-acceptant' approach to education, as opposed to the ideal 'active-modificational' approach.[90] A critical point is reached in the increasing autonomy of the subject. "It is reached when the subject finds out for himself that it is up to himself to decide what he is to make of himself."[91] At first doing for oneself, deciding for oneself, finding out for oneself have to do more with external objects in the child's world. But a point is reached at which he begins to see that these deeds, decisions, and discoveries affect him as a subject more deeply than they affect the objects with which he is concerned. These deeds, decisions, and discoveries "accumulate as dispositions and habits of the subject;

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[86] Bernard Lonergan, "*Existenz* and *Aggiornamento*", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 223.
[87] Ibid.
[88] John Dewey, *Experience and Education* (New York: Collier Macmillan Publishers, 1938), p. 49.
[89] Bernard Lonergan, "*Existenz* and *Aggiornamento*", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 223.
[90] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988)
[91] Bernard Lonergan, "*Existenz* and *Aggiornamento*", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 223.

they determine him; they make him what he is and what he is to be."[92]

One can say that in the first period, before this critical point is reached, the self certainly makes itself. However, once the critical point is reached "this making oneself is open-eyed, deliberate." As Lonergan explains: "Autonomy decides what autonomy is to be."[93] Lonergan claims that the opposite of this "open-eyed, deliberate" self-initiated action is drifting:

> The drifter has not yet found himself; he has not yet discovered his own deed, and so is content to do what everyone else is doing; he has not yet discovered his own will, and so he is content to choose what everyone else is choosing. He has not yet discovered a mind of his own, and so he is content to think and say what everyone else is thinking and saying[94]

This "drifting" appears somewhat similar to what Feuerstein categorises as the "passive acceptant" approach to self-development.

However, if one does not know oneself very well, one cannot chart one's future with certainty. Nor can one control one's environment completely or the influences that work on one; one cannot easily know or explore one's unconscious or preconscious mechanisms. Instead, "our course is in the night; our control is only rough and approximate." As opposed to this, Lonergan says that "we have to believe and trust, to risk and dare." [95] This critical point is never transcended in this life. It is one thing for a young person to decide what to make of himself: a serious student, a loyal friend, a trustworthy employee. It is quite another thing to execute that decision. Lonergan continues:

> Today's decisions do not predetermine the free choice of tomorrow, of next week or next year, of ten years from now. What has been achieved is always precarious: it can slip, fall, shatter. What is to be achieved can be ever expanding, deepening. To meet one challenge is to effect a development that reveals a further and graver challenge.[96]

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[92] Bernard Lonergan, "*Existenz* and *Aggiornamento*", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 223.
[93] Ibid., p. 224.
[94] Ibid.
[95] Ibid.
[96] Ibid.

7.10 *The Person as Self-Possessing*

In common with all real being, the human person may be described as "substance-in-relation." Just as every real being "exists first as present *in-itself*, standing on its own as a unity-identity-whole in the midst of the community of existents,"[97] so the human person has first and foremost an intrasubjective nature. Secondly, as all real being tends naturally to "pour over into active *self-communication* with other real beings, generating relations, community, etc.,"[98] so the human person may also be said to display an intersubjective nature. The intrasubjective nature must be regarded as taking priority for "unless one has some distinct self to give or share, and some conscious possession of it as one's own, how could one 'give oneself to another' in friendship and love?"[99]

One can say that the 'in-itself' nature of all being (its substance), when translated, or 'sublated'[100] , to the level of the intellectual and volitional, transcends the material level and "manifests itself on the conscious level as a luminous self-presence, which we call self-consciousness, awareness of oneself both as present and as source of one's actions."[101] The heightening of this awareness, the attending to it, the growing in understanding of it, the assenting to it as a good to be cherished, is what Lonergan terms 'self-appropriation of interiority'. A man is fully what he can be, is fully himself, when he is in possession of himself. He is fully in the *being* mode, one might say, when he fully possesses himself or *has* himself in the *having* mode. Clarke explains:

> Self-possession is the manifestation on the level of conscious experience of one of the two complementary poles of the underlying ontological structure of the person, its in-itselfness or substantiality, by which it stands out as a distinct, autonomous, self-governing moral subject in the community of other persons and of other beings. It is here that the unique inner depth of privacy and interiority of the personal self resides.[102]

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[97] W. Norris Clarke, *Person and Being* (Milwaukee: Marquette University Press, 1998), p. 42.

[98] Ibid.

[99] Ibid., p. 57.

[100] Lonergan defines the notion of sublation as follows: "What sublates goes beyond what is sublated, introduces something new and distinct, puts everything on a new basis, yet so far from interfering with the sublated or destroying it, on the contrary needs it, includes it, preserves all its proper features and properties, and carries them forward to a fuller realization within a richer context." (*Method in Theology* , p. 241)

[101] W. Norris Clarke, *Person and Being,* p. 43.

[102] Ibid., p. 57.

7.11 *The Human Person as Embodied*

7.11.1 *The Body in Philosophy*

The above definition of the person with its emphasis on "a being that is the self-conscious, responsible source of its own actions" reaches out to more contemporary philosophy: while it is securely grounded in metaphysics, it is also existentialist, and lends itself to phenomenological analysis. Clearly something is missing, however. The human person is possessed of a human nature. But by nature Clarke means "the hidden and abiding source and centre of (its) actions."[103] Part of that human nature is to be corporeal or embodied. To be *(esse)* is to be in process of becoming and that process of becoming, that *status viatoris*, one might say, is mediated by a corporeal essence.

So far the discussion of the nature of person has followed not only Lonergan but also the tendency in contemporary thought to equate personhood with the exercise of some mental or rational capacity. In can be argued that this is still a limited conception of 'person' and that it is inadequate in that it is not in keeping with the ontological reality of an individual human entity. Kevin Doran, for example, maintains that "this inadequacy is due, at least in part, to the failure to take account of the body as an aspect of the nature of finite persons."[104]

Commonsense experience tends to support the view that a human person without a body is incomplete; equally a body on its own does not qualify as a person, though the human body may have certain definite personal qualities. Allied to this, one can say that the reverence displayed in all parts of the world, and in all ages and cultures, for the bodies of the dead indicates a common perception of the importance of the human body as an aspect of the individual. Doran says:

> If such care and respect is elicited universally by the dead bodies of persons, how much more so is it evident that a living body is inextricably linked to the concept of a finite person.[105]

Both Aquinas and Lonergan follow Aristotle when they view the material aspects of the human being, the body, as the seat of individuality but not of personality. This is exemplified by Maritain when he says:

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[103] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 34.
[104] Kevin Doran, *What is a Person* ? (Lewiston, NY: The Edwin Mellen Press, 1989), p. 61.
[105] Ibid., p. 62.

> Now it should be pointed out that personality is only one aspect or one pole of the human being. The other pole is - to speak the Aristotelian language - individuality, whose prime root is matter. The same man, the same entire man who is, in one sense, a person or a whole made independent by his spiritual soul, is also, in another sense, a material individual, a fragment of a species, a part of the physical universe, a single dot in the immense network of forces and influences, cosmic, ethnic, historic, whose laws we must obey.[106]

This implies a certain dualistic tendency in Maritain's thinking whereby the person and the body are viewed as two poles of the human individual.

7.11.2 *The Body as Object*

Although it was Nietzsche who first called attention to the all-importance of the body, it was Merleau-Ponty who first made the body the central theme of a detailed philosophical analysis. This provided him with an original perspective from which to rethink some perennial philosophical issues as the nature of knowledge, freedom, time, language and intersubjectivity.

Merleau-Ponty in his *Phenomenology of Perception* distinguishes between what he terms 'the objective body', or body as object, and 'the phenomenal body' which is the body experienced as subject. This distinction is central to understanding the phenomenological treatment of what he termed 'embodiment'. Thus his philosophy could be characterised as a philosophy of the lived body or the body subject *(le corps propre)*. It is in this area that some significant differences appear between the theories of Merleau-Ponty and those of Husserl.[107]

The bodies of other people are objects of experience for a subject in many ways no different from the generality of objects. Like all objects they manifest themselves through the medium of the senses. One can see, touch and hear them. One can identify them by sight, and even at times by smell. One's own body can likewise be an object for oneself. One may accord more or less attention, more or less consciousness, to the data of sense from various parts of one's body depending on the circumstances.

There are some sense experiences, however, which one can only have in relation to one's own body. Pain and pleasure, for example, are inherently personal

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[106] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 9.
[107] See Section 7.11.4 below.

experiences. Frequently, when one refers to bodies, one does so using a possessive pronoun. It is 'my' body or 'her' body. On the other hand, in relation to oneself, as already said, one frequently uses the word 'my body' and 'me' interchangeably. This is quite commonly heard as when a child says "She pinched me" or "She pinched my leg", meaning exactly the same thing in each case. Leon Kass explains:

> True, our speech in self-reference reflects a certain self-division, in which we are linguistically both subject and object, the viewer and the viewed. Indeed the fact of such self-consciousness is largely responsible for the difficulty in understanding our relation to our own bodies.[108]

The use of the possessive pronoun could be interpreted as expressing ownership or control. But in practice one does not have absolute autonomy over one's own body and how one treats it. Even if one makes the ultimate act of choice to do away with one's own life, one is by that very act relinquishing all autonomy and control over one's own body, and leaving it to the care of others. Kevin Doran concludes: "It is probably more appropriate to think of the possessive pronoun as denoting relationship, rather than ownership."[109] However, as already mentioned, Marcel sees possession of a body as the prototype of all 'having'.

So, when one considers one's body as an object, one is immediately conscious of it as one's own body, and unable to prescind from its association with the self as a conscious subject of experience. When one experiences one's own body as an object, one is generally constrained to think of it also as a subject, in a way that does not occur in relation to other bodies. This is because, as already mentioned, there are sense experiences such as pain and pleasure that one has only in relation to one's own body. Such experiences are most often feelings as well as observations. One tends to ascribe such 'private' experiences also to other subjects on the basis of the assumption that, since they are observed to be behaving in a bodily manner similar to one's own, they must also be feeling as the observer is feeling.[110] Husserl terms this 'analogising apperception' and he regards it as the means through which one can understand that there are other egos who, like oneself, have bodies that are distinctly 'their own'. Thus, he explains:

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[108] Leon R. Kass, *Toward a More Natural Science: Biology and Human Affairs* (New York: The Free Press, 1988), p. 282

[109] Kevin Doran, *What is a Person* (Lewiston, NY: The Edwin Mellen Press, 1989), p. 64.

[110] Ibid.

> Only through my own originally experienced holding-sway, which is the sole original experience of living-bodiliness as such, I can understand another physiological body in which another 'I' is embodied and holds sway.[111]

7.11.3 *The Body as a Facilitator of Subjectivity*

It is because the individual human being, as subject of experience, is contingently dependent on one particular body for all the sense experience he receives, that one's body occupies a special position in the world. It can reasonably be said that it is one's own body that sees, hears, and touches, although it is dependent on a conscious subject to register these sensations and still more to organise them into a significant body of meaning. If one is to be considered a human subject at all, then one essential prerequisite is that one's own body should also be regarded as an integral part of oneself as subject. Once one has accepted one's body as a subject, then there are two alternative paths open to one. Either one accepts one's own body as "the same subject I am", or else one commits oneself to the Cartesian position which holds that there are two distinct subjects or types of subject, the sensual/corporeal and the conscious disembodied self. This dualistic picture of the human subject as a union of mind and body is a particular case of Descartes' wider split between nature and the psychic world, between *res extensa* and *res cogitans*. Husserl explains that according to this view "the world splits, as it were, into two worlds: nature and the psychic world"[112] But this leads to yet another absurdity, as Strawson explains:

> If we try to think of that to which states of consciousness are ascribed as something utterly different from that to which certain corporeal characteristics are ascribed, then it becomes difficult to see why states of consciousness should be ascribed to ... anything at all.[113]

Instead, one is obliged to conclude that the body which facilitates one's subjectivity is in fact a necessary condition of subjectivity. The body is thereby an essential part of the same subject as one is. Kevin Doran explains:

> It is not me in my entirety and on the other hand it is not something outside me which I use, but rather it is an indispensable part of the

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[111] Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (Evanston, IL: Northwestern University Press, 1970), p. 217.

[112] Ibid., p. 60

[113] Peter Frederick Strawson, *Individuals: An Essay in Descriptive Metaphysics* (London: University Paperbacks, 1964), p. 98

> entity which is denoted when I say 'I.'[114]

Lonergan gets round the problem of body by incorporating it into his notion of 'subject'. For Lonergan the body is part of man the human subject, and for him also the subject is a conscious person. When a child comes crying to his mother with the complaint "he hit me" he means, in effect, "he hit my body". It has already been mentioned that, as regards the human body, the words "me" and "my" are frequently interchangeable. The phrase "I hurt myself" can be substituted for "I hurt my hand (leg, arm, head, foot, hand)". While the one who experienced the pain in the first place was the existential subject. Nevertheless, the one offended was the feeling, seeing, imagining, understanding, reasoning child, the person. Lonergan's notion of subject subsumes and includes the notion of person. The subject is a conscious person.

7.11.4 *The Body as Intentional*

It has already been mentioned above that Lonergan recognises two levels of knowing. The more elementary type of knowing man holds in common with the animals and "is constituted completely on the level of experience; neither questions for intelligence nor questions for reflection have any part in its genesis"[115]. The environment which is the object of the senses is already there fully constituted. We can grasp it at this elementary level without the need to understand it or ask questions about it. This level of knowing is a product of biological and instinctive responses to stimuli. Piaget assumes that this is the predominant form of knowing in the neonate as well as in the animal.

Merleau-Ponty also recognises this lower form of knowing and maintains that one's body 'knows' the world upon which it operates and 'knows how' to deal with it successfully, in a way that does not require explicitly formulable thought or beliefs on the part of the conscious subject. He says:

> Our bodily experience of movement ... provides us with a way of access to the world and the object, with a 'praktognosia' [practical knowledge], which has to be recognised as original and perhaps as primary. My body has its world, or understands its world, without having to make use of any 'symbolic' or 'objectifying function',[116]

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[114] Kevin Doran, *What is a Person* (Lewiston, NY: The Edwin Mellen Press, 1989), p. 66.

115 Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (Longmans, London, 1964)

[116] M. Merleau-Ponty, *Phenomenology of Perception* (London: Routledge, 1994), pp. 140 - 141.

There is little doubt that Lonergan would not use the word "understands" vis-a-vis this lower form of knowing, but otherwise Merleau-Ponty and Lonergan appear to be largely in agreement on this point. His claim that this 'practical knowledge' possessed by the body must be "original" appears to mean that it cannot be analysed further by reference to more basic concepts. His claim that it must be "primary" seems to imply that he sees it as providing the foundation for other, higher forms of knowledge. Both Piaget and Lonergan would be in general agreement with this. For example, abstract knowledge of spatial relationships is seen as rooted in and derived from the practical knowledge displayed in the actual ability to perform such overt movements in the first place.

However, Merleau-Ponty's attempt to revise the intellectualist conception of intentionality to extend the notion of intentionality to the body also appears , at first glance, to contradict Lonergan's conception of intentionality, despite the fact that the attempt is a logical extension of what has been said above. But, if one considers the following statement from Merleau-Ponty, all is not lost:

> These elucidations enable us clearly to understand motility as basic intentionality. Consciousness is in the first place not a matter of 'I think that' but of 'I can'.[117]

In other words, the irreducible and foundational form of intentionality is that which is involved in one's ability to act on the world. In such action it is one's body which is 'directed towards' that world. For Lonergan, however, consciousness and intentionality apply to both 'I think' and 'I can', which merely represent two different levels of conscious intentionality. The 'pure desire to know' after all is both precognitive and intentional.

Consider the following quotation from Merleau Ponty:

> In the action of the hand which is raised towards an object is contained a reference to the object, not as an object represented, but as that highly specific thing towards which we project ourselves, near which we are, in anticipation, and which we haunt.[118]

Could Lonergan really support such a statement? Firstly, Lonergan does regard sense experience as intentional. After all, the very word 'experience' implies consciousness. Secondly, it is of the nature of intentionality that an orientation towards the object as represented is an orientation towards the object itself, "that

[117] Ibid., p. 137.
[118] Ibid., p. 138.

highly specific thing." Thus not only perception, but insight, judgement, and decision can all be regarded as orientations which put us in touch more and more fully with the object itself. Except in purely reflex action, the movement of the hand is always under conscious control, and is thus intentional. Merleau-Ponty uses the terms "project", "anticipation", and "haunt" in the above quotation, all of which imply conscious intentionality in the normal accepted sense of the terms.

Does Lonergan, then, also attribute intentionality to the body? The answer is that he does not, but that he can and he should. It is the subject who is conscious and so is the origin of intentionality. If the body is seen as an essential part of human subjectivity, as claimed above, then the body may be regarded as intentional. To say that only the mind is intentional is to deny that mind and body are one organism and so entails falling into a Cartesian trap. Certainly the body which is dead or unconscious is no longer a subject and so is not intentional. A body which is dead is still a substance but not a 'thing'; a body which is alive but unconscious may still be a 'person' but not a subject; a body which is alive, conscious, and intelligent may certainly be both a person and a subject. Apart from reflex activity, all human *doing* originates in the mind; all of human *doing* is both physical and mental; all human *doing* is intentional.

It is quite clear that Merleau-Ponty's notion of intentionality of the body outlined above need not necessarily contradict that of Lonergan. However, it does differ radically from that of Husserl, for whom the body is never other than an intended object for a conscious but non-bodily subject, the ego. Hammond, Howarth and Keat conclude: "Clearly, this [Merleau-Ponty's] conception of intentionality differs radically from the one employed by Husserl in Cartesian Meditations."[119]

7.11.5 *The Body as Limiter*

The body, while facilitating one's subjectivity in a whole range of activities, conscious and unconscious, is also a limiting factor in space and time. One has simply to note Feuerstein's observations that most of what goes wrong with mental functioning goes wrong at his 'input' and 'output' stages (corresponding to

[119] Hammond, Howarth and Keat. *Understanding Phenomenology* (Cambridge Mass.: Basil Blackwell, 1991) p.180. It is possible that these authors do not distinguish clearly enough between the earlier and later thinking of Husserl.

Lonergan's levels of experience and doing) where the mind is most influenced by the subject's corporality. As a conscious self, prescinding from one's spatial and temporal limitations, one can project oneself into any spatial or temporal frame through the agency of the memory and imagination. A child, for example, can take on many roles and play them through to a conclusion, while his body is lying dormant in bed. But while one's body, as already mentioned, plays an important role in constructing one's sense of self, one's subjectivity, yet it is also responsible for a definite sense of limitation and confinement. It keeps one, both literally and figuratively, firmly on the ground (or in the bed). As Kass says:

> Our bodies are isolated, finally unsharable, - yes, even in sexual union - and privitizing; vulnerable and weak; often mute and opaque; and frequently concealing rather than revealing of the soul within. Though highly touted as compliant tools, they all to often are an impediment and an obstacle to our wills, that refuse to do what we want them to do.[120]

Kevin Doran suggests that far from being a denial of corporeal subjectivity, these limitations which the body imposes serve only to demonstrate that the body is no mere token subject, but more of an equal partner in the complex entity that is the human being. This is certainly in line with Merleau-Ponty's thinking. On the one hand Merleau-Ponty rejects the empiricist notion of the human body as a mere object like any other; on the other hand, he also rejects the intellectualists for what he perceives as their failure to see that the body is an integral part of the subject.[121] Kass goes even further to suggest that the human consciousness of the limits imposed by the body actually contributes to the real achievement of the person/subject, i.e. understanding, rationality, judgement, and openness to the transcendent.[122]

> Thinking about the body may sober the thinker and dispel his illusions of autonomy, but it does not cripple him. ... The so-called fall of man is identical to his mental awakening. Moreover the discovery of his insufficiency becomes the spur to his rise.[123]

The very limitations imposed by corporality are, viewed in one way, the very means and vehicle of man's mental development. One has simply to consider the emphasis which Maria Montessori places on concrete didactic materials, and

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[120] Leon R. Kass, *Toward a More Natural Science: Biology and Human Affairs* (New York: The Free Press, 1988), p. 290.

[121] Hammond, Howarth and Keat. *Understanding Phenomenology* (Cambridge Mass.: Basil Blackwell, 1991) p.173

[122] Kevin Doran, *What is a Person* (Lewiston, NY: The Edwin Mellen Press, 1989), p. 66.

[123] Leon R. Kass, *Toward a More Natural Science: Biology and Human Affairs,* p. 290.

Piaget's notion of the cognitive foundation in sensory-motor activity. Equally validly, however, corporality imposes obstacles and limitations to that same mental development. Thus a child cannot perform certain physical or mental operations until/unless the organism has reached a certain critical level of maturity, according to Piaget. Is it possible for these two views to be reconciled? The answer is most definitely in the affirmative. These two poles of corporality, these two apparently antagonistic tendencies, the 'dynamic' on one side and what might be termed 'the inertial' on the other, form the very dialectic of human growth. Feuerstein's view of the human mind, which would be shared by both Lonergan and Piaget, is "a dynamic, flexible, and elastic system whose capacity and structure change as the organism interacts with new stimuli." However, It may be argued that without the inertia and the stability provided by corporality, there would be no "system", elastic or otherwise, and no "structure" to be developed. On another level, the dead weight of corporality and its attendant inertia provide a sense of personhood and continuity which forms such a critical part of a child's sense of identity.

7.11.6 *The Body as Mediator of the Person*

Clarke's analysis of Aquinas' notion of 'being' places the transcendence of the person, and even intersubjectivity, on a foundation of the fundamental relational nature of being itself. Clearly the body also shares in this relational nature of all being. One can say that, while one recognises a person in his actions or his *doing*, and while it is the human person who originates that *doing*, nevertheless it is the body which manifests it; the body may be said to mediate the person to the world at large. One may also say that the person 'shines through' the body. One sees the body but perceives the person beyond. One does not stop at the body, in other words; one perceives the person 'shining through' it; one recognises the complex of traits and mannerisms through one's imagery and insight; one 'names' or formulates to oneself the person thus recognised; through judgment one reaches the heart of the real, another human person; and finally one responds to the good of that person perceived with an affect loaded assent which says "It's good that you exist."[124] All of this happens within an affective milieu, within a complex of feelings, some intentional and conscious, some non-intentional and unconscious, 'community of feeling', 'fellow feeling', 'psychic contagion', and 'emotional

[124] Josef Pieper, see Section 14.5.2 below.

identification'.[125] In all of this, one has not simply two bodies encountering one another, not two 'monads' seeking to communicate and failing, but rather heart speaking to heart, "*cor ad cor loquitor.*"[126]

The human body mediates the person. But the body is a living, dynamic medium. It moves, it speaks, it smiles, it frowns, it gesticulates in a myriad of complex coordinated ways. It would be more accurate to say that the body reveals or mediates the person through its actions or *doing*. Wojtyla goes even further, however, saying that "action *reveals* the person, and we look at the person through his action."[127] In other words, the human person reveals or manifests himself through his *doing*.

The term *doing* as used in this study can very well be replaced by the words 'action' or 'acting', as used by Karol Wojtyla in his book *The Acting Person*. One has to distinguish carefully, however, between the Scholastic term 'act' and what is meant here by *doing,* or action. 'Act' is a very wide metaphysical term indicating the realisation of a 'potency', and it applies to a state of being, regardless of whether the thing in question is animate, inanimate, or spiritual. 'Action' or *doing*, on the other hand, belongs only to the realm of the person: "The kind of acting that is an action ... can be assigned to no other agent than a person. In other words, an action presupposes a person."[128] The term *doing,* as introduced in Chapter Six, also applies to a mode of human existence. An 'action' or a *doing* may be classified as an *actus humanus*, a human act, "with the stress laid on the aspect of purpose and deliberateness."[129] After all, "only man can act purposefully and deliberately."[130] Thus, one can say that 'action' or *doing* is a special case of the metaphysical term 'act' and "issues from the whole conception of being , and more directly from the conception of *potentia-actus,* which has been used by Aristotelians to explain the changeable and simultaneously dynamic nature of being."[131]

As already quoted above, Wojtyla states that "action *reveals* the person, and we look at the person through his action."[132] In other words, the human person

[125] This is dealt with in some detail in Section 17.5 below.
[126] The motto adopted for his crest by John Henry Newman when created Cardinal.
[127] Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 11.
[128] Ibid.
[129] Ibid., p. 25.
[130] Ibid.
[131] Ibid.
[132] Ibid., p. 11.

reveals or manifests himself not so much through his body as through his *doing* which his body mediates and facilitates. One can say of the human person that his *being* is revealed in *doing.* Wojtyla says:

> Action gives us the best insight into the inherent essence of the person and allows us to understand the person most fully. We experience man as a person, and we are convinced of it because he performs actions.[133]

Expressing this in Lonergan's terminology, one can say that one experiences in man all the characteristics of a person through his intelligent intentional action; one gains insights into the person through these same actions; and one judges this to be truly a person through checking or judging these actions which one experiences to see whether they are truly the actions one would expect from a person.

7.11.7 *Body, Movement, and Learning*

One of the consequences of corporality is human movement. Movement is both natural and necessary for man. Every movement which a human person makes is a sensory-motor event, linked to an intimate understanding of one's physical world, the world from which all new learning derives. Movement of one's head aligns one's sensory organs (eyes, ears, nose, and tongue) to environmental input. Subtle movements of the eyes enable one to see at a distance, experience three dimensions, sense one's periphery and focus on the letters on a page. Refined movements of one's hands allow one to touch and manipulate one's world in infinitely complex ways.[134]

Piaget describes the origin of all cognitive development as a coordination of interiorised sensory-motor schemes of action. To him, thinking is originally a coordination of interiorised physical activity. But there is a sense in which all learning seems to demand movement. It is a matter of common experience that most children's learning is accompanied by much scratching of heads, biting of pencils, rocking of chairs, low level vocalisation etc. It is possible that the natural restlessness of children is simply a yearning for a more natural and active form of learning. Hence the preference for project work and the phenomenal success of Eric Mazur's method of "Peer Instruction."

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[133] Ibid.

[134] Carla Hannaford, "Movement", *Smart Moves* (Arlington, Virginia: Great Ocean Publishers, 1995), p. 96.

Every time a child moves in an organised, graceful manner, full brain activation and full mind/body integration occurs, and the door to learning opens naturally. Howard Gardner, Rudolph Steiner, Maria Montessori, Glen Dolman, and many other outstanding educators espouse the importance of movement to the learning process. Maria Montessori complains that:

> "The first stretching out of those tiny hands towards things, the impetus of a movement that represents the effort of the ego to penetrate the world, should fill the adult observer with wonder and reverence. And instead man is afraid of those tiny hands as they stretch out to the valueless and insignificant objects within their reach; he sets out to defend these objects against the child. He is constantly repeating, "Don't touch!" just as he repeats, "Sit still! Be quiet!"[135]

7.11.8 *The Notion of Bodily Space in the Development of the Subject*

It has been argued that the body is an essential part of the conscious subject. From the kinaesthetic-tactile experience of the body comes the first, most fundamental, and most basic sense of self. The body is also the child's centre of orientation in the world; from it comes his first notion of space. Lonergan explains:

> Learning the differentiation of the different members of the body, the distinction between them, the use of each, the coordination of the movements of all, is the formation of a first notion of space.[136]

This human body is itself a spatial entity. But this part of physical space is an integral part of the very subject that experiences sensations and feelings. This experience of tactile and kinaesthetic sensation changes when the child moves his fingers, or his arms, or his legs, or turns his head etc. This set of felt differences provides an orientation in space, and a rudimentary notion of space itself.

> Space is a construct of up and down, right and left, forward and backward, where the differences between up and down, right and left, forward and backward are felt. They are on the level of feeling movement, feeling what is touched. That is the first notion we form of space. It is a construct of felt differences.[137]

With it also comes the primitive notions of me and not me, inside and outside, inner and outer, having and not having, mine and not mine.

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[135] Maria Montessori, *The Secret of Childhood* (Calcutta: Orient Longmans Ltd., 1963), p. 86.

[136] Bernard Lonergan, Topics in Education, F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 10* (Toronto: University of Toronto Press, 1967), p. 162.

[137] Ibid.

The second notion of space is visual. The child has visual experiences of height, breadth and depth. These visual experiences are another approach to space. By 'space' in this context is meant the spatial position of things, their sizes, and their relations one to another. When this visual apprehension of space, the visual layout and organisation of objects, is united with the kinaesthetic-tactile apprehension of space, it admits of greater development and indefinite extension:

> It can be extended to include not only things in the nursery but everything in the house, everything in the town, everything on earth, as well as the stars, the sun, and the moon.[138]

With it the child begins to grasp the notions of front and back, left, and right, near and far, where one is, in other words, in relation to external things. He begins to grasp them first in relation to his own body; the embodied subject is always at the centre of orientation. Only later, when he develops the capacity for mental representation (between eighteen months and two years), can he achieve sufficient freedom from the concrete to begin to extend these notions to other objects like houses, buses, and even other people. This freedom from the concrete is what causes Piaget to place the first stage of abstraction at this age. Lonergan also regards imagery or *phantasm* as the first level of abstraction in the mind. A very good example of this integration of the two first notions of space, the purely physical and the visual, is given in the following quotation from Standings book, *Maria Montessori: Her Life and Work:*

> I recall a lecture in which Montessori gave a description of a baby of six months who was in its pram, and holding an object. With a fixed expression of attention and concentration directed to its own hand, the baby slowly opened its fingers, one by one, beginning with the first until the object (a rattle) fell to the ground. When it was replaced in the child's hand, it repeated the process - many times. Evidently, said Montessori, it was not the object or its falling which fascinated the child, but the discovery of its own fingers, and the fact of prehension.[139]

The third development in the notion of space which involves decentering and reversibility, depends for its realisation on the development of the capacity for mental representation, as already mentioned. Visual space has as its centre the subject who is doing the looking. Lonergan cites the experiments performed by Piaget in which he gave the child a three-dimensional design of a mountain range. Piaget then placed a doll in a different position from the child relative to the model,

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[138] Ibid., p. 162.

[139] E.M. Standing, *Maria Montessori: Her Life and Work* (London: Hollis and Carter Ltd., 1957), pp. 76 - 77

and asked: "Now, how do these mountains look to the doll?" The child below the age of about seven or eight who was not able to mentally put herself in the doll's shoes, tended to describe the mountain in the same way as she saw it herself. She was not able to shift perspective, in other words. From the age of seven or eight onwards, however, there was "a progressive discrimination and coordination of perspectives."[140] This dramatic shift of perspective "from egocentric realism to relational coordination"[141] plays an important role in recognising 'other' and so distinguishing 'me' from 'not me'.[142]

7.11.9 *Modes of Embodiment and 'Nuptiality'*

It is of the very nature of *having* that one can dispose of what one *has*. The disposability of what one *has* is, according to Marcel, the origin of the inherent insecurity of all *having*. Erich Fromm explains:

> The anxiety and insecurity engendered by the danger of losing what one has are absent in the being mode. If I am who I am and not what I have, nobody can deprive me of or threaten my security and my sense of identity. My centre is within myself; my capacity for being and for expressing my essential powers is part of my character structure and depends on me.... .[143]

What one *has* may be used. What one *has* may also be given to another, or shared with another. There are different degrees of giving. One can give of one's *doing*, in which case one has a situation of shared work or *synergy*. One can give of what one *has*. But one can also give of what one *is*, except that what one *is* is not altogether transferable to another, so the most one can do is *share* of what one *is*.

One's body is not altogether a possession, something one simply *has*. Marcel has argued already that, while the *having* one's body may be viewed as the primordial *having*, the *having* which is the model for all other *having* or possessing, nevertheless one's body is in a sense also what one *is*, part of the *being* mode of existence. To share one's body with another, as one does in marriage, is to share not just another possession but is, in a sense, a sharing in what one *is*.

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[140] Jean Piaget & Bärbel Inhelder, *The Child's Conception of Space* (1948), from Howard Gruber & Jacques Vonéche (Eds.), *The Essential Piaget* (London: Routledge & Kegan Paul, 1977), p. 624.

[141] Ibid., p. 626.

[142] The fact that recent research tends to show that such decentering actually makes its appearance at a much earlier age than Piaget believed does not negate the fact that it plays an important role in the child's development of authentic intersubjectivity, even if it is at an earlier age than he predicted.

[143] Erich Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.112.

To be embodied is an essential part of one's nature as a human subject. Pope John Paul II states that "right from the beginning, man was able to distinguish himself, almost to be individualized - that is, confirm himself as a person - through his own body."[144] There are, however, two principal modes of embodiment, male and female. It follows that there are two principal modes of being a subject/ person, male and female. Sex must be regarded as a characteristic of the person as well as of the subject; sex is a characteristic of an intelligent, intelligible, unity-identity-whole. Sex, after all, has a bearing on the identity of the person, two modes of embodiment giving rise to two forms of identity. So, one might also say that a physical complementarity of embodiment is mirrored in a complementarity of identity or personhood rooted in the intellect.

In the English language, sexual relations has traditionally been expressed by the verb to 'know', as expressed by the term "carnal knowledge," or as in the expression "Adam had knowledge of his wife Eve." While knowledge in this sense refers to Lonergan's more basic form of knowledge which is shared with the animals, nonetheless it is clearly a type of knowledge which has an impact on a higher psychological plane, a type of knowledge which lifts the veil on mystery so that they look on one another with new eyes, as it were.

Man, according to Pieper, is in *status viatoris.* This is an instance of what Aquinas means when he says that all being is in a state of becoming. It follows that there is an inherent 'incompleteness' in man at any stage in his life. Christopher West explains:

> Everyone knows the experience of "incompleteness." It drives us to seek communion with others. Not only do we want to be with others; we want to *know* another person and have our persons *known* by another person.[145]

He uses this idea to point towards or throw light upon the notion of what he terms 'nuptiality':

> Man is not fully human - his creation is not complete - until he emerges in his "double unity" as male and female. Double unity speaks of a "two-in-oneness," which is man's completeness.[146]

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[144] John Paul II, *The Theology of the Body* (Boston: Pauline Books and Media, 1997), p. 113.
[145] Christopher West, *Theology of the Body Explained* (Herefordshire: Gracewing, 2003), p. 74
[146] Christopher West, *Theology of the Body Explained* (Herefordshire: Gracewing, 2003), p. 74

It has been argued already that one does not simply *have* a body but to a degree one can say with Marcel that one *is* a body. When what one *shares* with another is one's body, then this mutual possession takes on an element of the sharing of *being* also; nuptiality is not just a sharing of what one *has* but also of what one *is*. Because it is in the *having* mode, the body is something that can be shared. Because it is also an aspect of the *being* mode, the sharing of the body is, in a sense, the sharing of one's very being, "an overcoming the frontier of solitude,"[147] an overcoming the limitations of what Lonergan means to be a "unity-identity-whole." The body is unique in that it hovers or is median between what is *had* and what *is*. In so far as it is *had*, one can say that it is the medium whereby the person manifests himself. One can say that the person is mediated to the world by the body, and that the world in turn is mediated to the person by the same body.

Likewise, one person is mediated to another by the body. But it is at the border between *being* and *having* that these two lives meet. It is because this border is itself imprecise and ambiguous, not precisely *being* mode and not precisely *having* mode, that two separate beings can almost merge, "almost" in the same sense in which *being* and *having* in this case are "almost" inseparable, and yet "almost" separable. It is in this sense that Marcel can say:

> When I say a being is granted to me as a presence or as a being (it comes to the same, for he is not a being for me unless he is a presence), this means that I am unable to treat him as if he were merely placed in front of me; between him and me there arises a relationship which, in a sense, surpasses my awareness of him; he is not only before me, he is also within me - or, rather, these categories are transcended, they have no longer any meaning.[148]

Yet Marcel neglects the fact that the person is not just relational but also substantial, a being-for-itself, with a discrete intrasubjectivity. He also neglects the fact that one of the factors which facilitates such a "transcendence" of the notions of "before me" and "within me" is affectivity or emotion by which I am able to make an assent to her as a person and experience 'fellow feeling' or empathy for her as well as 'community of feeling' or sympathy, 'psychic contagion' and 'emotional identification'. Linked to all of these is the intellectual capacity to place oneself mentally 'in another's shoes', to transcend self with its egocentric perceptions and see things from another's angle and to experience things as 'one feels' that the

[147] Ibid., p. 77.

[148] Gabriel Marcel, Manya Harari trans., "On the Ontological Mystery", *The Philosophy of Existence* (London: Harlill Press, 1949), p. 24.

other experiences them.

7.12 *The Moral Person*

7.12.1 *Natural Law*

This study makes the assumption that there is an identifiable human nature, and that this nature is the same for all human beings. This, it may be argued, is a safe assumption in that it is shared, at least implicitly, by all of the various psychologists and philosophers on which the study is built. This nature is also 'identifiable' by man; it is intelligible, discoverable; and once he has discovered it "it is up to him to put himself in tune with the ends necessarily demanded by his nature."[149] This putting oneself "in tune" with one's own nature entails 'appropriating' to oneself all that one *is,* at its deepest and fullest level.

This notion of a 'natural law' dates back to very ancient times. Thus one finds, for example, in Sophocles' play *Antigone* a reference to "the unchangeable unwritten code of Heaven" which "is not of today and yesterday, but lives forever, having origin whence no man knows."[150] Jacques Maritain, however, gives a more Scholastic interpretation of natural law when he says:

> The natural law of all beings existing in nature is the proper way in which, by reason of their specific nature and specific ends, they *should* achieve fulness of being in their behaviour.[151]

He goes on to imply that while the word *should* has a metaphysical meaning, as when one says that the eye *should* of its essence be able to see, and the intellect *should* of its essence be able to understand. For man, however, the word also has a moral implication, implying moral obligation, as when one says that the child *should* attend to what is on the blackboard, *should* attempt to understand the problem, and *should* be encouraged to express, formulate, and evaluate what he has understood.

Thus one can say that the term natural law is not just a theoretical or philosophical notion but that for the human person it carries a moral imperative to

[149] Jacques Maritain, *Natural Law: Reflections on Theory & Practice* (South Bend, IND: St. Augustine's Press, 2001), p. 27.

[150] Sophocles, *Antigone* , ii, in *The Dramas of Sophocles rendered in English Verse* (Cambridge: Deighton Bell and Co., 1888), pp 452 - 460.

[151] Jacques Maritain, *Natural Law: Reflections on Theory & Practice* (South Bend, IND: St. Augustine's Press, 2001), p. 29.

assent to what is clearly seen to be a good and to act according to this assent. Such an assent to one's own inner nature perceived as a good is the final act of what Lonergan describes as 'self-appropriation of interiority' and, since it requires an assent of the will, it carries with it all the weight of a moral imperative. One could say that that ultimate moral imperative is "Become all that you can be," or to achieve what Pieper terms "existential Wholeness."[152]

Looking at the situation from a slightly different perspective, one can say that according to natural law, man has certain basic needs.[153] Ultimately, one can say that he has a need to *be*, to *have*, and to *do*. It will be argued later that the basic needs identified by John Finnis can be grouped under these 'triarchic' headings.[154] Corresponding to these natural needs man can be said to have 'natural rights.'

7.12.2 *Human Defect*

The fact that the human being is somehow defective or deficient is fundamental to any full consideration and exploration of the human condition. The all too apparent, ever-present reality of defective human functioning is a topic which must be addressed by any philosophy hoping to throw light on the education and development of the human person. One can almost say that it is 'natural' for humans to be defective in one way or another. After all, one of the main functions of education is to try to make up for these deficiencies in the functioning of young people. For 'defect' one could use the term, as Pieper does, "to miss the mark." One must then consider what this "mark" is, what it means to 'hit' the mark, and why all children are in one way or another 'defective', or fail to hit the mark. Where such a missing of the mark is morally culpable one can speak of moral defect. However, the term 'defect' is used here in a much wider sense.

When one speaks, as Feuerstein does, of 'deficient cognitive functions', for example, one is in fact considering the 'efficacy' of human actions. Are defects, then, all to do with defects in human *doing*, one might ask. The answer must be no, because common experience tells one that all too frequently a failure in *doing* is due to failure in human motivation which belongs to the *being* mode of human existence more than the *doing* mode. In practice there can be human defects in the

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[152] Josef Pieper, *Scholasticism* (South Bend, IND: St Augustine's Press, 2001), p. 90.
[153] This topic is dealt with in some detail in Chapter 12 of this study.
[154] See Section 13.7 below.

having mode, as when one lacks a particular piece of essential knowledge, for example; there can also be defects in the *doing* mode, as when one lacks a particular vital skill; however, most common are defects in the *being* mode, as when one fails to become all that one can *be*.

Man has "the power to determine for himself the ends which he pursues."[155] One can argue that all human *doing* is ordered towards some goal. All human activities "are human works ... proceeding from human design and springing up from man's own goals that he had previously set for himself."[156] Pieper continues:

> The *first* possibility of making a false step is an "artistic error" in the strict sense, that is, the failure to get "just right" whatever goal the artist has in mind.: the marksman fails to hit the bulls-eye, the surgeon nicks an organ essential for the life, the engineer's calculations of the bridge's tensile strength prove to be wrong.[157]

The first human deficiency, in other words, is failing to reach the goal or simply "missing the mark."

All too often, however, a child might reach what he regards as an important goal and yet 'miss the mark' in regard to his broader development. He might achieve some success in the *having* mode, for example, which might even undermine his overall development in the *being* mode. Thus the child who guesses correctly the answer to a question may insist that he has achieved the required goal, but because he has not used his logical reasoning powers, or the particular mental strategy being taught by the teacher, he may be said to have not only missed the mark in this particular instance, but missed the central point of the class itself. Pieper explains:

> The *second* ever-present possibility for making a false step ... consists in the dilemma that one might reach the goal set for oneself, perhaps brilliantly, but at the same time, *for that same reason*, will have violated the universal goal of existence as a whole.[158]

By reaching one's short-term goal one may have in fact put the wider goal of one's life, or at least one's education, that bit farther out of reach. A child may have executed a particularly brilliant, well thought out, well planned theft of another child's property, for example. Looking at it from the point of view of the mental

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[155] Jacques Maritain, *Natural Law: Reflections on Theory & Practice* (South Bend, IND: St. Augustine's Press, 2001), p. 27.

[156] Josef Pieper, *The Concept of Sin* (South Bend, IND: St. Augustine's Press, 2001), p. 23.

[157] Ibid., p. 25.

[158] Ibid.

strategies involved one cannot help but admire their execution as a value or a good. However, looking at the situation from the point of view of the child's overall development and goal in life one must concede that his *doing* has certainly not added any value either to himself or to his world. Pieper says that "something might be well made, perfectly said, charmingly formulated, and still, when looked at from the perspective of the whole and of what really counts, can be false and deeply vicious."[159]

What the child may have failed to grasp is that the most basic, most fundamental things in life must be the guiding rules, the stratagems, by which reality is perceived, insights grasped and formulated, solutions and possible answers weighed against one another and judged for their relative merits, and practical and moral decisions made and carried through. Such rules, or 'precepts', constitute a type of natural law. Feuerstein has shown that many children who 'miss the mark' are deficient in their functioning because they have never learned the rules of their nature, have never had the precepts which are enshrined in their cultures properly mediated to them, have never properly 'appropriated' these universal and invariant functions operative in their natures.

Man, as Pieper is fond of saying, is in *status viatoris;* [160] he is in a continual state of becoming. But man is also a traveller in his own self-knowledge.[161] Man grows in understanding of his own nature, his essence. This growth in self-knowledge is also social and cumulative. It follows that man's understanding of natural law unfolds with time. As Maritain says, "it develops in proportion to the degree of moral experience and self-reflection, and of social experience also, of which man is capable in the various ages of his history."[162] Natural law insofar as it is known is not, as we would like to think, 'carved in stone' for all time, in other words. One grows in one's grasp of the natural rules of one's existence. Lonergan, for example, has contributed a whole new chapter to man's understanding of the dynamics of his inner self. This must now be embraced as part of man's heritage, part of man's understanding of what is natural to man.

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[159] Ibid., p. 27.

[160] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997)

[161] W. Norris Clarke, *Person and Being* (Milwaukee: Marquette University Press, 1998), p. 48.

[162] Jacques Maritain, *Natural Law: Reflections on Theory & Practice* (South Bend, IND: St. Augustine's Press, 2001), p. 38.

7.12.3 *What Does it Mean to be Moral?*

But where, one might ask, does the notion of "moral subject" mentioned by Clarke fit into the overall picture? In so far as this study can speak of a moral law, in so far as a moral precept can be derived from what has been discussed and considered thus far, then it must be something like the following: "*Become* fully what you already *are*, in the deepest, most authentic longing of your nature."[163] Clarke goes on to explain more fully:

> Thus the fully mature person does good and avoids evil, not primarily because he will be rewarded or punished according to some law imposed from without, but precisely because he sees it as something *good* to do (or avoid), in creative harmony with his own nature and the whole order of the good.[164]

After all, Aquinas himself reminds one that "every man is obliged to act according to reason [i.e., in context according to his or her own personal participation in reason]."[165] Lonergan would say that such responsibility, such obedience to the dictates of one's own conscience demands that one be 'authentic', that one self-appropriate to the maximum that one is able, that one strive to *become* all that one can *be*. This 'self-appropriation' entails what Clarke prefers to call "self-possession" or what might be termed the *having* of one's own *being*. This self-possession finds expression in two main ways; (1) in the order of knowledge through self-consciousness or self-awareness, which enables the person to meaningfully say "I"; (2) in the order of action or *doing* , through self-determination or freedom of the will, which enables the person to say "I am responsible."

Clarke concludes that "responsible obedience, which alone is worthy of the moral dignity of the human person, requires that I myself freely and responsibly judge whether it is here and now *good* for me to obey, a judgment which cannot be abdicated to anyone else."[166] But by exercising one's freedom of choice one is not only freely determining one's own particular actions, one's *doing,* but one is also determining one's own self as a person, *who* one is, one's *being*. "Thus in every free responsible act ... one determines oneself not only to act but also to be."[167] This is what Karol Wojtyla appears to mean when he says "moral values - good or evil - not only determine the inner quality of human actions, but they also never enter the

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[163] W. Norris Clarke, *Person and Being* (Milwaukee: Marquette University Press, 1998), p. 51.
[164] Ibid.
[165] Thomas Aquinas, *De Veritate q. 17, art. 4 ad 5.*
[166] W. Norris Clarke, *Person and Being*, pp. 52 - 53.
[167] Ibid., p. 55.

dynamic sequence of human actions without leaving an imprint whereby man as a person, owing to his actions that may be good or evil, himself becomes either good or evil."[168] And Clarke concludes:

> By my actions therefore, especially the repeated ones, I gradually construct an abiding moral portrait of myself, like an artist's self-portrait, proclaiming implicitly, "This is the kind of person I am."[169]

By 'action' or *doing* is meant acting humanly, that is acting intelligently under consciousness. When one says 'conscious acting' one implicitly refers to the kind of acting which is related to, and characteristic of, the human will; for *actus humanus* one can just as well use the term *actus voluntarius*. Thus 'action' or *doing* belongs not just to the metaphysical or 'ontic' realm, but also to the psychological, ethical, and moral realms.

Just as Lonergan's third level, the level of judgment, has to do with the apprehension of the true or the real, so Lonergan's fourth level, the level of decision and action, has to do with the apprehension of good and value as applied to actions or *doing;* it has to do with ethical values, in other words. Wojtyla says:

> Good and evil manifest themselves in actions, and by actions they become a part of man. It is not surprising, therefore, that ethics, especially in the traditional approach, has always assiduously concerned itself with action and man. Examples can be found as early as the *Nichomachean Ethics.*[170]

Wojtyla goes on to say that since actions, or *doing,* reveal what it is to be a human person, and since actions can be good or bad and so lead to a consideration of ethical values, so it is not possible to separate a consideration of moral values from an account of the human person. Furthermore, He was already quoted above as saying that "moral values - good or evil - not only determine the inner quality of human actions, but they also never enter the dynamic sequence of human actions without leaving an imprint whereby man as a person, owing to his actions that may be good or evil, himself becomes either good or evil."[171] In this sense, one might say that a man *becomes* what he *does.*

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[168] Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 13.
[169] W. Norris Clarke, *Person and Being,* p. 55.
[170] Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 12. The *Nichomachean Ethics* referred to here is one of the major works of Aristotle.
[171] Ibid., p. 13.

7.13 *The Authenticity of the Subject and His World*

7.13.1 *The Subject, Concern, Horizon, and World*

Lonergan says that as the subject grows and develops, his world changes. He distinguishes carefully between what he means by 'his world' and 'the world'; "'the world' is what is there to be known, and that is unchanged by its being known." On the other hand, 'his world', the subject's world "is correlative to the subject: it may be a world that is mostly fantasy; it may be the real world; but its *differentia* is that it is the world in which the subject actually lives and develops."[172] The subject's horizon is what determines his world. But his horizon and his world are not the same thing. Lonergan explains:

> The horizon ....is an organization of possible selections of profiles. The horizon is not something you ever see, it is a collection of possible profiles.[173]

and again he says that *"my* world is the part of the universe determined by the horizon of my concern[174] Husserl, on the other hand, does not make such a distinction between 'his world' and 'the world'. To him the world in which the subject lives and moves and has his being, his *Lebenswelt* or 'life world', is the only real world. He says:

> the only real world, the one that is actually given through perception, that is ever experienced and experienceable - our everyday lifeworld.[175]

To Lonergan the horizon of the subject is comparable to what the author Thomas Friedman is referring to when he speaks of:

> the lens, the perspective, the organising system - the superstory - through which I would look at the world, make sense of events, prioritize them, opine upon them and help readers understand them.[176]

One's horizon is determined by one's prior learning and experience while it, in turn, determines the number of questions one can ask when confronted by a new

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[172] Bernard Lonergan, "*Existenz* and *Aggiornamento*". In F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 224.

[173] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 84.

[174] Ibid., p. 85.

[175] Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (Evanston, IL: Northwestern University Press, 1970), pp. 48 - 49.

[176] Thomas L. Friedman, *The Lexus and the Olive Tree* (New York: Random House, 2000), p. 5.

situation or new experience. It also determines the range of things one will be conscious of in the 'real world' and this selection, in turn, determines 'his world'. Lonergan summarises the interplay of these various terms and concepts as follows:

> Thus we have four terms, four moments in concrete existence: subject, concern, horizon, world. The subject's concern determines his horizon, and his horizon selects his world. With that notion of subject-concern-horizon-world, one can move from the child's world to the world of the man.[177]

As the child develops he goes, in Lonergan's terms, from a world of immediacy to a world mediated by meaning.

7.13.2 *Human Authenticity*

It has been pointed out already at the beginning of this chapter that what Lonergan means by the term *existenz* is the state of being an 'authentic' human being, "what it means to be a human being in the proper, genuine, authentic sense."[178] In man one can say that physical, chemical, biological, animal, and cognitive laws hold sway according to a definite ordered hierarchy, whereby each lower level is 'sublated' to the next higher, and so on. For an animal to be such would mean being a completely authentic animal. Thus, at the level of the animal the laws of sensitive psychology are operative and dominate in such a way that no physical, or chemical, or biological law is violated. The laws of the lower genus are at once retained and sublated in such a way that they become perfectly subordinate to the domination of the higher synthesis. For man, however, operating at a fourth level of synthesis, that of intellect and freedom, things are otherwise:

> In man the highest specifying element - his intelligence and freedom - does not exercise automatic control over his inferior pars. Rather, to 'exist' to become a truly authentic human being, man must freely move himself out of the state of potentiality to the state of radical dominion and full human actuality.[179]

To "freely move himself out of the state of potentiality to the state of radical dominion" demands an exercise of consciousness and 'self-appropriation of interiority'. To be an authentic human being, in other words, entails the conscious exercise of intellect and will. Lonergan gives the following example which sits well

[177] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 85.
[178] Bernard Lonergan, *Collected Works of Bernard Lonergan, Vol 7: The Ontological and Psychological Constitution of Christ* (Toronto: University of Toronto Press, 2002), p. 19.
[179] Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Dublin, Gill & Macmillan, 1974), pp. 31 - 32.

with Feuerstein's 'active-modificational' approach to human development:

> The child wants to do things itself, and boys want to decide for themselves, and adolescents want to find out for themselves. And teachers, parents, and others have to take account of that development, have to let their charges do more and more for themselves, decide more and more for themselves, find out more and more for themselves. There comes a critical point when one finds out for oneself that one has to decide for oneself what one is going to do with oneself. That's the moment of *existenz*. You find out for yourself that it's up to you to decide for yourself; and when you decide for yourself, you make the existential decision, you decide what kind of man you are going to be.[180]

7.14 *Chapter Conclusions*

Before you can speak of his education and development one must know what the human person is in himself. This chapter has sought to clarify in philosophical terms what is meant by the term person and how the notion of the person relates to that of the subject. In the distinction between person and subject lies the distinction between man as an intelligent thing, an intelligent 'intelligible unity-identity-whole', and man as conscious. Thus a man is the same person today as he was when he was a child, whereas his level of consciousness, his status as subject, may vary not only with age but with his level of intellectual functioning at a particular time. Thus, the notion of man as intelligent is an insight into human nature, an abstraction from observable behaviour, a conception, while the notion of subject is essentially existential and stems from the concrete experience of what it is to be a human being. A human being is both a person and a subject, however, and while the two may be separated conceptually, it is more correct to speak about the individual as a person/subject.

This chapter has also sought to 'flesh out' Lonergan's rather intellectualist notions by a closer consideration of the notion of corporality and its implications for his notions of person and subject. The overall unity and continuity of the person/subject is dependent on the way in which his physical, chemical, organic, animal, and cognitive natures are sublated one to the other to produce a realised, authentic human being.

The person is mediated by the body. One can say that the body reveals or

[180] Bernard Lonergan S.J. "Philosophical Positions with regard to Knowing". In Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 6* (University of Toronto Press, Toronto, 1993), p. 239.

mediates the person through its actions or *doing.* Wojtyla goes even further, however, saying that "action *reveals* the person, and we look at the person through his action."[181] Human learning is also mediated by these same human actions, not only through the intentional reaching out of the senses, but also by dynamically acting on the world itself. Learning, in the words of Freire, is a praxis.

The next four chapters deal with "The Transcendent Nature of Man" viewed from psychological and philosophical points of view. With these chapters one hopes that the study is getting closer to an understanding of the nature of the human person and of his development and, in the process, also getting closer to a fuller and more practical definition of what is meant by the term 'education for *being.*'

[181] Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 11.

Part III

The Transcendent Nature of the Human Person

Chapter 8

Human Development and Self-Transcendence

> "In a higher world it is otherwise, but here below to live is to change, and to be perfect is to have changed often."
>
> John Henry Newman[1]

8.1 *Introduction*

For Aquinas, Lonergan, and Clarke, all being is inherently dynamic. One can say that all being is in process of becoming. Fromm appears to agree with this when he says that

> there is no being that is not at the same time becoming and changing. Living structures can be only if they become; they can exist only if they change. Change and growth are inherent qualities of the life process.[2]

But for human beings in particular to learn is to be changed. Human persons, one can say, are modifiable beings endowed with the propensity to learn, "to change or modify the structure of their cognitive functioning to adapt to changing demands of life situations."[3] They are creatures of complexity and of change, of routine and of innovation. One can say that human change in the form of development and learning are observable truths, irrefutable facts. One can also argue that the whole of education is structured on the assumption that children can be changed and their development promoted.

"Nature," says Aristotle, "is a principle of movement and change"[4], in which things come into being, grow towards maturity and then fall away to decay. Teleologically, one can say that the movement from non-being to being is always an orderly advance towards the realisation of an end for which a particular organism or object was originally created. The outlook of Bernard Lonergan, like that of Aristotle, is also thoroughly teleological; it is deeply impregnated with the notion of purpose. A thing realises its nature to the degree to which it grows in its

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[1] John Henry Newman, *Essay on the Development of Doctrine,* p. 40.

[2] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.34.

[3] Reuven Feuerstein, Yaacov Rand, Carl Haywood, *L.P.A.D. Learning Propensity Assessment Device - Manual* (Jerusalem: International Centre for the Enhancement of Learning Potential, 1995), Section 1.1.

[4] Aristotle, *Physics*, iii, 1.

capacity to fulfil the function for which it is intended, to the degree to which its potency is realised in act.

The unifying concern in this chapter will be Lonergan's notion of self-transcendence, and with his 'unrestricted thrust to self-transcendence,' which is the drive or motive power of human development. One can say that Lonergan's 'pure desire to know' is simply one manifestation of a deeper, more basic, more fundamental 'desire to be', linked, to his 'notion of being'. Another manifestation of the same desire to be would be the desire to love and be loved. Carley implies as much when she speaks about Lonergan's "'unrestricted thrust to self-transcendence' which he claimed to be the ground of intellectual vitality expressed in questioning and longing for knowledge and for love."[5] It is this same desire to be, or instinct for self-fulfilment, or self-realisation, which Sacks describes as "that eager and anxious tension of anticipation, of intention, that normally drives us through life."[6]

Aristotle's philosophy, in all its aspects, including his ideas on education, was strongly influenced by his study of growth and development in organic nature. This underlying belief or attitude is still very much in vogue among scientists and philosophers today, even if some such philosophers, like Dewey and Piaget, would feel uncomfortable with the idea of a 'purpose' in nature.[7] However, Aristotle would be in strong agreement with the following more recent scientific assertion:

> Living organisms are, then, essentially dynamic and self-maintaining systems perpetually engaged in varied activities, and these are always of a 'directive' nature in the sense that they appear to be directed to attain a particular goal or end result, which is of advantage to the organism. Seen as a whole, the vital activities have a cyclic nature, since all organisms undergo development, reproduction, and, as individuals, death. This life-cycle is, perhaps, the most characteristic feature of living organisms.[8]

Like Aristotle, Aquinas and Lonergan would also subscribe to such a dynamic and teleological view of nature. This chapter will also attempt to show that Lonergan's notion of transcendence is not just a characteristic of the human mind but, in a sense, it is to be found at least in embryonic form in all organic growth.[9]

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[5] Moira T. Carley, *Bernard J.F. Lonergan S.J. : On Teaching* (Harvard University, Ed.D. Thesis, 1989), p.8.

[6] Oliver Sacks, *An Anthropologist on Mars* (Picador, London, 1995), p. 46.

[7] Dewey, however, does seem to recognise the notion of purpose as relating to a child's actions. See John Dewey, *Experience and Education* (New York: Collier Macmillan Publishers, 1938), p. 69.

[8] A.J. Grove and G.E. Newell, *Animal Biology* (London: University Tutorial Press, 1974), p. 6

[9] See Section 8.9 below.

It will be further argued in this chapter that the theories of Lonergan are also consistent with the view expressed in the above passage that "vital activities have a cyclic nature." The last chapter argued that Aquinas' notion of being is itself relational and that this relational nature of all being underpins the inherent transcendent nature of the human person. This notion of the inherent relational nature of all being comes from Clarke and is not explicitly dealt with in Lonergan's works. This chapter now proceeds to try to identify the common characteristics of all human growth, whether viewed as biological, neurological, psychological, emotional, or social. By so doing, it is hoped to add a 'philosophy of organic growth' to the overall psychological and philosophical model of education being developed in this study.

8.2 *Homeostasis and Transcendence*

From a scientific point of view, balance or homeostasis appears to be a characteristic common to all living organisms. According to Damasio, homeostasis "refers to the coordinated and largely automated physiological reactions required to maintain steady internal states in a living organism"[10] in the face, one should add, of external variability. Thus homeostasis is a characteristic of all living organisms in equilibrium with their environments, so that for every change in the environment there is a corresponding adjustment in the organism that restores the original balance within the organism itself as well as that between the two interacting domains, internal functioning and external environment. This regulation of internal composition is not absolutely constant but is held within certain critical limits that the system can tolerate without interruption to its normal functioning.[11]

One example of homeostasis is the maintenance of a constant body temperature despite changes in the ambient temperature. If the temperature goes up in the outer environment, an internal cooling mechanism is triggered keeping the interior of the organism at a steady temperature. Another example comes from more recent research into how one's state of mind can influence how well one resists, or recovers from, infectious or inflammatory diseases:

> The brain's stress response is activated in threatening situations. The immune system responds automatically to

[10] Antonio Damasio, *The Feeling of What Happens* (New York: Harcourt Brace and Company, 1999), p. 39.

[11] This internal stabilisation was first recognised by the French physiologist Claude Bernard (1830 - 1878) and developed by the Harvard professor, Walter B. Cannon (1871 - 1945), who coined the term 'homeostasis'.

> pathogens and foreign molecules. These two response systems are the body's principal means for maintaining an internal steady state called homeostasis. A substantial proportion of human cellular machinery is dedicated to maintaining it.
>
> When homeostasis is disturbed or threatened, a repertoire of molecular, cellular and behavioral responses comes into play. These responses attempt to counteract the disturbing forces in order to reestablish a steady state. [12]

So successful has the principle of homeostasis been in explaining the interaction of biological organisms with their environments that the concept is now having an important influence also in the fields of psychology and philosophy, particularly with regard to attempts to explain how the 'human organism' interacts with its social and cultural environment. One has only to consider Piaget's dual functions of assimilation and accommodation to find an excellent example of how the biological principle of homeostasis may be applied to the psychological development of the child.

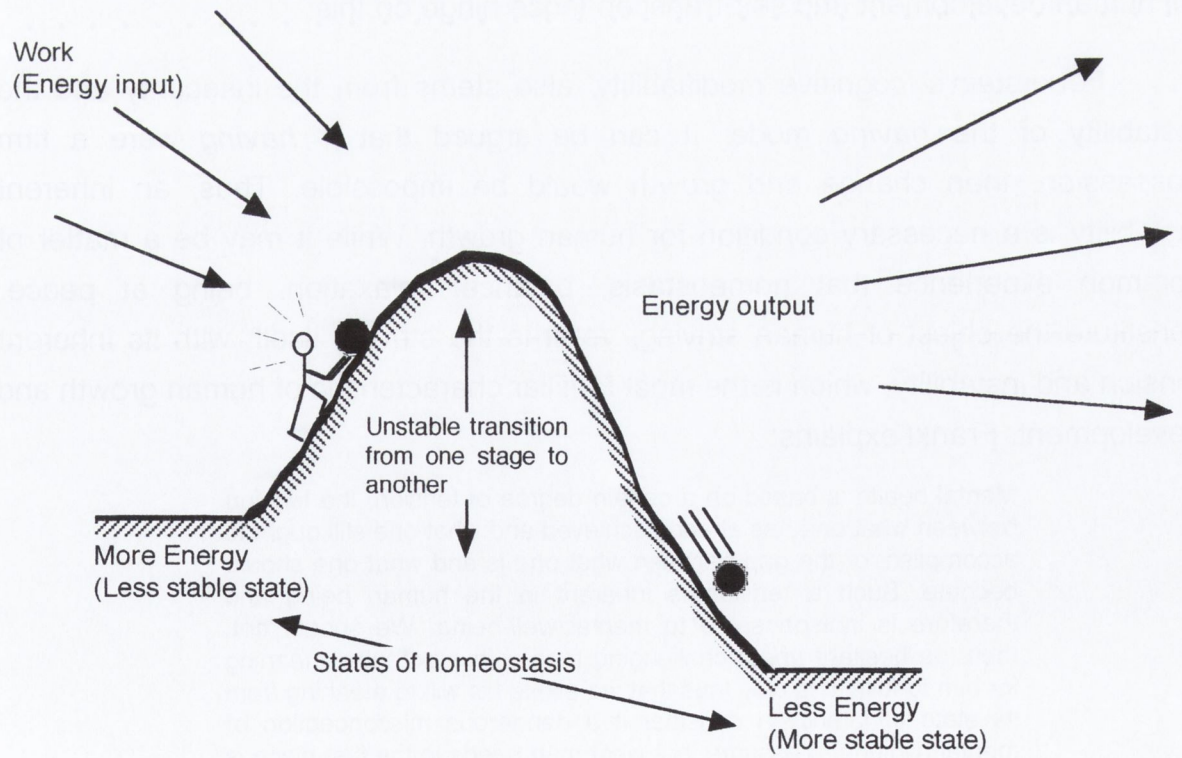
Instead of homeostasis Piaget uses the term 'adaptation'. Living organisms adapt to their environment through a series of higher and more effective states of equilibrium. This adaptation has two aspects - first, the organism 'assimilates' part of the outer environment into the organism's own interior environment; secondly, the inner environment adjusts or accommodates to the outer. Thus, for example, an intake of nutrients assimilated from the environment is the cause of a change in the organism which allows it to better adjust or accommodate to the future demands of the environment. Another example might be the way in which sunlight, water, and carbon dioxide are assimilated by the leaf cells of plants. These cells adjust or accommodate themselves to these nutrients by using them to create energy through the process of photosynthesis. This allows the plant to grow so that in future it can better avail itself even more successfully of these same nutrients from the environment. At a higher level again, one can say:

> The same sunlight may be assimilated by the eyes of the animal psyche into the brain that accommodates these visual stimuli to the need of the animal psyche. At a still higher level the human psyche can assimilate/ accommodate or transform these visual, neurological stimuli into aesthetic patterns through another higher and more complex set of operations which include self- correcting procedures that can keep changing and reversing the pattern until it attains the sort of aesthetic balance or equilibrium that these higher

[12] Esther M. Sternberg & Philip W. Gold, "The Mind-Body Interaction in Disease", *Scientific American: The Hidden Mind* (Vol. 12, No. 1, August 2002), p. 82.

accommodations demand.[13]

It can be argued that one feature of a biological or psychological system in a state of homeostasis or balance is efficiency in the use of energy, whether that energy be psychic or purely physical. Piaget envisages the human organism as going through a series of stable or balanced stages in its process of development. These stages are interspersed with periods of relative change and instability characterised by higher than normal energy requirements. Such a transition from one stable state to another may be represented by the following illustration or model. Greater stability, greater equilibrium within the organism, is represented by lower energy states. Transitions from one stable state to another are characterised by a rise in internal energy and consequently by greater instability. In the following model or diagram, periods of relative balance and stability are represented by the hollows or valleys, while the transition periods of relative instability are characterised by the energy expended in overcoming obstacles or problems or uncertainties on the road to a more stable and more comprehensive organisation of mental schemes.



[13] Joseph Flanagan S.J., "An Interdisciplinary Model", (Draft of an unpublished paper found in the Lonergan Centre of the Milltown Institute, Dublin.)

Balanced states of lower energy and increased homeostasis may also be described by Lonergan's notion of 'mutual-mediation' in which the elements of the system are in harmony with one another. A living organism in the process of growth and development is a 'self-mediating' system made up of mutually mediating elements. This notion of mediation will be dealt with in more detail in Chapter Fifteen of this study.

8.3 *Homeostasis, Transcendence and the Instability of Having*

All being is becoming. In fact, it is hard to conceive of being in any other terms than dynamic. This is particularly relevant to the human person in process of development. A state of homeostasis without an attendant transcendence, in other words, is unthinkable with regard to the human being. On an ontological plane, Marcel's notion of the basic insecurity of all having has this idea of transition and instability already in it by implication. A living organism can relax only tentatively into a state of *having;* this state is always uncertain and insecure. The normal state of living is 'to be in process'; the normal state of being is 'becoming'; the normal state of man is, according to Pieper, the *status viatoris*, the state of being 'in transit'. All human development and self-transcendence hinge on this.

Feuerstein's 'cognitive modifiability' also stems from the insecurity and the instability of the *having* mode. It can be argued that if *having* were a firm possession, then change and growth would be impossible. Thus, an inherent instability is a necessary condition for human growth. While it may be a matter of common experience that homeostasis, balance, relaxation, being at peace, constitute the object of human striving, yet it is the striving itself, with its inherent tension and instability, which is the most familiar characteristic of human growth and development. Frankl explains:

> Mental health is based on a certain degree of tension, the tension between what one has already achieved and what one still ought to accomplish, or the gap between what one is and what one should become. Such a tension is inherent in the human being and therefore is indispensable to mental well-being. We should not, then, be hesitant about challenging man with a potential meaning for him to fulfil. It is only thus that we evoke his will to meaning from its state of latency. I consider it a dangerous misconception of mental hygiene to assume that what man needs in the first place is equilibrium or, as it is called in biology, homeostasis, i.e. a tensionless state. What man actually needs is not a tensionless state but rather the striving and struggle for a worthwhile goal, a

> freely chosen task. What he needs is not the discharge of tension at any cost but the call of a potential meaning waiting to be fulfilled by him.[14]

Such "tension" is inherent to all creative work, the *work* that adds value to *being*, but not necessarily to all forms of *doing*. Routine by its very nature is without tension. Tension is inherent to the process of adding value to things through *doing* but only when an enhancement of *being* is also the reward. It is the stretching, the challenge, the self-transcendence, the intentional response, which is the source of the tension. It is inherent to the process of self-building and, from what Frankl says above, is inherent to the *being* mode of existence. It is natural to the *being* mode to be adding value to things. Thus, one finds such a type of *doing* in Lonergan's levels of experience, understanding, judging and deciding, the type of *doing* that adds value and enhances *being*. But nevertheless, it is the release of the tension which accompanies achievement, as in Lonergan's moment of insight, which constitutes much, but not all, of human satisfaction.

Frankl also speaks about the tension that exists "between 'I am' and 'I ought', between reality and ideal, between being and meaning," [15] while Lonergan goes even father insisting that "the subject is fundamentally a tension between what he is and what he ought to be. ... There is an ideal component in being a man. It is this tension that the existentialists emphasize a great deal."[16]

Tension is inherent in all change and hence in all development, whether in physical, chemical, biological or psychological systems. However, no organism can survive on a diet of pure tension or uninterrupted change. As Piaget insists, periods of stability, consolidation and 'homeostasis' are characteristic of all living organisms. Even Lonergan's insistence on the release of tension characteristic of the act of insight highlights the importance of such periods of comparative relaxation and consolidation to the needs of the growing organism. It is the heightened tension of intense mental activity that makes mental work so demanding and, for some children, unbearable. It is the joy and satisfaction of release of understanding that makes it pleasurable. This does not mean that the intense absorption in *doing* and adding value is not satisfying in itself, as Frankl seems to

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[14] Viktor Frankl, *Man's Search for Meaning* (New York: Washington Square Press, 1984), p. 127.

[15] Viktor E. Frankl, *The Will to Meaning* (Plume Books, New York, 1970), pp. 50 - 51.

[16] Bernard Lonergan, *Understanding and Being*, p. 190.

insist, but logic demands that we attribute no less satisfaction to a job well done, to a task completed, which must belong to the *having* of a more complete being. Thus, it is possible that the word 'harmony', or 'balance', or 'wholeness' might be more useful for philosophical, psychological, and educational purposes than the term 'homeostasis'.

From an educational perspective, Abraham Maslow states:

> Observation of children shows more and more clearly that healthy children *enjoy* growing and moving forward gaining new skills, capacities and powers. This is in flat contradiction to that version of Freudian theory which conceives of every child as hanging on desperately to each adjustment that it achieves and to each state of rest or equilibrium. According to this theory, the reluctant and conservative child has continually to be kicked upstairs, out of its comfortable, preferred state of rest *into* a new frightening situation.[17]

Maslow does not appear to be denying the importance of states of equilibrium and periods of calm in the development of the child, but rather he seems to be emphasising that the need to grow, the drive to self-transcendence, is equally important, if not more so. This may be viewed as a manifestation of Lonergan's 'pure desire to know' in action. Maslow continues:

> While this Freudian conception is continually confirmed by clinicians as largely true for insecure and frightened children, and while it is partially true for all human beings, in the main it is *untrue* for healthy, happy, secure children. In these children we see clearly the eagerness to grow up, to mature, to drop the old adjustment as outworn, like an old pair of shoes. We see in them with special clarity not only the eagerness for the new skill but also the obvious delight in repeatedly enjoying it.[18]

In the above quotation Maslow appears to be casting serious doubt on the usefulness of Freud's 'pleasure principle' in explaining the motivation of "healthy" children. This stance is strongly supported by Frankl when he says: "Pleasure is, and must remain, a side-effect or by-product, and is destroyed and spoiled to the degree to which it is made a goal in itself." [19] And, in a quotation which has much to say on the area of learning motivation, he says that "a human being is not one in pursuit of happiness but rather in search of a reason to become happy" [20]

John Bowlby also rejects Freud's pleasure principle. To him the child is not a

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[17] Abraham Maslow, *Towards a Psychology of Being* (New York: John Wiley and Sons, 1999), p. 30.
[18] Ibid.
[19] Viktor Frankl, *Man's Search for Meaning* (New York: Washington Square Press, 1984), p. 145.
[20] Ibid., p. 162.

passive recipient. The stable environment, the happy state of homeostasis, is important only because it provides a stable, secure base from which the child can reach out to the world with confidence. To Bowlby, in other words, homeostasis and transcendence are normally two sides of the same coin. Only in the insecure and deprived does one find a fear of exploration and a tendency to cling tenaciously to one's insecure and unstable base, as well as the thrust to seek compensations in the pleasure principle. He says:

> All of us, from the cradle to the grave, are happiest when life is organised as a series of excursions, long or short, from the secure base provided by our attachment figures.[21]

It follows that the secret of motivating children is not unconditional praise but rather producing some real progress, some genuine reason for praise, some "reason to become happy." Thus, so called 'self-esteem' stems from a genuine reason to be satisfied with oneself, and not from some artificially contrived praise for some pretended progress. This is also characteristic of the methodology adopted by Reuven Feuerstein himself in dealing with so-called 'retarded' children. His efforts are geared to producing at least some small success in a chosen exercise. A high degree of mediation may be required initially, but when the child grasps the nature of the exercise and is able to progress to more difficult examples, the delight in achievement becomes its own motivation. Thus, Maslow maintains that "self-actualization, self-development, productiveness, self-realization,"[22] involves not just a condition of homeostasis but a condition of self-transcendence, not just an adjustment to the environment, but a transcendence of the environment.

Linked to the notion of transcendence is the teleological notion that all growth and development is goal-directed. Thomists would say that every organism has both a formal cause and a final cause. Thus, in his *Summa Theologica*, we find Aquinas asserting that the goals of man are "neither outside or within him, they transcend him."[23] Even Dewey agrees that "'growth' is not enough; we must also specify the direction in which the growth takes place, the end toward which it tends."[24]

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[21] John Bowlby, *A Secure Base: Clinical Applications of Attachment Theory* (London: Routledge,1988), p.

[22] Abraham Maslow, *Towards a Psychology of Being* (New York: John Wiley and Sons, 1999), p. 30.

[23] Quoted from Frederick Hertzberg, *Work and the Nature of Man* (London: Staples Press, 1968), p. 20.

[24] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.36.

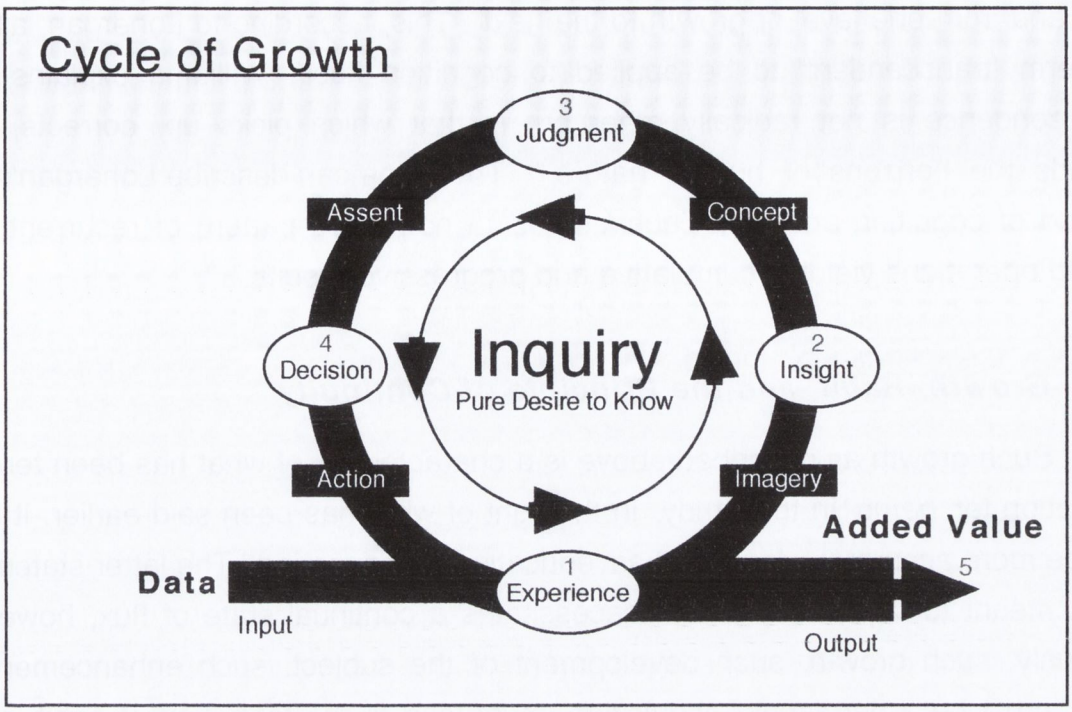
Another characteristic of development involves the preservation of the identity of the developing person over time. The organism that grows remains the same organism, despite its changing attributes. Similarly, the five year old child may appear very different when he has reached the age of forty five, yet he remains the same identical person or self. As a conscious subject, on the other hand, he has changed. He is more alert, has a wider horizon than he had at the age of five, and has a greater sense of responsibility. He has, hopefully, become more fully a subject. Lonergan has already been quoted as saying that "the subject is fundamentally a tension between what he is and what he ought to be."[25]

There is a crucial difference, however, between mere growth on one hand and true development on the other. Development is always positive, carrying with it the same notion of added value as is ascribed to the notion of *work* in this study. Indeed, the added value attributable to the subject of the work may very well be seen in terms of 'personal' development. Growth, on the other hand, may not always be positive, as evidenced by the ostensibly chaotic proliferation of cells in malignant tumours, for example. Not only is such growth non-functional with regard to the body, but it seems totally blind , disordered, and without any apparent goal or end. Development, it will be argued, includes also the notion of 'sublation' whereby each new stage of growth includes or incorporates all the characteristics of the lower levels, but at a higher level of organisation.

8.4 *The Cycle of Growth*

A model or scheme for Lonergan's dynamic process of coming to know has already been introduced graphically as a type of linear flow-chart in Chapter Five. However, in order to provide a more complete developmental picture of his 'invariant pattern of operations' it is better, and more accurate, to illustrate the operation of Lonergan's dynamic process of coming to know by what may be termed the 'cycle of growth' model, as illustrated below. The inspiration for this model comes from John Little's article in *The Practising Manager* entitled "Insight, Strategic Thinking and Control", in which he seeks to apply Lonergan's model of mental functioning to the field of management training and development.[26]

[25] Bernard Lonergan, *Understanding and Being,* p. 190.
[26] John Little, "Insight, Strategic Thinking and Control", *The Practising Manager* 17:1 (October 1996).



This model shows schematically how the insights, judgments, and decisions gained in one cycle of mental functioning influence the data of experience for the next cycle. The 'spirit of wonder and inquiry', or the 'pure desire to know', provides the turning power or 'torque' which moves cognition from one level of intentional consciousness to the next, through questioning as 'operator'[27]. It has been argued that experience, understanding, judgment and decision are all forms of *doing* which add value to the world; they are all forms of *work*, in other words.[28] In addition to adding value to the world, however, what flows from decision reframes one's experience and, in effect, 'reframes' and 'rewires' oneself as well, adding value to self and enhancing one's *being* mode of existence. It must be remembered that human beings cannot 'be' unless they are 'becoming'; "Living structures can be only if they become; they can exist only if they change."[29]

In this way, all proper exercise of cognition leads naturally not only from one level of conscious intentionality to the next, but also from one cycle of thought to the

[27] In Lonergan's philosophy a mental 'operator' may be described as a type of precognitive driving force or motive power. As such, it is more fundamental and more basic than the operations of the mind themselves: experience, understanding, and judgment. Thus, it influences or 'operates' over the whole range of cognitive levels and mental operations. Lonergan's 'pure desire to know', also termed the 'spirit of wonder and inquiry' or 'Eros of the mind', and manifest as an innate questioning attitude, is just such an operator. It may be said to be the motive power which guides and propels the cognitional process from one level of mental operation to the next.

[28] See Section 6.6.6 of this study.

[29] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.34.

next, and from one level of growth to the next. This, according to Lonergan, allows the term 'transcendent' to be applied to cognition itself. Williams explains that "transcendence is not radically other but is that which picks up, corrects, and extends the horizons of human nature."[30] Thus, one can describe Lonergan's method of cognition and consciousness as "a normative pattern of recurrent and related operations yielding cumulative and progressive results." [31]

8.5 *Growth, Habit, and the Principle of Continuity*

Such growth as described above is a characteristic of what has been termed 'education for *being'* in this study. In the light of what has been said earlier, it may also be more accurately described as 'education for becoming.' The latter statement is not meant to imply that growth necessitates a continual state of flux, however; obviously, such growth, such development of the subject, such enhancement of being, must be a permanent acquisition, must lead to the formation of habit, must involve homeostasis as well as transcendence.

Lonergan defines habit in the following terms:

> A person has a habit of mind when he does not have to learn, when he already knows, when he can operate on his own, when you do not have to take time to teach him.[32]

Clearly acquisition of habits, whether cognitional, volitional and attitudinal, or dexterity of skill, is a matter of central importance to education. Clearly also habits may be bad as well as good. However, a habit may be regarded as truly educational only in so far as its acquisition widens the scope for further development. This is what Dewey means by the 'principle of continuity'. In *Experience and Education* he explains that "Growth, or growing as developing, not only physically but intellectually and morally, is one exemplification of the principle of continuity,"[33] and that *"only* when development in a particular line conduces to continuing growth does it answer to the criterion of education as growing."[34] For Dewey, this principle of continuity is one of the factors which singles out or discriminates those experiences which are likely to be truly educational. What

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[30] Geoffrey B. Williams, "Transcendence and the Development of Consciousness". In *Studies in Formative Spirituality* Vol. 9 (Nov. 1988), p. 339.

[31] Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1971), p. 4

[32] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works, Vol. 10,* p. 35.

[33] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.36.

[34] Ibid.

Dewey means by 'habit' is precisely habit viewed in this positive, growth-producing, developmental sense.

Returning, then, to the notion of 'cycle of growth' explained above, one can say that an experience may be termed authentically educational if, and only if, each cycle widens the scope for further development, leading to what might best be termed a 'spiral of growth'. Dewey does not use either of these terms, but the following quotation from Dewey is a very apt description of what these terms are meant to convey in this context, and so it is quoted here in full:

> The basic characteristic of habit is that every experience enacted and undergone modifies the one who acts and undergoes, while this modification affects, whether we wish it or not, the quality of subsequent experiences. For it is a somewhat different person who enters into them. The principle of habit so understood obviously goes deeper than the ordinary conception of *a* habit as a more or less fixed way of doing things, although it includes the latter as one of its special cases. It covers the formation of attitudes, attitudes that are emotional and intellectual; it covers our basic sensitivities and ways of meeting and responding to all the conditions which we meet in living. From this point of view, the principle of continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after.[35]

As has already been explained, Dewey distinguishes primary or unreflective experience, which is roughly equivalent to Lonergan's notion of experience, and secondary or reflective experience, which is roughly equivalent to Lonergan's experience of data of consciousness. Compare Dewey's description:

> The distinction is one between what is experienced as a result of a minimum of incidental reflection and what is experienced in consequence of continued reflective inquiry.[36]

with that of Lonergan

> ... experience is commonly divided into external and internal. External experience is of sights and sounds, of odours and tastes, of the hot and cold, hard and soft, rough and smooth, wet and dry. Internal experience is of one's self and one's apprehensive and appetitive activities.[37]

These, at first glance, appear to be quite different perceptions. Yet, when one

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[35] Ibid., p.35.

[36] John Dewey, *Experience and Nature*, published in *John Dewey: The Later Works 1925 - 1953,* Vol. 1 (Carbondale & Edwardsville, ILL: Southern Illinois University Press, 1981), p.

[37] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection* (Darton Longman & Todd, London, 1967), p. 20.

stands back, as it were, and takes an overview of both theories, one can safely say that Dewey's notion of experience covers a complete cycle of growth as defined above. Dewey even includes Lonergan's notion of 'doing' as part of his notion of experience, saying that "every genuine experience has an active side which changes in some degree the objective conditions under which experiences are had."[38] Bearing these differences of terminology in mind, and allowing for the conceptual developments in the form of cycles and spirals of growth, there is little doubt that these latter ideas of Dewey's add something to Lonergan's cognitive theory, allowing it to be integrated more comfortably into the realms of pedagogy and developmental psychology.

8.6 *The Cycle of Growth and Education*

The role of the teacher, then, is clear: it is to encourage the development of those habits which widen the child's scope to learn and benefit from future experiences. This implies that the teacher must be able to distinguish constructive from useless habits, and at the same time be conscious of the aim or object of the learning process, or where he would like the spiral of development to end up. This demands much careful observation and planning on the teacher's part. Dewey says:

> Every experience is a moving force. Its value can be judged only on the ground of what it moves towards and into. The greater maturity of experience which should belong to the adult as educator puts him in a position to evaluate each experience of the young in a way in which the one having the less mature experience cannot do. It is then the business of the educator to see in what direction an experience is heading. There is no point in his being more mature if, instead of using his greater insight to help organize the conditions of the experience of the immature, he throws away his insight.[39]

However, for Dewey, experience includes not only what is going on within the individual child but also those "objective conditions" in the physical and social environment which are conducive to growth. Under this heading he includes "the place and function of the teacher, of books, of apparatus and equipment, of everything which represents the products of the more mature experience of elders."[40] This is already implicit in Lonergan's notion of "external experience." True

[38] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.39.
[39] Ibid., p.38.
[40] Ibid., p.41.

to his notion of 'progressive education', Dewey also insists that "experience is truly experience only when objective conditions are subordinated to what goes on within the individuals having the experience."[41]

In addition to the 'principle of continuity' outlined above, Dewey proposes a second 'principle' for use in evaluating experiences, the 'principle of interaction'. According to this principle the objective or 'environmental' conditions are in a constant state of 'interaction' with the internal conditions. He explains:

> The word "interaction," ... expresses the second chief principle for interpreting an experience in its educational function and force. It assigns equal rights to both factors in experience - objective and internal conditions. Any normal experience is an interplay of these two conditions. Taken together, or in their interaction, they form what is called a *situation*.[42]

Like Piaget, Dewey has a biological view of human development and pictures human experience as as an interaction or 'adaptation' of the human organism with its environment, although he appears not to differentiate between 'assimilation' and 'accommodation' as does Piaget. He explains:

> For many years I have consistently ... maintained that the key to a philosophic theory of experience must proceed initially linking it with the processes and functions of life as the latter are disclosed in biological science. So viewed, I have held that experience is a matter of an "affair" ... of interaction of living creatures with their environments.[43]

Both Dewey and Lonergan view the human subject as an active agent rather than as a passive recipient of external stimuli, as in the strict behaviourist model. Lonergan identifies this active principle with the 'pure desire to know' or 'spirit of wonder and inquiry" or 'intention of being'. However, it is difficult to find in Dewey's writings anything similar to these - a plausible vital principle of action, in other words. His philosophy of change, on the other hand, has a definite transcendent quality to it. One also finds a similar trust in his definition of intelligence which he sees as "the capacity to refer present conditions to future results"[44], while he has no explicit mention of intentionality in his theories. His definition of consciousness, however, while very different from that of Lonergan, does appear to contain an

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[41] Ibid.

[42] Ibid, p.42.

[43] John Dewey, "Experience, Knowledge and Value: A Rejoinder", p 530, quoted from Robert E. Dewey, *The Philosophy of John Dewey* (the Hague: Martinus Nijhoff, 1977), p. 30.

[44] John Dewey, *Democracy and Education* (New York: Macmillan Publishing Co., 1966), p. 103.

implicit reference to intentionality. For him, consciousness "is the name for the purposeful quality of an activity, for the fact that it is directed by an aim."[45]

8.7 *Growth and Mediation*

All of this can now be linked to Lonergan's notions of mutual mediation and self-mediation, which will be dealt with in detail in Chapter Fifteen. The 'cycle of growth' detailed above fulfils the conditions for self-mediation, that is that the 'output' as action, or *doing*, for one cycle changes the experience for the next. In this way, the output for one cycle frames or adapts or changes the 'input' for the next, potentially making for growth in the system.[46]

A typical self-mediated system, then, is one in which the output from the system is returned as input in what is generally known in science as a 'positive feedback loop'. Thus, Lonergan's cognitive scheme of experience, understanding, judgment, and doing, viewed as a spiral of development in which the doing stage changes the environment and hence the experience of the human organism itself, is an example of a self-mediating system made up of mutually mediating elements.

It will be argued later in this chapter that such self-mediating systems may be described or expressed in mathematical terms by the fractal formula. The fractal formula is itself a mathematical expression of many natural, living systems, and all living systems are characterised by such a positive feedback loop in which the output of the system becomes the new input for the next cycle of growth. This will also be illustrated in some detail below, but first it is necessary to consider two other related characteristics of natural systems.

8.8 *Growth as Differentiation and Integration of Function*

"The course of nature," says Goethe, "is to divide what is united, and to unite what is divided." In this way he was expressing two aspects of all growth in natural systems; whether these systems are organic, cognitive, or emotional, they may be viewed in part as the progressive 'differentiation' of structure and of behaviour, and in part as the progressive 'integration' of behaviour and structure.[47] This has its

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[45] Ibid., p. 104.

[46] While this model is inescapably functionalist, it can be argued that it has a real contribution to make to this study's unfolding model of the educational process.

[47] Gordon W. Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 97.

equivalent on the plane of cognition where putting together and taking apart, affirming and denying, "*compositio et divisitio*", are seen as constituent activities of the human reason. Aquinas explains:

> There are, as Aristotle says in *De Anima*, two kinds of activity of our intellect. One consists in forming simple essences, such as what a man is or what an animal is: in this activity, considered in itself, neither truth nor falsehood is to be found any more than in non-complex utterances. The other consists in putting together and taking apart, by affirming and denying: in this truth and falsehood are to be found, just as in the complex utterance which is its expression.[48]

This in turn is the origin of the two main types of reasoning: deductive, which is "reasoning from a general principle to particulars included within the scope of that principle," and inductive which is "reasoning from particulars to a general conclusion."[49]

8.8.1 *Differentiation*

When the human ovum is fertilised and the cells begin to divide, the cells remain at first undifferentiated one from the other. A point is reached, however, at which cells begin to specialise and prepare themselves for the function for which they are intended: arm, leg, kidney, heart. They begin to 'differentiate', in other words. The same process may be observed in the development of behaviour. The infant acts first with broad, global actions of his whole body. Only gradually does he acquire the ability to execute more discriminating actions.[50] At first the child is capable only of mass movement, gross retractions or outreaching, or else random twisting and squirming of the whole body. Then

> gradually from this amorphous matrix finer activities emerge. Vocal habits, reaching, handedness become differentiated; later, working, spending, saving, collecting, and skills and interests of all sorts emerge from the original global whole.[51]

Lonergan views such differentiation of the various members of the body as the source of the child's first notions of space:

> Learning the differentiation of the different members of the body, the distinction between them, the use of each, the coordination of

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[48] St. Thomas Aquinas, *Quaestiones Disputatae de Veritate*, 14, 1. R.M. Spiazzi (Ed.). (Turin, 1953)

[49] James Donald Butler, *Four Philosophies and Their Practice in Education and Religion,* p. 44.

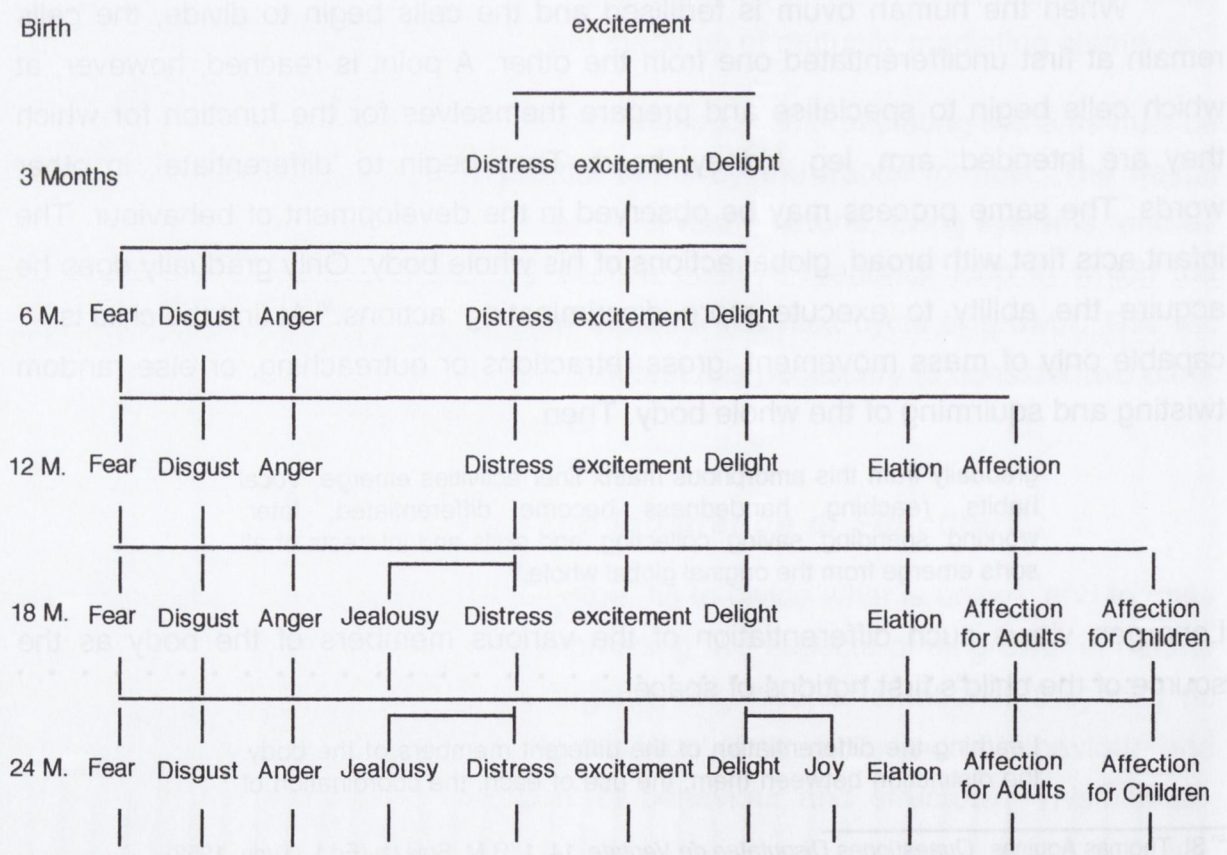
[50] K. Lewin, "Environmental Forces in Child Behavior and Development", in C.C. Murchison (Ed.), *Handbook of Child Psychology* (Worcester, MASS: Clark University Press, 1931), Ch. 4.

[51] Gordon W. Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 97.

the movements of all, is the formation of a first notion of space.[52]

The boundaries between functional systems are weak in infancy; if one drive is aroused, for example, the child is aroused 'all over'. Likewise the barrier between the child and his environment is less firm, leaving him a prey to all manner of environmental stimuli that later in life he will be able to disregard. His capacity for 'selective attention', in other words, is initially poor. The weakness of this barrier prevents the development of sharp self-consciousness in the first year or two of life. The young child does not yet fully differentiate himself from his surroundings.

Another good example of differentiation comes from the infant's emotional life. At birth it is impossible to distinguish different systems of emotion; there is only a diffuse distress-excitement. By the end of the first year, the child still has far fewer emotional systems than does an adult, but he does express differentially anger, fear, distress, delight, and affection. This progressive differentiation of the emotions is represented schematically below in a diagram borrowed from Allport[53] :



[52] Bernard Lonergan, Topics in Education, F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 10* (Toronto: University of Toronto Press, 1967), p. 162.

[53] Gordon W. Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 97.

The role of the emotions in intersubjectivity and education is dealt with later in this study. Suffice it to say that one of the essential elements in education is the refinement and cultivation of the emotions and feelings of the child. This, it will be argued, is the particular task of the Arts in education.[54] Such a refinement and cultivation is always cognitive as well as emotional and involves differentiation, discrimination (to produce a 'discriminating' person), relation, and understanding.

Although the principle of differentiation is especially clear in early childhood, much of the progressive change in later life shows the same course. Much learning involves making finer and finer distinctions between things. The process of learning a school subject, for example, involves breaking up its content into constituent topics, laws, concepts, theories. Allport explains that "the later precision of the boat builder, the surgeon, the pianist, involves finer and ever-finer differentiations."[55]

In part, differentiation is explained by 'maturation'. Maturation means ripening without learning. It is clear that the nervous capacities of the young child are not complete; his brain is not fully equipped with a myelin[56] sheath; certain important neuronal connections have not been fully established. His glandular development is incomplete; not until puberty is there maturation of the sexual glands, for example. One views maturation as having occurred when certain motor coordinations appear - creeping, walking, climbing, babbling, laughing - none of which is possible at birth.

However, one cannot divorce neuronal or physical maturation from the learning process which naturally accompanies the exercise of established skills. According to the model adopted in this study, one that appears closest to the mind of Lonergan, there is an interaction between maturation and learning. Learning leads the way, facilitating maturation according to Vygotsky's fourth model[57] , while maturation in turn facilitates learning. One can say that there is a process of 'mutual mediation' between maturation and learning, to use Lonergan's terminology. Lonergan himself, in speaking of Piaget, explains that "just as the organ develops by functioning and atrophies from lack of functioning, so the sensorimotor and

[54] See section 10.5.7 in this study.
[55] Gordon W. Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 98.
[56] The insulating material covering nerve fibres in the brain and spinal column.
[57] See Section 4.3, above.

perceptual schemes of activity develop by functioning."[58] For example, the child, by feeding at the breast, learns to feed at the breast, and learns to do it better. The scheme fundamentally is hereditary or instinctive in the 'rooting reflex', but it develops with practice. The reflex is at first global and undifferentiated, but becomes more differentiated through exercise.

8.8.2 *Integration*

The significance of the concept of 'integration' is best understood by returning to the cell theory in biology. Integration is a characteristic of all living organisms including the individual cell itself. The human body contains trillions of such cells, over nine billion of which are found in the brain. Somehow out of this astronomic array of single bits a relatively unified organism is constructed. Separate nerve cells function together in such a way as to lose their independence. From the many there emerge the one - *e pluribus unum.*

The notion of integration suggests a hierarchical organisation of the human organism. In ascending order. Allport distinguished a hierarchy of integrative levels as follows:

1. **Conditioned reflexes.** These are the simplest learned forms of adaptive behaviour. Responsiveness to a substitute stimulus becomes integrated with an innate reflex system.

2. **Habits.** These, according to the behaviourist model, are integrated systems of conditioned reflexes, involving especially 'reinforced' responses.

3. **Personal traits**. These are defined by Allport rather behaviouristically as:

> more dynamic and flexible dispositions, resulting, at least in part, from the integration of specific habits. Belonging to this level are dispositions called sentiments, values, needs, and interests.[59]

However, Oliver Sacks, the popular author and celebrated neurologist, would find this definition rather limiting and unsatisfactory:

> But a mind is not just a collection of talents. One cannot maintain a purely composite or modular view of the mind, as many neurologists and psychologists now do. This removes that general quality of

[58] Bernard Lonergan, "Piaget and the Idea of a General Education", Robert Doran & Frederick Crowe (Eds.) *Collected Works of Bernard Lonergan - Book 10: Topics in Education,* p. 198.
[59] Gordon W. Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 100.

> mind - call it reach or range or size or spaciousness - that is always instantly recognizable in normal people. It is a capacity that seems to be supramodal and that shines through whatever particular talents there are. This is what we mean when we say that someone has 'a fine mind'. A modular view of the mind, no less importantly, also removes the personal centre, the self, the 'I'. Normally, there is a cohering and unifying power (Coleridge calls it an 'essemplastic' power) that integrates all the separate faculties of the mind, integrates them, too, with our experiences and our emotions, so that they take on a uniquely personal cast. It is this global or integrating power that allows us to generalize or reflect, to develop subjectivity and a self-conscious self.[60]

4. **Selves.** These are systems of traits that are coherent among themselves, but likely to vary in different situations.[61]

5. **Personality.** This is defined by Allport as "the progressive but never complete integration of all systems that deal with an individual's characteristic adjustments to his various environments." Dewey would agree with this behaviourist notion of personality when he says that "a fully integrated personality ... exists only when successive experiences are integrated with one another. It can be built up only as a world of related objects is constructed."[62]

The above model smacks of behaviourism and reductionism, however, and, even when one adds points 4. and 5., it still leaves largely unanswered the question as to how this integration is achieved so that the human organism mounts upwards from one level to the next. While it is a model beloved of many philosophers and psychologists, it is significant that many top neurologists, like Oliver Sacks and Antonio Damasio, would regard it as quite inadequate. However, when added to Lonergan's theories of the person and the subject, as outlined already in Chapter Seven, and his theory of sublation as introduced in Chapter Five, it does contribute something to the overall picture of the emergence and growth of the human person.

8.8.3 *Differentiation, Integration, and Mediation*

It can be argued that a system becomes differentiated from another to the degree to which it becomes internally integrated within itself - through self-mediation. The notion of mediation will be dealt with in detail in Chapter Fifteen.

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[60] Oliver Sacks, *An Anthropologist on Mars* (Picador, London, 1995), p. 216.

[61] The notion of selves has already been introduced in the diagram in Section 3.4.4., and also described in Section 6.1, above.

[62] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.44.

Suffice it to say for the moment that a self-mediating system becomes progressively more integrated within itself, while becoming ever more differentiated from others, as described above. A self-mediating system in turn may be made up of elements which are themselves mutually mediating self-mediated sub-systems.

8.9 *Cognitive Growth as a Higher Reflection of Organic Growth*

The following quotation from the book *Animal Biology* has already been quoted in the introduction to this chapter. Because of its relevance to this section, however, it is quoted again here in full:

> Living organisms are, then, essentially dynamic and self-maintaining systems perpetually engaged in varied activities, and these are always of a 'directive' nature in the sense that they appear to be directed to attain a particular goal or end result, which is of advantage to the organism. Seen as a whole, the vital activities have a cyclic nature, since all organisms undergo development, reproduction, and, as individuals, death. This life-cycle is, perhaps, the most characteristic feature of living organisms[63]

This section examines the notion of a cognitive 'spiral of growth' as a reflection of organic growth. This "reflection" is more than a mere analogy or metaphor, as will be shown. Piaget and Dewey in particular viewed psychological growth as similar to organic growth because they viewed the psychological as basically biological in origin. Lonergan would state this in more philosophical terms by saying that the psychological 'sublates' the organic in the process of development. He explains his notion of sublation as follows:

> What sublates goes beyond what is sublated, introduces something new and distinct, puts everything on a new basis, yet so far from interfering with the sublated or destroying it, on the contrary needs it, includes it, preserves all its proper features and properties, and carries them forward to a fuller realization within a richer context.[64]

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[63] A.J. Grove and G.E. Newell, *Animal Biology* (London: University Tutorial Press, 1974), p. 6

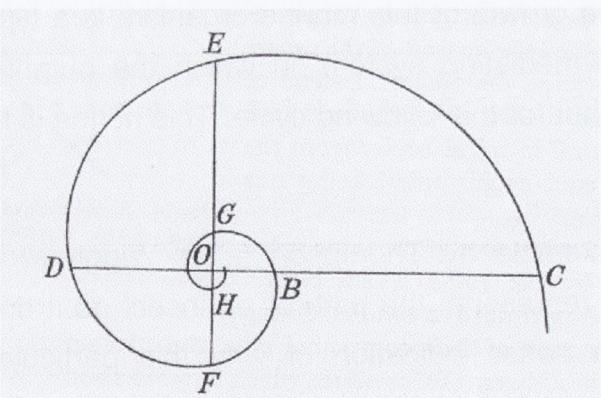
[64] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 241.
NOTE: Lonergan's notion of sublation was adopted from Hegel. Lonergan views stages or levels of conscious intentionality as undergoing sublation as they rise or develop from the lowest level of 'attention' to the highest level of 'judgement'. Thus they are not like the rings of a tree which maintain their identity as the tree grows, rather each higher level of conscious intentionality draws from, includes, and adds value to the one below it. Thus it exhibits new characteristics in its process of operation as well as all the characteristics of the lower level, now operating at a more complex and higher degree of organisation. Thus, the process of attending. for example, while belonging particularly to the first level of conscious intentionality, nevertheless appears as a trait or ability or inclination at each of the higher levels also. This means attention is not a characteristic at input level alone but is an inherent trait of mind at all levels of functioning.

It is important to illustrate at this stage how the notion of a spiral of growth which is being developed in this study is reflected in nature at large. According to the principle laid down in the introductory chapter to this study, such 'convergence' may be viewed as a type of 'validation' of the model being developed, as well as providing a signpost to future investigation.

It must be remembered that as the human child grows and develops he nonetheless preserves his basic identity; he remains the same person. Growth and change are therefore aspects of the human subject, who is in turn a conscious person. For the human subject, each cycle of experience widens his scope for further experience, according to Dewey's 'principle of continuity'[65] . Both of these may be regarded as natural principles and features of organic development. If they are added to the notion of 'spiral of growth', one ends up with what is termed an 'equiangular spiral'. This was described by Descartes in 1638 and was shown by Thompson, in his book *On Growth and Form,* to be a characteristic of many natural, organic forms. He states:

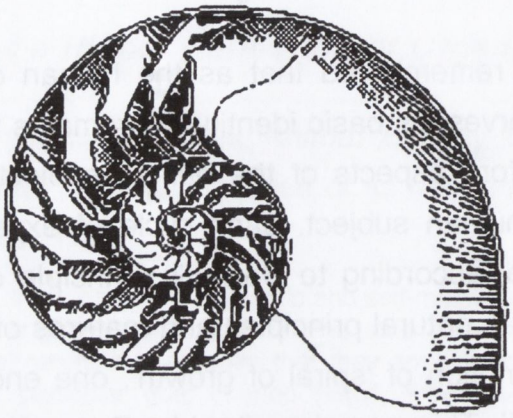
> This remarkable property of increasing by *terminal* growth, but nevertheless retaining unchanged the form of the entire figure, is characteristic of the equiangular spiral, and of no other mathematical curve. It well deserves the name, by which James Bernoulli was wont to call it, of *spira mirabilis.*[66]

The following representation of Descartes' original equiangular spiral, is taken directly from Thompson's book:



[65] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p.35.
[66] D'Arcy Wentworth Thompson, *On Growth and Form* (London: Cambridge University Press, 1961 abridged edition), pp. 179 - 180.

Thompson gives several examples of this design or shape in nature. For example, the following drawing represents the shell *nautilus pompilius*:



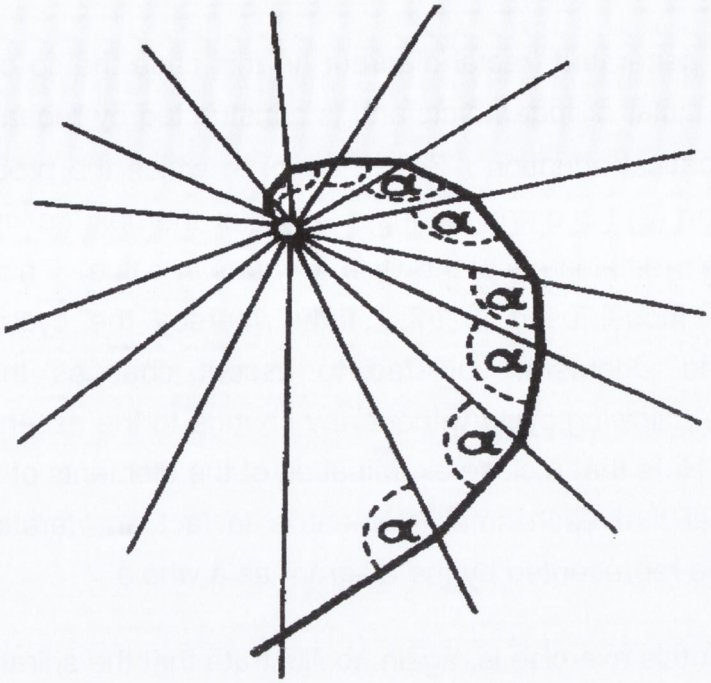
Thompson explains:

> In the growth of a shell, we can conceive no simpler law than this, namely, that it shall widen and lengthen in the same unvarying proportions: and this simplest of laws is that which Nature tends to follow. The shell like the creature within it, grows in size but does not change its shape; and the existence of this constant relativity of growth, or constant similarity of form, is of the essence, and may be made the basis of a definition, of the equiangular spiral.[67]

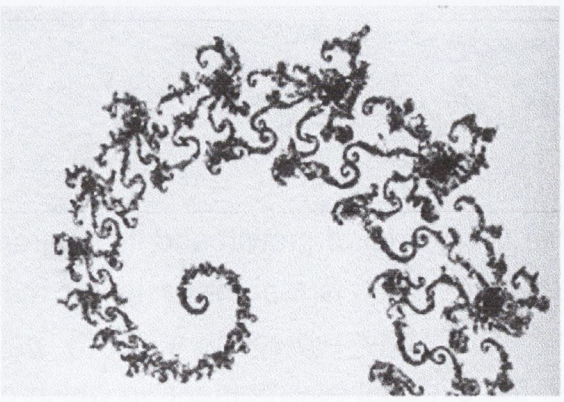
It will be shown that the growth of this marine organism is a typical example of the development of a 'self-mediating system' in which the output from one cycle of growth becomes the input for the following cycle. This notion is further expanded on below.

The following example by Thompson (after Wigglesworth) is yet another example. The diagram represents the path of an insect as it draws towards a light source and it gives a better indication of why this particular curve is termed 'equiangular': the angle turned by the insect at each stage of his progress is the same, in this case α.

[67] D'Arcy Wentworth Thompson, *On Growth and Form* (London: Cambridge University Press, 1961 abridged edition), p. 179.



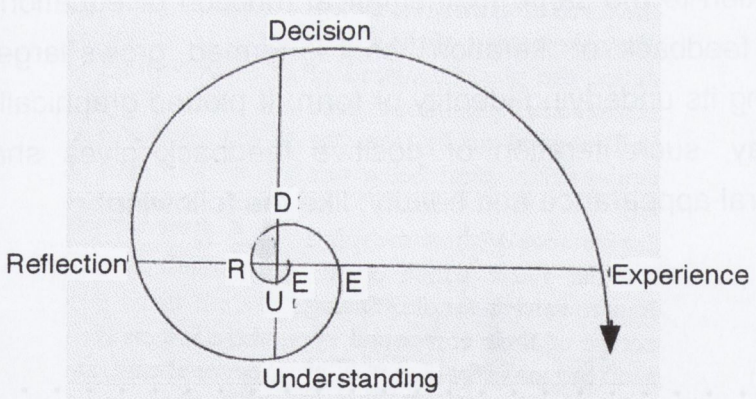
While Thompson first published his book in 1917, long before there was any hint of modern chaos theory, the characteristics of natural organic forms described above are also features of what is termed the Mandelbrot set in fractal geometry. Like the spiral of growth in which the child's experience grows with each cycle according to Dewey's 'principle of continuity', like a typical self-mediating system in other words, the fractal shapes are formed by successively returning each calculated solution to the fractal equation as a further input-value for the subsequent calculation to the same mathematical function or equation. The result from such 'positive feedback' or "iteration", as it is termed, grows larger each time while still maintaining its underlying identity or form. If plotted graphically by means of computer display, such iteration or positive feedback gives shapes of an extraordinarily natural appearance and beauty, like the following:



From Roger Penrose, *The Emperor's New Mind*, p. 78.

Such a computer generated fractal diagram (in this case the so called Mandelbrot set) is also equiangular or logarithmic and is constructed by repeated 'iterations' of the same mathematical equation ($Z \rightarrow Z^2 + c$) in which the product value of the previous calculation (Z) becomes the input value for the next ('c' merely represents a fixed value which remains constant while Z varies in value). This is similar to the 'spiral of growth' model used in this study whereby the cycle of experience, understanding and judgment, sublated to assent changes the conditions of experience for the following cycle without any change to the essential nature of the individual person. Note that a close examination of the elements of the above fractal diagram will reveal that each small element is in fact an 'iteration' of the same fundamental shape represented by the diagram as a whole.

The point of this exercise is, again, to illustrate that the spiral of growth model developed above, which is based on Lonergan's notions of mutual- and self-mediation and on Dewey's 'principle of continuity', is a 'natural' model in that is has many parallels in both organic forms found extensively in nature, as well as in the modern mathematics of fractal geometry and chaos theory. This leads to the following more natural illustration of the 'spiral of growth' which is consistent with the theories of both Lonergan and Dewey and extends Lonergan's model of cognition into the realm of developmental psychology:



It is important to note that this model of growth and its diagrammatic representation also displays the 'added value' which is a prerequisite for the definition of *work*, as used in this study. This *work* may represent a purely physical change in the organism or a change in the external environment, in which case an enhancement

of the *having* mode alone results. Or, as above, it may represent an internal growth through the sublated levels of experience, understanding, judgment, ending in an assent to a truth, a good or a value. In the latter case it would represent an enhancement of the *being* mode of existence, or of the *being* attitude, or orientation of the individual.

The notions of self- and mutual mediation, combined with differentiation and integration, seem to account for many aspects of organic and human development. However, self mediation, viewed as 'positive feedback' and expressed mathematically by the 'fractal equation', may give a model of growth as growth, but does not by itself give an account of growth as development. Self-mediation in sub-systems may give an account of differentiation, and mutual mediation between sub-systems may account for integration. However, a consideration of growth viewed as development requires the addition of Lonergan's notion of sublation. The fact that a lower level of functioning leaves its stamp, as it were, on the higher levels means that small or negligible differences at the lower level may have a very large influence on the form of higher level functioning. This is the essence of the "butterfly effect" in chaos theory whereby the flapping of a butterfly's wings in one part of the world may have an influence out of all proportion to its size elsewhere.[68] Lonergan's explanation of sublation appears to agree with this notion of development:

> While lower levels of operation are prior as presupposed by the higher, as preparing materials for them, it is also true that " the higher levels have a priority of their own; they sublate the lower, preserving them indeed in their proper perfection and significance, but also using them, endowing them with a new and fuller and higher significance, and so promoting them to ends beyond their proper scope.[69]

Thus, while self-mediation accounts for change in terms of growth, sublation accounts for change in terms of development.

This notion of development, with its diagrammatic representation, is also reflected in Lonergan's notions of 'method' and 'self-appropriation'. In *Insight* Lonergan defines a method as "a set of directives that serve to guide a process

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[68] Stephen Hawking, *The Universe in a Nutshell* (London: Bantam Press, 2001), p. 104.
A better example from modern cosmology might be how the effects of slight variations in background microwave radiation in the early developing universe may have produced the present discontinuous shape of the cosmos.
[69] Bernard Lonergan, "Mission and the Spirit" in F.E. Crowe (Ed.) *A Third Collection: Papers by Bernard Lonergan S.J.* (New York: Paulist Press, 1985), p. 30.

toward a result."[70] However, Lonergan's clearest explanation of what he means by the term 'method' is to be found in *Method in Theology* where he conceives method as "a normative pattern of recurrent and related operations yielding cumulative and progressive results."[71] Thus, the above diagrammatic representation may be regarded as a model of Lonergan's 'transcendental method' which in turn is central to his process of 'self-appropriation of interiority'. In *Method in Theology* Lonergan even refers to "the wheel of method (which) not only turns but rolls along."[72] It would be more accurate and more useful to refer to it as 'the *spiral* of method'. In his Ph.D. thesis for the Gregorian University, Thomas Naickamparambil provides a useful summary:

> A method involves distinct operations. These operations have to be related among themselves. Distinct but related operations form a set, and different sets of operations together constitute a pattern. And this pattern is normative, that is, the right way to arrive at the goal is to execute the operations as they are defined within the pattern. These operations in their order could be repeated indefinitely. But the fruits that result from such repetition are cumulative and progressive, that is, such recurrence of the operations can effect a succession of discoveries and ever greater synthesis.[73]

Returning briefly to the notion of mediation, Lonergan says that mediation is itself a relationship between a source, an origin, or ground of mediation, and whatever results from the mediation. Thus one sees that the mediation itself is represented by a dynamic relation between the 'input' into a system and the resulting 'output'. A self-mediating system results when part of the dynamic relation is that the 'output' automatically or necessarily forms part of the input for a further cycle of development.

8.10 *The Cognitive Spiral of Growth and Chaos Theory*

It is fair to say that the theory of the human mind thus far developed in this study is one of coming to know rather than of just knowing. In this model, one is viewed as being in a state of becoming rather than of just being; the model is one of process rather than of state. It has also been argued that the human mind is a

[70] Bernard Lonergan, *Insight*, p. 421
[71] Bernard Lonergan, *Method in Theology*, p. 4.
[72] Bernard Lonergan, *Method in Theology*, p. 5.
[73] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Gregorian University Press, 1997), pp. 232 - 233.

complex system, made up of mutually mediating elements, rather than what is generally termed a 'linear system'. Linear reductionist thinking, which has dominated science since the time of Newton, is now regarded of limited value in the face of a scientific world dominated by quantum mechanics, by Heisenberg's uncertainty principle, and by global phenomena as complex as weather patterns, for example. With access to the massive computing power of modern computers, previously intractable problems such as the dynamics of non-linear systems can be studied. The study of such complex systems is generally termed 'chaos theory'. Chaos or complexity theory is deemed relevant to the model of mind being developed in this study because, according to Gleick, the study of chaos "is a science of process rather than state, of becoming rather than being."[74]

Complex systems like the brain are normally made up of many elements in a constant and variable state of mutual mediation. Waldrop, for example, explains that in complex systems, each component or element or subsystem or 'agent'

> finds itself in an environment produced by its interactions with the other agents in the system. It is constantly acting and reacting to what the other agents are doing. And because of that, essentially nothing in its environment is fixed.[75]

This appears similar to the notion of 'mutual mediation' as defined by Lonergan: "You have a number of immediate centres, and from each centre there flows over the whole the consequences of that centre."[76] Larsen-Freeman also proposes that a second characteristic of complex systems is that "the behavior of complex systems is more than the product of the behavior of its individual components."[77] This latter characteristic can be explained by the fact that such a complex system also undergoes what Lonergan would term 'self-mediation'; it is "a whole that has consequences that change the whole." Bringing these two notions together, one can say with Lonergan:

> Each part is what it is in virtue of its functional relations to other parts; there is no part that is not determined by the exigencies of other parts; and the whole possesses a certain inevitability in its unity, so that the removal of any part would destroy the whole, and the

[74] James Gleick, *Chaos: Making a New Science* (New York: Penguin Books, 1987), p. 5

[75] M. Waldrop, *Complexity: The Emerging Science at the Edge of Order and Chaos* (New York: Simon and Schuster, 1992), pp. 241 - 242, as quoted in Diane Larsen-Freeman "Chaos/Complexity Science and Second Language Acquisition," *Applied Linguistics*, Vol. 18, No. 2, 1997, p. 143.

[76] Bernard Lonergan, *Collected Works of Bernard Lonergan, Bk. 6 - Philosophical and Theological Papers 1956 - 1964* (Toronto: Univ. of Toronto Press, 1996), p. 166

[77] Diane Larsen-Freeman "Chaos/Complexity Science and Second Language Acquisition," *Applied Linguistics*, Vol. 18, No. 2, 1997, p. 143.

> addition of any further part would be ludicrous. Such a whole is a structure.... The whole itself may be self-assembling, self constituting; then it is formally dynamic. It is a dynamic structure.[78]

Thus the complex systems dealt with in chaos/complexity theory may be described as self-mediating systems made up of mutually mediating elements. Such systems, as already mentioned, are also described as nonlinear. Unlike complex systems, linear systems are inherently predictable and in such a system "a cause of a particular strength results in an effect of equal strength." Larsen-Freeman explains:

> When a spacecraft is nudged into orbit by firing its thruster rockets, a linear system is responsible. Nonlinear systems can sometimes exhibit linearity; however, at other times, they may react in a way that is all out of proportion to the cause. A rolling pebble, for example, can trigger an avalanche. This has been termed the 'camel's back' effect. A simple trigger, one which occurs all the time, might be enough on any given occasion to bring about a great convulsion in the system, or to throw the entire system into a chaotic state.[79]

The term 'chaos' refers simply to the period of complete randomness that complex nonlinear system enters into unpredictably. A slight change in initial conditions can have vast implications for future behaviour as in 'the butterfly effect' already mentioned. According to Gleick: "Tiny differences in input could quickly become overwhelming differences in output."[80]

Yet, as the term implies, 'self-mediating' systems can 'transcend' chaos to restore order in such complex systems. Such self-mediation, as seen already, works by a 'positive feedback' system. Thus, for example, a basic feedback mechanism built into nature, namely natural selection, produces the steady improvement of a species which is termed evolution:

> Positive feedback kicks evolution forward. Meanwhile, negative feedback in evolution keeps mutation changes from spiralling out of control - the checking power of many negative feedback loops simply wipes out most mutations and keeps the design of the species stable for long periods of time.[81]

This capacity to select and to self-organise naturally, to differentiate and to integrate, makes complex systems adaptive. Such systems ranging from the purely biological to the cognitive are self-mediating systems made up of mutually mediating elements. "They do not simply respond passively to events; they actively

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[78] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection*, (London: Darton Longman & Todd, 1967), p. 16.

[79] Diane Larsen-Freeman "Chaos/Complexity Science and Second Language Acquisition," p. 143.

[80] James Gleick, *Chaos: Making a New Science* (New York: Penguin Books, 1987), p. 8.

[81] J. Briggs, *Fractals: The Patterns of Chaos* (New York: Simon and Schuster, 1992), p. 117.

try to turn whatever happens to their advantage. They are capable of learning."[82]

A complex system is inherently dynamic. As a dynamic system it is oriented towards something, it is teleological, in much the same way as Lonergan's dynamic system of coming to know is directed towards being as its proper end. This is what Lonergan means by the term 'method': "A method is a normative pattern of recurrent and related operations yielding cumulative and progressive results."[83] In chaos theory this is called an 'attractor' "because it is the pattern to which a dynamic system is attracted."[84] Taking for example the closed system of a bob swinging on the end of a string, it has a fixed point attractor in that it oscillates equally around a fixed point, until it finally comes to rest at that point. However, most nonlinear complex systems exhibit what are termed 'strange' attractors "because although its cycle repeats itself like the frictionless pendulum, no cycle ever follows the exact same path or overlaps any other cycle." The various orbits can become very densely packed together, however, constrained within the limits of the attractor. "Thus, globally a pattern emerges, but locally it is impossible to predict just what the details will look like."[85]

The 'strange' attractor is a "normative pattern" towards which the dynamic complex system as a whole is directed, "yielding cumulative and progressive results."[86] It may be represented graphically, in which case it will symbolise the behaviour of the system as a whole in geometric form. Different systems will yield different geometric figures. However, all strange attractors have something in common - their shape is geometrically a 'fractal'. This is a term coined by Mandelbrot to mean "a fraction that includes all." A fractal, like the one illustrated earlier in this chapter, is always a geometric figure which is "self-similar" (or 'isomorphic') at different levels of scale. Thus, as one 'zooms in' on any level of magnification, it always reveals a reproduction of itself.

8.11 *Lonergan, Piaget, and Genetic Development*

Lonergan himself leaves the vertical, historical, 'genetic' dimension of cognition to others, particularly to Jean Piaget. His concern is with the horizontal

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[82] Diane Larsen-Freeman "Chaos/Complexity Science and Second Language Acquisition," *Applied Linguistics*, Vol. 18, No. 2, 1997, p. 145.
[83] Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 4.
[84] Diane Larsen-Freeman "Chaos/Complexity Science and Second Language Acquisition," p. 145.
[85] Ibid., p. 146.
[86] Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 4.

dynamics of mind, not with how the mind of the child develops over time. It is clear, however, that this concentration or focus does not betray any lack of interest on Lonergan's part, nor any lack of appreciation of the importance of developmental aspects of cognition. On the contrary, his system is deliberately open-ended, realising that the more specialist contributions of others must be accommodated. Moreover, as has already been pointed out, Lonergan's notions of 'operation', 'system', and 'structure' appear to have been borrowed from Piaget, and form an integral part of Lonergan's own dynamic theory of cognition.

Piaget maintains that it is not possible to consider cognition and epistemology from a purely philosophical viewpoint, and that it is not only helpful but "indispensable"[87] to make use of psychological data when considering the nature of knowledge. As was mentioned already, he complains that, while many epistemologists actually do this, in practice they tend to use their own psychological intuitions rather than the results of solid empirical psychological research. "Every man considers himself a psychologist."[88] , he complains. As has already been intimated above, Lonergan has always been happy to defer to the hard-won insights of others, even in areas impacting on his own philosophical work. This applies not only to Piaget but to other philosophers as well.[89]

However, it is equally clear that Lonergan's key concepts of invariant operations, sublation, mutual- and self-mediation, when added to Dewey's simple 'principle of continuity' add enormously to Piaget's rather limited behavioural model. A further enhancement or 'higher viewpoint' will now be attempted through a consideration of Lonergan's notion of transcendence.

8.12 *Lonergan's Notion of Transcendence*

In his book, *Bernard Lonergan's Philosophy of God,* Tyrrell asserts that "Transcendence is in a sense the underlying theme of Lonergan's entire philosophical endeavour."[90] The terms 'transcendence', 'transcendental' and 'transcendent' appear again and again throughout Lonergan's writings. For

[87] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 7.
[88] Ibid., p. 8.
[89] In regard to his more basic ideas human emotionality, for example, he defers to the work of von Hildebrand, and in regard to the Arts he refers to the writings of Langer.
[90] Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Gill and Macmillan, Dublin, 1974), p.72

example, one finds him using the term 'transcendental method' for his dynamic structure of coming to know, or 'generalised empirical method'. Bernard Tyrrell explains that "the method, which .... is radically identical with cognitional process itself, is transcendental."[91] Lonergan also talks about the necessity for 'self-transcendence'[92] , and about the 'transcendentals' which underpin each level of intentionality and consciousness, while his 'transcendental precepts', as will be argued, form the basis for his articulation of the aims of education.[93]

For Lonergan, as has already been argued,[94] transcendence means simply 'going beyond'. The term implies an outward, object centred orientation, an intending. But going beyond what? Ultimately, going beyond this central core of mind which we call the self or the 'I'. Lonergan bases this fundamental orientation towards transcendence in the 'pure desire to know', the 'Eros of the mind', 'the notion of being'. He also calls this inner drive the "transcendental intending of the intelligible, the true and the good" and he identifies it with "the unifying intentionality dynamically operative and immanent within the diverse levels of human consciousness."[95] Thus, in addition, one can see how his notions of transcendence and intentionality are inherently interwoven with one another. One can say that the mind and its coordinated operations are intentional, or relate to things beyond themselves, because they have an inherently transcendent nature.

Transcendence is opposed to 'immanence'; it is opposed to the notion that knowing is simply a matter of having a good look at what is out there; it is opposed to the 'intuitionism' of the "naive realists". Implicit in this notion of immanence is not just the obvious fact that knowledge ontologically occurs within the knower, but also the epistemological conclusion that "nothing is known except the content immanent in the act of knowing."[96] Lonergan's notion of transcendence is also opposed to the extreme idealism of Kant who maintained that we know only appearances, colours, sounds and the like, but never the 'thing-in-itsel'. Kant maintained that true knowledge cannot transcend or go beyond experience.[97]

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[91] Ibid., p.74

[92] See Section 8.12 below.

[93] See Chapters 10 to 13 of this study.

[94] See Section 5.11 above.

[95] Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Gill and Macmillan, Dublin, 1974), p.72

[96] Bernard Lonergan, *Insight* p. 635.

[97] For a more detailed comparison of the philosophies of Kant and Lonergan see Section 5.12 of this study.

The first step in the notion of transcendence, then, is a rejection of this latter aspect of the notion of immanence. Lonergan says: "Inquiry, insight and formulation do not merely reproduce the content of sensible experience but go beyond it."[98] Insight grasps intelligibility or relations in the given data. These relations are apprehended by understanding and are not invented or added on, as Kant would hold, but are really present in the totality of the given. They cannot be made present by taking some kind of look inside it. Understanding, like seeing or hearing, is an intentional or 'relational' activity. It relates an agent to an object. Just as through seeing and hearing colours and sounds are made present to the agent, so through understanding relations are made present.[99] In other words, while data are certainly a necessary condition for knowing, they are not a sufficient condition. Between the desire to know and knowing there is an intentional process of coming to know. It begins with experience and goes beyond it to understanding and judgment. Lonergan holds that this 'going beyond' the immediate world of experience, this transcendence of sensory data, "is the achievement of conscious intentionality."[100]

However, for Lonergan cognition is transcendent not only in the sense of going beyond the perceptual, but also in the Thomistic sense whereby, according to Tyrrell, "the transcendental intending of the intelligible, the true and the good which is the core of cognitional process is not confined (in its intending) to any particular genus or category."[101] In other words, it is transcendent also in the fact that it is unlimited in the range of its intending; its object is 'being' and 'the good' in all its fullness. It was argued already that the pure desire to know is the "pure question"[102] and that this questioning "intends being"; that is, it intends knowledge of all reality. Our intending intends unrestricted understanding. We intend complete intelligibility, even though its attainment is beyond our immediate reach. Thus, the pure desire to know, which is the motive power or vehicle of self-transcendence, is unrestricted in its intending and in this sense also it is transcendent.

It will be argued below that, to describe the operation of 'the pure desire to know' at the different levels of consciousness and intentionality, Lonergan in

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[98] Bernard Lonergan, *Insight* p. 635.

[99] William A. Mathews, *Questioning and its Object*, p. 61.

[100] Bernard Lonergan, *Method in Theology*, p. 35.

[101] Bernard Tyrrell, *Bernard Lonergan's Philosophy of God*, p.74.

[102] Ibid. p. 9.

Method develops the concept of the 'transcendentals'.[103] These represent the dynamism of the pure desire to know as it manifests itself differently through each cognitional and intentional level. "They are the radical intending that moves us from ignorance to knowledge."[104] More, they "constitute the very dynamism of our conscious intending."[105] Thus, intelligence, reasonableness, and responsibility may be regarded as 'transcendentals'. They may also be regarded as 'precepts' or 'intellectual virtues' which, as will be argued, are together 'sublated' to form the cardinal virtue of prudence.[106]

In summary, Lonergan maintains that the "unrestricted thrust to self-transcendence" is the ground of intellectual vitality, and finds its expression in a longing for knowledge or 'pure desire to know', a desire for love, and a questioning attitude towards the world. This "unrestricted thrust", in turn, finds its ground in the 'notion of being' which, in the presence of objective being, becomes an intention of being.

8.13 *Lonergan's Cognitional Theory and Self-Transcendence*

"Man", Lonergan says, "achieves authenticity in self-transcendence."[107] Thus, the notion of self-transcendence is central to Lonergan's philosophy and to his notion of the cognitive, affective, and moral dimensions of human development as "a single, radical thrust of the human spirit."[108] Lonergan is not alone in this; it will be argued that self-transcendence is also implicitly operative as a criterion of development in the psychological perspectives of Reuven Feuerstein, Jean Piaget, Erik Erikson, and John Dewey. However, it is doubtful that Piaget and Dewey in particular would appreciate being so labelled.

For consideration of the affective dimension of development, this part of the study will depend principally upon the psychoanalytic perspective of Erik Erikson, who regards all development as pyschosocial. The theories of Reuven Feuerstein will be used for the wider cultural and social implications of human development found in his theories of 'structural cognitive modifiability' and 'cultural deprivation'.

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[103] See Section 9.3

[104] Bernard Lonergan, *Method in Theology*, p. 11.

[105] Ibid., p. 12.

[106] See Section 13.11

[107] Bernard Lonergan, *Method in Theology*, p. 104.

[108] Walter E. Conn, "Moral Development as Self Transcendence", *Horizons* Vol 4 (1977), p 191.

The genetic epistemology of Jean Piaget will provide the primary guide as to the cognitive factors in personal growth and development.

Just as the notion of transcendence itself runs like a 'theme song' through all the writings of Bernard Lonergan, so also the notion of self-transcendence is central to his cognitive theory and to his ideas on human development. As has been argued already, Lonergan finds in the dynamism of questioning, in the quest for meaning and value, the beginning of everything that is properly human. Questioning first moves a person beyond the "narrow strip of space-time accessible to immediate experience"[109] into a vastly larger world mediated by meaning and intelligence. But since the drive to question and understand is satisfied by nothing less than correct understanding, questions for intelligence must be followed by questions for reflection, the critical process of determining whether an apparent meaning really is so, or really could be so. It is in this critical reflection, according to Lonergan, that a person transcends self by seeking not only what is beyond the subject but also what is independent of the subject. A judgement of critical reflection reports not what appears to one, not what one wishes, "but what is so."[110]

Furthermore, when one deliberates on the reports of critical reflection and asks "whether this or that is worthwhile, whether it is not just apparently good but truly good, then we are inquiring ... about objective value."[111] And, in striving for objective value, the radical drive for self-transcending authenticity becomes not only cognitive but moral also. And, in the extent to which one's living is a response to values, in that measure, says Lonergan, self-transcendence is effected in the field of action. One has gone beyond mere selfishness, in other words; one has become capable of genuine collaboration with others, capable of 'synergy', capable of true love.

It is quite clear from his later works, particularly from *Method in Theology*, that Lonergan identifies not only cognitional and moral dimensions of self-transcendence, but also an affective dimension. In *Method* Lonergan identifies feelings that are intentional responses to values. For Lonergan, not only are values apprehended in feelings, however, but feelings give intentional consciousness its "mass, momentum, drive, power"; without them "knowing and deciding would be

[109] Bernard Lonergan, *Method in Theology* (London: Darton, Longman & Todd, 1972) p. 104.
[110] Ibid.
[111] Ibid.

paper thin."[112] Because of the affective dimension "we are oriented massively and dynamically in a world mediated by meaning."[113] Walter Conn summarises:

> All the operations of knowing, valuing, and deciding, then, are imbedded in and given their concrete orientation and very life by an affective matrix which colors and shapes the totality of a person's horizon.[114]

It follows that moral self-transcendence itself can be understood as self-transcendence in the cognitive, volitional, and affective dimensions of human consciousness focused on the issues of value, responsible decision, and action.

8.14 *Development and Self-Transcendence*

Much of what follows owes its inspiration to an excellent article published by Walter Conn in *Horizons.* Conn says that in the context of human development, it is possible to identify two ways in which self-transcendence can be viewed or considered:

1) There is self-transcendence which is intrinsic to the very notion of development itself; that is to say, development to a higher stage means the transcendence of a previous stage; one develops by becoming a new self that transcends the self one had previously been. This sense of self-transcendence applies to the cognitive, the psycho-social and the moral spheres of human development. This is the self-transcendence which views man as a being in "*status viatoris*", in a state of becoming, to use Pieper's terminology.

2) One can also consider self-transcendence as a criterion, or as a normative direction of development; that is, the self-transcendence that is realised when one moves beyond oneself in one's capacity to take the perspective of another, or make a true judgment, or take a responsible decision, or develop the capacity for genuine love. This second sense is the more fundamental, as self-transcendence in the first sense is realised only in and through the second - that is in terms of a person's concrete capacity for the self-transcendence of realistic knowing, responsible deciding, and genuine loving. Conn

[112] Bernard Lonergan, *Method in Theology* (London: Darton, Longman & Todd, 1972) pp. 30 - 31
[113] Ibid., p. 31.
[114] Walter E. Conn, "Moral Development as Self Transcendence", *Horizons* Vol 4 (1977), p 192.

says that "personal authenticity is the criterion of genuine development, and self-transcendence (in this more fundamental sense) is the criterion of authenticity."[115]

8.15 *Piaget and Self-Transcendence*

8.15.1 *Genetic Epistemology as a Transcendent View*

Piaget's 'genetic epistemology', as has already been argued, is an intrinsically developmental theory of human knowledge. It is about two things: what knowledge consists of, and the ways in which knowledge develops over time. Genetic epistemology, then, deals with both the formation and the meaning of knowledge.[116] For many philosophers and epistemologists, however, epistemology is the study of knowledge as it exists at the present moment; it is the analysis of knowledge for its own sake and within its own framework without regard to its development. Piaget rejects this view:

> Genetic epistemology attempts to explain knowledge, and in particular scientific knowledge, on the basis of its history, its sociogenesis, and especially the psychological origins of the notions and operations upon which it is based.[117]

For Piaget, knowledge is not a matter of pictures or sentences or symbolic data structures in the mind that correspond to structures in the world; knowledge is basically pragmatic or action-oriented. Knowledge is fundamentally 'operative'; it is knowledge of what to do with something under certain possible conditions. Or it is knowledge of what the thing will do under different conditions.[118]

Genetic epistemology also takes into account formalisation; it has already been mentioned that it is particularly concerned with logical formalisations applied to equilibrated thought structures. However, it also applies to transformations from one level to another in the development of these thought structures.

For Piaget, as for Lonergan, knowledge is a process of continual construction and reorganisation: "knowledge," Piaget says, "is currently coming to be considered

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[115] Walter E. Conn, "Moral Development as Self Transcendence", *Horizons* Vol 4 (1977), p 194.
[116] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 12.
[117] Ibid., p. 1.
[118] Jean Piaget, *Studies in Reflecting Abstraction*, in Robert L. Campbell (Ed. & Trans.), (Sussex: Psychology Press, 2001), p. 2.

more and more as a process rather than as a state."[119] He also emphasises that "the current state of knowledge is a moment in history, changing just as rapidly as the state of knowledge in the past has ever changed and, in many instances, more rapidly."[120] This "current state" is far from being definitive or even stable. To Piaget, this means that historical and psychological factors in these changes must be of interest in the attempt to understand the nature of scientific knowledge. One feels that Lonergan, who deals with the same topic in various works from *Insight* onwards, would have no problem concurring with this.

8.15.2 *The Transcendent Nature of Piaget's Stages of Cognitive Development*

Cognitive development, according to Piaget's analysis, is dominated by a dialectical movement from cognitive egocentrism towards self-transcendence and decentred objectivity. Four basic stages mark the course of this development. Piaget views this development as fundamentally discontinuous. The four stages identified by Piaget are:

1/	*The Sensorimotor Period*	0 - 2 years
2/	*The Preoperational Period*	2 - 7 ..
3/	*The Period of Concrete Operations*	7 - 11 ..
4/	*The Period of Formal Operations*	11 - 15 ..

1/ *The Sensorimotor Period*

The first, or sensorimotor, stage sets the pattern of later development towards decentred objectivity in a strikingly clear way. The titles of two key volumes by Piaget on this early period illustrate well the bi-polar character of cognitive development: *The Origins of Intelligence in Children* in reference to the subject-pole of personal horizon and *The Construction of Reality in the Child* in reference to the object-pole.[121] These two aspects of cognitive development occur together in the one interaction between the individual and his environment. Thus, as the infant adapts in a very practical way to his surroundings (assimilation and

[119] Jean Piaget, *Psychology and Epistemology* (London: The Penguin Press, 1970), p. 2

[120] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 2.

[121] Jean Piaget, *The Origins of Intelligence in Children*, Margaret Cook (Trans.)(London: Routledge & K.Paul,1953) Jean Piaget, *The Construction of Reality in the Child*, Margaret Cook (Trans.)(New York: Ballantine, 1975)

accommodation), he discovers himself and his cognitive operations, and he "organizes reality by constructing the broad categories of action which are the schemes of the permanent object, space, time, and causality, substructures of the notions that will later correspond to them."[122]

Piaget points out that these categories are completely absent at the beginning when "the child's initial universe is entirely centred on his own body and action in an egocentrism as total as it is unconscious (for lack of consciousness of self)" He goes on to say that

> in the course of the first eighteen months, however, there occurs a kind of Copernican revolution, or, more simply, a kind of general decentering process whereby the child eventually comes to regard himself as an object among others in a universe that is made up of permanent objects (that is, structured in a spatio-temporal manner) and in which there is at work a causality that is both localized in space and objectified in things.[123]

As this line of thought indicates, Piaget, though widely known for his descriptive analysis of the development of children's thought, and particularly in its pedagogical application to curriculum planning, is essentially interested in questions and issues that are best described as epistemological. Walter Conn agrees that "it is the explanatory, theoretical power of his genetic epistemology, worked out in a critical, empirical context, that constitutes, in my opinion, the real and lasting contribution of his work."[124]

Even at this first stage one sees the self-transcendent development of the individual in the movement from egocentrism toward decentred objectivity. This is characteristic of the entire course of the child's development, and is clearly evident in the most significant though rudimentary development of infancy.

2/ *The Preoperational Period*

The second key period of cognitive development in Piaget's analysis, spanning the years approximately from two to seven, is essentially one of transition and preparation. It represents a transition from the direct external actions of practical intelligence to the internalised actions of thought called 'operations'. As

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[122] Jean Piaget & Bärbel Inhelder, *The Psychology of the Child*, Weaver (Tr), (New York: Basic Books, 1969), p 13

[123] Ibid.

[124] Walter E. Conn, "Moral Development as Self Transcendence", *Horizons* Vol 4 (1977), p 196.

Piaget himself explains, "through the influence of language and socialization, intelligence is transformed during early childhood from simple sensorimotor and practical intelligence to thought itself."[125] However, social relations are only rudimentary at this stage, and

> it is only vis-a-vis others that we are led to seek evidence for our statements. We always believe ourselves without further ado until we learn to consider the objections of others and to internalize such discussions in the form of reflection.[126]

Thus, even in the most reality-oriented thinking of the young child, says Piaget, one quality stands out: "he constantly makes assertions without trying to support them with facts."[127] Only gradually does there appear a clear differentiation between fact and fiction.

But around the age of six or seven, according to Piaget, there begins to occur a fundamental change in the child's thinking which marks a key turning point in the course of cognitive development. There begins at this point a transition from the isolated intuitions of the preoperational period to concrete operations which are by definition organised and interrelated in what Piaget terms 'groupings'.

According to Conn, the important development at this stage from the point of view of self-transcendence is the further decentering of the young child's egocentric viewpoint that is achieved through the emerging logical operations' power to situate the knowing subject within the much broader context of objective relations. The emergence of concrete operations is gradual, but by the time their development is completed at around the age of ten, the transformation of the child's world is nothing short of radical.

3) *The Period Of Concrete Operations*

Because of the limitations of their concreteness, concrete operations are not the last word in cognitional development. However, these new systematically organised logical operations do enable the child to move beyond her own viewpoint and to take other perspectives into account. In this way, they constitute a springboard for cognitional self-transcendence that is totally beyond the horizon of

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[125] Jean Piaget, *Six Psychological Studies*, Anita Tenzer (Trans.), David Elkind (Ed.), (New York: Vintage Books, 1968), p. 22.
[126] Ibid., p. 29.
[127] Ibid.

the young child. Just as social interaction seems to be a necessary condition for the realisation of this stage of intellectual growth, so also these concrete operational powers seem to be the condition for the psychosocial achievements of industry and competence which occur during primary school age.

4) *The Period of Formal Operations*

Piaget claims that when the child thinks concretely, "he deals with each problem in isolation and does not integrate his solutions by means of any general theories from which he could abstract a common principle." By contrast, he says, "what is striking in the adolescent is his interest in theoretical problems not related to everyday realities." And, "what is particularly surprising," is the adolescent's "facility for elaborating abstract theories ... that transform the world in one way or another."[128]

This is all part of a "fundamental transformation" in children's thinking - a transition from concrete to formal thinking. Whereas the concrete intelligent operations of childhood are concerned only with "tangible objects that can be manipulated and subjected to real action," with the advent of formal thinking "the logical operations begin to be transformed from the plane of concrete manipulation to the ideational plane, where they are expressed in some kind of language (perhaps words or mathematical symbols.), without the support of perception, experience, or even faith."[129]

Piaget describes this formal thinking as "hypothetico-deductive". What he means by this is that "it permits one to draw conclusions from pure hypotheses and not merely from actual observations." This revolution effected by the emergence of formal operations finds its fundamental significance in the fact that it provides the adolescent "with an entirely new ability that detaches and liberates thinking from concrete reality and permits it to build its own reflections and theories." As Piaget summarises it, "with the advent of formal intelligence, thinking takes wings". However, he continues, "it is not surprising that at first this unexpected power is both used and abused."[130]

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[128] Jean Piaget, *Six Psychological Studies*, Anita Tenzer (Trans.), David Elkind (Ed.), (New York: Vintage Books, 1968), p. 61.
[129] Jean Piaget, *Six Psychological Studies*, pp. 62 - 63.
[130] Ibid., p. 64.

What Piaget means by the latter statement is clear: like other cognitional abilities, formal thought tends to start off "by incorporating the world in a process of egocentric assimilation, only later does it attain equilibrium through a compensating accommodation to reality." In other words, the power of formal operations to draw conclusions with a validity independent of factual truth, the power which allows formal thought to transcend the limitations of immediate concreteness, can construct an idealistic world of possibilities entirely separated from, and maybe even opposed to, experience. An equilibrium in touch with the real world is attained only when "the adolescent understands that the proper function of [formal thought's] reflection is not to contradict but to predict and interpret experience."[131]

5. *Postformal Thinking*

Some neo-Piagetians, like Deirdre Kramer[132] and Juan Pascual-Leon[133], propose a fifth stage of cognitive development, in which individuals recognise that many real-life situations pose multiple problems and opportunities, for which there will not be one clear answer:

> Through postformal thinking, we can consider and choose among alternatives, recognising that other alternatives may offer benefits not obtainable from the chosen one.[134]

It is also worth noting that some neo-Piagetians disagree with Piaget regarding the discontinuous nature of development, claiming instead that human development is, at least to some degree, continuous. However, this does not cast doubt on the central concern of this section of this work, that Piaget's view of the cognitive development of the child is essentially a transcendent one.

8.16 *Erikson and Self-Transcendence*

Just as Piaget has provided a developmental or 'genetic' view of cognition that appears to complement and support Lonergan's dynamic, and essentially transcendent, theory of coming to know, so there is also a need to find a developmental view of the affective and emotional aspects of the human psyche which is consistent with Lonergan's theory of feelings as intentional (and thus

[131] Ibid.

[132] Deirdre A. Kramer, "Conceptualizing Wisdom: the primacy of affect-cognition relations", in R.J. Sternberg (Ed.) *Wisdom: its nature, origins and development* (New York: Cambridge University Press, 1990), pp. 279 - 313.

[133] Juan Pascual-Leon, "Wisdom: towards organismic processes", in R.J. Sternberg (Ed.) Wisdom: its nature, origins and development (New York: Cambridge University Press, 1990), pp. 244 - 278.

[134] Robert J. Sternberg, *In Search of the Human Mind* (New York: Harcourt Brace College Publishers, 1998), p.405

transcendent) responses to values. Lonergan does not provide any suggestions with regard to a preferred theory of emotional development. In the absence of such, a summary of the theories of Erik Erikson is presented here for the sake of completion. Any theory, if it is to be consistent with Lonergan's, must provide a self-transcendent view of human development. Self-transcendence implies that the theory must provide a "'forward' formulation of progressive differentiation in growth and development" as well as a "'backward view of genetic reconstruction"[135]. Freud's theories of psycho-sexual development, for example, with their minute reconstructions of 'pathogenic' events in early childhood cannot be viewed as transcendent, nor does their view of human development include the idea of self-transcendence. It would be difficult then to justify any marriage of the theories of Lonergan with those of Freud.

Erikson, on the other hand, has analysed the course of the affective development of the human person in terms of eight psychosocial stages, each marked by a definite crisis, and each productive of a specific virtue or psychosocial strength. Erikson does have an "'upward' awareness of compelling social experience" that his overall theory would qualify for the appellation 'transcendent'. Walter Conn who has studied Erikson's theories in relation to Lonergan's concludes that "it is clear that his view of self-transcendence is a critical issue from the very beginning of personal development." [136]

Erikson's system might also be classified as 'organismic'. Organicism, as defined by Pepper, relies on the root metaphor of integration. It assumes the primary interdependence of variables as they evolve over time. This root metaphor is based, in turn, on dialectical theories, and posits that all knowledge evolves towards states of increased integration via the interplay of contradiction (within and between systems) and its resolution.[137]

Erikson's stages extend to mature adulthood. Here, however, only his first five stages will be considered, those concerned with the human person during the normal school years, and correlating roughly with the five stages of cognitive development attributed to Piaget and his disciples. The first four of these stages

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[135] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, IX (The Macmillan Company, 1968), p. 286.

[136] Walter E. Conn, "Moral Development as Self Transcendence", *Horizons* Vol 4 (1977), p 194.

[137] Deirdre A. Kramer, "Conceptualizing Wisdom: the primacy of affect-cognition relations", in R.J. Sternberg (Ed.) *Wisdom: its nature, origins and development* (New York: Cambridge University Press, 1990), p. 280.

also correlate closely with the Freudian analysis of the sexuality of the infant and young child. However, with Erikson the emphasis is on the development of the individual in the context of the social environment. His interest is with the development of the human mind as a social entity. The following, then, are the first five of Erikson's 'psychosocial stages of development', together with the particular 'crisis' and consequent psychosocial strength corresponding to each:

	Stage	Psychosocial Crisis	Psychosocial Strength
I	Infancy	Trust vs Mistrust	Trust or Faith
II	Early Childhood	Autonomy vs Shame or Doubt	Will Power
III	Play Age	Initiative vs Guilt	Sense of Purpose
IV	School Age	Industry vs Inferiority	Competence
V	Adolescence	Identity vs Identity Diffusion	Fidelity

Erikson's psychosocial stages of development will be dealt with in more detail in that section dealing with "Intersubjectivity from a Developmental Viewpoint."[138] Suffice it to say at this point that Erikson's model of psychosocial development appears to be transcendent in the two senses outlined above.[139]

8.17 *Feuerstein and Self-Transcendence*

Feuerstein does not attempt to provide a stage-by-stage account of human development like Piaget and Erikson. This is partly because his theory of human cognitive modifiability applies to all, regardless of age. In practice, most of his clinical work has been with adolescents and young adults. However, like Piaget and Erikson, he also has an inherently transcendent view of human nature. This view stems from his fundamental belief in what he terms 'Structural Cognitive

[138] Section 17.8.

[139] Section 8.13.

Modifiability' (SCM). He insists that "except in the most severe instances of genetic and organic impairment, the human organism is open to modifiability at all ages and stages of development." [140]

He claims that all human beings need to be considered as open systems, liable to be meaningfully modified by environmental intervention. Such a view contrasts sharply with the general hereditary view of achievement potential, which, in its extreme form, considers that the ultimate level of an individual's functioning is determined solely by his genetic endowment. [141] One can say that, at least in this regard, Feuerstein has an inherently transcendent view of the human mind.

In the Feuerstein system the term 'transcendence' also refers to the fact that in most mediator/child interactions what is communicated to a child goes beyond, or transcends, the narrow mediational goals of the particular interaction. Making an individual acquire a skill or become competent in a particular area of knowledge is the goal of the interaction between parent and child, or teacher and student. However, the secondary intention of making him feel competent, or the mediation of tidiness or sharing behaviour, for example, goes beyond the immediate skill or competence acquisition, and yet plays an important part in the mediated learning of the child. [142]

Feuerstein's structural cognitive modifiability (SCM) is anchored deeply in what he terms the 'active-modificational'(AM), as opposed to the 'passive-acceptant'(PA), approach to human development. Hence comes the title of his book, *Don't Accept Me as I Am*. His underlying philosophy and his practical pedagogical approach are both inherently transcendent. In the above-mentioned book, for example, he states:

> The ultimate goal of the teaching process is to transcend the world of the concrete, to teach richer and more effective levels of abstract thinking rather than to create an 'artificial world' to which the student may easily adapt. [143]

Feuerstein rejects an 'acceptant' approach only with regard to a student's disability, however, and not with regard to the student himself as a person. While an

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[140] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore: University Park Press, 1980), p. viii.

[141] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York: Plenum Press, 1988), p. 5.

[142] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), pp. 20 - 21.

[143] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York: Plenum Press, 1988), p. 21.

emotional acceptance of each individual is always a pre-requisite of effective intervention, his underlying philosophy as well as his practical pedagogical approach may be regarded as inherently transcendent in that they always emphasise the individual's potential for development rather than his present performance, always making reasonable demands on the student in keeping with his potential.

It follows that Feuerstein's approach to assessment also emphasises measurement of potential rather than estimation of present knowledge. Thus, even his approach to assessment may also be termed transcendent. Feuerstein explains:

> Psychological assessment guided by a PA approach and its belief in the immutability of intellectual and cognitive functioning, usually contents itself with a "one-time" assessment. No reassessment is needed where no change is expected. On the other hand, assessment anchored in the AM approach will require - and perform - more frequent reassessment so as to be able to evaluate changes that occur as a result of environmental intervention.[144]

Such a "reassessment" is part of Feuerstein's Learning Potential Assessment Device (LPAD), which has already been mentioned.[145]

According to Feuerstein, the 'passive-acceptant' approach to education is often the product of a misguided concern to bolster a student's self-esteem by offering him a special curriculum which more or less guarantees success. Feuerstein rejects such special 'watering down' of curriculum, and he insists that "experiences of 'hard-won' success are very important to the development of feelings of competence and self-esteem; they are real, not artefacts."[146] Feuerstein rejects in particular the prevalent notion that slow learners or 'handicapped' children are somehow lacking in ability to form abstractions:

> Concretized educational practices are sometimes justified by claims that the students are being offered a world in which they are capable of acting adequately without having to experience continuous challenges, and perhaps failure and frustration. The problem is, though, that by binding the child only to a concrete world and by training him to act - even successfully - within the limits of concrete learning opportunities, not only are we not enhancing the individual's coping capacities, we are often reducing them substantially. Life's realities are *not* only concrete. On the contrary, adaptation requires a continuous activation of abstract thinking. Consequently, the continuous reference to concrete learning may cause the student to be incapacitated in real-life situations,

[144] Ibid., p. 18.

[145] See Section 4.4.5, above.

[146] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York: Plenum Press, 1988), p. 20.

incapable of coping with a constantly changing environment.[147]

It is interesting that Piaget similarly criticised the Montessori system for what he saw as its over- dependence on concrete didactic materials and its relative neglect of the abstract.

Again, all of this clearly indicates that Feuerstein, like Piaget, Erikson, and Lonergan, has a transcendent view of both the mind of the child and of the educational process itself. In a paragraph already quoted above he says: "The ultimate goal of the teaching process is to transcend the world of the concrete, to teach richer and more effective levels of abstract thinking rather than to create an 'artificial world' to which the student may easily adapt."[148] This author has witnessed Feuerstein in interaction with many so called 'mentally retarded' children. His gentle, good humoured insistence on leading the child up an inclined plane of every greater and more demanding performance appears at times unreasonable. Yet the sheer delight and triumph on the child's face as he achieves something genuinely difficult, is matched only by the sincere joy and delight on the face of the elderly psychologist himself. The words "cruel to be kind" come to mind, but do not do justice to the situation. The child is aware only of a challenge, and of an old man's confidence that he can meet that challenge, then comes the glorious moment of triumph which can blow away in one fell swoop all the old accusing, self-doubting gremlins in his mind. Thus, in this instance at least, one can say that self-transcendence has led to self-actualization.

8.18 *Self-Transcendence and Self-Actualisation*

It has been argued above that, whether they intended it or not, 'self-transcendence' is implicit in the developmental theories of Jean Piaget and Eric Erikson. Thus, in this regard at least, their work supports the theories of both Lonergan and Aquinas. Hertzberg also insists:

> It has been established that human development entails a process of self-transcendence. It is not surprising, then, that the goal of man, man's purpose in life, is also self-transcendent. Thus, in his *Summa Theologica*, we find Aquinas asserting that the goals of man are "neither outside or within him, they transcend him.[149]

[147] Ibid., pp. 20 - 21.
[148] Ibid., p. 21.
[149] Frederick Hertzberg, *Work and the Nature of Man* (London: Staples Press, 1968), p. 20.

Both Piaget and Erikson are developmental psychologists, viewing human development, human growth, or human self-actualisation, from different perspectives. It follows that what is normally termed 'self-actualisation' goes hand in hand with self-transcendence. One can even say that self-actualisation is a consequence of self-transcendence. Viktor Frankl supports this view and, like Lonergan, links the notion of self-transcendence to that of intentionality:

> Being human always points, and is directed, to something, or someone, other than oneself - be it a meaning to fulfil or another human being to encounter. The more one forgets himself - by giving himself to a cause to serve or another person to love - the more human he is and the more he actualizes himself. What is called self-actualization is not an attainable aim at all, for the simple reason that the more one would strive for it, the more he would miss it. In other words, **self-actualization is possible only as a side effect of self-transcendence.**[150]

The last word on self-transcendence goes to Abraham Maslow, quoted from a work of Stephen Covey. Covey claims:

> Abraham Maslow, one of the fathers of modern psychology, developed a "needs hierarchy" in which he identified "self-actualization" as the highest human experience. But in his last years, he revised his earlier theory and acknowledged that this peak experience was not "self-actualization" but "self-transcendence", or living for a purpose higher than self.[151]

8.19 *Bruner's 'Spiral Curriculum."*

That all of the above theoretical notions of self-transcendence and self-actualisation can find practical application in education can be seen from Jerome Bruner's notion of the 'spiral curriculum'. According to Bruner "any domain of knowledge can be constructed at varying levels of abstractness or complexity." this leads to his now famous conclusion that "any subject can be taught to any child at any age in some form that is honest." [152] By this he means that by proper preparation and curriculum design, it is possible to introduce quite complex notions and ideas to children in a form which is consistent with their 'horizons' and their developmental levels. Then, carefully, thoughtfully, and methodically, it is possible to circle back and revisit the same ideas at progressively higher levels of abstraction and

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[150] Viktor Frankl, *Man's Search for Meaning* (New York: Washington Square Press, 1984), p. 133. (Emphasis is this author's own)

[151] Stephen R. Covey, A. Roger Merrill, Rebecca R. Merrill, *First Things First* (New York: Simon and Schuster, 1994), p. 49.

[152] Jerome Bruner, *The Culture of Education* (Cambridge MASS: Harvard University Press, 1996), p. 119.

complexity. This is the essence of what he terms the "Spiral Curriculum:"

> The idea is that in teaching a subject you begin with an "intuitive" account that is well within the reach of the student, and then circle back later to a more formal or highly structured account, until, with however many more recyclings are necessary, the learner has mastered the topic or subject in its full generative power.[153]

This follows very closely the spiral of growth model employed in this study. It is also very much the practical pedagogical method employed by Reuven Feuerstein in his Instrumental Enrichment programme. Of equal note, however, is Bruner's statement that

> a so-called "higher-level" way of characterizing a domain of knowledge encompasses, replaces, and renders more powerful and precise a "lower-level" characterization.[154]

One can immediately recognise in this quotation parallels with Lonergan's notion of 'sublation', according to which stages or levels of conscious intentionality undergo an absorption, or 'appropriation', as they rise or develop from the lowest level of 'attention' to the highest level of judgement. Thus they are not like the rings of a tree, for example, which maintain their identity as the tree grows, rather each higher level of conscious intentionality draws from, includes, and adds value to the one below it. Thus it exhibits new characteristics in its process of operation as well as all the characteristics of the lower level, but now at a more complex and higher degree of organisation. Lonergan explains:

> Lower level of operation are prior as presupposed by the higher, as preparing materials for them, as providing them with an underfooting and, in that sense, with foundations. But the higher have a priority of their own. They sublate the lower, preserving them indeed in their proper perfection and significance, but also using them, endowing them with a new and fuller and higher significance, and so promoting them to ends beyond their proper scope.[155]

These are not just points of convergence between the theories of Bruner and the model being developed in this study on the basis of Lonergan's philosophy, but it may be argued that they can also be taken as an additional support, validation, or confirmation of the same model.

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[153] Ibid.

[154] Ibid.

[155] Bernard Lonergan S.J., "Mission and the Spirit", F.E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan S.J.*, (London: Geoffrey Chapman,1985), p. 30.

8.20 *Chapter Conclusions*

This chapter has attempted to outline a possible philosophical and psychological model of human development based on Lonergan's cognitive theory and his four levels of cognitive and volitional operation. Firstly, by linking Lonergan's theories with Dewey's 'principle of continuity' a spiral of growth model was introduced which also incorporated Lonergan's notion of 'sublation'. Next it was argued that this spiral of growth model of cognitive development follows similar rules to organic growth and development, as well as exhibiting similar patterns to those displayed in fractal theory. This was taken as offering some support and confirmation of the model of human development being proposed. But importantly, it also represents a point of convergence between Lonergan's philosophy and modern science. This also represents an attempt to show that transcendence is not just a characteristic of the human mind but, in a sense, it is to be found in embryo, as it were, in all organic growth.

Lonergan's notion of transcendence was introduced in this chapter as a distinguishing feature of 'development' as against mere 'growth'. It was next argued that, whether Piaget intended it or not, the notion of the transcendence of the human being is also shared by his theory of 'genetic epistemology'. It was also suggested that Erikson, who based his theories of psychosocial development on the different psychosexual stages of Freud, has also proposed what is an inherently transcendent view of man. It is perhaps less surprising to find such a transcendent view in the theories and practical methods of Reuven Feuerstein, but it is included in this chapter for the sake of completion and because it is important to emphasise once again the degree of consistency that appears to be emerging between the work of Feuerstein and the cognitional theories of Lonergan. Finally, as an attempt to bring together the notions of cycle of growth and transcendence with wider educational considerations, Bruner's notion of the 'spiral curriculum' was introduced.

Since the notions of consciousness and self-appropriation are central to any treatment of Lonergan's notion of the transcendent nature of the human mind, the study now turns to an in-depth treatment of these related and very central concepts.

Chapter 9

Consciousness, Intentionality, and Self - Appropriation

"The human being is by nature a philosopher."

Pope John Paul II[1]

9.1 *Introduction: Consciousness and Intentionality*

In his paper entitled "Learning Levels," which he delivered to the Australian Lonergan workshop, Tom Daly says that "one of Lonergan's most original contributions to philosophy is on the nature of consciousness." He goes on to say that, in this regard, Lonergan "has a fairly simple solution to problems that Gilbert Ryle and others have struggled with."[2] This present chapter attempts to give an exposition of Lonergan's notion of consciousness and how it relates to his kindred notions of self-transcendence, intentionality, and interiority.

In *Method in Theology* Lonergan explains that not only do the operations of "seeing, hearing, touching, smelling, tasting, inquiring, imagining, understanding, conceiving, formulating, reflecting, marshalling and weighing the evidence, judging, deliberating, evaluating, deciding, speaking, writing,"[3] by their intentionality make objects present to the subject, but "by them the operating subject is conscious"[4] and "by consciousness they make the subject present to himself."[5] In other words, consciousness is not grasped by looking inwards at the mind and its operations, but rather it is experienced by the subject in the ordinary operations of his mind. It has already been argued that these same distinct activities may be conveniently

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[1] Pope John Paul II, *Fides et Ratio* (London: Catholic Truth Society, 1998), p. 95.

[2] Tom Daly, "Learning Levels", William Danaher (Ed.), *Australian Lonergan Workshop* (University Press of America, New York, 1993), p. 237. For Ryle, the difficulty was "the Problem of what *Le Penseur* is doing." [*Dilemmas: The Tarner Lecture* (Cambridge: Cambridge University Press, 1954), p. 33] He was referring, of course, to Rodin's famous sculpted figure which, with fist on chin, clearly represented private cognitional activity. Of more direct relevance to our present work, however, is the obvious conclusion that there can be no room in the theories of philosophers like Ryle for any real notion of intentionality, since intentionality presupposes the existence of internal mental activity.

[3] Bernard Lonergan, *Method in Theology*, p. 6.

[4] Ibid., p. 8.

[5] Ibid.

grouped under the headings of experience, understanding, judgment, and decision. Paul Kidder further explains that "to analyse these operations in their patterning and their concrete conditions is to perform what Lonergan, in *Method*, calls 'intentionality analysis'."[6] Further, going beyond mere analysis in order to try to identify, experience, and grasp these operational patterns in one's own living and thinking is, in Lonergan's terms, appropriation of one's intentionality, or 'self-appropriation of interiority'. Further still, the exercise of such self-appropriation is equated by Lonergan with the ultimate and most central aspect of philosophising, or 'doing philosophy'.[7] It is also the chief task to which *Insight* and all of Lonergan's subsequent writings direct his readers.

To Lonergan, the mental operations listed above are not merely intentional, they are also conscious. Through consciousness, he would say, one is aware of both objects intended and of oneself as the intending subject. One is aware not only of oneself as a knower of external empirical data, but also as a knower of oneself as a knowing subject. Through consciousness one is made present to oneself as an inquiring subject. This "being present" to oneself is not an awareness of oneself as an object intended but as a subject in the process of intending.[8] Thus Lonergan distinguishes clearly between knowing oneself as subject and the 'reflexive' knowing of oneself as object. "Consciousness," he says "is not to be confused with reflexive activity."[9] Descartes, for example, confused consciousness with introspection, and some contemporary philosophers, even those who have enthusiastically rejected his mind/body dualism, have fallen into the same introspective trap.[10] Long ago, Herbert Spencer had already sought to confront this fallacy in the following terms: "If, then, the object perceived is self, what is the subject that perceives? Or if it is the true self which thinks, what other self can it be that is thought of?" [11]

Still other contemporary philosophers actually reject or simply ignore the

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6 Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", *Method: Journal of Lonergan Studies,* Vol. 4, No. 1 (March 1986), p. 29.

7 Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 181. It is significant also that the first definition of philosophy offered in *The Oxford Companion to Philosophy,* published in 1995, is "thinking about thinking."

8 William Reynolds Eidle, *The Self-Appropriation of Interiority* (Peter Lang Publishing, New York, 1990), p. 14.

9 Bernard Lonergan, F.E. Crowe (Ed.), *Collection* (Darton, Longman & Todd, London, 1967), p. 177.

10 Anthony Kenny, *The Metaphysics of Mind* (Oxford University Press, Oxford, 1992), p. 2.

11 Herbert Spencer, *First Principles* (London: 1875), p. 65.

whole notion of consciousness. Lyons, for one, insists that "consciousness or attention have no longer been seen as essential to intentionality."[12] This may be for the very good reason that the theories of many of these philosophers, like Ryle, Carnap, and Dennett, cannot give an adequate account of consciousness.

Among contemporary philosophers of mind, however, John Searle in his *Rediscovery of the Mind* certainly appears to grasp the central importance of consciousness and to engage in a serious search for a mentalistic and non-reductionist understanding of it. With regard to modern materialist philosophers he states:

> It seems clear that when they assert the identity of the mental with the physical, they are claiming something more than simply the denial of Cartesian substance dualism. It seems to me they wish to deny the existence of any irreducible mental phenomena in the world. They want to deny that there are any irreducible mental phenomena such as consciousness.[13]

Here Searle is clearly referring to reductionists like Dennett, Ryle and Carnap. Lonergan would, no doubt, support Searle's observations and add, with a touch of irony:

> Not even behaviourists claim that they are unaware whether or not they see or hear, taste or touch. Not even positivists preface their lectures and their books with the frank avowal that never in their lives did they have the experience of understanding anything whatever. Not even relativists claim that never in their lives did they have the experience of making a rational judgment. Not even the determinists claim that never in their lives did they have the experience of making a rational choice.[14]

Lonergan's own position in regard to consciousness introduced above may be further summarised in the following quotation:

> Consciousness is the presence of the subject to himself that is distinct from, but concomitant with, the presence of objects to the subject. This self-presence differs from the presence of an object; it is prior to any reflexive, introspective operation; it is constitutive of the subject as subject.[15]

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12 William Lyons, *Approaches to Intentionality* (Oxford: Clarendon Press, 1995), p. 4.

13 John R. Searle, *The Rediscovery of the Mind* (MIT Press, Cambridge Mass, 1992) , p. 27.

14 Bernard Lonergan, "Cognitional Structure", p. 21.

15 Bernard Lonergan, "The Mediation of Christ in Prayer", *Method: Journal of Lonergan Studies*, Vol 2 (1), March 1984, pp. 8 - 9. This is a transcript of a lecture given by Lonergan at the Thomas More Institute, Montreal, on 24th. September 1963. The same lecture has also been published in Volume 6 of *The Collected Works*, although the extract just quoted appears in truncated or incomplete form in this publication.

What Lonergan appears to be saying is that there can be no experience of things in the objective world without a simultaneous awareness of self, that there can be no knowledge of things external, without a concomitant consciousness of self. Consciousness, according to Lonergan, is essentially the experience of the self, or the subject, in operation. It is in and through an interaction with the outside world that consciousness, or experience of self, first emerges. Lonergan, in other words, like Husserl, emphasises the inseparability of consciousness and its objects. Acts of consciousness and objects of consciousness are essentially related. What this means is that one cannot examine one's act of consciousness without some intentional object being simultaneously present to act as the focus of consciousness. Likewise, one can examine an external object only in the light of consciousness since "objects are always objects *for* consciousness."[16]

Husserl also insists that "inquiry into consciousness concerns *two sides* ... ; they can be characterised descriptively as *belonging together inseparably*." [17] This means that there are two types of empirical data to be considered by a philosophy of mind: data of sense and data of consciousness. The following exercise paraphrased from Husserl's *Cartesian Meditations* illustrates this latter point very well:[18]

a) Put your hands on the table and close your eyes.

b) You can feel its hard, smooth, metallic surface. This can be termed 'outer perception' and it is a real phenomenon. As such, it is 'apodictic'. In other words, it is indubitable; it cannot be doubted, cannot be 'bracketed'. However, any acts of understanding with regard to the table, as well as acts of judgement as to whether the table exists or not, *can* be suspended, doubted, and 'bracketed'[19] . Only the original

[16] Hammond, Howarth and Keat, *Understanding Phenomenology* (Cambridge, MASS: Basil Blackwell, 1991), p 48

[17] Edmund Husserl, *Cartesian Meditations* (Dordrecht: Kluwer Academic Publishers, 1995), p 39.

[18] Ibid.

[19] In phenomenology, to say that something is 'bracketed' is to say that it is 'dubitable', or may be doubted for the moment. A clearer, and more positive, exposition of the meaning and origin of the term, however, is given by Wojtyla. He explains that in algebra "we place outside brackets those factors of an algebraic expression which in one way or another are common to all the terms of the expression, that is, which are somehow common to everything that remains within the brackets. The aim is to simplify subsequent operations and not to reject what is withdrawn or to sever the relations of what is outside to what remains in the brackets. On the contrary, the operation underlines and enhances the significance of the factor isolated from the expression. If it were not placed outside the brackets, it would remain hidden among the other terms of the expression; but it is now brought to light and given prominence." Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 13.

phenomenon experienced may be regarded as indubitable, according to the phenomenological method.

The phenomenological description of the experience of such an intentional object as the table Husserl calls a 'noematic description'. An intentional object like the table itself he terms the 'cogitatum'.

c) Now shift your attention to your fingers so that they become the figure against the ground[20] of 'other'. You can feel the pressure of the table against your fingers. This can be termed 'body perception' and the phenomenon experienced is equally real, apodictic, and indubitable. A decision as to the existence of the body, on the other hand, demands both insight and judgment and thus may not be regarded as apodictic.

This phenomenological description of the act of perceiving the table (as opposed to the description of the table perceived) Husserl terms a 'noetic description'.

d) To Descartes, the 'ego sum' or 'I am' is apodictic. In Husserl's 'method of doubt', however, it is the experience of phenomena which cannot be doubted, and not the existence of a rational thinking Self, as asserted by Descartes. For Husserl, even the notion of 'sensation' or 'data of sense' is an abstraction from the concrete experience of inner and outer reality, and so it must also be 'bracketed' or doubted.

For Lonergan also two types of experience are operating simultaneously, inner and outer. In the same way, there are two types of data which the mind deals with simultaneously, external data of sense and internal data of consciousness. It is this extension of the notion of experimental data to include not only data of sense but also data of consciousness that gives rise to Lonergan's notion of 'generalised empirical method'. He explains:

> Experience is commonly divided into external and internal. External experience is of sights and sounds, of odours and tastes, of the hot and cold, hard and soft, rough and smooth, wet and dry. Internal experience is of one's self and one's apprehensive and appetitive activities.[21]

[20] The complementary notions of 'figure' and 'ground' belong to the realm of attention and are dealt with in some detail in the next chapter of this work, dealing with Lonergan's first 'transcendental precept'.

21 Bernard Lonergan, "Cognitional Structure", *Collection*, F.E. Crowe(Ed) (London: Darton Longman & Todd, 1967), p. 20.

It follows that there is also a 'duality of knowing'. Ogden explains what he means:

> There is the kind of knowledge whose basis is 'the data of sense' and whose refined and fully developed form is empirical science. But there is also the kind of knowledge whose primary object is not the known but the knowing subject, and which is based, therefore, on 'data of consciousness'[22]

Mathews also explains that "the two realms cannot be separated, for unless one is wondering about some sense datum or some object in the world one is not yet presented with the conscious experience of inquiring."[23] Data of consciousness are of the intentional sensory and mental operations themselves in the act of being intentional.[24] As with sensory data, one can attend to data of consciousness or one can neglect them. If one neglects them, it does not mean that one is not conscious; on the contrary one is conscious but does not advert to, or attend to, the experience. Just as one can experience data of consciousness and advert to that experience, one can also reflect on and gain insights into such data. Again, William Mathews asserts that "it is simply obscurantism to hold that we can wonder about data of sense but not of consciousness." [25] And Lonergan explains more fully:

> Because human knowing is a structure of different activities, experience of human knowing is qualitatively differentiated. When one is reflecting, weighing the evidence, judging, one is experiencing one's own rationality. When one is inquiring, understanding, conceiving, thinking, one is experiencing one's own intelligence. When one is seeing or hearing, touching or tasting, one is experiencing one's own sensitivity. Just as rationality is quite different from intelligence, so the experience of one's rationality is quite different from the experience of one's intelligence; and just as intelligence is quite different from sensitivity, so the experience of one's intelligence is quite different from the experience of one's sensitivity. [26]

And asserting once more the identity of form between knower and known, or between the experiencer and the experienced, he continues:

> Indeed, since consciousness is of the acting subject *qua* acting, the experience of one's rationality is identical with one's rationality bringing itself to act; the experience of one's intelligence is identical with one's bringing one's intelligence to act; and the experiencing of one's sensitivity is identical with one's sensitivity coming to act.[27]

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22 Schubert M. Ogden, "Lonergan and the subjectivist principle", in Philip McShane (Ed.), *Language Truth and Meaning: Papers from the International Lonergan Congress 1970*, (Gill & Macmillan, Dublin, 1972), pp. 218, 219.

23 William A. Mathews, *Questioning and its Object* (University of Leeds, Ph.D. Thesis, 1980), p. 180.

24 William Reynolds Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 21.

25 William A. Mathews, *Questioning and its Object,* p. 180..

26 Bernard Lonergan, "Cognitional Structure", pp. 19 - 20.

27 Ibid.

What place then, in Lonergan's scheme, has introspection in the traditional meaning of the term? The answer is that it has none. According to Lonergan, one cannot simply turn around and take a good objective look at one's self. Presumably it is the self which is doing the looking in the first place. And even if one did manage, one would be coming to know oneself as object, but never as subject. Lonergan does, however, have concepts of self-awareness, self-understanding, and self-knowledge. Just as consciousness is experience of self as an agent of action, so Lonergan maintains that one can also have insight into the resulting data of consciousness. This results, in turn, in self-understanding which can be formulated as a self-concept. Self-knowledge, in turn, can be gleaned by rational reflection on one's understanding of the data of consciousness. Introspection, in the sense of gaining knowledge of oneself by standing outside oneself and having an objective look, simply does not exist. Lonergan on many occasions has rejected this notion as a product of 'naive realism'. He insists:

> There is the word, introspection, which is misleading in as much as it suggests an inward inspection. Inward inspection is just myth. Its origins lie in the mistaken analogy that all cognitional events are to be conceived on the analogy of ocular vision. [28]

Eidle explains Lonergan's position on self-knowledge as follows:

> To know ourselves in reflexive or introspective activity is not "to see" ourselves. Rather it is to experience ourselves directly in the data of consciousness, to understand that data, and then through an act of critical judgment to affirm our own objectivity, our own reality.[29]

One can see immediately that this entire scheme of consciousness, self-understanding, and self-knowledge is simply Lonergan's dynamic cognitive structure operational at a higher 'reflexive' level. In other words, it is a reduplication of the cognitive structure on a higher 'metacognitive' plane. He says: "Self-knowledge is the reduplicated structure: it is experience, understanding, and judging with respect to experience, understanding, and judging"[30]. In his earliest work, *Verbum*, Lonergan had already explained his idea of "reduplicated structure" with the following formula:

> We know by what we are. We know we know by knowing what we are; and since even the knowing in 'knowing what we are' is by what we are, rational reflection on ourselves is a duplication of

[28] Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 8

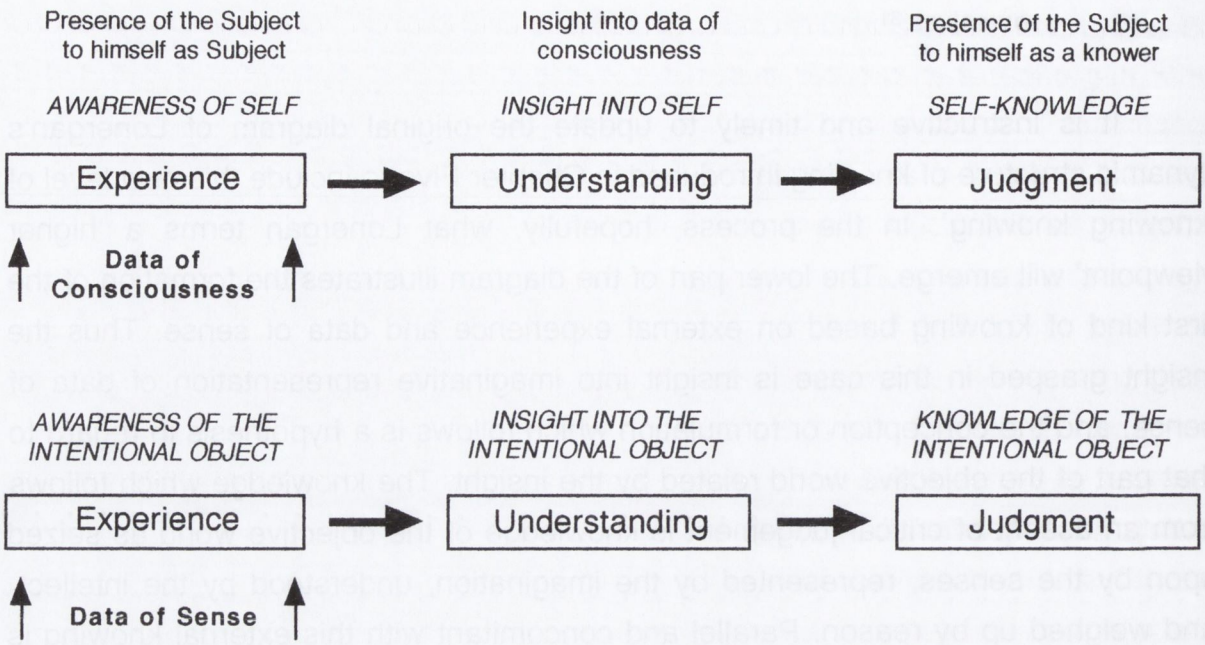
[29] William Reynolds Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 19.

[30] Bernard Lonergan, "Cognitional Structure", p. 19.

ourselves.[31]

It is instructive and timely to update the original diagram of Lonergan's dynamic structure of knowing introduced in Chapter Five to include this new level of 'knowing knowing'. In the process, hopefully, what Lonergan terms a 'higher viewpoint' will emerge. The lower part of the diagram illustrates the formation of the first kind of knowing based on external experience and data of sense. Thus the insight grasped in this case is insight into imaginative representation of data of sense, and the conception or formulation which follows is a hypothesis in regard to that part of the objective world related by the insight. The knowledge which follows from an assent of critical judgement is knowledge of the objective world as seized upon by the senses, represented by the imagination, understood by the intellect, and weighed up by reason. Parallel and concomitant with this external knowing is an internal knowing based on internal experience and data of consciousness. This awareness of self in the process of coming to know can, through a reduplication of the same intellect, give rise to an insight into data of consciousness, an insight into self. If one can have an insight or understanding of oneself, it follows that one can also have a self-concept based on that insight. It also follows that one can weigh up, scrutinise, judge, this same self-concept for its appropriateness and consistency with the original data of consciousness. And when one has assented to or affirmed this aspect of one's interiority, one has seized hold of, or 'appropriated', an increment of self-knowledge; one can affirm that one is indeed of necessity a knower.

31 Bernard Lonergan, *Verbum*, pp. 88 - 89 .



In short, one can say that as well as having experiences of, insights into, and judgements about, intentional objects, one is also aware that one is involved in a process of experiencing, understanding, and judging. As well as being present to oneself in one's experiencing, understanding, and judging, one can also gain insight into one's experiencing understanding and judging. By so doing, one is advancing one's self-appropriation of interiority. The final step in self-appropriation is achieved when one can follow this "insight into insight" with the judgment that one is indeed a knower, an affirmation of oneself as a rational knower.

9.2 *The Duality of Knowing*

It has already been mentioned above that Lonergan recognises two levels of knowing. The more elementary type of knowing man holds in common with the animals and "is constituted completely on the level of experience; neither questions for intelligence nor questions for reflection have any part in its genesis."[32] The environment which is the object of the senses is already fully constituted. One can grasp it at this elementary level without the need to understand it or ask questions about it. This level of knowing is a product of biological and instinctive responses to stimuli. Piaget assumes that this is the predominant form of knowing in the neonate as well as in the animal.

32 Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans, 1964)

However, fully human knowing involves activity of the intellect, that is enquiry and reflection. It requires data of sense experience to provide material for questions for enquiry and reflection. While the objective world exists fully constituted and independent of the observer, "the real" can be grasped and known only through experience, understanding and judgment. This is "the kind of knowledge whose basis is 'the data of sense' and whose most refined and fully developed form is empirical science."[33]

But there is also for Lonergan the kind of knowledge which has as its primary object not the known object as such but the knowing subject in the act of coming to know the object. This knowledge is based therefore not directly on data of sense, but on what he terms "data of consciousness". Eidle explains that

> The data of consciousness are the intentional sensory and mental operations themselves in the act of being intentional. Awareness of the subject as subject is awareness of oneself as the operator of intentional operations fulfilling their intentional function.[34]

According to Lonergan, it is this latter kind of knowledge which is the proper objective of philosophy as distinct from the special sciences.[35] One might say with Walsh that "the most important part of philosophy is the transcendent reality within the soul of the philosopher - everything is measured in relation to that - and it cannot be communicated. It must be experienced."[36]

In the introduction to *Insight* Lonergan talks about the importance of breaking down "the duality in one's knowing."[37] Indeed, he identifies the task and method of philosophy as precisely the breaking down of this duality through "personal appropriation of ones rational self-consciousness."[38] In the ordinary operation of the human mind both types of knowing are operational at the same time. They are in a sense inseparable for the human person, "*belonging together*

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33 Schubert M. Ogden, "Lonergan and the subjectivist principle", Philip McShane (Ed.), *Language Truth and Meaning: Papers from the International Lonergan Congress 1970* (Gill & Macmillan, Dublin, 1972), pp. 218 - 219, sic.

34 William Reynolds Eidle, *The Self-Appropriation of Interiority* (Peter Lang Publishing, New York, 1990), p. 21.

35 Schubert M. Ogden, "Lonergan and the subjectivist principle", p. 219.

36 David Walsh, *After Ideology: Recovering the Spiritual Foundations of Freedom* (Washington, D.C.: Catholic University of America Press, 1995), p. 151. Walsh is professor and chair of the department of politics at The Catholic University of America.

37 Bernard Lonergan S.J., *Insight*, p. xxviii.

38 Bernard Lonergan, from transcript of lectures delivered in Trinity College Dublin in 1961 and quoted in Schubert M. Ogden, "Lonergan and the subjectivist principle," Philip McShane (Ed.), *Language Truth and Meaning: Papers from the International Lonergan Congress 1970* (Gill & Macmillan, Dublin, 1972), p. 218.

inseparably." [39] Ogden goes on to argue that "knowledge of knowledge is, in a certain sense, knowledge of the objects of knowledge." Lonergan would say that this is so because of the isomorphism or identity of form that exists between the structure of knowing and the structure of the known, so that the affirmation of oneself as a knower is also the affirmation of the structure of any object of knowledge.[40]

Both the mind and the object after all belong to the realm of being. All the different ways of looking at being and analysing it, which were outlined in Chapter Two, belong equally well to both mind and object. The structure of the mind is such that it has an innate 'notion of being'. This 'notion of being' becomes an 'intention of being' in the presence of an objective being. Through this intentional thrust the mind grasps the form of the object. The mind takes on the form of the object and, in a sense, becomes itself the object. This isomorphism between the structure of knowledge and the structure of being is the core of Lonergan's notion of intentionality. And, since it is also the way in which he defines being, this is also the foundation on which he grounds his metaphysics:

> For knowledge and known, if they are not an identity, at least stand in some correspondence and, as the known is reached only through knowing, structural features of the one are bound to be reflected in the other.[41]

Lonergan identifies the task and method of philosophy as self-understanding or "personal appropriation of one's rational self-consciousness". However, this embraces not only cognitional theory but also metaphysics since, while his method begins as an understanding of all understanding, it moves on to a basic understanding of all that can be understood,[42] in other words, to being in all its fullness. This throws light on what might be described as Lonergan's foundational 'mission statement' stated at the beginning of insight:

> *Thoroughly understand what it is to understand and not only will you understand the broad lines of all there is to be understood but also you will possess a fixed base, an invariant pattern, opening upon all further developments of understanding.*[43]

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[39] Edmund Husserl, *Cartesian Meditations* (Dordrecht: Kluwer Academic Publishers, 1995), p 39.

[40] This is dealt with in more detail in Section 5.9 of this study.

[41] Bernard Lonergan, *Insight*, p. 115.

[42] Schubert M. Ogden, "Lonergan and the subjectivist principle", p. 219.

[43] Bernard Lonergan S.J., *Insight*, p. xxviii.

9.3 *Levels of Consciousness and Intentionality Analysis*

For Lonergan, the confirmation of his dynamic theory of knowing, or what he has variously called his 'generalised empirical method' or 'transcendental method', comes from the subjective experience of its various operations active within oneself, and its objectification through insight and judgment. One comes to a knowledge of one's own inner workings by a process of attending to the data of one's consciousness, of gaining insight into this data, and of judging and affirming oneself as a knower in the process. This is what Lonergan terms "self appropriation" of one's cognitive interiority.

Lonergan recognises four levels of cognition and volition. Corresponding to these four levels of experience, understanding, judgment, and decision, he identifies four corresponding levels of consciousness. One might speculate that the increased complexity of mental functioning, and the consequent increased demands made on the subject, necessitate a progressive heightening of the state of one's consciousness at each successive level. He explains in *Method:*

> There is the empirical level on which we sense, perceive, imagine, feel, speak, move. There is an intellectual level on which we inquire, come to understand, express what we have understood, work out the presuppositions and implications of our expression. There is the rational level on which we reflect, marshal the evidence, pass judgment on truth or falsity, certainty or probability of a statement. There is the responsible level on which we are concerned with ourselves, our own operations, our goals, and so deliberate about possible causes of action, evaluate them, decide, and carry out our decisions.[44]

Corresponding to each of the four levels of consciousness Lonergan proposes four corresponding levels of intentionality. Experience, for example, is always experience *of* something. The intentionality of the first level is thus an attending, an attending to objects of experience. Eidle explains:

> The cognitive operations associated with sensory function, memory and imagination make objects present to us so that we might be aware of them. As such the underriding intentionality is an intentionality of attentiveness.[45]

Mathews describes this level of intentionality more briefly as involving an "attitude of

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44 Bernard Lonergan S.J., *Method in Theology*, p. 9.

45 William Reynolds Eidle, *The Self-Appropriation of Interiority*, p. 23.

questioning attentiveness to the world."[46] In Lonergan's own words, it involves "an openness to the world."[47] Like all levels of intentionality, its operation is essentially private; it is above and prior to anything on a psychological level that can differentiate between one thing and another. Like all levels of intentionality, it is understandable only on an experiential plane, and objectified only on a philosophical plane.[48]

Wondering, inquiring, and questioning are quite different from looking, or hearing, or feeling, and so the quality of conscious awareness that characterises the first group of activities must be different from that which characterises the second. As mental acts differ in kind, so the conscious attributes that they enjoy also differ. Understanding always involves insight *into* the data of experience through imagination or *phantasm*.[49] Since it has a relation to object or objects external to the self, it is an intentional operation. The intentionality at this second level is the seeking of intelligibility or relations in these external data. Insights are responses to questions. At a level deeper and prior to language there is a questioning attitude, a 'pure desire to know', a 'spirit of wonder and inquiry'. Intentionally one is aware of a datum to be explained or a problem to be solved. The seeking for intelligibility which characterises this drive constitutes the second level of intentionality. This "is the intentionality of understanding, of seeking the intelligible organisation within data: the organisation that distinguishes it from the unintelligible." [50]

Thus, in the 'dramatic instances' cited in Chapter Five[51] , it was argued that the child totally engrossed in fitting different sized cylinders into the appropriate holes and Sir Isaac Newton obsessed with the scientific problem of gravitation are both operating at this same level of consciousness and intentionality. Questioning transforms and organises our perceiving, imagining, and remembering. One's understanding in turn is influenced and constrained by the lower levels of perception, imagery, and memory. Thus does a higher level of intentionality and consciousness (that of insight, in this case) subsume or 'sublate' the level or levels

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46 William A. Mathews, *Questioning and its Object*, p. 164.

47 Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education*, p. 214.

48 A detailed psychological analysis of the phenomenon of attention is attempted in Chapter Ten of this study.

49 See Chapter 5 of this study.

50 William Reynolds Eidle, *The Self-Appropriation of Interiority*, p. 23.

51 See Section 5.3.2.

below. Again, one can speculate that the greater the range of objects of one's experience and awareness, and the greater the complexity of the mental operations required, the greater the heightening of consciousness that is demanded.

Through questioning one can say that one intends intelligibility, or "the intelligible unity or relatedness, that organises data into intelligible wholes."[52] The grasp of this intelligibility through insight is not merely subjective but tells one something about the intended object itself. Mathews explains:

> As understanding stands to perceiving, so structure stands to data. The set of attributes and relations characteristic of the structure of some thing is a property, not of understanding but rather of the thing understood. Understanding understands structure in things.[53]

For "structure" one can substitute the term 'form', insofar as it resides in, and is identifiable and intelligible within, the object itself. This is what Lonergan terms the 'material dispositions' of the object. When understanding grasps a rule, or a form, it doesn't single out some one feature given in direct experience. Rather, it grasps the elements of a structure and their interrelation.[54] Relations, one could say, are the very 'food' of the intellect. These relations cannot be perceived by the senses but are discernible only by the intellect.

Inquiry can be a time-consuming process. The achievement or grasp of intelligibility or insight, however, seems to be instantaneous, more an 'achievement' than an event. Once one has understood a possible solution one must then formulate the possible answer to the question. This can be a mental or verbal expression or definition, or it can be a formula or function expressed in scientific or mathematical notation. However, it is as yet only a *possible* solution, a 'proposition' in logical terms, a 'hypothesis' in scientific terminology. "Intelligibility" Lonergan says "is the ground of possibility."[55]

Objects of thought, like concepts or propositions, can themselves become intentional objects for reflective or critical wonder and questioning. Mathews says: "The emergence of such critical questioning initiates a search for adequate evidence in favour of the proposition or hypothesis."[56] The purpose of critical

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[52] Bernard Lonergan S.J., *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 10.

[53] William A. Mathews, *Questioning and its Object*,p. 194.

[54] Ibid, p. 46.

[55] Bernard Lonergan S.J., *Verbum*, p. 43.

[56] William A. Mathews, *Questioning and its Object*, p. 188.

reflection is to test the adequacy or otherwise of the formulation of one's insight. Thus, the manifestation of intentionality at this third level of conscious intentionality is, according to Lonergan, a reasonableness in the affirmation of reality. The movement of the mind to determine the truth and reality of one's insights is the intentionality of reasonableness through which, in Eidle's words, "we seek evidence that will lead to the affirmation of truth and the discard of untruth."[57] The intended object at this level is the rule, or the concept, or the definition, or the hypothesis, or the proposition, which is a formulation of the insight or understanding, and which is to be tested by critical reflection. In the reflective questioning, however, which initiates and organises the process of reflection, there is an awareness not just of the proposition but also of the original data, or 'given', of the problem, as well as of any evidence from memory or perception gathered to date. Mathews says: "There emerges an organisation of one's perceptions, acts of understanding, and thoughts, under the influence of the questioning activity."[58] Both this emergence and the resulting mental reorganisation are conscious activities.

This higher level of consciousness and intentionality subsumes, or 'sublates', the levels below it so that judgment preserves fully the characteristics of attentiveness and insight as well as adding those traits which are peculiar to judgment itself. It also involves a qualitative change within the subject himself. For example, there is a conscious awareness of oneself, wondering, questioning, seeking evidence, judging, and changing in the process. The question for reflection of the type "Is it so?" initiates the search for evidence. The reflective understanding grasps the sufficiency or otherwise of this evidence, whilst judgment, which is based on such understanding, gives assent to the proposition or rejects it; if assent ensues, then an increment of knowledge, a grasp of an element of the real, has resulted.

All mental acts are intentional[59] because they relate the subject to objects which are either public and external to the subject or, if internal like concepts or propositions, are at least capable of being expressed and being made public. The origin of this intentionality is the 'pure desire to know'[60], or the underlying primordial questioning attitude, which initiates and organises each level of coming to know or

57 William Reynolds Eidle, *The Self-Appropriation of Interiority*, p. 23, sic.

58 William A. Mathews, *Questioning and its Object*, p. 188.

59 See Section 2.7, Section 5.4, Section 5.6, and Section 5.9.

60 See Sections 5.6 and 5.7 of this study.

learning, and which is intentional by its very nature. All mental acts are also conscious in that one is aware of oneself perceiving, understanding and reflecting. But the type of consciousness attributed to different acts differs qualitatively, just as the different levels of intentionality differ with the object intended. More importantly from an educational point of view, however, is the fact that each and every level brings about its own change in the subject. Apart from the increment of knowledge which results from assenting to a proposition, the very process of coming to know produces its own change or development in the subject himself, which one could describe as an enhancement of his *being* mode of existence[61].

To raise the question "is it so?" in relation to a proposition or a hypothesis implies that the judgment "Yes" is conditioned, that the answer depends on whether certain conditions regarding the given data are fulfilled. What these conditions are depends both on the given data and on the hypothesis under judgment. To conclude with the judgment "Yes!" means that not only are the conditions fulfilled but that there are no apparent outstanding conditions left unfulfilled. We have reached what Lonergan calls the 'virtually unconditioned'.[62] Mathews says: "If certain understandable conditions are fulfilled it will be rational to make the judgment and irrational not to make the judgment."[63] And Ryan summarises the situation as follows:

> As soon as one begins to sort and marshal conditions that must be fulfilled, then the knowing process is initiated. A movement takes place. There is a heading towards a very definite goal, namely the grasp of a certain number of conditions as fulfilled. But there can be movement and the heading of the knowing process only because of questions; only because the question for reflective assaying of the conditions is an operator vis-a-vis the field of conditions; only because it is the link between the conditions and the grasp of the unconditioned.[64]

Put more simply, one can say that the question for level three is "Is it *really* so?" or "Is the insight which I have just expressed and clarified for myself *really* consistent with the original problem or data?" Or again, one can ask "Does my

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[61] See Chapter 7 of this study.

[62] The word 'virtually' is necessary since Lonergan would say that only God truly fulfils all conditions for existence and so is 'absolutely' unconditioned.

[63] William A. Mathews, *Questioning and its Object* (University of Leeds, Dept. of Philosophy, Ph.D. Thesis, 1980), p. 97.

[64] William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan", *International Philosophical Quarterly,* Vol. 13 (1973), p. 185.

insight and its formulation *really* make the situation intelligible, and is that intelligibility satisfactory from the point of view of what I already know, including the other insights that I have had?" These questions are obviously about what is 'real'. They are questions about truth, about reality, about existence. The 'truth conditions', or the circumstances under which one can give a definitive, unconditional, "yes" to the question, hinges on fittingness of the insight, or the grasped intelligibility, to the circumstances or the data presented.

In the process of reasoning, one experiments mentally, revisiting one's imagery, insight, and conception, to check if the conditions that would make the proposition true have indeed been fulfilled under all conceivable circumstances that one can think of. When one is satisfied that one has exhausted all the objections or possibilities one can think of, one has reached the 'virtually unconditioned'. One can at last assent to the insight and its conception, confirm that one has indeed made an intelligent assessment of available data, confirm that within the limits of one's perceptions and one's horizon, one has indeed reached a truth. There is once again a release of the tension of inquiry, yet another moment of insight, the 'pure desire to know' has a last reached its term, its 'rest point', in an act of assent, a resounding "yes" to a truth.

The fourth level of intentionality involves responsibility in seeking what is truly good, and in choosing an appropriate course of action to achieve that good. At this level "Intentionality is .... differentiated to a new kind of question, questions for deliberation of value,"[65] "Is it good?" Even though cognitive knowledge reaches its term at the third level of judgment, or verification, Lonergan extends his 'intentionality analysis' to incorporate judgment of value and decision. In this way he integrates the notions of intellect, will, and feelings which 'faculty psychology' had so decisively separated. This will be dealt with in greater detail in the next section below when considering feelings as intentional responses to values.[66]

To describe the operation of the pure desire to know at the different levels of consciousness and intentionality Lonergan, in *Method,* develops the notion of what he terms 'transcendentals'. These represent the dynamism of the pure desire to know as it manifests itself differently through each cognitional and intentional level;

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[65] William Reynolds Eidle, *The Self-Appropriation of Interiority,* p. 23.

[66] Section 9.4

> The transcendentals are contained in questions prior to answers.... So intelligence takes us beyond experiencing to ask what and why and how and what for. Reasonableness takes us beyond answers for intelligence to ask whether the answers are true and whether what they mean really is so. Responsibility goes beyond fact and desire and possibility to discern what truly is good and what only apparently is good.[67]

9.4 *Feelings as Intentional Responses to Values*

It is arguable that no treatment of the human condition, particularly with regard those spheres which touch on education and development, can be complete without an exploration of the affective dimension of the human psyche. Such an exploration is also necessary for a fuller and more complete treatment of Lonergan's fourth level of consciousness and intentionality. The objection can be made that, as regards human cognitive functioning, the world of feelings, if it has any effect at all, acts merely as a possible source of bias and distraction. Modern neurological research, however, shows a much more complex interaction between cognition and affect with interesting parallels to Lonergan's later ideas on the cognitive and volitional role of feelings.[68]

Tyrrell maintains that in the post-*Insight* period overall "there is evidence in Lonergan's writings of a growing emphasis on love, values, and the affective in general,"[69] with "a greater leaning toward the Augustinian 'restless heart' than to the 'restless mind' of Aquinas."[70] Lonergan's later position can be exemplified in the following quotation, in which he says of feelings:

> There it is the mass and momentum of our lives, the color and tone and power of feeling, that fleshes out and gives substance to what otherwise would be no more than a Shakespearian "pale cast of thought."[71]

In an interview published in 1971 and republished in *A Second Collection* Lonergan says: "Recently what I've got hold of is the fact that I've dropped faculty

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67 Bernard Lonergan S.J., *Method in Theology*, p. 11.

68 Antonio Damasio, *Descartes' Error*, (London: Picador, 1995) and *The Feeling of What Happens* (New York: Harcourt Brace and Company, 1999)

69 Bernard J. Tyrrell S.J. , "Feelings as Apprehensive-Intentional Responses to Values", *Lonergan Workshop, 7* (1988), p. 331.

70 Ibid. pp. 331, 332.

71 Bernard Lonergan S.J., "Mission and the Spirit", F.E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan S.J.* (London: Geoffrey Chapman, 1985), p. 30.

psychology and I'm doing intentionality analysis."[72] One effect of this 'intentionality analysis' was to bridge the gap between the intellect, the will, and the heart, or feelings, which had been posited by medieval 'faculty psychology'.

Lonergan's central discussion of feelings in relation to cognition is to be found in Chapter Two of *Method in Theology* entitled "The Human Good". In *Method* Lonergan proposes that feelings play a crucial role in the formation of value judgments, saying that "the apprehension of values is the task not of understanding but of intentional response [of feeling]"[73]. He defines certain feelings as "intentional responses to values". For example, in *Method* he says: "Pascal remarked that the heart has reasons which reason does not know. ... By the heart's reasons I would understand feelings that are intentional responses to values." [74]

Human responses are intentional if they relate the subject to an object. In the case of the emotions, that intended object is, according to Lonergan, a value or a good of some kind. The arrival of a child's friend, for example, might be a value capable of eliciting an emotional state of happiness in the child. In that case happiness is the intentional response; the friend, or rather the friend being made present to the child, is the intended good. The event happens at the fourth level of consciousness, that of "discernment of value and judgment of value." Lonergan explains:

> Besides the factual knowledge reached by experiencing, understanding and verifying, there is another kind of knowledge reached through the discernment of value and judgments of value of a person in love.[75]

This world of feelings may be regarded as yet another 'primary mode of human existence,' the *affective* mode, in addition to *being*, *having*, and *doing*.[76] Lonergan draws on the work of Dietrich von Hildebrand for certain key distinctions which he makes regarding the basic types of feelings and their interrelationships. He distinguishes, for example, between:

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[72] Bernard Lonergan S.J., "An Interview with Father Bernard Lonergan S.J.", William F.J. Ryan and Bernard J. Tyrrell (Eds.), *A Second Collection* (London: Darton, Longman & Todd, 1974), p. 223.

[73] Bernard Lonergan S.J., *Method in Theology*, p. 245.

[74] Ibid., p. 115.

[75] Bernard Lonergan S.J., *Method in Theology*, p. 115.

[76] See Chapter 7 of this study.

1) Feelings that are just states like fatigue, irritability, bad humour and 'free floating anxiety'[77] . These states have causes but no goals.

2) Feelings of pleasure or pain that respond to objects. These can be urges or promptings such as hunger, thirst, or sexual discomfort. They have both causes and goals but cannot be termed 'intentional'; Lonergan explains that "the relation of the feeling to the cause or goal is simply that of effect to cause, or trend to goal."[78] These feelings cannot be intentional since the feeling precedes the perception, phantasm or cognition, rather than being a response to it. First we feel hungry, then we decide we need food. Also, of themselves, they do not discriminate between what is truly good and what is only apparently good.

3) Feelings that are intentional responses to values, on the other hand, do involve such a discrimination. These include, in an ascending order of value, vital values[79] , social values, cultural values, religious values.[80] These feelings also relate one, not just to a cause or general goal, but to a particular object. Such feelings include love and hatred, trust and distrust, esteem and contempt, joy and sorrow.

Lonergan further subdivides feelings which are intentional responses to values into two main classes of objects:

> On the one hand [is] the agreeable or disagreeable, the satisfying or dissatisfying; on the other hand, [are] values, whether the ontic value of persons or the qualitative value of beauty, understanding, truth, virtuous acts, noble deeds.[81]

Unlike von Hildebrand, Lonergan, as already mentioned, does not accept the sharp distinctions which faculty psychology draws between intellect, heart (feelings), and will. Where von Hildebrand uses the term 'perception of values', for example, Lonergan prefers the term 'apprehension of values'. To him the grasp of values is not just a matter of perception alone but involves a certain "knowing of the

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77 A term from clinical psychology used to denote a form of anxiety which has no particular object but may, as in forms of phobia, become variously attached to different objects in the patient's environment.

78 Bernard Lonergan S.J., *Method in Theology*, p. 19.

79 Sexual attraction would be one example of this type of value.

80 Bernard Lonergan S.J., "An Interview with Father Bernard Lonergan S.J.", William F.J. Ryan and Bernard J. Tyrrell (Eds.), *A Second Collection* (London: Darton, Longman & Todd, 1974), p. 223.

81 Bernard Lonergan S.J., *Method in Theology*, p. 31.

heart" which includes an element of "discernment" and "recognition."[82] In other words, perception of an incident or an event is never sufficient for an emotion; a personal evaluation of its significance for the individual is also required. Tyrrell says that at the same time, through every such feeling response "we discern, recognise, and apprehend a dimension of reality previously unknown to the knowledge of experiencing, understanding, and judging."[83] This is the fourth dimension of knowledge and volition, involving a fourth level of consciousness and intentionality.

As already mentioned, Lonergan in his writings seems to imply that the true source of integration of intellect, will, and feelings (heart) which characterises his 'intentionality analysis' has its source in the 'sublation' or subsuming of lower states of consciousness and intentionality by the higher. He explains:

> Let us note too that the old questions of priority, of intellectualism and voluntarism and the like, are removed and in their stead comes what at once is simple and clear. Lower levels of operation are prior as presupposed by the higher, as preparing materials for them, as providing them with an underfooting and, in that sense, with foundations. But the higher have a priority of their own. They sublate the lower, preserving them indeed in their proper perfection and significance, but also using them, endowing them with a new and fuller and higher significance, and so promoting them to ends beyond their proper scope.[84]

Lonergan's apprehension of values, in other words, is not located in the sphere of perception alone, nor in the sphere of intellect alone, nor in the sphere of reason alone, but in a fourth level where the cognitive and affective are sublated and act as one, the sphere of the "knowing of the heart". "Lonergan holds that feeling itself recognises the value present in the object apprehended cognitively."[85] For Lonergan, this is yet a fourth stage of consciousness. For him, also, it is the feeling state of being in love, and, above all, the graced feeling state of being in love with God, that crowns human consciousness.[86]

If feelings play a vital part in value judgments, so also they must have an influence on the decisions which follow. Such an interaction of the affective with the

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82 Ibid., p. 115.

83 Bernard J. Tyrrell S.J. , "Feelings as Apprehensive-Intentional Responses to Values", pp. 354, 355.

84 Bernard Lonergan S.J., "Mission and the Spirit", F.E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan S.J.* (London: Geoffrey Chapman, 1985), p. 30.

85 Bernard J. Tyrrell S.J. , "Feelings as Apprehensive-Intentional Responses to Values", p. 337.

86 Ibid, p. 357.

world of value judgments and the will is borne out by modern neurological research. In his book, *Descartes' Error,* Antonio Damasio recounts a number of medical case studies and concludes:

> Reason does seem to depend on specific brain systems, some of which happen to process feelings. Thus there may be a connecting trail, in anatomical and functional terms, from reason to feelings to body. It is as if we are possessed by a passion for reason, a drive that originates in the brain core, permeates other levels of the nervous system, and emerges as either feelings or non-conscious biases to guide decision making.[87]

9.5 *Conscience and the Fourth Level of Consciousness*

In *Method in Theology* Lonergan writes that on this fourth level, consciousness becomes conscience.[88] The implication is that an affective response to value is essential if the appreciation of something good is to be translated into action. Elizabeth Morelli in her article "Feelings of Freedom", which deals with this aspect of Lonergan's thought, expresses the connection between consciousness, conscience, and affectivity as follows: "Conscience or the normativity of the intention of the fourth level is experienced either as the peace of a satisfied moral demand or as the unrest, even torment, of an unmet moral demand." [89]

In an era in which so called 'values clarification' has become such a controversial issue in education, this aspect of Lonergan's philosophy and its implications for human development are highly relevant. More important, however, is his idea that feelings are yet another way of knowing or 'apprehending' the world around us. This has immense ramifications for cognitive psychology and must surely be of vital importance to educators in particular. This will be examined more closely in Chapter Eleven of this study when the role of the Arts in education is explored. Unlike the detailed analysis of cognition provided in *Insight*, however, Lonergan has made no attempt at providing a comparable 'phenomenology' of feelings as a help in exploring this most complex area. He has, however, indicated that such a detailed analysis might be found in the works of Susanne Langer. This will be explored in some detail later in this study.[90]

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87 Antonio Damasio, *Descartes' Error: Emotion, Reason and the Human Brain* (London: Picador, 1994), p. 245.

88 Bernard Lonergan S.J., *Method in Theology*, pp. 268, 269.

89 Elizabeth A. Morelli, "The Feeling of Freedom", T.P. Fallon & Phillip Boo Reilly (Eds.), *Essays in Honour of Bernard Lonergan S.J.* (Albany: State University of New York Press, 1987), p.101.

90 See Section 11.11 below.

9.6 *Self-Appropriation as the Basis of Lonergan's Method*

It is clear from what has been said above that the notion of intentionality is not just another element of Lonergan's theory of cognition, but on the contrary it is the very 'weft and warp' that holds the whole fabric of his theory of learning together. It is also clear that for Lonergan intentionality and consciousness are two sides of the same coin. Just as the operations of experience, understanding, judgment, and decision, by their intentionality make objects present to the subject, "so also by consciousness they make the operating subject present to himself."[91] At the same time, Lonergan describes 'intentionality analysis' as "a heightening of consciousness that brings to light our conscious and intentional operations." [92] As has been mentioned already, this heightening of consciousness in order to grasp one's own cognitive structures in operation, gaining insight into oneself as a knower and assenting to, or affirming, all that that implies, is what Lonergan terms 'self-appropriation of interiority'.

In a dissertation submitted to the Gregorian University entitled *Through Self-Discovery to Self-Transcendence* Thomas Naickamparambil states that "In the entire body of Lonerganian literature, self-appropriation is a very prominent notion and has a foundational place in his whole system."[93] He goes even farther, however, insisting that "self-appropriation is Lonergan's starting point and all his arguments are anchored on this solid basis and are penetrated by its implications."[94]

The central significance of the notion of self-appropriation lies in Lonergan's drive to produce a 'philosophy of philosophies', a philosophy which would unify the very many disparate and discordant views found in all the various branches of philosophy, by appealing to that one area which they, and the natural sciences also, have in common, and must take as their starting point and foundation - the human mind and its invariant operations. He claims that self-appropriation "cuts to the root of philosophical differences and incomprehensions."[95] In *Method* he says: "We shall go behind the procedures of the natural sciences to something both more

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[91] Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 8.

[92] Ibid., p. 25.

[93] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 8. Naickamparambil is from Kerala in southern India.

[94] Ibid.

[95] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 95.

general and more fundamental, namely the procedures of the human mind." [96] The need to do this is made more urgent by the very nature of modern science itself. Naickamparambil explains:

> Within the old classicist world view, science was conceived to be true and certain knowledge of things by their causes. Its concerns were certainty, necessity, permanence, logic, etc. But the ideals of modern science are no longer certainty, but probability, not permanence, but development, not logic, but method. If in the old view science was considered to be a permanent propositional achievement, the modern science is an ongoing process of discovery which is subject to continuous refinement and revision. In the classical culture science was concerned about immutable truths. But in modern culture, science is essentially open-ended; it attempts only approximation towards truth, and consequently, the emphasis is on developing understanding. The whole scientific enterprise today is an ongoing and dynamic process of collective inquiry.[97]

Thus for Lonergan, the consciously operating subject and his mental operations were to form the new foundation for both science and philosophy. The proper first principles of philosophy, in other words, are no longer abstract verbal concepts or propositions like 'being' or 'existence', but "the *de facto* invariants of human conscious intentionality." A clear differentiation of human consciousness and an analysis and appropriation of the operations of the subject should now constitute the proper method of philosophy, if it is to be truly a philosophy of philosophies and a philosophy of science. This appears to be consistent with the view expressed by the philosopher of science Nigel Sanitt when he says that "as an intellectual pursuit the process of science demands that the rational analysis of what is going on is part of the process itself." [98] It also appears to be what Walsh means when he says that "the most important part of philosophy is the transcendent reality within the soul of the philosopher - everything is measured in relation to that - and it cannot be communicated. It must be experienced."[99]

9.7 *What Does Lonergan Mean by Self-Appropriation?*

To appropriate something is to make it one's own. Thus, in *Insight* Lonergan

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[96] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 4.

[97] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence,* p.. 27.

[98] Nigel Sanitt, *Science as a Questioning Process* (London: Institute of Physics Publishing, 1996), p. xi.

[99] David Walsh, *After Ideology: Recovering the Spiritual Foundations of Freedom* (Washington, D.C.: Catholic University of America Press, 1995), p. 151. Walsh is professor and chair of the department of politics at The Catholic University of America.

gives the following explanation of what he means by the term 'self-appropriation of interiority':

> To appropriate a truth is to make it one's own. The essential appropriation of truth is cognitional. However, our reasonableness demands consistency between what we know and what we do; and so there is a volitional appropriation of truth that consists in our willingness to live up to it, and a sensitive appropriation of truth that consists in an adaptation of our sensibility to the requirements of our knowledge and our decisions.[100]

This is hardly a scientific definition, however, and Naickamparambil complains that, though Lonergan has made extensive use of the notion of 'self-appropriation', it is difficult to find anywhere in his writings "either a sharp definition or a systematic elaboration"[101] of what he means by the term. One reason for this might be that self-appropriation is a transcendent reality within the mind of the individual philosopher, and so is something that cannot be readily communicated, but rather needs to be done and experienced. One clear conclusion from the above quotation however is the fact that Lonergan sees self-appropriation as more than just cognitional but as including the volitional and the sensitive also.

In the *Halifax Lectures* Lonergan says of his book *Insight* that it may be described as a set of exercises in which it is hoped that one attains self-appropriation.[102] In other words, Lonergan's aim in writing *Insight* in the first place was to produce this kind of 'appropriation' in the reader, or to "give insight into insight", which he saw as helping "people experience themselves understanding, advert to the experience, distinguish it from other experiences, name and identify it, and recognise it when it recurs." [103] The following quotation, expressing the same idea in educational terms, is also from *Insight*.:

> The point is not to provide the reader with a stream of words that he can repeat to others or with a set of terms or relations from which he can proceed to form inferences and prove conclusions.... the point is to discover, to identify, to become familiar with the activities of one's own intelligence.[104]

In *Insight* Lonergan also defines self-appropriation as the activity by which

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100 Bernard Lonergan S.J., *Insight - A Study of Human Understanding,* p. 558.

101 Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence,* p. 8.

102 Bernard Lonergan S.J., *Understanding and Being: An Introduction and Companion to Insight,* p. 1.

103 Bernard Lonergan, "Insight Revisited", *A Second Collection: Papers by Bernard Lonergan S.J.*, F.J. Ryan & B.J. Tyrrell Editors, (Darton, Longman, Todd, London, 1974), p. 269.

104 Bernard Lonergan S.J., *Insight*, p. xix.

"one's rational self-consciousness takes clear and distinct possession of itself as rational self-consciousness."[105] Hugo Meynell explains that "attention to one's acts of consciousness *heightens* them." This attention or advertance to the experience of one's own conscious interiority, or to one's intentional nature at work, is part of what Lonergan termed 'self-appropriation of interiority' or "self-appropriation of one's own intentional consciousness."[106] The achievement of insight into one's own conscious processes and assenting to what one grasps as a truth, a good, and a value Lonergan describes as the 'attainment' of self appropriation. In *Method* he comes back to the same topic when he says: "To say it with all the greatest brevity: one has not only to read *Insight* but also to discover oneself in oneself." [107]

So what is it "to discover oneself in oneself". Basically, it is to begin to discover the answer to the first of Lonergan's three questions which he asked himself at the beginning of *Insight* and again in *Method*, "What am I doing when I am knowing?"[108] In answering this question himself Lonergan moved forward on an internal journey into his own intimate self. The overall cognitional pattern of operations which he found unfolding within himself as he did so he termed his 'generalised empirical method'. The term 'method' for Lonergan does not mean a technique; most fundamentally it refers to the innate dynamic operations of human consciousness, its 'method.'[109] He uses the word 'generalised' because for him data of consciousness and not just data of sense are also legitimate objects for empirical investigation. The basic pattern of activity generated by the interrelated operations within the four levels of consciousness and intentionality, which have already been dealt with in detail, constitutes Lonergan's generalised empirical method. The self-appropriation of one's interiority is the objectification of the generalised empirical method in operation, as personally experienced in one's own consciousness. Or, as Eidle explains: "It is the self appropriation of one's own intentional consciousness with its motivating transcendental dynamisms." [110]

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[105] Bernard J.F. Lonergan, *Insight - A Study of Human Understanding,* p. 13.

[106] William Reynolds Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang, 1989), p. 39.

[107] Bernard Lonergan S.J., *Method in Theology*, p. 260

[108] Ibid., p. 83.

[109] In *Method in Theology* he says: "A method is a normative pattern of recurrent and related operations yielding cumulative and progressive results. There is a method, then, where there are distinct operations, where each operation is related to the others, where the set of relations forms a pattern, where the pattern is described at the right way of doing the job, where the operations in accord with the pattern may be repeated indefinitely, and where the fruits of such repetition are, not repetitious, but cumulative and progressive." Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 4.

[110] William Reynolds Eidle, *The Self-Appropriation of Interiority,* p. 39.

In practical terms, then, Lonergan describes the method of self-appropriation as none other than the practical application of his 'generalised empirical method' or 'transcendental method'. That involves

> (1) experiencing one's experiencing, understanding, judging, and deciding, (2) understanding the unity and relations of one's experienced experiencing, understanding, judging, deciding, (3) affirming the reality of one's experienced and understood experiencing, understanding, judging, deciding and (4) deciding to operate in accord with the norms immanent in the spontaneous relatedness of one's experienced, understood, affirmed experiencing, understanding, judging and deciding.[111]

One can say that "to know what knowing is, you have to have immediate experience of each one of the activities that occur in the structure."[112] In other words, in self-appropriation of interiority one heightens one's awareness of the dynamic operations of experience, understanding, judgment, and action as they operate in one's normal living. First of all, the process of self-appropriation has to start by attending to the data of one's cognitional consciousness. This attending is also an intending of an object. The intended object is made present to the human subject by the act of intending. But the subject is also constituted as present to himself by the same act of intending. Secondly, these data have to be understood and formulated. Such a formulation would constitute a cognitional theory. Thirdly, this theory has to be affirmed by oneself, answering the fundamental question "is it so?" As in the first step, this would not be just an affirmation of the truth or otherwise of the theory but also an affirmation of the subject himself as a knower. Fourthly, the self-appropriating subject lets himself be transformed by the conscious self-possession of his cognitive structures, attained and sublated in his act of self-affirmation. Thus, according to Naickamparambil,

> the subject has to adhere to the basic positions on knowledge, reality and objectivity. This would amount to a radical intellectual conversion, the essence of which is an uncompromising commitment to truth. This paves the way for further intellectual development and authenticity.[113]

There occurs, in other words, a radical enlargement in one's horizon which provides the self-appropriating subject with a new world to live in, a new environment to influence him, a world mediated and constituted by meaning.

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[111] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), pp. 14-15.

[112] Bernard Lonergan, "Philosophical Positions with Regard to Knowing" In F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 6* (Toronto: University of Toronto Press, 1967), p. 220.

[113] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence,* p. 12.

Finally, the appropriated structures of one's consciousness provide the subject with the necessary methodological tools for his further integration and development.

In *Method in Theology* Lonergan also defines self-appropriation as "the objectification of ... subjective experience."[114] Later, he goes on to state more fully:

> [It] is not to be achieved by reading books or listening to lectures or analyzing language. It is a matter of heightening one's consciousness by objectifying it, and that is something that each one, ultimately, has to do in himself and for himself. ... It is a matter of applying the operations as intentional to the operations as conscious. [115]

By "applying the operations as intentional to the operations as conscious" Lonergan means focussing the intentional operations of experience, understanding, judgment, and decision, which are already being used to make sense of, and interact with, the outside world, on to the subjective inner world of the experiencing subject himself. This connection between consciousness and intentionality has already been established as fundamental to Lonergan's 'transcendental method'.

In *Method* Lonergan asks the question "In what does objectification consist?" Again, he repeats that "it is a matter of applying the operations as intentional to the operations as conscious". [116] As one intends the operations of experience, understanding, and judgment present to oneself at the level of consciousness, so that one intends oneself experiencing the data of consciousness, intends oneself gaining insight into the data of consciousness and making judgments about the data of consciousness, one gains an increase of self awareness, self understanding and self knowledge. As in the process of coming to know anything, one formulates hypotheses. One such hypothesis is that one is a knower. If one sees that the conditions for this to be true are in fact fulfilled, one ends up affirming oneself as a knower. First there is the proposition that one is a knower and then the affirmation of oneself as a knower when one experiences and sees that the necessary conditions are fulfilled. What are these conditions? David Tracy explains:

> I am a knower if I am a concrete and intelligible unity-identity-whole characterized by acts of sensing, perceiving, imagining, inquiring, understanding, formulating, reflecting, grasping the unconditioned and judging.[117]

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[114] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 9.

[115] Ibid., p. 14.

[116] Bernard Lonergan S.J., *Method in Theology*, p. 14

[117] David Tracy, *The Achievement of Bernard Lonergan* (New York: Herder and Herder, 1970), p. 134.

Once the "virtually unconditioned" has been grasped on this level of consciousness then the reality of oneself as knower is a "fact" and not some necessary *a priori* assumption. This appears to be what Lonergan means when states in *Insight*: "It is not that I exist necessarily, but merely that in fact I do. It is that that I am of necessity a knower, but merely that in fact I am."[118]

By 'objectification', then, is meant that starting from a standpoint of simply experiencing one's data of consciousness, one then proceeds to seek insight or understanding of one's experienced conscious mental processes, to form hypotheses regarding them and, finally, through rational reflection and judgment, that one achieves an increment of self-knowledge and affirms oneself as knower. This is what it is to appropriate one's interiority, to appropriate one's conscious intentionality, to gain knowledge of one's inner intentional nature, to affirm oneself as knower, and be changed in the process. As regards this latter point, Eidle relates such interior change to "the personal development of the human subject, human authenticity, self esteem and intrinsic motivation"[119] which results from the process. Thus appropriation of one's intentionality appears to have profound educational and developmental implications, provided one remembers that "the process of self-appropriation is a task one undertakes for oneself. One cannot be taught about it in the normal way. One cannot merely read about it. Rather, one must induce it in oneself and experience it for oneself." [120]

Then, how then does one go about 'teaching' self-appropriation in school? In other words, is there a place for self-appropriation of interiority on the school curriculum? Self-appropriation is something one does; it is a method that can be taught only through experience. It cannot be readily communicated through textbooks or courses of lectures. It will be argued in the next section that, while he does not use the term 'self-appropriation', yet it appears to be what Feuerstein is seeking to do through his Instrumental Enrichment (IE) programme and Mediated Learning Experience. In fact, it will be argued that the IE programme provides a very practical and effective means for the communication of Lonergan's 'transcendental method' to groups of children in school. In turn, Lonergan's philosophy provides a much more complete, comprehensive, and convincing rationale for Feuerstein's methods than Feuerstein's own rather limited theoretical

118 Bernard Lonergan S.J., *Insight*, p. 319.

119 William Reynolds Eidle, *The Self-Appropriation of Interiority*, p. 9.

120 Ibid., p. 42.

framework. As this author explained elsewhere:

> Lonergan's appropriation of interiority or appropriation of intentionality, ... stands in need of an appropriate pedagogical system, if it is to find a place in broader education and is not to remain the preserve of just a few fortunate philosophers.[121]

The following section will attempt to deal specifically with this second problem and, at the same time, draw some relevant parallels between the works of Lonergan and those of Feuerstein.

By way of summary, one can do no better than to return to the excellent dissertation of Thomas Naickamparambil who takes as his objective the clarification of what Lonergan means by the term 'self-appropriation'. In it he concludes:

> We have been inclined to interpret the meaning of self-appropriation in terms of a very personal activity, namely, of appropriating or consciously possessing one's true self as cognitional and existential. Such an appropriation or conscious self-possession is more than any self-experience, self-understanding and self-knowledge. It is all of these, and more than these. It involves both a self-discovery and a self-transcendence. It is knowing oneself as cognitional and existential to the extent that such self-knowledge transforms oneself. Consequently, cognitional self-appropriation is a process by which one attains conscious self-possession or a self-transforming knowledge of oneself as cognitional.[122]

More poetically, in the same work he describes it as "a journey into the cognitional depth of human subjectivity and from there to a creative and self-transcending return to the objective world of meaningful realities." In other words, the withdrawal into interiority is not an end in itself, but is a withdrawal in order to return. Hugo Meynell puts it even more clearly when he says: "Interiority, in order to be fully itself, must externalise itself in radical critique and action." [123] In other words, this self-discovery must lead to self-transcendence. Naickamparambil says:

> In essence, self-appropriation involves a self-discovery and a self-transcendence. One discovers one's true self, one consciously possesses one's dynamic self to the extent that such conscious self-possession transforms one's very life and effects a self-transcendence.[124]

It has been argued briefly that what Lonergan describes as 'self-

[121] John McDermott, "Intentionality in Learning and Education", (Trinity College Dublin, M.Ed Thesis, 1997), p. 183
[122] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence,* p. 9.
[123] Hugo Meynell, "Interiority and Revolution", *Philosophy Today*, Vol. 29 (1985), p. 198.
[124] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence,* p. 45.

appropriation of interiority' is similar in philosophical terms to what Fromm, Rand and others are grappling with when they speak about the '*being* mode of living'. It would follow that what this study describes as education for *being* is nothing less than the practical development of what Lonergan describes as self-appropriation of interiority. Fromm, for example, gives some pointers as to how the *being* mode can be developed:

> Any attempt to increase the sector of being means increased insight into the reality of one's self, of others, of the world around us. ... The way to being lies in penetrating the surface and grasping reality.[125]

This "increased insight into the reality of one's self, of others, of the world" demands not just an awareness of oneself as a subject, but also a heightening of one's consciousness in order to come to an understanding of oneself and make rational judgments about what one understands, so that one becomes changed by the process. To see how this compares with the ideas of Rand, it is necessary to revisit his original definition of the *being* mode:

> The term *Being* refers to a basic propensity of the individual to enhance self-knowledge, and to adhere to beliefs and value systems that make life meaningful. It refers to the inner authentic existence of the individual which governs all, or most, of his/her feelings, thoughts and deeds, reflecting a consciousness of one's fundamental orientation towards life, self, and the world.[126]

It can be argued that such enhancement of "self knowledge", adherence, or assent, to the "beliefs and value systems that make life meaningful," the achievement of "authentic existence," and "consciousness of one's ... orientation towards life" has much in common with Lonergan's 'self-appropriation of interiority'.

9.8 *Self-Appropriation & Feuerstein's Mediated Learning Experience*

9.8.1 *The Problem*

With regard to the achievement of Lonergan's self-appropriation of cognitive interiority in the context of the school curriculum, the object of the exercise must initially be to get students to attend or advert to their normal thinking and reasoning processes as they bring them to bear on their ordinary academic studies, or as they

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[125] Erich Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.102.

[126] Yaacov Rand and Abraham J. Tannenbaum, "To Be, To Have, To Do: an Integration and Expansion of Existing Concepts", in Kozulin & Rand (Eds.), *Experience of Mediated Learning: An Impact of Feuerstein's Theory in Education and Psychology* (Oxford: Pergamon, 2000), p.89.

grapple with the usual problem-solving activities of the laboratory or of everyday life. Lonergan would obviously cite his 'transcendental precepts'(be attentive, be intelligent, be reasonable, be responsible) as part of his *modus operandi.* But still the question remains, how does one actually do this in practice? How does one develop such habits of attention, intelligence, reasonableness and responsibility in a group of school leavers, for example, who have neither the discipline, the maturity, nor the motivation to care about such matters of the intellect and whose education, for the most part, has done little or nothing to cultivate a love of learning? Or, even more importantly, how does one cultivate such virtues in a group of culturally and educationally deprived young adolescents?

9.8.2 *Self-Appropriation and 'Metacognition'*

Yet it was particularly for this latter group, the culturally and educationally deprived, that Reuven Feuerstein developed his Instrumental Enrichment[127] programme in Israel towards the end of the Second World War. Feuerstein, as mentioned already, believes in what he terms "structural cognitive modifiability," the notion that intelligence is not a fixed state but that the intellectual abilities of people can be developed and changed throughout their lives through what he terms Mediated Learning Experience (MLE).

Feuerstein's method of cognitive development is best described as learning how to learn by gaining insight into one's own cognitive functions. This compares well with Lonergan's aim of self-appropriation and self-affirmation: "to discover, to identify, to become familiar with the activities of one's own intelligence."[128] While Lonergan would concentrate on one's ordinary every-day cognitive activities as philosopher, scientist or student, Feuerstein's method can also involve the use of specially designed exercises or "instruments". These are, as far as is possible, 'content free', in that the content does not relate to any specific school subject or body of knowledge. In addition, at the heart of Feuerstein's work is the need for a human intermediary or mediator. Feuerstein blames inadequate cognitive development and its consequent 'cultural deprivation' on the lack of proper 'mediated learning experience' during the course of the child's early development.

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127 Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, MA: University Park Press, 1980)

128 Bernard Lonergan S.J., *Insight,* p. xix.

Feuerstein appears to use the term 'metacognition' for the capacity of the child to experience his own mental functioning in operation, gain insight into that experience, and objectify or take hold of and appropriate the resulting knowledge of his own mental functioning. Roughly, one can say that it corresponds to the activity of the operations of experience, understanding and judgment as applied to data of consciousness. With Lonergan he would argue that it is precisely in knowing one's own knowing that one also takes control over it. Unlike Lonergan, however, Feuerstein dwells a lot on what can go wrong with the individual's mental functioning, or on what he terms 'deficient cognitive functions'. Rather than simply concentrating on concrete practical exercises as a way of compensating for cognitive deficiencies, he sees the central issue as one of raising the child's awareness of what proper efficient mental functioning consists, together with an understanding of what is going wrong in his particular case. Feuerstein also believes that the child must be given the proper terms or 'labels' with which to conceptualise what he has grasped or understood.

In Lonergan's terms, Feuerstein leads the child to 'appropriate' his own mental functioning with its strengths and weaknesses and, in this way, enables the child himself to take more and more control of his own mental growth. Expressed in other terms one might say that practical exercises are not enough; *doing* is not sufficient. Only when the learning activity is interiorised to the level of metacognition does inner growth result, a learning and a growth that can allow one to compensate and make up for the cognitive deficiencies manifest at a lower level, even for deficiencies at a sensory and perceptual level. Such 'interiorisation' produces mental flexibility, or what Feuerstein terms 'cognitive modifiability', and allows the learning to be generalised to other situations which may present themselves in the child's life. To use a term in general use in educational theory, one can say that in such a case a wide 'transfer of learning' takes place.

Feuerstein is not alone in grasping this idea. The renowned Petö Institute in Budapest uses much the same approach in its treatment of organically impaired children. That is, it uses 'metacognitive' insight or 'self appropriation' to correct cognitive damage, even damage at a lower organic or motor level. This 'Conductive Education', as it is called, was devised by Dr. András Petö in Hungary to help children who are severely disabled as a result of innate or acquired injuries to the brain or to the nervous system in general. It has been remarkably successful in

enabling such children lead a normal life. The Petö method is not a mere education for *doing*, not just a series of practical exercises to correct a localised dysfunction, but it involves interiorisation that gives the child a lived, authentic grasp of his own deficient functioning, and herein lies its true effectiveness. "Conductive Education is directed at the whole, not to improve symptoms merely but the whole personality." [129]

Such results are possible with the Petö method because even a damaged brain always retains a large residual capacity, and with the appropriate educational methods this can be mobilised and used even in the case of dysfunctions where damage to the nervous system is restricted to the spinal cord or to peripheral nerves. In Feuerstein's terms, 'cognitive modifiability' is always a possibility and the means for mobilising this 'residual capacity' is nothing less than what Lonergan terms 'self-appropriation of interiority':

> Every dysfunction arrests the cerebral adaptive developmental process even if it were not the brain which was damaged first but, say, the spinal cord. A dysfunction always appears when an individual cannot cope with his biological-social demands. Education for orthofunction is possible only through recognizing and accepting all those demands normally relevant for a given age, by using successful forms of instruction directly applicable to them and by finding orthofunctional methods suitable for the developmental state of each individual. Then the activity will be linked with with cerebral regulation through carrying it out successfully and this is the only way in which any residual capacity can be mobilized.[130]

Translated into Lonergan's terms, one can say that the experience of "biological-social demands" raises a task to be solved or question to be answered. The solution lies not just in a set of exercises but, rather, in bringing the child to a state of insight, "recognizing" his problem as a problem and "accepting" or assenting to the solution 'mediated' by his instructor. Only in this way can the eventual "carrying out" or *doing* of the remedial exercise truly mobilise the "residual capacity" of the child. Thus one can argue that 'self-appropriation of interiority' is central to the Petö system. On the other hand, it is significant that the Frostig method[131] with its undue emphasis on practical exercises in the *doing* mode has been found to be relatively ineffective in correcting motor deficiencies in the child.

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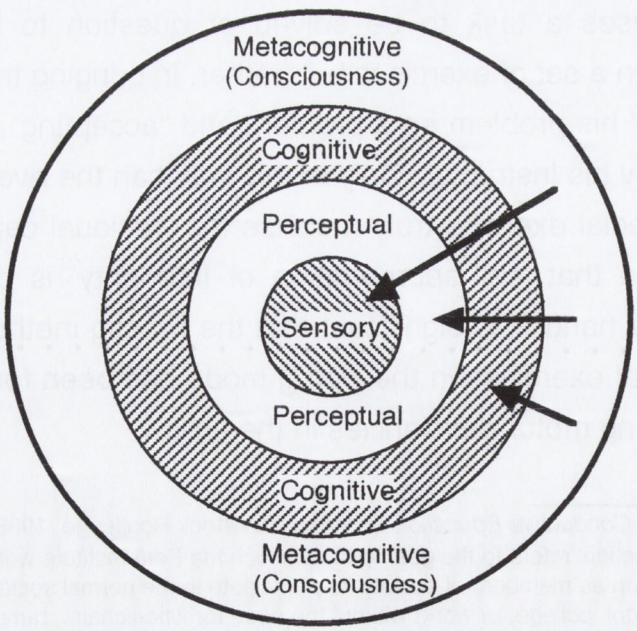
[129] Mária Hári & Károli Ákos, *Conductive Education* (London: Tavistock Routledge, 1988), p. 214.

[130] Ibid. The term 'orthofunction' refers to the goal towards which the Petö Institute works. It refers to the ability of its pupil/patients to function as members of society, to participate in the normal social settings appropriate to their age (kindergarten, school, college, or work) without the need for wheelchairs, ramps, special furniture etc.

[131] See Marianne Frostig, *Education for Dignity*,

Lonergan, Feuerstein, and Petö are in agreement on the issue of transcendence. Each would agree that for an educational system to be truly effective it must transcend the here and now, striving to extend the scope of the child from the concrete to the abstract, from exterior locus of control to interior, from the *doing* and *having* modes to the *being* mode of interiorised action, from sense experience and perception to cognition and metacognition, from mere empirical experience to the heights of self-appropriation of cognition, with its consequent self-transcendence.

The following diagram is an attempt to illustrate the relationships between metacognition or 'self-appropriation' and the enhancement of cognitive modifiability. The diagram shows the more basic levels of functioning, the organic and the sensory, at the centre, while the progressively higher levels follow as ever wider concentric circles. Lonergan teaches that lower levels of cognitional functioning are subsumed or 'sublated' to the higher. If this is true, then a direct link exists from higher capacities of mind to lower. Thus the higher capacities may exercise a controlling influence over the lower, with the levels of consciousness, 'metacognition' or 'self-appropriation' exercising the greater and more all-pervading influence. The success of Feuerstein's method in producing cognitive modifiability in the culturally and educationally deprived, and of the Petö method in producing even an organic change in brain damaged children, would seem to indicate that such an internal top-down influence and control may in fact be the case.



Feuerstein argued that lower levels of functioning are corrected and enhanced by bringing them to metacognitive consciousness or, in Lonergan's terminology, by self-appropriating one's cognitive interiority. The fact that the sensory and perceptual levels are already sublated to the cognitive and the metacognitive means that an immediate link already exists between the lower levels and the higher, and the higher levels with the lower. It is argued that this is the source of the effectiveness of Feuerstein's Mediated Learning Experience which, as will be shown, in turn provides a practical methodology for the achievement of what Lonergan terms 'self-appropriation of interiority'. In the process, both provide an approach to what this study terms 'education for *being*'.

Lonergan in *Insight* sees self-appropriation as an essentially personal affair. Feuerstein's method, on the other hand, can be used with whole classes, directed by a properly trained 'mediator.' The aim in both cases, however, is the same: to enable the human person to change himself by bringing him to a heightened level consciousness and knowledge of his own mental functioning. Feuerstein states that the major goal of his system is "to increase the capacity of the human organism to become modified through direct exposure to stimuli and (through those) experiences provided by the encounters with life events and with formal and informal learning opportunities."[132]

9.9 *Interiority, Interiorisation, and Mental Distance*

9.9.1 *Interiorisation and Mental Distance*

The words 'interior', 'interiorisation', and 'interiority' have been used extensively throughout this study. While these notions clearly have their origins in human corporality, since only something physical can truly be said to have an inside and an outside, yet philosophers and psychologists tend to apply the terms analogously to mental phenomena also. Thus, one finds an emphasis in Lonergan's writings on what he terms 'self-appropriation of interiority', while Feuerstein insists on the need to get the child to 'interiorise' his thinking, by which he means to enter the realm of abstractions by increasing the mental distance from concrete stimuli or 'data of sense'. One also finds Jacques Maritain, for example,

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132 Ibid. p. 115

laying "stress on inwardness and the internalization of the educational influence."[133]

Feuerstein takes as an illustration of the notion of mental distance, the cultural change as the individual member of the human race developed from being a hunter-gatherer to being a labourer and producer:

> For gatherers, the distance between the individuals and the food was almost zero. Food production created a new distance between the need expressed by hunger and its gratification in satiation. This new distance was accompanied by processes that affect the mental functioning of the human organism: from direct immediate recognition of the food to be gathered in response to hunger, to the representation of the food as a future - often delayed - answer to the need expressed by hunger.[134]

The point is that while human beings appear to have an inherent capacity for mental representation and abstraction, nevertheless this ability is actually realised and developed by their interaction with the world; "human beings had to learn to increase the distance at which they interact with the world."[135]

Unlike animals, human beings live in a world which is not just experienced and recognised, but is also understood, categorised, made meaningful, conceptualised, evaluated, and objectified. This latter notion of objectification implies a standing back from the world. Such a mental distancing of oneself from the world allows the creation of relationships of the type I-Thou and I-It. Feuerstein says that "relationship is the direct product of distance."[136] And Pieper explains this more fully and more clearly when he says:

> Relationship, in the true sense, joins the inside with the outside; relationship can only exist, where there is an "inside," a dynamic center, *from* which all operations has its source and *to* which all that is received, all that is experienced, is brought. The "internal" ... is the ability to have a real relationship, the relation to the external; to have an "inside," means ability to be related, and to enter into relationship. And "world"? A world means the same thing, but considered as a whole field of relationships. Only a being that has an ability to enter into relationships, only being with an "inside," has a "world"; only such a being can exist in the midst of a field of relations.[137]

The concept of distance, then, encompasses not only the dimensions of

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[133] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 39.

[134] Reuven Feuerstein, Rafi Feuerstein, Yaron Schur, "Process as Content in Education of Exceptional Children," in *Feuerstein's Theory & Applied Systems* (Jerusalem: ICELP, 2003), p. 129.

[135] Ibid.

[136] Ibid, p. 130.

[137] Josef Pieper, *Leisure, the Basis of Culture* (South Bend, Indiana: St. Augustine's Press, 1998), p. 81.

space and time, internality and externality, but also the mental distance produced by cognitive processes. This has already been seen in Piaget's conception of the development of intelligence through the internalisation of sensory-motor schemes of action, for example. However, the distance and internalisation produced by these cognitive processes may also be illustrated in Lonergan's scheme by the progressive abstraction and sublation which happens as one goes from concrete data of sense to image formation, from image to act of insight, from insight to conception, from conception or hypothesis to judgment, and from judgment to objectification.

Cognitive processes and mental distance are also manifest in the formation of substitutes for reality through the process of 'encoding' this reality into signs and symbols. A good example of the latter is given by Vygotsky's illustration of how the "indicatory gesture" appears in a child's behavioural repertoire. Kozulin explains:

> At first it is an unsuccessful grasping movement directed at an object. Vygotsky used the term "gesture in itself" to designate this stage of the development of gesture. When mother comes to the aid of the child, the situation acquires a different character. Gesture "in-itself" becomes gesture "for-others." Others (mother in our case) interpret the child's grasping movement as an indicatory gesture, thus turning it into a socially meaningful communicative act. Only afterward does the child become aware of the communicative power of his movement. He then starts addressing his gesture to adults, rather than to the object, which was the focus of his interest in the first place.[138]

In this latter illustration one sees not just the power of interiorisation at work but also the important lesson that development of such interiorisation, or development from 'below upwards', may require active adult mediation from 'above downwards'.

A simpler illustration of mental distance and progressive interiorisation is given by Feuerstein's notion of 'superordinate concepts', as when one asks in the Wechsler Adult Intelligence Scale "In which way are an orange and a banana alike?" The answer "They are both fruit" involves the formation of a higher, more abstract superordinate concept, "Fruit". One could proceed in a similar way to ever higher levels of abstraction and interiorisation as follows:

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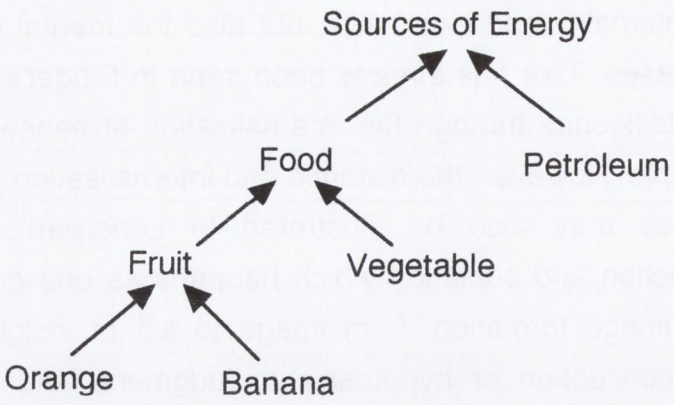
[138] Alex Kozulin, "Vygotsky in Context," in Lev Vygotsky, *Thought and Language* (Cambridge MASS, The MIT Press, 1986), p. xxvii.



The question "In what way are a fruit and a vegetable alike?", for example, gives rise to a higher and more abstract solution "Food". An even more abstract (meaning at a greater distance from the concrete) answer is elicited by the question "In what way are food and petroleum alike?" In each case the superordinate concept being sought by the child is at a greater distance from the concrete and so is more abstract. In this regard, Feuerstein states:

> The process of classification, of categorization, and of establishing relationships are all modes of action performed at distances that only the dualistic mode of interaction between human beings and the world permits.[139]

By "dualistic mode of interaction" Feuerstein is merely referring to what Lonergan identified as the two ways of human knowing. The first way which man has in common with the animals is learning from direct experience, or by 'direct exposure to stimuli'. The higher forms of knowing involve imagery, insight, conception, reasoning, and judgment, and, according to Feuerstein, they demand also 'mediated learning experience' for their full and proper acquisition.

Just as there are higher forms of consciousness corresponding to Lonergan's progressive levels of human knowing, so one can say that there are corresponding degrees of interiorisation. The greater the degree of interiorisation, the greater also is the power to relate things to one another in the mind and to relate the content of the mind to the one's 'world'. This is what makes interiorisation such a vital remedial instrument, creating "the mental plasticity that turns human beings into an open system,"[140] a system in which 'processes' like intelligent insight and rational reflection rule rather than inflexible facts and poorly understood concepts.

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[139] Reuven Feuerstein, Rafi Feuerstein, Yaron Schur, "Process as Content in Education of Exceptional Children," in *Feuerstein's Theory & Applied Systems* (Jerusalem: ICELP, 2003), p. 130.
[140] Ibid., p. 136.

Feuerstein decries

> the "addiction" that is often produced by the educational process to the "facts' that have to be acquired through rote learning, by the strong emphasis on the knowledge base, irrespective of its limited relevance, and by the little demand that is laid on operational activity of the individuals to produce their responses.[141]

He says that, in practice, "all too often, the superordinate concepts necessary to adapt the operation to a variety of conditions are thought to be inaccessible to individuals with mental retardation."[142]

Interiorisation or inwardness is linked to the capacity to reflect. The neonate, for example, has not yet developed such a capacity to reflect and relate things to himself and to one another. For him concrete physical experience is all there is. His capacity to relate with his world is not yet interiorised but is both concrete and physical. His relations lie in the concrete movements towards his world and in the coordination of these movements. As he develops, however, he begins to internalise his sensory-motor schemes of action. Pieper expresses this idea of levels of interiorisation very well from a philosophical viewpoint when he says:

> For the stronger power of relating corresponds to a higher degree of inwardness; the power to relate is greater to the same degree as the bearer of that relation has "inwardness"; the lowest power of relating not only corresponds to the lowest form of being in the world but also to the lowest grade of "inwardness," whereas the spirit, which directs its relating-power to the sum-total of being, must likewise have a corresponding inwardness. [143]

Pieper then proceeds to relate interiorisation or inwardness to what Lonergan terms the 'authenticity" of the human person:

> The more comprehensive the power of relating oneself to the world of objective being, so the more deeply anchored must be the "ballast" in the inwardness of the subject. And when a distinctively different level of "world" is reached, namely, the orientation towards the whole, there too can be found the highest stage of being established in one's inwardness, which is proper to the spirit: not only the relation to the "whole" of the world and "reality," but also the highest power of living-with-oneself, of being in oneself, of independence, of autonomy - which is exactly what has always been the "person" or "personality" in the Western tradition: to have a world, to be related to the totality of existing things - that can occur only in a being that is "established in itself": not a "what," but a

[141] Reuven Feuerstein, Rafi Feuerstein, Yaron Schur, "Process as Content in Education of Exceptional Children," in *Feuerstein's Theory & Applied Systems* (Jerusalem: ICELP, 2003), p. 139.
[142] Ibid., p. 137.
[143] Josef Pieper, *Leisure, the Basis of Culture* (South Bend, Indiana: St. Augustine's Press, 1998), p. 90.

"who" - an "I," a person.[144]

This is an aspect of Interiorisation, interiority, or inwardness, is to be found implicitly in the works of Feuerstein. For example, it is why Feuerstein insists that interiorisation (inwardness) is necessary to learning and mental development. The greater the degree of interiorisation the greater is the power to relate things to one another in the mind and relate the content of the mind to the person's 'world', and also the greater the degree of mental flexibility and 'cognitive modifiability'.

Inwardness involves the capacity to reflect. The child and the 'culturally deprived' have not developed such a capacity to reflect and relate. For them concrete physical experience is all there is. Their capacity to relate with their world is not yet interiorised but is both concrete and physical. Their relations lie merely in their concrete movements towards their world and in the coordination of these movements.

9.9.2 *Interiorisation and the Triarchic Model*

If what has been considered in this chapter regarding interiorisation were to be viewed in the light of the *being*, *having*, and *doing* model of human existence, then clearly interiorisation corresponds to the *being* mode of living. Learning which enhances interiorisation is learning that develops the efficiency and effectiveness of the various cognitive processes. It may be termed 'process learning'. Content learning, on the other hand, which involves learning simply for the acquisition of facts, enhances mainly the *having* mode of human existence. Feuerstein explains:

> The content-oriented approach confines activity to the immediacy of the concretely perceived object or event on which humans operate. Limiting learners to the acquisition of content knowledge is acting like gatherers and hunters, who gratified their needs by the adualistic immediacy of their realm and the immediate presence of the gratifying object.[145]

It can be argued, in other words, that content learning, mere acquisition of facts, while all too familiar in the ordinary classroom situation, contributes little to the development of the human mind unless it is accompanied by the mediation of the necessary processes which will allow the child to become an autonomous learner:

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[144] Josef Pieper, *Leisure, the Basis of Culture* (South Bend, Indiana: St. Augustine's Press, 1998), p. 90.

[145] Reuven Feuerstein, Rafi Feuerstein, Yaron Schur, "Process as Content in Education of Exceptional Children," in *Feuerstein's Theory & Applied Systems* (Jerusalem: ICELP, 2003), p. 130.

> The absence of process leaves the individuals in a passive state, acting as reproducers of gathered information, with little, if any, readiness to act as generators of the needed information.[146]

On the other hand, mental distance and interiorisation convert basic human needs and urges into effective values capable of influencing higher forms of human behaviour. For example, the more concrete drive or need for warmth and security can, through interiorisation, become the value of sociability capable of influencing and directing human thought and action into positive, altruistic enterprises.

For Feuerstein, 'mediated learning experience' is vital for the development of higher level mental functioning and its attendant interiorisation. An essential part of MLE is the active, involved presence of an adult mediator. Feuerstein derived this notion from Vygotsky, but it is also consistent with Lonergan's notion of 'development from above downwards', or what Crow terms 'the way of heritage', dealt with in Chapter Fourteen. What then, one may ask, is the situation in regard to those pedagogies which are based on direct exposure to stimuli but lay claim to producing the same effects of mental development of higher functions and interiorisation. In the Montessori system, for example, the mediation is produced by the task at hand and the specially designed didactic materials:

> When the instruments [materials] have been constructed with great precision, they provoke a spontaneous exercise so coordinated and so harmonious with the facts of internal development, that at a certain point a new psychical picture, a species of higher plane in the complex development, is revealed. The child turns away spontaneously from the material, not with any signs of fatigue, but rather as if impelled by fresh energies, and his mind is capable of abstractions.[147]

And, as regards Maria Montessori's attitude to the need for a human mediator, she is quite clear that:

> The lesson must be presented in such a way that the personality of the teacher shall disappear. There shall remain in evidence only the object to which she wishes to call the attention of the child.[148]

There is no doubt that we have here a very central, and very puzzling contradiction between the theories of Feuerstein, Vygotsky, and Lonergan on one hand, and those of Montessori on the other. It is not enough simply to dismiss out of hand Montessori's claim that the primary mediator is the task itself. Unlike Dewey, she

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[146] Ibid., p. 131.

[147] Maria Montessori, *Spontaneous Activity in Education* (New York: Schocken Books, 1965), p. 77.

[148] Maria Montessori, *The Absorbent Mind* (Wheaton, ILL: Theosophical Press, 1964), p. 108.

was not primarily a theoretician but had developed a very successful practical pedagogy which has been lauded and emulated the world over. Yet the contradiction remains: interiorisation, cognitive development, appropriation of cognitive interiority, education for *being*, can, according to Montessori, be produced by the mediating effects of the 'controlled environment' alone, with the adult mediator relegated to a secondary position.

9.10 *Chapter Conclusions*

The previous chapter introduced the notion of transcendence and attempted to show it to be a central characteristic of the very notion of development itself, whether that development was in the purely organic sphere or in the sphere of the cognitive. It also argued that the notion of intentionality as employed by Lonergan is a natural consequence of the transcendence of the human mind. In this chapter the relationship between intentionality and consciousness has been explored and clarified. Lonergan's notion of 'intentionality analysis' was examined in detail, including his idea of feeling as an intentional response to a value or a good. This led naturally to a discussion of one of the most central concepts of this study, Lonergan's notion of 'self-appropriation of interiority'.

One of the main 'discoveries' of this research is the fact that what Lonergan is attempting to achieve in *Insight* through what might be termed 'guided self-appropriation' is very similar to what Feuerstein is attempting to achieve through his Mediated Learning Experience (MLE) and his Instrumental Enrichment (IE) programme. Feuerstein's notion of 'metacognition' was compared to Lonergan's notions of consciousness and 'self-appropriation' and, together with the notion of 'sublation', was used to develop a model to explain the effectiveness of Feuerstein's MLE, and of the method employed by the famous Petö Institute in Budapest. This now points to the desirability of a closer examination of Feuerstein's theory of 'defective cognitive functions' and how they relate to Lonergan's dynamic levels of coming to know.

Chapter 10

Lonergan's First Transcendental Precept 'Be Attentive'

10.1 *Introduction*

10.1.1 *The Aims of the Study - A Review*

At the beginning of this current chapter it may be useful to recapitulate the twofold aims of this study. They are:

> 1) To examine the relevance of Lonergan's theories as a foundation for a comprehensive philosophy and theoretical model of the educational process;
>
> 2) To explore the possibility of a practical pedagogical method based on such a model or philosophy, and particularly on the 'self-appropriation of cognitive interiority' which is an integral part of it;

The next four chapters seek to progress these two aims by examining each one of Lonergan's transcendental precepts in detail, and exploring how it interfaces, or dovetails, or fits with existing established theories in psychology and philosophy. As regards a possible third aim, it may be argued that by firstly attending to each of Lonergan's levels of mental functioning in turn, then by attempting to understand each level in terms of the author's existing psychological, educational, and philosophical horizon,[1] and ultimately by assenting to the 'goodness of fit' or otherwise achieved in the process, the personal self-appropriation of cognitive interiority of the author could be promoted. In practical terms, these four chapters, if taken together with what has been previously dealt with, might seek to achieve the same purpose as Lonergan's *Insight*, with the obvious difference that in this case there is necessarily a stronger bias towards the human sciences and education.

[1] This has not been made a formal part of the aims of the study as it is difficult to formalise, objectivise, and prove for an outside observer. Nevertheless, one could argue that the self-appropriation of interiority on the part of the author could be progressed by using the study as a vehicle for bringing together the disparate elements in his life experience as scientist, educational psychologist, teacher, and school principal.

It has already been argued that the coherence of a theory of education based on Lonergan's scheme will depend on its consistency with established psychological and philosophical theories, particularly those that have withstood the test of time, or are based on careful scientific scrutiny and investigation. Thus, in this study the validity of Lonergan's insights are examined and assessed through what has been termed a 'convergence of theories' (their consistency with existing theories in philosophy and psychology).

10.1.2 *Lonergan's Operations and Feuerstein's Functions*

As one might expect from a philosopher, Lonergan's philosophical theories and cognitive system are quite idealised, at least in the sense that they take little note of the very many things that can go wrong with, or act as limitations to, the smooth functioning of the mental operations. This does not invalidate in any way Lonergan's insights. However, in order to be useful educationally, in order to find their place in the realm of practical pedagogy, it is necessary to augment and supplement Lonergan's theories with the hard-won findings of empirical science and clinical psychology.

Lonergan's attitude to what may be termed deficient mental functions is best summarised by Williams:

> When we examine the way we are present in this life we discover a repeated pattern of operations which do not vary. No matter what we do as humans, we are attentive; we reflect on what is presented to our attention and try to make sense of it. Then we ask ourselves if we are right in our understanding of what is going on, and, after that, we try to act out of those judgments. We have to learn to overcome what limits our attentiveness, our intelligence, our judgments, and finally our behavior.[2]

This consideration of mental operations and of what can go wrong with them will be a study of precisely "what limits our attentiveness, our intelligence, our judgments, and finally our behavior," and, importantly, how to overcome these limitations. In doing so, the study will lean heavily on the clinical theories of Reuven Feuerstein.

Of all the theories with which Lonergan's system have been compared so far in this study the theories of Feuerstein appear to have the most to offer, both in terms of the support they lend for Lonergan's theoretical scheme and also in terms

[2] Geoffrey B. Williams, "Transcendence and the Development of Consciousness". In *Studies in Formative Spirituality* Vol. 9 (Nov. 1988), p. 340.

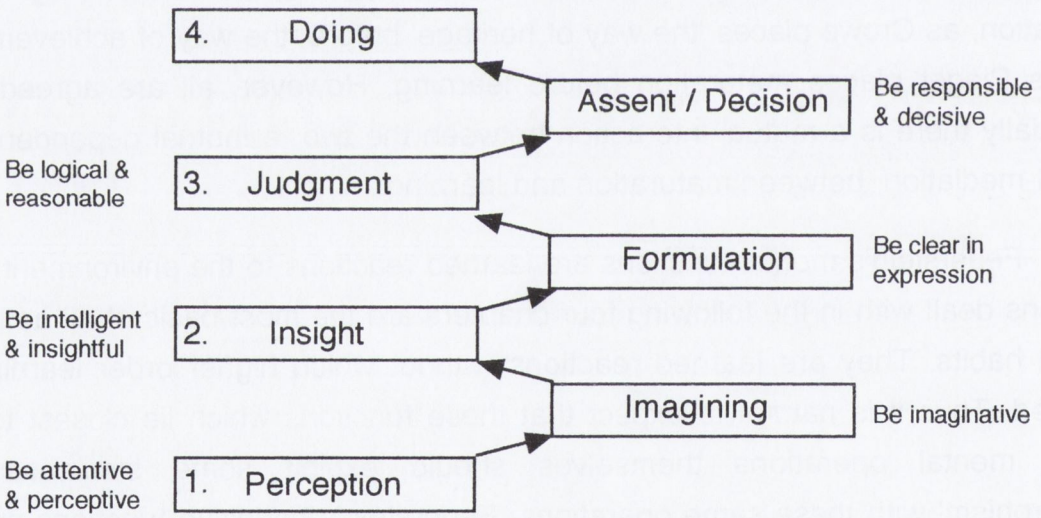
of the expansion and deepening they provide for the educational model developed from it. It is therefore important from the outset to distinguish clearly between certain aspects of the foundations of the two systems, particularly between what Lonergan terms 'mental operations' and what Feuerstein calls his 'cognitive functions.'

Feuerstein is very clear that his cognitive functions are learned capacities; they are basic or lower level acquired habits which are mediated to the growing child by the mother and other significant persons in the child's life. Lonergan is equally clear that his mental operations of experience, understanding, judgment, and decision are aspects of the very nature of the human mind itself and must thus be viewed as innate, inborn, or inherited rather than as acquired. The difference between operations and functions is thus one of 'nature' as opposed to 'nurture'. But this is a 'difference' which previous chapters have already attempted to reconcile. It has already been argued that there is a 'mutual-mediation', or mutual interaction, of learned acquired habits and the innate structure of the mind; there is in other words a mutual-mediation between learning and maturation. One can certainly attempt to put one before the other, as Vygotsky places learning before maturation, as Crowe places 'the way of heritage' before 'the way of achievement', and as Piaget places maturation before learning. However, all are agreed that essentially there is a mutual interaction between the two, a mutual dependency, a mutual-mediation, between maturation and learning.

Feuerstein's mental functions are learned reactions to the environment. The functions dealt with in the following four chapters are the most basic of all acquired mental habits. They are learned reactions without which higher order learning is impeded. Thus it is natural to expect that those functions which lie closest to the innate mental operations themselves should exhibit some similarities or 'isomorphism' with these same operations. Feuerstein's cognitive functions should display some family resemblance, in other words, to Lonergan's mental operations. Such a consistency does in fact seem to be the case. Each one of Feuerstein's functions, while operational at all levels of Lonergan's cognitive functioning, nevertheless appear to belong more completely, more naturally, to some levels than to others. In fact, it seems that one can assign Feuerstein's learned functions to each of Lonergan's levels of experience, understanding, judgment, and decision, in the same way that Feuerstein himself assigns them to the cruder, more simplistic functionalist and mechanistic classificatory levels of 'input, elaboration, and output'.

A secondary purpose of the following four chapters is, then, to show that such an isomorphism between the mental operations of Lonergan and the cognitive functions of Feuerstein does in fact exist, and to determine in more detail the nature of this isomorphism.

Since this chapter and the following three will attempt to explore Lonergan's scheme in some detail, the four basic levels have been expanded to include imagery, conception, assent, and doing. This is quite consistent with the practice of Lonergan himself who, while continuing to adhere to his four main levels, nevertheless sometimes recognised many more types of conscious intending.[3] Even at this more refined level of classification, the next four chapters will attempt to show that a consistency with Feuerstein's list of acquired functions is quite apparent.[4] Just as the number of levels has been expanded to include imagery and conception, so also the number of transcendental precepts has been expanded to include "be imaginative" and "be expressive." All of the levels dealt with, and their corresponding precepts are represented on the following schematic diagram:



The following four chapters, then, while clearly still belonging to a consideration of the transcendent nature of man, nevertheless form a certain unity among themselves. At each level of conscious intending there will be a discussion of the relevant cognitive functions necessary for its efficient operation. It is quite

[3] See Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), pp. 10 - 11.

[4] It must be emphasised however that while Feuerstein recognises and explores as many as thirty such basic acquired functions, this study will concentrate on a slightly lesser number. These functions are summarised on the schematic diagram in Appendix C of this work.

apparent, for example, that Feuerstein's cognitive functions of 'precise and accurate data gathering' and 'systematic exploration of a learning situation' belong at Lonergan's level of experience. On the other hand, his functions of 'spontaneous comparative behaviour' and 'ability to project virtual relationships' are essential mental habits or capacities for insight or understanding to occur freely and unimpeded. In addition, Feuerstein's functions of 'inferential-hypothetical thinking' and 'strategies for hypothesis testing' belong clearly to what Lonergan describes as his level of reasoning and judgment. While this overall exercise is necessarily imperfect, it will be argued that there is enough evidence of a 'match' between the two systems to support the notion of a certain 'isomorphism' between Lonergan's mental operations and Feuerstein's cognitive functions.

10.2 *Experience and Attention*

10.2.1 *Data of Sense*

The terms 'sense', 'data of sense', 'sense perception', and 'experience' are all used extensively by Lonergan, and so appear again and again throughout this study. It is useful at this stage to attempt a definition, or at least a description, of what Lonergan means by each one of these terms, and how they are differentiated from, and relate to, one another.

Lonergan conceives of a sense like seeing, hearing, tasting, touching, or smelling as a capacity to receive sense impressions, impressions which can be attended to, or not. He regards the sense of sight, for example, as the capacity to see, the capacity to receive visual impressions, and not the mere response of rods and cones in the retina to photons of different frequencies. One can never 'see' sight, one cannot objectify it, but one can certainly experience it in operation and at least to that degree know it. One can certainly see the organ of sight but this can tell one very little of the immense richness of the sense itself. This is what Anthony Kenny means when he says:

> A capacity is not, in the ordinary sense of the word, something which occupies space at all..... My car's capacity to do 120 m.p.h. is something which it would be foolish to look for under the bonnet, as one might look for a carburettor under the bonnet.[5]

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5 Anthony Kenny, *The Metaphysics of Mind* (Oxford: Oxford University Press, 1992), p.25.

Lonergan links the notion of attention to that of sense perception. In his explanation of what he means by 'attention' he cites the case of Thales[6] who was so taken up with the stars that he fell into the well. It wasn't as if Thales did not 'see' the well, or receive visual impressions of it; it was simply that he was not attending to it; he did not 'conate' it; he did not advert to it; he did not take cognisance of it. A sense impression, if one can speak of a single sense impression, to which one does attend Lonergan classifies as a 'datum of sense'. Thus one can say that he does not have a passive notion of sense data. He also maintains that seeing without at least a glimmer of cognition hardly qualifies as seeing at all. Susanne Langer supports this view when she says:

> The activity of our senses is "mental" not only when it reaches the brain , but in its very inception, whenever the alien world outside impinges on the furthest and smallest receptor. All sensitivity bears the stamp of mentality. "Seeing", for instance, is not a passive process, by which meaningless impressions are stored up for the use of an organising mind, which construes forms out of these amorphous data to suit its own purposes. "Seeing" is itself a process of formulation; our understanding of the visible world begins in the eye.[7]

What Langer means in the above quotation will become clearer in what follows. One is normally bombarded by many and varied kinds of sense impressions; some of these the individual is more interested in than others, and so he attends to these more than to the others. Lonergan calls this the "flow of sensations." But one is normally conscious of "the flow of perceptions" rather than of the flow of sensations. What Lonergan means by the term "perception" is best illustrated when he says that "the flow of sensations, as completed by memories and prolonged by imaginative acts, becomes the flow of perceptions."[8] In perception, in other words, the data of sense are organised and made meaningful with the aid of imagery and memory. One can say that, while in sense experience one is already in search of meaning, in perception one has already grasped it, albeit in a basic form.

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[6] Bernard Lonergan, *Insight,* p. 73, and p. 182.

[7] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 90.

[8] Bernard Lonergan, *Insight: A Study in Human Understanding* (London: Longman, Green & Co., 1964), p.73.

10.2.2 *Attention*

Lonergan's first 'transcendental precept' is 'be attentive'. Ian Robertson in his book, *The Mind's Eye*, explains what modern psychology generally means by the term 'attention':

> The billions of bits of information that a single scene might contain - texture, shape, shadows, objects, movement, location - could never be transcribed 'raw' into our brains via the senses. Of course we must impose windows through which this is channelled. And the most important of these windows is attention. What we attend to has a royal road into our brain circuits, though there is much that we don't attend to - and of which we are unaware - that also imprints itself on our neural circuits.[9]

Lonergan could have no complaint with this description, as far as it goes. Unlike Robertson, however, Lonergan highlights the central roles of consciousness and intentionality in attending: "The intending of our senses" he says "is an attending; it normally is selective but not creative."[10] Thus he emphasises the essentially active role of attention in the way the senses selectively reach out to the environment in order to absorb something of what it has to offer.

Of all the senses sight is commonly considered the most important and the most highly developed in man. Aristotle attributed this preferred position of sight to the fact that sight, more than any other sense, enables man to become aware of the distinctions between things,[11] and to recognise the distinguishing features within each thing. These 'distinguishing features' are what Lonergan would term the 'material dispositions' of the particular thing. Schachtel gives the following phenomenological description of the workings of attention in the organisation of what he terms "the visual field":

> In looking at an object the eyes have to focus on it. This means an active organization of the visual field, lifting out of its diffuse impact a particular object which becomes the focus of attention and is set off against a less attended-to background. It means, furthermore, that the eye and mind have to pursue the dominant lines, form, and structure of the object which are its distinctive features; they have to take hold of these features, thus establishing a firm perceptual grasp of the object. [12]

These "distinctive features," the "dominant lines, form, and structure of the object" mentioned by Schachtel appear similar to what Lonergan terms the 'material

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[9] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 19.

[10] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 10.

[11] Aristotle, *Metaphysics*, 98D a 26.

[12] Ernest Schachtel, *Experiential Foundations of Rorschach's Test* (London: Tavistock Publications, 1967), p. 89

dispositions' of the object. The grasp of these material dispositions, first in the senses, and then in the intellect, constitute what he means by the 'form' of the object.

It is useful to note at this stage that, according to many modern psychologists, the selective aspect of attention works as much by a process of 'selective inattention' as by positive selection, as Schachtel's quotation implies.[13] Thus, in taking hold of the 'material dispositions' of the object, the mind selects and attends to what it regards as significant or relevant. This it does, not only by a process of positive selection, but also by a parallel process of exclusion, or the suppression or neglect of everything that is not relevant. Thus a 'figure' is brought to the fore by an active process of excluding the elements that form the "less attended-to background" (or 'ground') from active consideration. This constitutes Lonergan's first level of intentionality, that of attending. This process of selecting what is relevant and rejecting what is irrelevant for a percept is important because it constitutes the essence of what Lonergan conceives as the process of abstracting, and is also the means by which the 'form' of an object is grasped by the senses. He says: "Properly, to abstract is to grasp the essential and disregard the incidental, to see what is significant and set aside what is irrelevant, to recognise the important as important and the negligible as negligible.... abstraction is the selectivity of intelligence."[14]

To take a concrete example, the material dispositions within an object are experienced by a child while looking at or manipulating an object. These are registered in the central nervous system and constitute the ground (or 'matter') from which sensitive form emerges. This depends for its proper functioning on the ability of the child to compare and contrast incoming data on a sensitive level. This is relational thinking operating on the level of the senses. A child encounters an object; he may explore it by grasping it, bringing it to his mouth, looking at it, or hitting something else with it, as in the following description by the noted developmental psychologist, Arnold Gesell:

> Directly he sees a cube he grasps it, senses surface and edges as he clenches it, brings it to his mouth, where he feels its qualities anew, withdraws it, looks at it on withdrawal, rotates it while he looks, looks while he rotates it, restores it to his mouth, withdraws it again

[13] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 182.
[14] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans, 1964), p. 30.

> for inspection, restores it again for mouthing, transfers it to the other hand, bangs it, contacts it with the free hand, retransfers, mouths it again, drops it, rescues it, mouths it yet again, repeating the cycle with variations - all in the time it takes to read this sentence.[15]

The child notices that the object has a number of sharp edges, but this sharpness exists only relative to some other parts which are less sharp. Hardness or roughness of texture are also relative. It is not one feature, sharp edge, which is borne in mind, but the relation of one part to another. The mind cannot grasp a feature in isolation, it can grasp or hold only a contrast, a relation. The mind cannot take hold of a 'figure' except against a 'ground', cannot grasp a 'form' except as distinct from its attendant 'matter'. "The mind of man seeks out only the relations of things,"[16] says Malebranche.

Thus, Montessori's insistence that education should begin with the handling of concrete didactic materials, and with a careful refinement of all the various senses, makes enormous sense physiologically, psychologically and, one might even say, philosophically. One can also see the importance of what Feuerstein terms the function of 'systematic exploratory behaviour' in coming to grasp the world around, and Dewey's insistence that experience is essentially active. Feuerstein holds that the ability to compare and contrast one thing with another, or one part of a thing with another part, is vital to clear perception and to accurate experience in general, as it is vital also to the process of abstraction. Thus, Feuerstein holds that where a child's learned exploratory habits are 'impulsive' rather than 'systematic and orderly', or where a child's perception is similarly 'blurred and sweeping' rather than 'clear and accurate', then all levels of his mental functioning will be impaired, regardless of his innate or inherited intelligence.

10.2.3 *Attention and Neurology*

Robertson presents some useful scientific proof for this view of attention:

> Recent PET studies have provided the strongest support that attention is fractionated into different supramodal systems; and that such systems have distinct neuro-anatomical bases. Posner and Peterson (1990) have argued that attention consists of at least

[15] Arnold Gesell, *The First Five Years of Life* (London: Methuen, 1976), pp. 22 - 23.

[16] N. Malebranche, *The Search After Truth* (Columbus, OH: Ohio State University Press, 1980), p. 252. Nicolas Malebranche (1638 - 1715) was a French philosopher and theologian who agrees with Descartes that ideas or immaterial representations which are present in the mind play an essential role in knowledge and perception. However, unlike Descartes, Malebranche holds that the ideas that function in human cognition reside in God's divine understanding as essences and ideal archetypes.

> three separate systems - a selection system responsible for selecting relevant stimuli/processes and inhibiting irrelevant ones, a vigilance system responsible for maintaining readiness to respond in the absence of external cues, and an orientation system responsible for engaging, moving and disengaging attention in space.[17]

The first attention system mentioned corresponds to the system of selective attention and inattention, and corresponds closely to Lonergan's first level of abstraction - the selection of what is relevant and the rejection of what is irrelevant in data of sense. The second system mentioned by Robertson, "a vigilance system responsible for maintaining readiness," one can argue, is none other than the experiential aspect of consciousness, albeit cloaked in anatomical and behaviourist terms. This experiential consciousness, it may also be argued, is what Lonergan means by the subject being "present to himself" in the following quotation:

> Modes of presence .... There is material presence, in which no knowing is involved, and such is the presence of the statue in the courtyard. There is intentional presence, in which knowing is involved, and it is of two quite distinct kinds. There is the presence of the object to the subject, of the spectacle to the spectator; there is also the presence of the subject to himself, and this is not presence of another object dividing his attention, of another spectacle distracting the spectator; it is presence in, as it were, another dimension, presence concomitant and correlative and opposite to the presence of the object. Objects are present by being attended to; but subjects are present as subjects, not by being attended to, but by attending.[18]

The third system of attention mentioned by Robertson in the above quotation is highly significant in that it is the process whereby the child forms an inner map or spatial mental image of the 'material dispositions' of the object, as illustrated in Arnold Gesell's example quoted above, by comparing and contrasting one aspect of the object with another. Recent research by Dr. Harold Levinson and others in New York have found that problems with this aspect of attention, which is related to cerebellar-vestibular dysfunction, is one major cause of dyslexia and ADD in children.[19]

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[17] Ian H. Robertson et al., *The Test of Everyday Attention - Manual* (Bury St Edmunds: Thames Valley Test Company, 1994), p. 31. The initials PET stand for 'positron emission tomography'. This is a modern diagnostic technique which allows investigators to assess the amount of metabolic activity in various parts of the brain. See Neil R. Carlson, *Foundations of Physiological Psychology* (Boston: Alyn and Bacon, 1992), p. 23.

[18] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection* (London: Darton Longman & Todd, 1967), p. 20.

[19] Harold N. Levinson, *The Discovery of Cerebellar-Vestibular Syndromes and Therapies* (New York: Stoneridge Publishing Ltd., 2000)

10.2.4 *Perception*

Sensing, perceiving, and imagining all belong to Lonergan's first level of conscious intentionality, that of experience. A datum of sense, according to Lonergan, is "the content of an act of seeing, hearing, touching, tasting, smelling." Perception, however, involves more than sense data. Lonergan says that seeing without at least a modicum of knowing is not really human seeing at all:

> Such contents do not occur in a cognitional vacuum. They emerge within a context that is determined by interests and preoccupations. ... Thus, the flow of sensations, as completed by memories and prolonged by imaginative acts of anticipation, becomes the flow of perceptions. It is of the latter, perceptual flow that we are conscious. It is only when the perceptual flow goes wrong that the mere sensation bursts into consciousness ...[20]

A central part of the active, selective reaching out to the environment, which characterizes the intentionality of the senses, is what might be termed interpretation or search for meaning. It is this search to make the field of vision meaningful which is the essence of the selective aspect of attention. Robertson explains that "most of the time we see, hear, feel, taste, and smell what our brains *expect* rather than the sensations themselves."[21] This, again, is what differentiates perception from mere sensation. The individual mind selects those aspects of the field of sensation which it finds meaningful to its existing 'memory-bank' or 'horizon'. Thus it perceives the object or situation rather than merely sensing it. Again, Robertson explains that "for much of our lives, we taste memories - what we expect - not the raw, fresh complexity of the sensations on our tongues." [22]

The following quotation from Beckett's *Molloy* grasps the essence of the field of sensation impinging on poor Molloy without that selective aspect of the 'pure desire to know' which constitutes attentive perception. Here Molloy is presenting very much the mind-set of the artist with its hypersensitivity to sense stimulation. Here also is portrayed a cognitive bewilderment bordering on the autistic:

> Yes, the words I heard, and heard distinctly, having quite a sensitive ear, were heard a first time, then a second, and often even a third, as pure sounds, free of all meaning, and this is probably one of the reasons why conversation was unspeakably painful to me. And the words I uttered myself, and which must nearly always have gone

[20] Bernard Lonergan, *Insight: A Study of Human Understanding* (London: Longman Green & Co., 1958), p. 73.
[21] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 4.
[22] Ibid., pp. 18 - 19.

> with an effort of the intelligence, were often to me as the buzzing of an insect. And this is perhaps one of the reasons why I was so untalkative, I mean this trouble I had in understanding not only what others said to me, but also what I said to them. It is true that in the end, by dint of patience, we made ourselves understood, but understood in regard to what, I ask of you, and to what purpose? And to the noises of nature too, and to the works of men, I reacted I think in my own way and without desire of enlightenment. And my eye too, the seeing one, must have been ill-connected with the spider, for I found it hard to name what was mirrored there, often quite distinctly.[23]

10.2.5 *Perception and Intellect*

Piaget regards perception as separate from intellect. Lonergan and Robertson would both most certainly disagree with him in this regard. So also would Susanne Langer. In a paragraph already quoted she says:

> The activity of our senses is "mental" not only when it reaches the brain , but in its very inception, whenever the alien world outside impinges on the furthest and smallest receptor. All sensitivity bears the stamp of mentality. "Seeing", for instance, is not a passive process, by which meaningless impressions are stored up for the use of an organising mind, which construes forms out of these amorphous data to suit its own purposes. "Seeing" is itself a process of formulation; our understanding of the visible world begins in the eye.[24]

And again, in a quotation which summarises very well what has been said to date on attention, sensation, perception, abstraction and the relationship between them, she says:

> A tendency to organize the sensory field into groups and patterns of sense-data, to perceive forms rather than a flux of light-impressions, seems to be inherent in our receptor apparatus just as much as in our higher nervous centers with which we do arithmetic and logic. But this unconscious appreciation of forms is the primitive root of all abstraction, which in turn is the keynote of rationality; so it appears that the conditions for rationality lie deep in our pure animal experience - in our power of perceiving, in the elementary functions of our eyes and ears and fingers. Mental life begins with our mere physiological constitution. A little reflection shows us that, since no experience occurs more than once, so called "repeated" experiences are really *analogous* occurrences, all fitting a form that was abstracted on the first occasion. *Familiarity* is nothing but the quality of fitting neatly into the form of a previous experience.[25]

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[23] Samuel Beckett, *Molloy* (London: Pan Books, 1979), p. 47.

[24] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 90.

[25] Ibid., pp. 89 - 90. Italics in original.

10.3 *Deficient Cognitive Functions Related to Attention & Perception*

Lonergan's level of experience corresponds roughly to Feuerstein's 'input level' of mental functioning. At this level the child is brought face to face with an unfamiliar situation, a disequilibrium, and responds with the questioning attitude "What is it?" The pure desire to know, operating at this empirical level, responds by attending to the data of sense and by selecting those data necessary for the solution of the perceived problem. Dewey also notes that the origins of reflective thinking lie in perplexity, confusion or doubt. Thought, in other words, does not rise unsolicited but must be evoked by the situation. Feuerstein has identified the mental functions which, if deficient, interfere with the quality and quantity of the data gathered by the child as he attempts the solution of the perceived problem, or even as he begins to appreciate that there is indeed a problem.

Feuerstein maintains that most of what can go wrong with a person's mental functioning happens at the input and output levels where, presumably, the workings of the mind are at their most organic, neurological, or material. Many defects at the experience or input level however cannot be blamed on organic or metabolic problems but, according to Feuerstein, are due to lack of development of the good mental habits and attitudes highlighted below as deficiencies of mental functioning.

10.3. A *Blurred and Sweeping Perception*

In an extract from *Insight* quoted above, Lonergan finishes by saying: "It is only when the perceptual flow goes wrong that the mere sensation bursts into consciousness."[26] One problem that can cause the perceptual flow to go wrong is what Feuerstein describes as "blurred and sweeping perception". He explains:

> What characterises the blurredness is a poverty of details or their lack of clarity, a poor quality of sharpness, an imprecise definition of borders, and an incompleteness of the data necessary for proper distinction and description.[27]

This deficiency affects not only cognitive functioning at the input stage but, if data input is deficient, it must also affect functioning at the elaboration and output stages as well.[28] From the perspective of Lonergan's cognitive scheme one can say that if

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[26] Bernard Lonergan, *Insight: A Study of Human Understanding* (London: Longman Green & Co., 1958), p. 73.

[27] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, Maryland: university Park Press, 1980), p. 76.

[28] Reuven Feuerstein, Yaacov Rand, Carl Haywood, *L.P.A.D. Learning Propensity Assessment Device - Manual* (Jerusalem: International Centre for the Enhancement of Learning Potential, 1995), Section 4.8.

perception is "blurred and sweeping", then the data accessed will necessarily be impoverished, and if the original data are impoverished, then any subsequent image or *phantasm* formed will also necessarily be vague and inadequate. Since insight, according to Lonergan, is insight into *phantasm* and not directly into data, then this situation must, in turn, lead inevitably to doubtful, unreliable, and incomplete understanding. Feuerstein says: "Unless the initial step of data gathering is undertaken with attention and skill, the understanding of a problem will be nonexistent or partial at best." [29]

So what exactly causes these poor habits of perception? Feuerstein answers:

> The nature of the child's investment in the perceptual process, as defined by the amount of time and the degree of his persistence in focussing on an object or an event, will determine the accuracy and pervasiveness of the perceptual process. So, too, speed and rhythm may be important factors in the clarity of perception.[30]

Feuerstein emphasises that by "blurred and sweeping perception" he means the manner in which things are perceived and not any "peripheral limitations of the perceptual processes." The problem is due to inadequate learning of an important discipline and this is due to poor parental or educational mediation in the first place. The problem can be corrected by the proper use of what he terms 'mediated learning experience' (MLE). For example, one can mediate focussing behaviour to the child and also encourage him to take adequate time to collect the necessary data: "Look carefully now." and "Don't just guess; examine it in detail." or "Do you remember what the instructions were?" The process of mediating the problem to the child, of allowing him to see the problem more clearly, of encouraging him to spend more time collecting data, and of showing him how much better his performance is when he succeeds in doing so, will not only help the child sort the problem out for himself, but will also enhance his motivation, his felt need to aim at focussed, clear perception. Feuerstein explains that in children very often "perceptual inadequacy arises because purpose, focusing, and investment are not the result of an intrinsic need system of the organism." [31] The problem is not just one's of lack of skill, in other words, but a lack of that motivation which must accompany skill.

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[29] Reuven Feuerstein, Yaakov Rand, Mildred B. Hoffman, *The Dynamic Assessment of Retarded Performers* (Baltimore, MA: University Park Press, 1979), p. 62.

[30] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 76.

[31] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 77.

Clearly, the nature of the perceived stimulus and whether it is simple or complex, familiar or novel, also has an important bearing on the types of perceptual investment and the amount of focusing. Feuerstein says:

> One of the well observed phenomena in children who have not received MLE from a constant caregiver is ... the diffused nature of their perception. These children scan their perceptual environment without attending differentially to the more relevant elements, and therefore do not persist in developing the means necessary for attaining specific goals. Very often, these children are described as perseverative, that is, they repeat their perceptual and motor behaviors inappropriately and engage in sweeping perceptual activities without attending to the more meaningful elements of the environment.[32]

As with all the defective functions, the solution lies in appropriate mediated learning experience. In this case mediation is directed towards three different tasks corresponding to three sources of blurred and sweeping perception:

1) It is directed towards orienting the subject's perception. ("What are we looking for?") One of the tasks of the mediator, whether parent, sibling or teacher, is to select the stimuli to which the child will be exposed. This selection of stimuli has an enhancing effect on the child's focussing behaviour, because the mediator serves to emphasise certain stimuli by attaching to them qualities not shared by other stimuli. In this way, the mediator frames the reality experienced by the child; he frames the child's "world" or "horizon of concern," to use Lonergan's terms.[33]

2) It is also directed towards lengthening of the time of exposure to the stimulus ("Make sure you have gathered all the information that you need." "Look carefully, take your time.")

and

3) It is directed towards regulating the complexity and/or familiarity of the task ("This task has lots of parts .... see what you already know about it.")[34]

If the mediation takes place at a 'metacognitive' level, at a level of heightened

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[32] Ibid., p. 27.

[33] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (Toronto: University of Toronto Press, 1993), p. 85.

[34] Reuven Feuerstein, Yaacov Rand, Carl Haywood, *L.P.A.D. Learning Propensity Assessment Device - Manual* (Jerusalem: International Centre for the Enhancement of Learning Potential, 1995), Section 4.8

consciousness, abstraction, and interiorisation on the part of the child, the acquired habit, or learned function, generalises readily to other life situations where it is appropriate to use it.

Other perceptual problems, which are primarily of an affective or motivational nature, may also manifest themselves at Lonergan's first level of conscious intentionality. These are:

10.3. B *Unplanned, Impulsive, and Unsystematic Exploratory Behaviour*

Expioratory habits that are impulsive rather than systematic and orderly will have an effect on all levels of mental functioning of the child. At the level of experience and attention such a student will tend to rush into tasks too quickly in a haphazard and disorganised manner without appropriate attention to what is required or without adopting a methodical approach. Such students will also have poor investigational strategies and will not see the need to gather and integrate all the information necessary to think through a problem. They also tend to lack self-control and have difficulty adjusting the speed, accuracy, and precision needed for a particular task.

What one is dealing with here is not what is sometimes termed 'pathology of attention'. On the contrary, these defects are not the result of any underlying incapacity to attend but are rather the result of inadequate training in exploratory skills. This is reflected in a poor definition of the problem to be solved, a lack of goal orientation, and unsystematic exploration. This does not mean that this deficient cognitive function and the previous one do not play some contributory role in the so called Attention Deficit Disorder (ADD). It is simply that Feuerstein would maintain that conditions like ADHD are not unitary conditions at all and that simply applying labels is no substitute for clear qualitative analysis in terms of deficient cognitive functions, an analysis which is sufficiently detailed and precise to suggest equally clear and precise remedial strategies. Reuven Feuerstein's son, Rafi, says:

> These functions permit the thinking process of every person to be described in an extremely precise manner, due to the great amount of detail and sharp distinction between them. And indeed, to put forward a defined target for the cognitive rehabilitation process, instead of the sweeping use of labels in relation to particular deficiencies (such as dyslexia, discalculia, disgraphia, and so forth. The description of the child as "dyslexic" should raise the question of whether there is a particular function which is directly responsible

> for the child's difficulty. For example, there could be a problem of spatial concepts associated with the reading process. Likewise, one may ask whether two children who are described as dyslexic do indeed suffer from the same defective function. [35]

Unlike the elements of intelligence described by Howard Gardner in the context of his notion of "multiple intelligences", for example, Feuerstein does not define his cognitive functions in terms of their affinity to particular content. This content neutrality widens the scope and field of application of his functions to encompass all areas of human endeavour. Another advantage of this approach to intelligence is that "low functioning does not necessarily testify to a broad and irreversible cognitive injury."[36] On the contrary, it could indicate a deficiency in one of the essential conditions for the proper realization of a certain mental process, without that process itself being otherwise deficient in any more fundamental sense.

Impulsivity, as has already been said, negatively affects the three phases of the mental act. At the input phase (Lonergan's level of experience) it manifests in the gathering of blurred, fragmentary, and incomplete data; at the elaboration phase (understanding and judgment) it is reflected in the lack of internalised processes; and in the output phase (decision) it is reflected by inaccurate choices among given alternatives and erroneous responses.[37]

10.3. C *Lack of Receptive Verbal Tools and Concepts*

It has already been argued in this chapter that the human mind is inherently relational and that a single stimulus (in this case, a word) has no meaning except in relation to a 'ground' of other stimuli. Expressed somewhat differently, one can say that the meaning of a word emerges primarily in its distinction from other words. Words (signifiers) are distinguished by a grasp of related concepts (what is signified). Similarly, concepts are differentiated one from the other through the agency of the words which are used to 'encode' them.

In his manual for the Learning Potential Assessment Device (LPAD)

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[35] Rafi S. Feuerstein, "Dynamic Cognitive Assessment and the Instrumental Enrichment Program," in Alex Kozulin and Yaakov Rand (Eds.), *Experience of Mediated Learning: An Impact of Feuerstein's Theory in Education and Psychology* (Oxford: Pergamon, 2000), p. 153.

[36] Ibid., p. 154.

[37] Reuven Feuerstein, Yaacov Rand, Carl Haywood, *L.P.A.D. Learning Propensity Assessment Device - Manual* (Jerusalem: International Centre for the Enhancement of Learning Potential, 1995), Section 4.8

Feuerstein says that "the absence of a verbal code ... reduces the quantity and quality of gathered information."[38] In other words, the lack of a proper term or word or "code" to designate an object, a relationship, or a concept, may severely limit a child's capacity to differentiate such an object, relationship, or concept, from others. Consider, for example, the basic concepts of triangle, square and circle: lack of verbal labels with which to encode each of these makes their differentiation by the child that bit more difficult. Feuerstein maintains that any such deficiency in the grasp of fundamental labels must be made good in an initial approach to the learning of any body of material. Furthermore, he says that "the existence of verbal codes permits the use of more complex relationships and facilitates both the understanding and communication of more abstract components." [39]

The same applies where a child lacks the necessary concepts to encode incoming verbal data. Lack of an adequate grasp of certain concepts may cause him to interpret incoming language incompletely or inaccurately. Imagine, for example, at a more mature level, trying to digest a lecture, or a paper, on the poetry of T.S. Elliot without being able to distinguish the terms 'simile' from 'metaphor', or 'sign' from 'symbol', at a conceptual level. If such concepts are lacking or inaccurate, then it is very difficult to make sense of incoming data (i.e. the words used by the lecturer). It is important to emphasise again that such deficiencies in receptive verbal tools and concepts, as highlighted by Feuerstein, are due to lack of mediated learning (MLE) in the child's or young adult's life, and are not necessarily due to poor or deficient hearing or memory, or to the poor functioning of some so-called 'verbal intelligence'.

The relationship between cognition and language is dealt with in more detail in Chapter Eleven of this study. It is worth drawing attention in passing, however, to the obvious role played by language even at this most basic level of mental functioning. This does not imply, however, that language is prior to cognition, as Wittgenstein and others claim, but on the contrary that language, once developed, plays a vital supportive role in mental functioning. It is argued in this study that the relationship between language and cognition appears to be one of 'symbiosis' or mutual dependency. However, one could just as usefully use Lonergan's notion of

[38] Reuven Feuerstein *et al, L.P.A.D.: Learning Potential Assessment Device Manual* (Jerusalem: Hadassah-Wizo-Canada Research Institute, 1986), section 3.7.

[39] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, Maryland: University Park Press, 1980), p. 83.

'mutual mediation' to categorise the relationship, although Lonergan himself does not appear to have directly addressed this problem of the relationship between cognition and language in his writings.

10.4 *Attention and Memory*

Lonergan is quoted as saying that there is no such thing as bad memory, just poor attention.[40] It is clear from what has been said so far that what is contained in the memory of the individual subject has an enormous influence on what he attends to in the process of perception. Lonergan is referring, however, to the fact that memory itself is influenced directly by attention. This link between memory and attention is variously called 'short-term memory' or 'working memory'. Its function is to hold the registration of sense data just long enough to check them or manipulate them in some way before being registered on 'long-term memory. This applies to all of the senses. In the special case of the auditory sense Robertson calls it "the phonological loop": "The phonological loop is the mind's system for holding onto sounds - usually words or numbers - for the few seconds we need to use or check them." [41]

One instructive example of this phonological loop is the "Digit Span" sub-test of the *Wechsler Intelligence Scale for Children* (WISC). The examiner reads out a series of numbers which the child must then say back to the examiner. As the test proceeds, the number of digits to which the child must attend gets ever larger until the maximum number of nine digits is reached. The maximum number of digits which a child can remember and repeat back to the examiner is taken as a measure of what is termed his 'span of attention'. The average span of attention is reckoned to be about seven separate items, for the population as a whole.

10.5 *Interim Summary*

Many scientists like Robertson are essentially reductionist and physicalist in orientation. For Robertson, "*'you' exist in the trembling web of connected brain cells.*" And again, he speaks about "*that utterly unique weave of brain connections that is 'you'.*"[42] Even Feuerstein, a very devout Jew with a clear underlying spiritual

[40] This author has been unable to trace the original quotation.
[41] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 23.
[42] Ian Robertson, *Mind Sculpture* (London: Bantam Books, 1999), p. 13.

view of the human mind, largely confines himself to the psychological sphere. Both men miss, or at least ignore, the very obvious fact that through the mechanism of attention the mind demonstrates its essential outward thrust, its 'allocentricity', its intentionality. Lonergan states: "The intending of our senses is an attending."[43] In its automatic search for meaning, attention is also a manifestation of what Lonergan terms the 'pure desire to know'. It is this same 'pure desire to know' or 'spirit of wonder and inquiry' which propels the mind forward from one level to the next until it reaches its term at "the heart of the real". Goethe appears to take a similar view, when he says:

> For merely looking at an object cannot be of any use to us. All looking goes over into an observing, all observing into a reflecting, all reflecting into a connecting, and so one can say with every attentive look we cast into the world we are already theorising.[44]

Attention involves an organisation of the data of sense into perceptions. Such perceptions are already an abstraction from, or a mental representation of, what might be termed sense impressions. In other words, the mind is already forming mental representations at the very first level of experience. It will be argued, however, that there is a fundamental difference between a percept and what is generally termed a 'mental image'. This difference was recognised by Lonergan and it is highly instructive to consider imagery, or the formation of sensitive mental representations, as a separate but related topic of exploration from what has already been dealt with above.

Finally, it is worth noting that all of the eight cognitive functions which Feuerstein identifies as operative at his input stage, or at Lonergan's level of experience, are directly dependent upon, or at least influenced by, the mechanism of attention. This applies also to the functions which are more directly related to image formation, dealt with in the next section of this chapter.

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[43] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 10.

[44] Goethe, quoted in Paddy Walsh, *Education and Meaning: Philosophy in Practice* (London: Cassell Educational Limited, 1993), p. 71.

10.6 *The Importance and the Role of Imagery*

10.6.1 *Imagery*

In his preface to *Saint Joan,* Bernard Shaw says:

> A very little enquiry among ... acquaintances will reveal that the mind's eye is more or less a magic lantern, and that the street is full of normally sane people who have hallucinations of all sorts which they believe to be part of the normal permanent equipment of all human beings.[45]

What Shaw does not seem to grasp, however, is that these same "hallucinations" are a necessary precondition for understanding. Aquinas, for example, says:

> As anyone can experience for himself, if he attempts to understand anything, he will form images for himself which serve as examples in which he can, as it were, look at what he is attempting to understand. This is the reason, indeed, why, when we want to help someone understand something, we propose examples to him so that he can form images for himself in order to understand.[46]

Lonergan, like Aquinas and Aristotle before him, places *phantasm* between sense experience and Insight, asserting that "images are to the understanding as colors are to sight."[47] To achieve his object in intelligent grasp, or insight, a subject must use imagination or *phantasm,* which is a representation of matter and a first level of abstraction. For Lonergan abstraction in this case is merely the ordinary operation of the intellect as it judges and accepts only the data that are relevant for *phantasm* and discards the data which are judged irrelevant. Lonergan sees imagination or *phantasm* as playing a vital role in the process of cognition. A whole chapter in *Insight*, for example, is devoted to illustrating how the concept or definition of a circle can arise from the experience of a cart wheel, presented to the intelligence in the form of an image as something to be understood. Insight or understanding grasps the form of, intelligibility[48] of, or relations within, the imagined object in the image. A two-way interaction between insight and imagination ensues. Thus, "insight grasps imagined equal radii in a plane surface as the necessary and

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[45] Bernard Shaw, "Preface" to *Saint Joan* (New York: Penguin Books, 1946), p. 25.

[46] Thomas Aquinas, *Summa Theologiae,* 1a. Q. 84, 7 (New York: Blackfriars with McGraw-Hill Book Company, 1968), Vol 12, p. 41.

[47] Bernard Lonergan, *Understanding and Being*, p. 33.

[48] The term 'intelligibility' as used by Lonergan refers to an intrinsic characteristic of being whereby it can come to be known through intelligent insight and rational reflection. In fact Lonergan defines being itself as that which one grasps at the end of the process of experience, understanding, and judgment. By experience one comes to know potency; by insight one grasps form; by conception one expresses essence; and by judgment one apprehends act. Thus all being is inherently intelligible in its potency, its essence, its form, and its act. See Bernard Lonergan, *Insight - A Study in Human Understanding* (London: Longmans, Green, and Co., 1957), pp. 499 - 500

sufficient condition of an imagined uniform curve; imagination presents terms which insight relates or unifies."[49] Once insight is grasped, it is then expressed in an inner word *(verbum)*, or definition, which is Lonergan's notion of 'conception'.

So central is the role of imagery in the operation of the human mind that it is felt necessary to give it more detailed consideration in this study, rather than merely relegating it to the position of a 'half way house' between data of sense and insight.

10.6.2 *Developmental Aspects of Mental Imagery*

It has been argued already that a percept requires sensory data chosen by the process of selective attention for their relevance. What is judged relevant is determined by the needs of the subject at that time, and is influenced by his memory and 'horizon'; it is determined, in other words, by meaning[50] . The selective aspect of attention and perception creates the first and most fundamental form of abstraction. Lonergan explains:

> Properly, then, abstraction is not a matter of apprehending a sensible or imaginative *Gestalt* ; it is not a matter of employing common names just as it is not a matter of using other tools; finally, it is not even a matter of attending to one question at a time and, meanwhile, holding other questions in abeyance. Properly, to abstract is to grasp the essential and disregard the incidental, to see what is significant and set aside what is irrelevant, to recognise the important as important and the negligible as negligible.... abstraction is the selectivity of intelligence.[51]

Thus, selective attention with its figure-ground formation, perception with its attendant interpretation, and image formation, are all aspects of the human intellect, operating at this first, most basic, empirical level, which Lonergan terms the level of experience. This also involves the first, most basic grasp of the 'form' of an object. One can say that 'figure' is to 'ground' as 'form' is to 'matter'. The form is what is selected by the intellect; the matter is what is left as irrelevant. Lonergan says: "When one abstracts, one grasps the intelligible in the sensible.... In virtue of that grasp of the necessity one could pick out the parts of the form." Susanne Langer

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[49] Bernard Lonergan, *Verbum*, p179 as quoted from Bernard Tyrrell, *Bernard Lonergan's Philosophy of God* (Gill & Macmillan, Dublin 1974), p86

[50] In general terms, a meaning may be said to be the relation between a signifier and what it signifies. A signifier might be a word, a gesture, a pictogram, a mental image; what is signified may be a mental concept of some kind. Thus, for example, a meaning could be the relation of the mental image of a thing to its concept. The meaning of a word, for example, could be the relation of the acoustic image of the word, with its attendant connections to memory, to the concept which that word conjures up.

[51] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans, 1964), p. 30.

appears to support this view when she says:

> The power of ... regarding everything about a sense datum as irrelevant except a certain *form* that it embodies, is the most characteristic mental trait of mankind. It issues in an unconscious, spontaneous process of *abstraction*, which goes on all the time in the human mind: ... *Abstractive seeing* is the foundation of our rationality and is its definite guarantee long before the dawn of any conscious generalization or syllogism.[52]

A mental image may be regarded as an interiorised[53] percept. As such, it is also a product of the intellect and is influenced by the need to find meaning, or by 'the pure desire to know'. It follows that a mental image is not a faithful reproduction of the real world on some inner mental 'screen'. It is, rather, a reproduction which is at the same time an interpretation of reality. This is what Robertson means when he says that "while the preverbal images of childhood may be vivid and immediate, they are not reliable markers of reality."[54]

In his book *The Mind's Eye* Robertson asserts that "in the preverbal world of the infant, image is king."[55] The implication is that the child's ability to form images appears at a very early age. This contradicts Piaget who sees mental imagery as making its appearance in the middle of the second year, along with language and symbolic play. Spencer Pulaski explains:

> In contrast to perception which develops early in infancy, mental images seem to appear towards the middle of the second year, along with symbolic play, deferred imitation, and language. Like all the symbolic functions, mental imagery, according to Piaget, arises out of imitation and consists of internalized reproductions functioning in the absence of the imaged objects. But, ... this does not mean that images are exact copies of reality. "Images," says Piaget, "are instruments of knowledge and therefore depend on cognitive functions."[56]

Piaget, then, supports the notion that imagery depends on the cognitive functions, or the intellect. His notion that imagery consists of internalised reproductions arising from imitation is interesting in the light of Robertson's assertion that "it seems that we may visualize and imagine by using the very parts of the brain that we would

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[52] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 72. Italics in original.

[53] For a detailed discussion of what is meant by the term 'interiorisation' see Section 9.9 of this study.

[54] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 30.

[55] Ibid., p. 25.

[56] Mary Ann Spencer Pulaski, *Understanding Piaget: An Introduction to Children's Cognitive Development* (New York: Harper and Row, 1980), p. 114

use to see with." [57] The source of visual imagery in the brain, in other words, is the visual cortex, the same brain location as that used in processing actual visual sensations, or as that used in the process of visual perception itself.

Both Piaget and Robertson are agreed that imagery has a very important role to play in learning and hence in education. Robertson, for example, asserts that "Imagery ... re-creates an incredible facsimile of the world, and of your mind and body state within the imagined world. This makes it an incredibly useful and powerful forum for learning and habit-change." [58]

10.6.3 *Imagery and Language*

Langer supports Lonergan's assertion that language and imagery operate on different levels of consciousness, and yet are both part of the mind's natural capacity to operate in symbols. Both imagery and language are integral parts of the intellect; both are carriers of meaning. She says:

> If language is born, indeed, from the profoundly symbolic character of the human mind, we may not be surprised to find that this mind tends to operate with symbols far below the level of speech. Previous studies have shown that even the subjective record of sense experience, the "sense-image," is not a direct copy of actual experience, but has been "projected," in the process of copying, into a new dimension, the more or less stabile form we call a *picture*.[59]

Of particular interest to educators, however, is Robertson's assertion that "words and images do not go well together."[60] and that the development of language and of the written word in particular seems to impede the operation of mental imagery. He says that "it is the nature of words that they tend to transform experiences into a rather bloodless code that can starve our brains of the rich images that wordless imaging can evoke."[61] The implication is that an overemphasis on the written word may impede development of the child's more creative and artistic side. Robertson quotes Robert Graves in support of this view:

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[57] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 47.
[58] Ibid., p. 170.
[59] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p.144. Italics in original.
[60] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 60.
[61] Ibid., p. 2.

But we have speech, that cools the hottest sun,
And speech that cools the hottest rose's scent.
We spell away the overhanging night,
We spell away the soldiers and the fright.

There's a cool web of language winds us in,
Retreat from too much gladness, too much fear:
We grow sea-green at last, and coldly die
In brininess and volubility.[62]

However, Robertson, like so many empirical scientists, lacks the complete picture. Lonergan reminds one that insight or understanding is not into data but into images which are an abstraction from data. To gain insight into sensible data, the mind must use an image as an intermediary. This is by no means a new idea; it can be traced all the way back to Aristotle who said: "To the thinking soul images serve as if they were contents of perception. That is why the soul never thinks without an image"[63] . This means that anything which impedes the child's capacity to form images must necessarily also impede the child's capacity to think clearly and to learn. Daniel Murphy, for example, claims that "the nurturing of learning potential depends ultimately on the enrichment of the imaginative resources of the learner."[64] Thus, it is of the utmost importance that educators fully appreciate the role of imagery in the overall thinking of the child and make every effort to enhance and develop this most central of human abilities.

Clearly the development of language is vital for self-expression and communication. However, it also makes the child's thinking more disciplined and objective, giving him the capacity to reason logically, with greater clarity and accuracy. Imagery, on the other hand, while being a very useful tool is nonetheless relatively unreliable and inaccurate. Robertson is already quoted as saying that "while the preverbal images of childhood may be vivid and immediate, they are not reliable markers of reality." [65] One must remember that images, like percepts, are not faithful copies of reality but rather interpretations of that reality - reality as coloured by one's memories, feelings and attitudes, by one's system of meanings, by one's 'horizon'. The fact that children's images are not only vivid but so

[62] Robert Graves quoted in Francis Turner Palgrave (Ed.), *The Golden Treasury of the Best Songs and Lyric Poems* (London: Collins, 1973), pp. 500-501.

63 Aristotle, J.L. Ackrill (Ed.), *Aristotle's De Anima.* 431a, 7., (Oxford: Clarindon Press, 1974), p. 233.

[64] Daniel Murphy, *Tolstoy and Education* (Dublin: Irish Academic Press, 1992), p. 150.

[65] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 30.

subjective means inevitably that their grasp of reality is often quite poor. In fact, the wonder is that they are capable of grasping reality at all. Langer explains:

> They [mental images] are our own product, yet not part of ourselves as our physical actions are; rather might we compare them with our uttered words (save they remain entirely private), in that they are objects to us, things that may surprise, even frighten us, experiences that can be contemplated, not merely lived.
>
> In short images have all the characteristics of symbols. If they were weak sense-experiences, they would confuse the order of nature for us. Our salvation lies in that we do not normally take them for bona fide sensations, but attend to them only in their capacity of *meaning* things, being *images* of things - symbols whereby those things are conceived, remembered, considered, but not encountered.[66]

What Langer is implying in the above quotation is that the child learns to distinguish between the part of the image which arises from data of sense and that projection from one's horizon and memory which comes from the need to assign a personal meaning to it. How this comes about she does not make clear. However, a hint of how the child comes to distinguish reality from subjective imagination comes from a very unlikely source, George Bernard Shaw:

> Socrates, Luther, Swedenborg, Blake saw visions and heard voices just as Saint Francis and Saint Joan did. If Newton's imagination had been of the same vividly dramatic kind he might have seen the ghost of Pythagoras walk into the orchard and explain why the apples were falling. Such an illusion would have invalidated neither the theory of gravitation nor Newton's general sanity. What is more, the visionary method of making the discovery would not be a whit more miraculous than the normal method. The test of sanity is not the normality of the method but the reasonableness of the discovery. If Newton had been informed by Pythagoras that the moon was made of green cheese, then Newton would have been locked up. Gravitation, being a reasoned hypothesis which fitted remarkably into the Copernican version of the observed physical facts of the universe, established Newton's reputation for extraordinary intelligence, and would have been so no matter how fantastically he had arrived at it.[67]

According to Shaw, Saint Joan for example never denied the essentially symbolic character of her voices. They came from her imagination, but the message they conveyed was no less real for that. She was not insane; she could tell the difference between reality and imagination. But the message in her imagination, conveyed by her voices, was a logical and rational one and therefore real.

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[66] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), pp.144-145

[67] Bernard Shaw, "Preface" to *Saint Joan* (New York: Penguin Books, 1946), p. 17.

The key to distinguishing reality, then, may come from the development of rationality which, it will be argued, develops in parallel with one's capacity to use language. To use Robertson's terminology, what ultimately controls imagery and allows reality to emerge is nothing other than Graves' "cool web of language." This is merely another way of saying what Lonergan has claimed, that the only way to get to "the heart of the real" is by being attentive, intelligent, and rational. Reality emerges only as the final product of experience, understanding, and judgment. It is first and foremost rationality and judgment, and only secondarily language, which acts as a help to reasoning, that act as a support, a discipline, and as a check on reality. In other words, it can be argued that it is primarily rationality rather than language that act a 'damper', a straightener, or a censor on the child's unruly flights of imagination.

But if one is inclined to accuse Shaw of romantic exaggeration or poetic licence in what he says above, one has simply to be reminded that two of the greatest scientific minds in history, Newton and Einstein, both used imagination deliberately and extensively in what they termed 'thought experiments'. This did not preclude the need to weigh up their conclusions carefully and extensively with the mathematical tools available to them, and so to be rational in their approach to their insights. The young Einstein attended a school in Aarau, Switzerland which was based on the philosophy of Johann Pestalozzi. To Pestalozzi imagery was the foundation of all knowledge, and visual thinking was a fundamental and powerful feature of the mind.[68] Einstein himself later wrote:

> The psychical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be "voluntarily" reproduced and combined ... This combinatory play seems to be the essential feature in productive thought - before there is any connection with logical construction in words or other kinds of signs which can be communicated to others. The above-mentioned elements are, in my case, of visual and some muscular type. Conventional words or other signs have to be sought for laboriously only in a secondary state, when the mentioned associative play is sufficiently established and can be reproduced at will.[69]

It is important to note that the treatment employed in this part of the study appears to place perception and imagery on two different levels. As indicated

[68] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 82.

[69] Albert Einstein quoted in Steven Pinker, *The Language Instinct* (London: Penguin Books, 1994), p. 71.

already, Piaget would agree with such a dichotomy. However, Robertson does not indicate any distinction between perception and image formation. On the contrary, as mentioned already in this section, it is quite clear from neurological research that in the process of image formation, one uses much the same areas of the brain as one does in perception. Vivid pictorial images seem to have their origin in the visual cortex, while spatial images, like spatial perception, seems to have its origin in the parietal lobes. Robertson says: "Spatial imagery can be particularly affected by damage to the brain's parietal lobes."[70] Similarly, in the formation of auditory images, as when one has a tune in one's head, it can be shown that those areas of the auditory cortex which are used in hearing are involved.

Thus an image may be regarded as a type of interiorised percept. This interiorisation gives rise to a fundamental difference between image and percept, and to define imagery as merely memorised perception, as Piaget appears to do, would not be accurate. The difference is that one can manipulate, vary and enhance a mental image in a way that is quite impossible to do with a simple percept. Thus an image may be said to be under interior cognitive control to a much greater extent than is a percept. An image, one can argue, is more removed from the concrete and is therefore at a higher level of abstraction than is a percept.

10.6.4 *Imagery and Children's Drawings*

Nowhere is the dichotomy between reality and one's own mental image of that reality brought home more clearly than in the study of children's drawings. And to see this most vividly one must study particularly the drawings of those children who approach reality with a certain stark simplicity, and with a minimum of critical analysis and interpretation - one must study the drawings of autistic children, in other words.

Robertson in *The Mind's Eye* explains phenomenologically how one normally approaches the drawing task. He says that "to draw you have to come much closer to the raw data of the senses, and switch off the machinery of naming and categorization."[71] This is easier said than done, however, and in practice children's drawings reflect more their subjective analysis than the objective reality

[70] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 44.
[71] Ibid., p. 18.

on front of them. This is what Sacks means when he says that "most children .... tend to draw less from direct observation than from symbols or images seen second hand." [72] Robertson in *The Mind's Eye* compares the drawing of a horse by a young autistic girl, unencumbered by language, with the much poorer effort of a 'normal' girl of the same age who was "drawing categories of horse-ness downloaded from general descriptions stored in memory."[73] The fact that the normal child was influenced by memory and by a comparatively well formed 'horizon' in her drawing meant that her effort lacked the same vivid realism and direct sensorial contact with reality which characterised the work of the autistic child.

As already intimated above, however, one is tempted to speculate that what actually interferes with imagery as children mature and develop is not so much the "cool web of language", as Robertson terms it, but the increased capacity for critical reasoning and analysis which language facilitates. It is a lack of just this capacity which makes the autistic child more open to concrete experience, as Sacks so clearly explains:

> His mind is not built for the abstract, the conceptual. That is not available to him as a path to truth. But he has a passion and a real power for the particular - he loves it, he enters into it, he re-creates it. And the particulars, if one is particular enough, is also a road - one might say natures road - to reality and truth.
>
> The abstract, the categorical, has no interest for the autistic person - the concrete, the particular, the singular, is all. Whether this is a question of capacity or disposition, it is strikingly the case. Lacking, or indisposed to, the general, the autistic seem to compose their world picture entirely of particulars. Thus they live, not in a universe but in what William James called a 'multiverse', of innumerable, exact, and passionately intense particulars. It is a mode of mind at the opposite extreme from the generalising, the scientific, but still 'real', equally real in a quite different way. [74]

10.6.5 *Affectivity, Imagery and Symbols*

As has already been mentioned in this section, the idea that imagination is vital for thinking because "without images understanding is impossible" stems from Aristotle's *De Anima*. This was later adopted by Aquinas in his *Commentary on Aristotle's De Memoria et Reminiscentia.*[75] In *Method in Theology* Lonergan

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[72] Sir Hugh Casson quoted from Oliver Sacks, *An Anthropologist on Mars* (London: Picador, 1995), p. 196.

[73] Ian Robertson, *The Mind's Eye*, p. 17.

[74] Oliver Sacks, *The Man who Mistook his Wife for a Hat* (South Yarmouth: John Curley and Associates, 1986), pp. 375 - 376.

[75] Aristotle, *De Memoria et Reminiscentia*, $449^{b}30 - 450^{a}25$.

emphasized that at the fourth level of conscious intentionality feeling is vital, and the reason why feeling is so essential, if one is to move from judgement to decision, has to do with images. Affectivity, according to Lonergan, is carried by images[76]. The imaginal life of the individual is, therefore, crucial, as both Aristotle and Aquinas insisted. Just as the reaching of a judgement of fact requires a return to the relevant image or images that released the insight, so choice and decision also send a person deep into the world of internal images and, at the same time, deep into the world of feeling.

Such images are also symbols. For Lonergan, a "symbol is an image of a real or imaginary object that evokes a feeling or is evoked by a feeling."[77] And Hughes and Moore commenting on this notion of Lonergan's explain that

> a person's images and dreams reflect the person's connections with family, with culture, with race, with earth, with God. ... And the images that are liable to present themselves when a time for crucial decision is approaching will reflect one's relationships with mother and father and other archetypal presences. From them must be released the flood of psychic energy needed.[78]

10.7 *Deficient Cognitive Functions at the Level of Image Formation*

The particular cognitive functions identified by Feuerstein that seem to bear directly on this level of image formation are examined in what follows. Once again, one object of the exercise is to search for an 'isomorphism' between the theories of Feuerstein and Lonergan and, as a consequence, gain a deeper insight into Lonergan's transcendental precepts.

10.7. A *Lack of, or Impaired, Spatial and Temporal Orientation*

Temporal and spatial concepts describe the way objects or events relate to others in terms of order and sequence, distance and proximity. Thus they represent a level of functioning that transcends the 'here' and 'now' and the isolated unique existence of an object or an event. Feuerstein says:

> Direct exposure to stimuli without adequate orientation toward time and space reduces cognitive functioning to the level of simple

[76] Bernard J.F. Lonergan, *Method in Theology* (London: Darton, Longman and Todd, 1972), pp 64 - 67.
[77] Ibid., p. 64.
[78] Glen Hughes & Sebastian Moore, "Hamlet and the Affective Roots of Decision", *Lonergan Workshop 7* (1988), p. 182.

> identification and recognition of objects without permitting the establishment of relationships between them.[79]

Thus, these functions still belong at the input level for Feuerstein, or the level of experience for Lonergan. They are placed alongside considerations of imagery here because they act upon imaginal spatial and temporal representations rather than upon direct perceptions of data of sense. One has simply to experience the phenomenological exercise of "perceiving the die" described in some detail in the appendix of this study to appreciate the degree to which notions of space and time must depend upon mental imagery for their conception.

Like all the other cognitive functions, spatial and temporal orientation also depend on mediated learning experience to become established into the cognitive repertoire of the individual child. After all, most of what one knows about the past, for example, has been mediated to one rather than experienced directly. Feuerstein explains:

> The mediational processes reflected in the transmission of the past create representational thinking as a modality to relate and to act upon the "represented" as one would to the "experienced."[80]

Piaget found that the notion of space is much more direct and simple from the psychological point of view than knowledge of time.[81] Feuerstein's researches have similarly found that temporal orientation seems to be deficient more often than spatial and other factors in culturally deprived children. He suggests that the reason is that time is abstract and requires representational relational thinking. For the same reason, concepts of time demand a much higher level of 'Mediated Learning Experience' for their acquisition than concepts of space.

10.7. B *Lack of, or Impaired, Conservation of Constancies*

The fact that this function when deficient can interfere with proper cognitive operation at Lonergan's level of experience can be seen from its effects on perceptual stability. Perceptual stability is closely related to the notion of 'object constancy'. One can say that "perceptual stability is, to a large extend, dependent on the capacity of the individual to conserve the constancy of objects across

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[79] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 83.
[80] Ibid.
[81] See also Section 7.11.8 of this study.

variations in some of their attributes and dimensions."[82] Such attributes and dimensions include size, shape, quantity, and orientation, and clearly the corresponding perceptual constancy demands a level of mental imagery. As such, it is a step higher than simple perception, demanding a higher level of interiorisation and abstraction. Clearly also, such conservation of constancies under conditions of transformation demands a level of mental reversibility not available to a pure percept.

The student who experiences an impaired ability to conserve constancies may often lack an understanding of conservation and reversibility of numbers. For example, he cannot see that 3 + 2 is the same as 2 + 3. He also has a tendency to focus only on the immediate appearance of an object without forming connections or generalising to the abstract. The child who fails to form connections between one situation of an object with another, for example, is said to have 'an episodic grasp of reality' in which he fails to eliminate as irrelevant the perceived transformations in the attributes of the object. Remembering Lonergan's description of abstraction as identification of what is relevant and rejection of what is irrelevant to the essence of an object or situation, then this failure of the child to conserve is also a failure of abstraction. The claim by the child that a taller glass, for example, holds more water than a lower but wider one of the same capacity is a case in point. Such a child may also have difficulties perceiving similarities and difference at a perceptual level. A square placed at an angle, for example, may be said by the child to be a triangle. "The shift in orientation has made the child neglect the more important dimension of a square, its four angles rather than three."[83]

If the conservation of constancy is impaired at the input stage, or level of experience, then at a higher level the student will also have difficulty forming categories (grouping things according to similarities). This in turn will result in imprecise understanding and inaccurate judgment. Mediation to correct this deficiency requires the teacher to help the student identify critical elements of the object that have undergone transformation, and use comparative behaviour to establish relationships between the two states of the transformed object.[84]

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[82] Ibid., p. 85.

[83] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 86.

[84] Reuven Feuerstein, Yaacov Rand, Carl Haywood, *L.P.A.D. Learning Propensity Assessment Device - Manual* (Jerusalem: International Centre for the Enhancement of Learning Potential, 1995), Section 4.10.

10.7. C *Lack of, or Impaired Use of, Two or More Sources of Information*

It may be argued that at least two elements must be used as sources of data whenever a problem is encountered. In fact, no experience can be encountered as a problem unless some incompatibility of data stemming from two or more sources is identified and confronted. Thus, problem solving may be viewed as the re-establishment of a state of equilibrium whenever an incongruity between multiple sources of information has been identified. The calculation of speed, for example, demands that one considers both time and the displacement simultaneously. Besides, as Feuerstein explains, "the uses of two sources of information is a prerequisite of thinking because it is the basis of all relational thought processes." [85]

The student who experiences an impaired capacity to consider more than one source of information tends to focus on, attend to, or take into account only one of a variety of dimensions or alternatives. Thus, the child who maintains that the taller glass holds more water is attending to only one dimension, the vertical height, to the neglect of the other factors which contribute to the overall volume. He would also tend to consider only some of the information needed to complete an assignment, for example, or solve a problem. He might frequently be unable to recall all the facts needed to complete a task and, where he does recall disjointed pieces of information, he might be unable to put them together to form a meaningful whole. Such a student may also tend to see something from his point of view only and have difficulty accommodating differing opinions; i.e. he may engage in egocentric thinking.[86] All of these have implications for image formation as one inevitably holds things in mind at a basic level in the form of images.

The lack of, or impaired use of, two or more sources of information is a deficiency at the input phase (Feuerstein) or level of experience (Lonergan). However, this will affect many of the cognitive process at the higher levels also, including hypothetical or "what if -" type thinking, at the level of Judgment. This, in turn, might result in excessive trial-and-error behaviour at the output phase, or at Lonergan's level of decision and doing.

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[85] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 88.

[86] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom* (Arlington, IL: SkyLight Publishing, 1996), p. 106.

10.8 *Chapter Conclusions*

The formation of mental images may be just one element in the operation of the human intellect, but it is nevertheless a vital one. It is not only the ground or basis for insight, but it has been argued in this chapter that it is also instrumental in the formation of what is generally termed 'object constancy'. It has also been argued that it is essential for the formation of concepts of space and time, for conservation of constancies, and for the initial ability to form abstractions. Based on Lonergan's theories, this section has also suggested a plausible hypothesis to account for Robertson's observations that mental imagery in children becomes less vivid as the capacity for language develops, and also to account for the exceptional 'artistic' abilities of some autistic children.

This chapter has suggested that, while perception and image formation are clearly related to one another, that nevertheless there is also a fundamental difference: one has much greater control over one's mental images than one's percepts. Finally, It has been argued, and hopefully demonstrated, that a number of Feuerstein's cognitive functions appear not only to merge, blend, and integrate with Lonergan's level of experience, but also appear to throw considerable light on the operation of this level.

Chapter 11

Lonergan's Second Transcendental Precept 'Be Intelligent'

11.1 *Introduction*

Lonergan's second precept "Be Intelligent" sounds like a contradiction. Surely a child either is or is not intelligent, depending on his genetic endowment and early upbringing? Feuerstein's answer to this question would be a most emphatic "No!" "All human beings need to be considered as open systems," he says, "liable to be meaningfully modified by environmental intervention."[1] Intelligence is not a fixed entity and the human mind remains highly modifiable throughout life, if only one can identify those cognitive functions which are deficient in the person's day-to-day living and provide him with the necessary 'mediated learning experience' (MLE) to correct them. Besides, by 'being intelligent' Lonergan simply means being insightful and persistent in the search for meaning and understanding. The person, he says, "is not simply the percipient of a series of images, clouds sailing through the windy sky. He is asking *why*. He wants to understand something, he achieves a certain measure of understanding, and he formulates that understanding."[2] This is something that is as natural to children as it is to adults, and it is as natural to the so-called 'retarded' as to the 'intelligent'.

Lonergan's notion of insight has already been introduced in the earlier chapters of this study.[3] The object of this section, however, is to consider the notion more closely, particularly with regard to its theoretical and practical implications. As has already been mentioned, the notion of insight has been recognised by many philosophers and scientists over the years, but one is especially indebted to Lonergan for the painstaking and analytical way in which he has conceptualised and formulated the notion, particularly with regard to what he has termed 'understanding of understanding'.

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[1] Feuerstein, Rand & Rynders, *Don't Accept Me as I Am* (New York: Plenum Press, 1988), p. 5.

[2] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 137.

[3] See Chapter Five.

11.2 *The Nature of Insight*

Jacques Maritain says: "What matters most in the life of reason is intellectual insight."[4] He also says that "without abstract insight and intellectual enlightenment the most striking experiences are of no use to man, like beautiful colors in darkness."[5] Lonergan himself, while no doubt agreeing with this assessment, yet gives various and varied definitions of what he means by the term 'insight'. In his earlier work *Verbum,* for example, he says that "an insight, an act of understanding, is a matter of knowing a cause ... that stands between the sensible data and the concept whose definition is sought."[6] In *Understanding and Being*, however, he gives the following explanation:

> Beyond the level of sense - colors, sounds, odours, tastes, feelings - and beyond the level of imagination, there is this *must* and *can be* and *cannot be* that we grasp. Getting hold of that is the insight. It is that event that is our primary object of attention.[7]

And in *Method in Theology* he describes it as "the idea or form, the intelligible unity or relatedness, that organises data into intelligible wholes."[8] Clearly this most central notion of Lonergan's cognitive philosophy is a complex one, and demands a more thorough analysis. The following characteristics of insight are derived from Lonergan's various works and are analysed and discussed here in the light of the needs of the present study:

1) An insight can occur only when one is in a learning mode, when one is attentive to the world around and actively engaging with it in an open and searching manner. It "comes as a release to the tension of inquiry,"[9] in response to a questioning attitude, to a "spirit of wonder and inquiry," to a prompting of "the pure desire to know." Lonergan explains:

> To have an insight, one has to be in the process of learning or, at least, one has to re-enact in oneself previous processes of learning. While that is not peculiarly difficult, it does require (1) the authenticity that is ready to get down to the elements of a subject, (2) close attention to instances of one's own understanding and, equally, one's failing to understand, and (3) the repeated use of personal experiments in which, at first, one is genuinely puzzled

[4] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 43.
[5] Ibid., p. 16.
[6] Bernard Lonergan, *Verbum: Word and Idea in Aquinas* (Notre Dame: Univ. of Nortre Dame Press,1967), p. 14.
[7] Bernard Lonergan, *Understanding and Being*, p. 27.
[8] Bernard Lonergan S.J., *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 10.
[9] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans 1964), p. 4.

and then catches on.[10]

This same notion is to be found at least implicitly in Feuerstein's theoretical writings, as well as in his practical methodology. The emblem or 'logo' of his Instrumental Enrichment programme[11], for example, is a drawing of a boy with a pencil in his mouth and with his head meditatively tilted to one side, while underneath is inscribed the motto of the programme: "Just a minute, let me think."

2) Insight, as a cognitive operation, can take place very quickly; it "comes suddenly and unexpectedly"[12] when the appropriate conditions are present. One must then ask what these appropriate conditions for insight are. An insight according to Lonergan requires the proper organisation and arrangement of data of sense, imagery, and memory. Terry Tekippe in his book, *What is Lonergan Up to in Insight?,* adds to this list, describing the appropriate conditions for insight as "a good memory, a rich accumulation of past insights, a moderate to high degree of intelligence, a willingness to experiment, the past occurrence of a similar insight, or a good teacher." [13]

It is a contention of this study that a number of learned cognitive functions are also required for proper mental functioning, in addition to the more basic, more innate, mental operations identified by Lonergan. Thus, while insight itself may be regarded as a natural, innate mental operation, in practice it frequently requires the additional use of tried and trusted mental strategies, or methods, for efficient application. These strategies are learned mental functions which, though separate from insight, nonetheless facilitate its proper working. One such function which is vital for the appearance of insight and which will be dealt with towards the end of this chapter is what Feuerstein describes as "spontaneous comparative behavior." Two other important conditions for the proper occurrence of an insight involve the ability to identify a problem clearly, and to select the relevant cues, or clues, for its definition or expression. These are dealt with in some detail later in this chapter.

3) Insight collates things, puts them together, connects them. An insight, in other words, is a relational activity and entails forming a connection or link between two

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[10] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection* (London: Darton Longman & Todd, 1967), p. 19.

[11] See Section 4.4.4 above.

[12] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans 1964), p. 4.

[13] Terry K. Tekippe, *What is Lonergan Up to in Insight?* (Collegeville, MINN: The Liturgical Press, 1996), p. 19.

or more pieces of data. One can say that through insight the mind seeks out and grasps patterns in data or, in more philosophical terms, one can say that it "grasps form in the sensible data."[14] One can also say that "one has enriched the data with an insight, (because) one has grasped the unity in the data."[15] These notions of relation and form are central to Lonergan's cognitional philosophy as well as to his metaphysics. These will also be dealt with in further detail in this section of the study.

While insight can be said to be a relation grasped within sensible data[16], it does so, as already said, through the medium, or mediation, of imagery or *phantasm*: In his book, *The Language Instinct,* Steven Pinker appears to support this view when he says:

> Nikola Tesla's idea for the electric motor and generator, Friedrich Kelulé's discovery of the benzene ring that kicked off modern organic chemistry, Ernest Lawerence's conception of the cyclotron, James Watson and Francis Crick's discovery of the DNA double helix - all came to them in images. The most famous self-described visual thinker is Albert Einstein, who arrived at some of his insights by imagining himself riding a beam of light and looking back at a clock, or dropping a coin while standing in a plummeting elevator.[17]

4) It follows from the last point that there is a disproportion between 'before' and 'after' an insight. Again, Tekippe explains:

> Before the insight occurs, no pattern is discerned, the materials jostle one another without being connected; one scratches one's head in complete puzzlement. But, once the insight has occurred, it may seem the simplest thing in the world; one only wonders why it took so long to catch on.[18]

5) Once an insight occurs, it is usually a permanent acquisition. In other words, a true insight is easily remembered and becomes much easier to grasp again at a later time, in similar circumstances. This, however, appears to depend on the insight being followed by a conception or formulation of some kind. Little, for example, explains that "unexpressed, our insights are easily lost."[19]

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[14] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (Toronto: University of Toronto Press, 1993), p. 113

[15] John Little, "Insight, Strategic Thinking and Control", *The Practising Manager* 17:1 (October 1996), p. 22.

[16] An insight can also mentally relate existing insights to one another to form a 'higher viewpoint'. See 6) below.

[17] Steven Pinker, *The Language Instinct* (London: Penguin Books, 1994), p. 71.

[18] Terry K. Tekippe, *What is Lonergan Up to in Insight?* (Collegeville, MINN: The Liturgical Press, 1996), p. 19.

[19] John Little, "Insight, Strategic Thinking and Control", *The Practising Manager* 17:1 (October 1996), p. 22.

6) Insights are cumulative, or as Lonergan expresses it: "insights cluster"[20]; they can be related readily to one another. Accumulated insights can lead to what Lonergan terms 'higher viewpoints'. Insights naturally cohere with past insights and, in the process, suggest new lines of inquiry. Only insights have the flexibility to cohere in this way. Conceptions or formulations have all the rigidity of definitions and do not readily cohere , or merge, or blend with one another.

7) Insights can be shared by a whole culture or race. Tekippe again explains: "Euclid no doubt spent years working out all the proofs in his geometry, but any fairly intelligent high-schooler can learn them all in a semester."[21] In fact, for Lonergan, culture itself involves such a sharing of accumulated insights. He sees culture as "the set of meanings and values that inform a way of life."[22]

8) It can be argued that the notion of insight has enormous implications for education. One can say that proper teaching involves the mediation of insights by the teacher through the didactic method of suggestive questioning. It is clear, however, that one cannot communicate an insight directly to another; a teacher must simply arrange the necessary information in the most suggestive way possible, raise appropriate questions, and leave it to each student to grasp, or fail to grasp, the relevant insight for himself. Lonergan explains:

> A teacher cannot undertake to make a pupil understand. All he can do is present the sensible elements in the issue in a suggestive order and with a proper distribution of emphasis. It is up to the pupils themselves to achieve understanding, and to do so in varying measures of ease and rapidity.[23]

9) Schopenhouer states that "life presents itself as a problem, a task to be worked out."[24] An insight is the natural response to the perception of such a problem. John Dewey also says that "problems are the stimulus to thinking" and that "growth depends upon the presence of difficulty to be overcome by the exercise of intelligence."[25] But, in line with the previous point above, Lonergan would add that such problems have to be solved by the child himself with the aid of the teacher.

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[20] Bernard Lonergan, *Understanding and Being*, p. 122.
[21] Terry K. Tekippe, *What is Lonergan Up to in Insight?* (Collegeville, MINN: The Liturgical Press, 1996), p. 19.
[22] Bernard Lonergan S.J., *Method in Theology* (Toronto: University of Toronto Press, 1999), p. xi.
[23] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans, 1964), p. 5.
[24] A. Schopenhauer, *The World as Will and Idea, Vol. III* (London: Trübner, 1887), p. 377.
[25] John Dewey, *Experience and Education* (New York: Collier Macmillan Publishers, 1938), p. 79.

Feuerstein in turn would add that any help or mediation from the teacher should be kept to the absolute minimum. And Montessori would concur:

> But even to solve these problems, one should not interfere unless asked; the children will solve them by themselves. ... The teacher's skill in not interfering comes with practice, like everything else, but it never comes easily [for] even to help can be a source of pride.[26]

10) The development of an insight depends on the formulation of a correct question or set of questions. Ian Robertson says:

> But problem *solving* may not be the key to creativity - *finding* what the problem is may be the key to creative breakthroughs in science, art, design and technology. In other words, 'What's the question?' may be an even more important challenge than 'What's the answer?'.[27]

Eric Mazur, professor of Theoretical Physics in Harvard, has developed a special approach to the teaching of Physics based on what he terms "problem posing."[28] The challenge for him was to find precisely those questions which tested the student's understanding of the concepts used in physics. He insists: "I don't think we should be satisfied when a student just knows how to plug numbers into an equation in a given situation, how to solve a differential equation, or how to recite a law of physics."[29] In his method, "the students do not merely assimilate the material presented to them; they must think for themselves and put their thoughts into words."[30]

11.3 *Form and Relation in Insight*

Herbert Spencer in his book, *First Principles,* identifies conscious thought in relational terms. He says: "A characteristic of consciousness is that it is only possible in the form of a relation."[31] He also believes that no thought can ever express more than relations.[32] And Malebranche in his book, *The Search after Truth,* also puts relations at the forefront of epistemology when he says: "The mind of man seeks out only the relations of things;"[33] and again he says: "In all questions

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[26] Maria Montessori, *The Absorbent Mind* (Wheaton, ILL: Theosophical Press, 1964), p. 281.
[27] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 97.
[28] Eric Mazur, *Peer Instruction* (New Jersey: Prentice Hall, 1997)
[29] Ibid. , p. 31.
[30] Ibid., p. 14.
[31] Herbert Spencer, *First Principles* (London: Watts Thinkers Library, 1946), p. 62
[32] Ibid., p. 70.
[33] N. Malebranche, *The Search after Truth* (Columbus, OH: Ohio State University Press, 1980), p. 252.

we search only for the knowledge of some relations, be they relations between ideas or between things and their ideas."[34]

Lonergan also insists on the central importance of relations in mental functioning. He claims that what insight grasps is the form[35], or formal cause, or relatedness, that organises data into intelligible wholes: "What is sought by inquiry is never just another datum but the idea or form, the intelligible unity or relatedness, that organises data into intelligible wholes." [36] What the mind grasps in the act of insight, in other words, is "the intelligible unity or relatedness" in the data to which the object gives rise in the subject.

The importance of relations in science is also highlighted by Dewey when he says: "Relations become the objects of inquiry since meanings are determined in the ground of their relation as meanings to one another."[37] One can argue, for example, that the meaning of a word is the relation between its acoustic image in the mind and the concept to which it is related.

11.4 *Relation and Comparison*

One of the most central abilities which a child learns and develops as he grows and matures is the capacity to compare one thing with another. How else does one develop the concept of 'apple' for example if not by comparing an apple with an orange or banana. How does one develop the notion of roundness if not by comparing round objects with others that are square, or at least less round. Likewise, the ideas of 'large' and 'small' are based on a comparison of objects by size, and the ideas of 'heavy' and 'light' by a comparison of the pull of gravity on different objects in one's hand. In general, one can say that to grasp the meaning of any thing, event, or situation is to see it in its relations to other things, events, or situations, as well as noting how something operates or functions, what consequences follow from it, what causes it, and what uses it can be put to.[38] Dewey appears to support this view when he says:

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[34] Ibid., p. 489.

[35] Lonergan uses the classical Scholastic notion of form: "That which makes matter, in general, to be a thing, ... the causa essendi, the formal cause" (Verbum, p. 15). However, he also defines form simply as that which is grasped in the act of insight: "What is known in understanding is form in matter." (Collected Works, Bk. 10, p.113)

[36] Bernard Lonergan, *Method in Theology* (London: Darton, Longman & Todd, 1972), p.10

[37] John Dewey, *Logic: The Theory of Inquiry* (London: Allen and Unwil, 1939), p. 116.

[38] Max Velmans, *Understanding Consciousness* (London & Philadelphia: Routledge, 2000), p. 7.

> To assume anything can be known in isolation from its connections with other things is to identify knowing with merely having some object before perception or in feeling, and thus to lose the key to the traits that distinguish an object as known ... . The more connections and interactions we ascertain, the more we *know* the object in question.[39]

What is being considered here are not just mere ideas in the mind but ideas that relate to real properties of real objects, since one cannot live and move without having recourse to such objects and ideas. It is not always necessary to have the real objects in front of one, however. One can just as easily carry out the method of comparison on mental images or representations of the various objects. Thus the word 'rabbit' will conjure up a different image in the child's mind than the word 'cat'. To ask a child in what way they are different from one another and in what way they are alike demands a mental effort that is not always very successful, however. The implication is that the child's concept of 'rabbit' is not derived solely by comparison with another object like 'cat' but is also derived by a process of internal comparison within the imagined 'rabbit' itself. In other words, the primitive working of the intellect involves the comparison not just of object with object but also the relation of part to part within each object. This is the origin of Aristotle's notion of form and, in the quotation from Arnold Gesell already used in the previous chapter, it is the way the child grasps the form of the cube in the 'material dispositions' of the object:

> Directly he sees a cube he grasps it, senses surface and edges as he clenches it, brings it to his mouth, where he feels its qualities anew, withdraws it, looks at it on withdrawal, rotates it while he looks, looks while he rotates it, restores it to his mouth, withdraws it again for inspection, restores it again for mouthing, transfers it to the other hand, bangs it, contacts it with the free hand, retransfers, mouths it again, drops it, rescues it, mouths it yet again, repeating the cycle with variations - all in the time it takes to read this sentence.[40]

11.5 *Relation and Abstraction*

It can be argued that it is by comparing things with one another that a child first learns to form abstractions. The concept of 'dog', for example, as already argued, is meaningful only by comparison with other animals, cat, or mouse, say. From such comparisons also come what Feuerstein terms 'superordinate concepts.'

[39] John Dewey, in Jo Ann Boydston (Ed.), *The Later Works*, 1925 - 1953, Vol. 4 (Carbondale and Edwardsville: Southern Illinois University Press, 1981), p. 213.
[40] Arnold Gesell, *The First Five Years of Life* (London: Methuen, 1976), pp. 22 - 23.

One could ask a child "In what way are an orange and a banana alike?", for example, or "an axe and a saw?", "a coat and a dress?", as one does in the *Wechsler Intelligence Scale for Children* (WISC)[41]. In each case the child reaches for the relevant classificatory 'superordinate concept.' The child does this by comparing one concept with another, and choosing what is significant in their similarities and differences. In the process the child must also reject what is insignificant. The child who gives the answer "They are both metal" to the "axe and saw" question, for example, has certainly grasped a significant similarity, but fails to judge it as insignificant in comparison to other possible answers, e.g. "They are both tools".

Before the child can conceive such abstract concepts, he must first have an insight into the form of the objects considered. This grasp of the form of an object is itself a process of abstraction. Lonergan explains:

> When one abstracts, one grasps the intelligible in the sensible.... In virtue of that grasp of the necessity one could pick out the parts of the form - the elements of the definition - and neglect the parts of the matter. What happens is that one selects from the sensible what is intelligible in the light of a given insight. What is necessary for the insight you call the essential, the relevant, the important, and what is not essential and necessary for the insight you call the incidental, the accidental, the irrelevant, the negligible.[42]

And Susanne Langer would add:

> The power of ... regarding everything about a sense datum as irrelevant except a certain *form* that it embodies, is the most characteristic mental trait of mankind. It issues in an unconscious, spontaneous process of *abstraction*, which goes on all the time in the human mind: a process of recognizing the concept in any configuration given to experience, and forming a conception accordingly. This is the real sense of Aristotle's definition of man as "the rational animal." *Abstractive seeing* is the foundation of our rationality and is its definite guarantee long before the dawn of any conscious generalization or syllogism.[43]

This capacity, then, to abstract 'form' is based on the other fundamental faculty of the human mind already mentioned, the ability to compare one thing with another.

This capacity to compare one thing with another depends in turn on the ability to hold at least one thing in the mind in the form of an image while actually

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[41] David Wechsler, *Wechsler Intelligence Scale for Children* (San Antonio, TEX.: The Psychological Corporation)

[42] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works, Vol. 10,* p. 124.

[43] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 72. Italics in original.

attending to the other object, for when one attends to one thing, one must carry a mental image of the other, if one is to adequately compare the two. Also, it follows that if one is to compare one thing with another without the aid of a direct percept, one must then hold at least two things as mental images at the same time, and internally attend first to the one image and then to the other.

One can say that to abstract, or form an abstraction, entails laying hold of what is essential and rejecting what is inessential for the conception of an object. The process of abstraction, in other words, involves an insight into what is essential and the rejection of what is inessential. One can term what is essential the form, and what is inessential the matter[44] of the object. Take for example, the child's notion of triangle. The child has an insight whereby she grasps the form of triangle as any enclosed figure with three angles. But clearly, the form does not constitute the whole of a concrete thing. One can have many different triangles, all completely different from one another, yet all having the property of triangle. One can term what remains, what is irrelevant to the concept or definition, - size, colour, length of lines, etc. - the 'matter' of the thing. Lonergan says: "The matter is *this*, what one points to, while the form is what is known by insight into the sensible data."[45] If one is to draw comparisons or make an analogy with the act of perception, then what is essential, the form, the intelligible relations within the object, becomes a 'figure' against the 'ground' of what is inessential, the matter.

While insight grasps the form, conception formulates the essence of the thing. The difference between the two is what Lonergan would term 'common matter':

> On the traditional view what intellect abstracts from phantasm is the form and the common matter. In the concept of man, for example, there is abstracted the form (the soul) and the common matter (the bones and flesh), though the common matter is not these particular bones or this particular flesh. That gives the traditional notion of the content of a definition: the definition expresses the form and the common matter.[46]

The insight provides the form alone, the definition, the conception, or the essence,

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[44] Lonergan uses the classical Scholastic and Aristotelian notions of matter and form, as when he says: "Just as you have insight into sensible data, so there is form in matter. Aristotle's 'matter and form' distinction is tied right in with insight." (*Understanding and Being*, p. 30)

[45] Bernard Lonergan, *Understanding and Being*, p. 32.

[46] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (Toronto: University of Toronto Press, 1993), p. 126.

provide both the form and the common matter together. For example, one can gain an insight into human nature, but only through an additional act of abstraction can one arrive at the concept of 'humanity'- not this or that particular human being, but humanity, human beings in their generality, according to their essence.[47]

It is clear from all of this that there is in fact, as Lonergan holds, a perceptual basis for intellect. Piaget, on the other hand, not only rejects anything that smacks of metaphysics,[48] including concepts like matter and form, he also holds that intelligence and perception evolve independently of one another. He believes that intelligence is continually developing, whereas perception shows no such development but rather is enriched by the emerging structures of intelligence.[49] For Lonergan, on the other hand, perception is an integral part of the operation of the human mind itself, inseparable from intellect.

11.6 *Relations, Concepts, and Definitions*

The act of understanding entails insight into relation, structure, or form. For that relation or form to become a concept, as was already argued, it must be formulated, expressed, or conceptualised, or defined, either in words or in some other symbolic medium. Lonergan explains: "The intending that is conception puts together both the content of the insight and as much of the image as is essential to the occurrence of the insight."[50] When a child compares or relates a thing with herself, she is reaching first for an insight, and then for a description. When a child relates things to one another, she is reaching for an insight which will give rise to an explanation. Thus definitions may be said to be either descriptive ('nominal'), in which one relates something to oneself, or explanatory, in which one relates things to one another. Most scientific definitions, according to Lonergan, have both nominal and explanatory characteristics.

Again, one can grasp intelligible relations of things to one another, and so give rise to an 'explanatory definition', or one can grasp relations of things to oneself, and so give rise to a 'nominal definition'. Most definitions have both

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[47] This has already been dealt with in some detail in Section 2.4 of this study.

[48] Jean Piaget, in Jean-Claude Bringuier, *Conversations with Jean Piaget* (Chicago: University of Chicago Press, 1977), p. 13.

[49] Mary Ann Spencer Pulaski, *Understanding Piaget: An Introduction to Childrens' Cognitive Development* (New York: Harper and Row, 1980), p. 108.

[50] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 10.

explanatory and nominal elements. A definition which is only explanatory and has no relation to oneself, where each part of the relation defines the other, is termed by Lonergan an 'implicit definition'. He says: "Implicit definition is a more abstract type of thinking that omits even the common matter."[51] It is pure insight, in other words. Lonergan's concept of 'mediation', for example, which will be dealt with in Chapter Fifteen of this study is such an implicit definition.

11.7 *The Objectivity of Relation and Form*

Are these relations to be found in the data alone or are they part of the very nature of the object itself? In other words, do relation and form represent something real in the objective world. The answer is that relation is part of the essence of the object. But, then, essence is a construct of the mind and relations are products of the act of insight. Do these relations actually have an existence in the physical object intended or are they simply mental constructs?

To attempt the same question again but in different terms, one can ask: Are matter and form then to be found 'in' an object, as something out-there-already prior to looking? The answer is emphatically "No!", they are not. Matter and form are philosophical concepts and, as such, are mental constructs. Are matter and form, then, part of the essence of objects? The answer is that they are, since the essence of an object is grasped only by the mind. Yet Lonergan presented with a similar problem comes to a different conclusion: speaking of potency, form, and act he says:

> One can ask, 'are these three simply posited as real? Are they components of reality, or are they components of reality as known?' We spoke of all three in terms of their intelligibility, and that would suggest that they are components of reality as known. However, if we go back to our definition of being - being is the object of the verb 'to know' - we note that it has an intrinsic relation to knowing. Being has to be intrinsically intelligible; otherwise understanding and understanding correctly could not be knowledge of being.[52]

To Lonergan, being inheres in objects yet is capable of being grasped by the mind, and essence is part of that being.

To try yet a different approach, one can ask whether intelligibility resides in

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[51] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works, Vol. 10,* p. 126.
[52] Bernard Lonergan, *Understanding and Being,* p. 208.

the cosmos itself. From a common sense point of view, the answer must be that it does. It is clear that the sun, as an object existing independently of one, has a real existence independent of one's mind. It was there before one existed and it would be there even if one ceased to exist. It is clear also that it has a particular structure, and scientific experiment can confirm that the structure one holds in one's mind is an approximation to this actual, or real, structure in the objective world. Is intelligibility part of the nature of the cosmos? Yes, because I can grasp the nature of the universe, even if incompletely. The cosmos inherently intelligible. But form is that in objects which makes them intelligible, so form must also be a characteristic of the objective world itself.

To return to the child who was described by Arnold Gesell investigating the wooden cube, one can say that the child notices that the object has a number of sharp edges, but that this sharpness exists only relative to some other parts which are less sharp. Hardness or roughness of texture are also relative. It is not one feature, the sharp edge, which is borne in mind, but the relation of one part to another. The mind cannot grasp a feature in isolation; it can only grasp or hold a contrast, a relation. The mind cannot take hold of a figure except against a ground, cannot grasp a form except as distinct from its attendant matter. "The mind of man seeks out only the relations of things"[53] The child is intent on grasping what Lonergan describes as "the material dispositions of the object." It is these material dispositions, one could say, which are the equivalent of the form in objective material reality. Lonergan says:

> Such is the mutual cohesion between form and matter that where there are similar forms there are similar material dispositions and, conversely, where there are similar material dispositions there are similar forms.[54]

The child, by manipulating an object with his hands, placing it in his mouth and viewing it from different angles, grasps the material dispositions of the object, which imprint themselves on the child's senses. It is from these sense data that the mind then abstracts the form, first through imagery and then through insight. Lonergan says: "Now the act of understanding is to sense perception as form to the disposition of matter." [55]

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[53] N. Malebranche, *The Search After Truth* (Columbus, OH: Ohio State University Press, 1980), p. 252.
[54] Bernard Lonergan, *On the Incarnate Word* (Draft of revised unpublished text), Michael G. Shields (Trans.) (Toronto: Lonergan Research Institute, 1987), p. 9.
[55] Ibid.

The material dispositions of the object under observation which are grasped first by the senses and then by the intellect constitute the form of the object. Can one say that the material dispositions *are* the form of the object? Is this all there is to what Beckett describes so poetically as "the mystery, the essence, the Idea, imprisoned in matter" which "solicited the bounty of a subject passing by."[56] The answer again must be "yes". What the intellect grasps is related to the deepest reality of the object intended. The form once seized by the intellect has the power to reconstitute the material dispositions in the mind. In Casey's terminology, what was originally to be found only in *esse naturale* and *esse materiale* is now in the mind as *esse intentionale* and *esse immateriale*.[57] Or, as Matthews explains it:

> Insight grasps intelligibility or relations in the given data. These relations which are apprehended by understanding are not invented or added on but are really present in the totality of the given. They cannot be made present by taking some kind of look inside it. Understanding, like seeing or hearing, is an intentional or relational activity. It relates an agent and an object. As through seeing and hearing colours and sounds are made present to the agent, so through understanding relations are made present.[58]

Material dispositions inhere in the object. Data result from the subject's perception of the object. The subject perceives relations in the object corresponding to the material dispositions. Understanding then 'sublates' the intending of perception. The relations perceived become the form of the object under the action of the intellect. In this way understanding still relates the subject directly with the object, even if it is sense perception which relates originally, and therefore more immediately, with the object. The act of understanding relates the subject to the object at a deeper, more penetrating level than that possible at the level of sense data alone.

Does that mean that "the intelligible unity or relatedness that organises data into intelligible wholes"[59] is a reflection of that same unity or relatedness that organises the objective entity itself? This certainly appears to be what Mathews is implying when he says:

> As understanding stands to perceiving, so structure stands to data. The set of attributes and relations characteristic of the structure of some thing is a property, not of understanding but rather of the

[56] Samuel Beckett, *Proust* (London: John Calder, 1965), p. 76.

[57] Gerard Casey, "Immateriality and Intentionality" , Fran O'Rourke (Ed.), *At the Heart of the Real* (Dublin: Irish Academic Press, 1995), p. 102. See Section 2.7.3 of this study for a more complete discussion of this topic.

[58] William A. Mathews, *Questioning and its Object* (University of Leeds, Dept. of Philosophy, Ph.D. Thesis, 1980), p. 61.

> thing understood. Understanding understands structure in things.[60]

According to Aquinas, *"Intellectus in actu et intellectum in actu sunt unum"*[61] The intelligence in act is identical with the intelligible in act[62] . There is an isomorphism, in other words, between the knower and the known, between intended object and the mind intending.[63] Again, Mathews says:

> When understanding grasps a rule it doesn't single out some one feature given in direct experience. Rather in an instance it grasps the elements of a structure and their interrelation. These elements cannot be perceived by the senses.[64]

What, then, ultimately are relations and structures? In the objective world they are the laws discoverable by science, the intelligibility discovered in the data of sense, in empirical data. Lonergan says:

> Each part is what it is in virtue of its functional relations to other parts; there is no part that is not determined by the exigencies of other parts; and the whole possesses a certain inevitability in its unity, so that the removal of any part would destroy the whole, and the addition of any further part would be ludicrous. Such a whole is a structure.... The whole itself may be self-assembling, self constituting; then it is formally dynamic. It is a dynamic structure.[65]

Thus, Chet Raymo, when speaking of quantum mechanics, is probably 'barking up the right tree' when he surmises that "relationships, rather than things, are the fundamental elements of reality.[66]

11.8 *Deficient Cognitive Functions Related to Insight Formation*

For the human organism to gather sense data is one thing, to make efficient use of these data is quite another. The act of insight involves the grasping of relations within the available data. But perceiving relations entails having the ability to compare one thing with another. This in turn requires the function, or the capacity, or the faculty to hold two or more things in the mind at one time. This is a function which is necessary at Feuerstein's 'input stage', or at Lonergan's level of

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[60] William A. Mathews, *Questioning and its Object,* p. 194.

[61] Thomas Aquinas, *Summa contra Gentiles* 2, 59, quoted from Joseph Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1967), p. 127.

[62] The term 'act' is used here in the classical Scholastic sense of 'the realisation of a potency'.

[63] See Section 2.7 of this study for a more in-depth treatment of this subject.

[64] William A. Mathews, *Questioning and its Object,* p. 46.

[65] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection* (London: Darton Longman & Todd, 1967), p. 16.

[66] Chet Raymo, "A Spin on Spin Foam", *Scientific American*, Volume 265 Number 2, pp 80 - 81.

experience. The following are some other related cognitive functions which, if deficient, can block , inhibit, or delay the mental operation of insight or understanding.

11.8. A *Inadequacy in Perceiving and Defining the Existence of an Actual Problem*

Insight does not arise spontaneously and unprovoked in an individual. As mentioned already above, John Dewey regarded the origins of reflective thinking as lying in perplexity, confusion, or doubt. The first question for intelligence, "What is it?", refers to a perceived ambiguity, discrepancy or incompatibility within the data of sense which constitutes a problem to be solved. If one has not done an efficient job of data gathering in the first place, one may have difficulty in even perceiving the existence of such an ambiguity or problem. And even if one does perceive such a problem, one may still have difficulty conceptualising it clearly. Feuerstein explains:

> To perceive that a problem exists, a person must first establish a relationship among the various sources of information in the given data and then note that there is a discrepancy or incompatibility in the newly established relationship.[67]

A student may have difficulty in recognising the existence of a problem because of poor data gathering skills in the first place. Even if the data are well collected, however, he may still be unable to perceive relationships among the data. This may be due to poor comparative skills. This may, in turn, lead to a lack of "awareness of incongruous, incompatible, or missing elements in a situation" which means that he may fail to perceive the problem.

The student may also simply lack curiosity and may respond with a lack of interest or motivation to the question "What is it?" posed by 'the pure desire to know'. And, even if all the above factors are in order, he may still lack the ability or the motivation to define the problem in terms of the factors that impinge on it, and so may fail to identify those that are incompatible:

> A student with an inadequacy in experiencing or defining a problem may tend to be passive when faced with a task because he or she is unsure of what needs to be done. He or she may be unable to continue working independently, may frequently ask that the task be reexplained, and may be unable to apply the concepts being taught.[68]

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[67] Reuven Feuerstein at al, *L.P.A.D.: Learning Potential Assessment Device Manual* (Jerusalem: Hadassah-Wizo-Canada Research Institute, 1986), section 3.10.

[68] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom* (Arlington, IL: SkyLight Publishing, 1996), p. 116.

11.8. B *Inability to Select Relevant as Opposed to Irrelevant Cues in Defining a Problem.*

By 'cue' Feuerstein means anything that helps, or points towards, or gives a clue to, the solution of a problem. In might be the shape of a piece in a jigsaw puzzle, for example, or the pattern of colour on its surface. Clearly, both colour and shape are relevant cues in that situation. In a class discussion on Newton's laws of motion, on the other hand, time, displacement, initial and final velocities, might all be relevant cues to the calculation of the acceleration of an object. The country the object was travelling through, on the other hand, or even the planet it happened to be on, would be quite irrelevant. Obviously, if a problem is not clearly understood in the first place, it will be difficult to select important and relevant cues for its solution. To decide which cues are relevant and which are irrelevant, one must clearly understand the goal of the activity or the problem to be solved.

A student who cannot eliminate certain cues and assign preference to others will be inclined to ramble 'off the point'. In a class discussion on the Amazonian rain forest, for example, a child's lengthy story about his dog Spot might be deemed irrelevant. Frequently, such students can also have problems recognising what has been asked in an exam question and may end up giving answers that are irrelevant or 'off the point'. A student who has impaired ability to select relevant cues may also have difficulty in finding the main points or 'gist' of a text, or in extracting the moral of a story, or even in sticking to the point in an argument, or in finding points to justify a particular stance or argument. He may also have difficulty in solving problems that require discrimination and elimination of irrelevant alternatives, as in multiple-choice questions, for example.

11.8. C *Lack of, or Impaired, Spontaneous Comparative Behaviour*

It has already been extensively argued in this section that the natural or spontaneous capacity for comparative behaviour is essential for insight or understanding. Insight, after all, is the capacity to grasp relations in available data. Feuerstein appears to be saying much the same thing when he says:

> Spontaneous comparative behavior may be viewed as the primary condition for the establishment of relationships because it entails the organization and integration of discrete units of information into coordinated thought. As such, it is considered by the author to be

> one of the most fundamental building blocks of higher cognitive processes.[69]

In brief, comparative behaviour is a prerequisite of relational thinking which leads to insight and conception. A deficiency of comparative behaviour limits cognition to the most elementary processes by blocking or impeding the involvement of higher mental processes. The process of abstraction, for example, which, according to Lonergan, involves identifying what is relevant and rejecting what is irrelevant in the definition of an object or situation, demands a comparison of one aspect of the thing with another. Again, Feuerstein explains:

> By means of the products of spontaneous comparative behavior, an individual is able to transcend his immediate perceptual experience and is able to draw logical inferences which lead to abstract, propositional, and hypothetical thinking.[70]

Thus, one can say that it is on the foundation of comparative behaviour that the child's construction of reality is laid down, as aspects of his outer world are organised into meaningful systems in terms of the relationships that he perceives in them. Again, Feuerstein explains:

> It is thus by comparative behavior that a person actually contributes to the world, for it is he who organizes aspects of outer reality into meaningful systems, defined by the relationships that he establishes among them.[71]

Feuerstein does not suggest, however, that there are children who naturally, or genetically, lack this ability. The fact that the child is usually successful in comparing when specifically requested or motivated to do so is sufficient evidence of his ability to compare. The problem lies in his failure to search for such similarities and differences among items of data of perception "spontaneously" or automatically . The children who lack this most central cognitive ability are those who simply have never had this skill mediated to them by significant others in their lives.

This in no way casts doubt on Lonergan's notion of insight as a natural innate capacity of the human mind, nor does it imply that the capacity to form insights is itself merely a product of a child's cultural experience. However, it does

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[69] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltymore, Maryland: university Park Press, 1980), p. 92.

[70] Ibid., p. 93.

[71] Reuven Feuerstein, *The Dynamic Assessment of Retarded Performers* (Baltymore, Maryland: University Park Press, 1980), p. 63.

suggest that the propensity and motivation to search for insights may be impaired by the poor development of certain learned cognitive functions in the child. This is perfectly consistent with Lonergan's notion of the 'two ways of human development' dealt with in chapter Fourteen. Suffice to say for the moment that Lonergan sees development 'from above downwards' or 'the way of heritage' as having priority, as being an essential prerequisite for the natural unfolding of psychic and physical abilities 'from below upwards'.

The student who is unable to engage in spontaneous comparative behaviour may have what Feuerstein calls "an episodic grasp of reality" in which items are viewed separately and as having no relationship to one another. He may also have difficulty using adjectives like "similar", "like", and "unlike" in spontaneous speech. He would have difficulty making judgments and decisions that involve an underlying insight into how things compare with, or relate to, one another. Thus, he may be unable to decide which clothes to wear, what game to play, which TV channel to watch, which career to choose, because he is unable to weigh the pros and cons of the situation. He may also tend to make sweeping generalisations about people or events without taking note of individual differences.[72]

11.9 *Conception as a Separate Level*

Lonergan says that "the general conception, the general formulation, is not the same as the insight into the particular case."[73] One can gain an insight into human nature, for example, but only through an additional act of abstraction can one arrive at the concept of 'humanity': "You have to do some further thinking when you want a conception, an expression, a general formulation, of that insight."[74]

Just as imagery is an inherent part of attentive experiencing and in a sense constitutes its culmination, so in the same way conception may be regarded as the culmination, or crystallisation, or 'rest point', of the act of understanding. Without it, the insight itself remains a type of intuition but cannot be said to have been 'grasped' as such. Just as imagery has been dealt with separately from perception, so also expression of an act of understanding can be viewed as a separate and

[72] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom* (Arlington, IL: SkyLight Publishing, 1996), p. 120.
[73] Bernard Lonergan, *Understanding and Being*, p. 38.
[74] Ibid., p. 37.

distinct level of the act of coming to know. One can also say that expression, conception, or 'formulation', is essential if that understanding or insight is to be remembered, and later recalled. Little grasps this idea clearly when he states:

> But our act of understanding, sudden as it is, can equally be lost if it is not caught. Hence, there is the power of 'formulation'. We formulate a concept. This power of formulation requires skills of accuracy, brevity and completeness. We must write down and express what we have understood. Unexpressed, our insights are easily lost. Equally, we can capture our insight with a drawing or sketch. Words are more difficult ways and can begin to tangle us into cultural and linguistic traps.[75]

One can say that this is the level or stage at which thinking first emerges from the 'private' sphere and enters the public arena. It is also the point at which symbolic expression comes into its own, and at which the child's thinking enters what Feuerstein terms his 'output' level of mental functioning.

11.10 *Conception, Expression, and Language*

11.10.1 *Language and Conception*

One of the problems in studying language is that, like the act of insight itself, one is so close to it that one is inclined to miss its essentials. Wittgenstein, for example, says that "the aspects of things that are most important to us are hidden because of their familiarity (one is unable to notice something because it is always before one's eyes.)"[76] One such 'obvious' aspect of language which Chomsky saw very clearly is that language is not just an instrument to construct and strengthen social relations, but it may also be regarded as a vehicle for self-expression. This ties in very well with Lonergan's theory. It is clear that symbolic expression of some kind is necessary if an insight is to be communicated to another, or to oneself as to another. Such a mode of expression might be linguistic, mathematical, or artistic. However, conception, according to Lonergan's view, is first and foremost a necessary part of the individual's thought process. In other words, it may be argued that language as a mode of self-expression and formulation is at least as important as it is as a mode of inter-personal communication.

Is discursive language itself, then, necessary for conception or concept

[75] John Little, "Insight, Strategic Thinking and Control", *The Practising Manager* 17:1 (October 1996), p. 22.
[76] Ludwig Wittgenstein quoted in John Maher and Judy Groves, *Introducing Chomsky* (Cambridge: Icon Books Ltd., 1999), p. 9.

formation? Psychologists and Philosophers differ with regard to the answer to this question. Wittgenstein says "yes": language is necessary for concept formation. Chomsky and Lonergan would both reject this view. Chomsky, for example, says that concept formation comes before language acquisition, pointing to the fact that

> the speed and precision of vocabulary acquisition leaves no real alternative to the conclusion that the child somehow has the concepts available before experience with language and is basically learning labels for concepts that are already part of his or her conceptual apparatus.[77]

In Lonergan's scheme, it must be remembered that every statement is a response to a question. As already mentioned, such a question might be a question for intelligence (who, where, when, why, what, *quid est)*, or a 'truth' question - (Is it really so?, *an sit?)*. Implied in every question and its resulting answer is a question and statement of being. This can be termed the 'status' or the verb. Every sentence also shows a clear appreciation of the pre-existence in the world of experiencing subjects (I, me, you, he) as well as intended objects (he, she, it). Thus, one can argue that there can be an intentional language of meanings only because there is first an inner, non-verbal intentional mind, a mind already intent on finding meaning, and expressing that meaning, at least initially, in non-linguistic concepts.

Lonergan says that "a language is not simply a set of words, but also a set of meanings."[78] Meaning itself can be defined as the relation between a signifier of some kind and the concept signified. But such a signifier might be a word, a gesture, a symbolic object, or a mental image. It has been argued already that the search for meaning is operative even at the most basic level of perception. Much more, then, should one expect to find it at the subsequent level of image formation. Thus, a pre-verbal mode of conception is possible, if not probable. Imagery with its attendant meaning constitutes the first and lowest level of symbolic expression. Such symbolism can certainly form the basis for a pre-verbal mode of expression and conception. Such symbols, according to Langer and Lonergan, can also be carriers of emotionality and provide a vehicle for emotional expression allied to intellectual articulation.

This does not in any way belittle the central importance of language. Langer,

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[77] Naom Chomsky, *Language and Problems of Knowledge* (Cambridge, MASS: MIT Press, 1988), p 28.

[78] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 230.

for example, says that "the notion of giving something a *name* is the vastest generative idea that ever was conceived."[79] Feuerstein appears to agree with this when he says that "the absence of a verbal code ... reduces the quantity and quality of gathered information."[80] In other words, the lack of a proper term or word or "code" to designate an object, a relationship, or a concept, may severely limit a child's capacity to differentiate such an object, relationship, or concept, from others. Already mentioned above, for example, are the basic concepts of triangle, square and circle; lack of verbal labels with which to encode each of these makes their differentiation by the child more difficult and less reliable. Thus, even at Lonergan's first level of experience one finds language playing a vital role in cognition. This does not imply, however, that language is a prior condition for cognition, as Wittgenstein and others seem to claim, but rather that language, once developed, plays a vital supportive role in mental functioning. The relationship between language and cognition, as already said, may be viewed as one of 'symbiosis', of mutual dependency, of 'mutual-mediation'.

One may still argue, however, that language comes into its own at the level of conception. It seems, after all, that it is because the human mind has a need to express itself, for itself, that symbolic forms of expression first make their appearance. It may be argued that when social mediation meets this prior human need for self-expression a language of some kind is almost inevitable, even if it only consists of an organised system of primitive gestures. It will be argued in Chapter Fourteen below that there are two vectors to concept formation and that human social mediation operating from 'above downwards' plays just as vital a part in concept formation in the child, and in the generation of meaning, as the child's own 'spontaneous concepts', operating from 'below upwards'.

11.10.2 *Chomsky and Language*

Chomsky maintains that the brain has an innate language faculty and that part of this biological endowment is a system of principles common to all languages, which is the core of his theory of a 'Universal Grammar'. This notion is

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[79] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p.142. Italics in original.

[80] Reuven Feuerstein *et al, L.P.A.D.: Learning Potential Assessment Device Manual* (Jerusalem: Hadassah-Wizo-Canada Research Institute, 1986), section 3.7.

supported by the work of Steven Pinker.[81] As argued above, meaning may be regarded as the relation of the mental image of a thing to its concept. The meaning of a word, for example, may be regarded as the relation of the acoustic image of the word, with its attendant connections to memory, to the concept which that word conjures up. To Chomsky also language is like a bell, it 'sounds' and it 'means'. Sound or speech is the external face of language. It is merely a series of disturbances or longitudinal waves in the air. When someone speaks or 'sounds' a language, it comes in contact with the mind. The sound carries internal meanings which are present only in the mind. Thus, the representation of sound, 'Phonetic Form', and the representation of meaning, 'Semantic Form', must be connected in some way. Chomsky calls this connection, or intervening structure, 'Syntax' and seeks to explain how the child acquires this 'syntactic interface'.

While there are a bewildering range of languages (approximately 5,000 within the borders of some 600 nations), and while these languages appear at first glance to be quite different from one another, nevertheless Chomsky holds that the common core of language is the same and has remained so throughout history, saying: "The underlying structures of language may be invariant sleepers over long historical eras."[82]

Another important defining characteristic of language according to Chomsky is its 'structure dependence'. Knowing a language is to know not a mere string of words but their 'structural relationship'. This is a universal principle common to the syntax of all languages. For example, structure dependence is involved when elements of a sentence are moved to form questions, or passives, or reflexives.

Like Lonergan, Chomsky adopts a mentalistic approach to the study of the human person in terms of the cognitive systems that underlie his behaviour. This is in accord with normal scientific practice, and for Chomsky it is also a step toward assimilating the study of behaviour into the main body of the natural sciences. Human language is one of these cognitive systems, one identifiable component of the human mind-brain with its specific properties and principles.

Chomsky considers that children already bring a package of relevant information to the process of language acquisition. With this, they can progress to

[81] Steven Pinker, *The Language Instinct* (London: Penguin Books, 1994)
[82] John Maher and Judy Groves, *Introducing Chomsky* (Cambridge: Icon Books Ltd., 1999), p. 9.

more and more mature states of knowledge. He uses the term 'innate', but he means by this not that language is already completed, sitting waiting in the brain of the child ready to be spoken, but rather that the child has what might be termed a 'genetic programme', a blueprint that comes into use when and as the child is ready. In other words, language arises in the mind-brain of the child as a specific realization of the language faculty, which passes through three states:

a) An initial state.

b) A series of developmental states, as the child matures in a speech community.

and c) A steady state, reached at or just before puberty.

Thus for Chomsky acquiring a language is less something a child does for himself than something that happens to the child. The process certainly depends on external events and human mediation, but the basic lines of development are internally determined. Chomsky could say with James Harris, the 18th century philosopher:

> The growth of knowledge ... [resembles] ... the growth of fruit; however external causes may in some degree cooperate, it is the internal vigour, and virtue of the tree, that must ripen the juices to their maturity.[83]

This view of language acquisition is incompatible with the idea that language acquisition is purely a type of learning and so also discards out-of-hand the notion of language development as a type of imitation. It is quite consistent, however, with Feuerstein's notion of mediated learning experience within a 'speech community' and is consistent with Lonergan's 'two ways of human development'. Chomsky says:

> The language faculty develops in the individual along an intrinsically determined course under the triggered effect of appropriate social interaction, and partially shaped by the environment ... just as the distribution of horizontal and vertical receptors in the visual cortex can be modified by early visual experience.[84]

Chomsky insists that language is so rich and complex that it contains myriad structures so far beyond what one can pick up in the environment that unless there is some innate, predetermined intellectual capacity, children would never learn language.

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[83] James Harris, quoted in John Maher and Judy Groves, *Introducing Chomsky* (Cambridge: Icon Books Ltd., 1999), p. 50.

[84] Ibid., p. 61.

11.10.3 *Langer, Lonergan, and Chomsky*

In *Philosophy in a New Key* Langer makes the following observation:

> There seem to be no simple, amorphous, or imperfect languages, such as one would naturally expect to find in conjunction with the lowest cultures. People who have not invented textiles, who live under roofs of pleated branches, need no privacy and mind no filth and roast their enemies for dinner, will yet converse over their bestial feasts in a tongue as grammatical as Greek, and as fluent as French.[85]

What can best account for this fact that peoples at different stages of cultural and social development have languages of comparable sophistication and complexity? Chomsky's postulation of a 'language instinct', like that of Pinker, does not necessarily imply that there is a direct causal link from some gene sequence in the human genome to language acquisition. Yet clearly some inner 'blueprint' must exist to account for Langer's observation above. Is it possible that language acquisition is instead simply mediated by Lonergan's invariant dynamic operations of the human mind - experience, understanding, and reflection? Is it possible that language acquisition, like human cognition itself, is simply driven by the same 'pure desire to know' manifest as the need to express one's insights or meanings in symbolic form? After all, one can say that without expression or formulation there would be no full human knowing. Expression, or formulation, or conception, according to Lonergan, forms a mental hypothesis which is a precursor of judgement, and only at the level of rational reflection and judgment can one be said to have reached an increment of knowledge.

Every statement, or conception, or expression, is a response to a question, a question for intelligence *(quid est)*, or a 'truth' question *(an sit)*. Implied in every question, whether for insight or for judgment, is a question of being. The resultant answer may be said to constitute both the 'status' of being and the verb. In *Philosophy in a New Key*, Langer says: "Verbs are symbols with a double function; they express a relation, and also *assert that the relation holds.*"[86] Every verb, then, expresses the result of an insight or relation and the ontological status regarding that relation.

It is possible that the form of language follows that of an underlying 'mentalese' or 'universal grammar'. It is also possible that such a mentalese could

[85] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 103.
[86] Ibid., p. 76.

be underpinned by Lonergan's dynamic invariant operations. Both insight and verb are relations which hold two things together. Intelligent insight and rational insight together form the normal verb, expressing a relation and asserting that the relation holds. Rational insight alone constitutes the verb 'to be'. The subject of the verb corresponds to the subject of experience, while assent to a judgement puts one in touch with the object of the verb. Every sentence shows a clear appreciation of the existence in the world of experiencing subjects as well as intentional objects. There can be, one can say, an intentional language because there was, first and foremost, an inner, non-verbal intentional mind.[87]

It has already been argued that conception or formalisation is the obvious entry point for language. While it is clear that expression is an inherent need of the human person, and that symbolic expression of some kind is a natural response to this need, nevertheless it is clear also that language once formed finds application and use at each and every stage of the dynamic process of coming to know. In practice, the connection, the mutual dependency, the symbiosis, between language and cognition is so intimate that one can begin to understand those who regard language as the natural foundation for cognition. Accuracy of perception, as already argued, is quite dependent on the availability of vocabulary with which to encode the objects perceived. Again, human reasoning seems to come into its own only when available language is adequate to the job. However, one must first express or communicate with oneself if one is to communicate authentically with others. Authentic intersubjectivity, it can be argued, follows only from authentic intrasubjectivity.

However, to confuse the issue further, It will be argued in Chapter Fourteen that Lonergan, when speaking of the two ways of human development, insists that development from above downwards is the "chronologically-prior phase."[88] One can say, in other words, that the intersubjective dynamics of mediation from above downwards is the normal way in which the intrasubjective dynamic of coming to know, development from below upwards, is induced and facilitated in the child. And even where spontaneous development from below upwards does happen, Feuerstein would maintain that it is due in large part to the changes induced in the human organism by such top-downwards mediation.

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[87] See also Section 14.9 for a discussion of Vygotsky's notion of "speech for oneself."

[88] Bernard Lonergan, "Theology and Praxis" in Frederick E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan, S.J.* (New York: Paulist Press, 1985), p. 196.

11.10.4 *Lonergan, Vygotsky, and Language*

In *Method,* Lonergan says: "Inquiry leads to understanding, understanding expresses itself in language."[89] It will be argued later[90] that Lonergan's distinction between insight or understanding and conception or formulation is similar to Vygotsky's distinction between what he terms the 'meaning' of a word and its 'sense'. Vygotsky says: "While meaning stands for socialised discourse, sense represents an interface between one's individual (and thus incommunicable) thinking and verbal thought comprehensible to others."[91] Again, it will be argued that what Vygotsky means by the word 'sense' corresponds to Lonergan's notion of insight, while Vygotsky's notion of 'meaning' appears similar to Lonergan's notion of conception. In the same section, Vygotsky explains that "meaning is only one of the zones of sense, the most stable and precise zone,"[92] indicating again a possible parallel between Vygotsky's idea of 'meaning' and Lonergan's notion of conception, or definition, or *verbum*.

This topic will be dealt with in much more detail later[93], where the above ideas on language will be further developed, and where a theory of language based on the thinking of Vygotsky which is much more in keeping with Lonergan's cognitional theory will be proposed and developed.

11.11 *The Arts and Conception*

11.11.1 *Music and the Arts as Modes of Expression and Conception*

In his book with the unlikely title *The Man Who Mistook His Wife For a Hat* the prominent neurologist Oliver Sacks makes the extraordinary observation:

> The motionless Parkinsonian can sing and dance, and when he does so is completely free from his Parkinsonism; and when the galvanised Touretter sings, plays or acts, he in turn is completely liberated from his Tourette's. Here the 'I' vanquishes and reigns over the 'It'.[94]

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[89] Bernard Lonergan S.J., *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 10.

[90] See Section 14.9

[91] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. xxxvii.

[92] Ibid.

[93] Section 14.9

[94] Oliver Sacks, *The Man who Mistook his Wife for a Hat* (South Yarmouth: John Curley and Ass., 1986), p. 159.

Thus, people whose verbal expression is impeded by Parkinson's disease and Tourette's syndrome apparently have an alternative mode of expression available to them, music, song and dance. Clearly the parts of the brain which control these more artistic modes of expression are different from those damaged brain centres which control and direct verbal and gestural expression. This raises questions about the nature of music and the arts in general, and about their role in the growth and development of the human subject.

It may be argued that no treatment of education would be complete without at least some effort to throw light on that most mysterious and yet most deeply human of all appetites, the urge or drive towards artistic creation and expression. As far as the development of this study is concerned, the effort must necessarily include an exploration and an investigation of how this mode of expression may fit into, 'interface' with, and be explained by, the overall cognitive scheme so far developed. Following Lonergan's advice[95] , the approach adopted will lean heavily on the work and thought of Susanne Langer.

As a starting point, it is useful to divest oneself of those misconceptions about music in particular which are largely discredited by serious philosophers and psychologists. For example, Langer maintains that music does not, except incidentally, create representations of real life objects and situations. Thus, while Tchaikovsky's 1812 overture was written to celebrate the famous battle of Borodino, and while the score helps one conjure up pictures of conflict through the addition of the sound of cannon to the musical score, nevertheless the music remains much more than a mere sound-picture of Napoleon's so-called 'defeat'. While it can certainly add some excitement as well as historical interest to a performance, it is no more central to the music itself than the representation of the sound of cuckoos, for example, in Beethoven's Pastoral Symphony. Langer says:

> Music ... is preëminently non-representative even in its classical productions, its highest attainments. It exhibits pure form not as an embellishment, but as its very essence; we can take it in its flower - for instance German music from Bach to Beethoven - and have practically nothing but tonal structures before us: no scene, no object, no fact.[96]

[95] Bernard Lonergan, *Method in Theology* (Toronto: University of toronto Press, 1979), p. 64, footnote says: "For an application of the above analysis (of the nature of meaning) to different art forms in drawing and painting, statuary and architecture, music and dance, epic, lyric, and dramatic poetry, the reader must go to S.K. Langer."
[96] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 209.

Another misconception is that the primary role of music is to put people in a certain feeling or affective state, or to elicit a certain emotional reaction. While clearly music and emotionality are related in some way, Langer feels that the reality is in fact much more complex:

> Music is known, indeed, to affect pulse-rate and respiration, to facilitate or disturb concentration, to excite or relax the organism, *while the stimulus lasts*; but beyond evoking impulses to sing, tap, adjust one's step to musical rhythm, perhaps to stare, hold one's breath or take a tense attitude, music does not ordinarily influence behavior. Its somatic influences seem to affect unmusical as well as musical persons ..., and to be, therefore, functions of *sound*, rather than of *music*.[97]

This section of the study will attempt to make the case that Lonergan's dynamic mental operations are just as operative in the experiencing, understanding, and appreciation of a piece of music as in any other area of human endeavour. To Langer, for example, music like language is about expression and conception. Just as discursive language may be used to give expression or formulation to an insight, so music shapes or creates an understanding of a different kind, an understanding or insight into something which is simply too complex for the "cool web of language" to express. To Langer the primary effect of music and of the arts in general is to give one an insight into, an understanding and an appreciation of, the depths of human longing and emotionality in all its complex shades and nuances. Not alone is this beyond the reach and scope of ordinary discursive linguistic expression but, according to Robert Graves in the passage already quoted in the last chapter, linguistic articulation and the cold logical reasoning which it facilitates is sometimes the enemy of, or a hindrance to, emotional expression:

> There's a cool web of language winds us in,
> Retreat from too much gladness, too much fear:
> We grow sea-green at last, and coldly die
> In brininess and volubility.[98]

Clearly poetry itself is also a form of art which, like music, attempts to express the inexpressible, but Graves is here referring to that dead weight of everyday prose and written expression with which most of the educational systems of the world, of necessity perhaps, tend to crowd and cloud the minds of its children.

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[97] Ibid., p. 212. Italics in original.

[98] Robert Graves, quoted in Francis Turner Palgrave (Ed.), *The Golden Treasury of the Best Songs and Lyric Poems* (London: Collins, 1973), pp. 500-501.

For Langer, then, music is about the expression of human longing and emotionality in all their bewildering complexity. It involves an insight into the affective side of human nature expressed, conceptualised, or formulated in musical form by a composer, whose meaning is grasped and understood by an audience, through the mediation of a performer:

> The composer is, indeed, the original subject of the emotions depicted, but the performer becomes at once his confidant and his mouthpiece. He transmits the feelings of the master to a sympathetic audience.[99]

It is not, however, an unstructured expression like a shout or a noise, but is as highly structured and 'formed' as any insight. Langer implies that music does not so much provide a vehicle for emotional self-expression in the here and now, but it is rather a symbolic grammar or logic of the emotions, "an impersonal, negotiable, real semantic, a symbolism with a content of ideas, instead of an overt sign of somebody's emotional condition."[100] Langer goes on to quote Wagner in support of this position:

> What music expresses is eternal, infinite and ideal; it does not express the passion, love, or longing of such-and-such an individual on such-and-such an occasion, but passion, love or longing in itself, and this it presents in that unlimited variety of motivations, which is the exclusive and particular characteristic of music, foreign and inexpressible to any other language.[101]

Appreciation of a piece of music, then, entails an insight and expression which is as much a cognitive act as is verbal discursive language itself, and like language it has a logic and grammar of its own. It is a contention of this study that the appreciation of a piece of music bears all the hallmarks of Lonergan's "pattern of recurrent and related operations"[102] including the act of insight itself. Also, musical apprehension, like insight or understanding, entails the grasping of a relation or form in the data of sound:

> Insight grasps intelligibility or relations in the given data. These relations which are apprehended by understanding are not invented or added on but are really present in the totality of the given. [103]

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[99] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 215.
[100] Ibid., p. 219.
[101] Richard Wagner, "Ein glücklicher Abend," reprinted by Gatz, in *Musik-Aesthetik*, from *Gazette Musicale*, nos. 56 - 58 (1841), quoted from Susanne K. Langer, *Philosophy in a New Key,* pp. 221 - 222.
[102] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 4.
[103] William A. Mathews, *Questioning and its Object* (Univ. of Leeds, Dept. of Philosophy, Ph.D. Thesis, 1980), p. 61.

Since they seem to have such a bearing on the human intellect and emotionality, then music and the arts in general must also be of immense interest to the field of education. However, if one is to follow Langer's reasoning, it is as an ordered and intelligent introduction to the world of human emotions that it provides what is possibly its main contribution to human development. Langer's comments on the above quotation from Wagner are quoted here at some length by way of interim summary of these points:

> Despite the romantic phraseology, this passage states quite clearly that music is not self-expression, but *formulation and representation* of emotions, moods, mental tensions and resolutions - a "logical picture" of sentient, responsive life, a source of insight, not a plea for sympathy. Feelings revealed in music are essentially *not* "the passion, love or longing of such-and-such an individual," inviting to put ourselves in that individual's place, but are presented directly to our understanding, that we may grasp, realize, comprehend these feelings, without pretending to have them or imputing them to anyone else. Just as words can describe events we have not witnessed, places and things we have not seen, so music can present emotions and moods we have not felt, passions we did not know before. Its subject-matter is the same as that of "self-expression," and its symbols may even be borrowed, upon occasion, from the realm of expressive symptoms; yet the borrowed suggestive elements are *formalized*, and the subject-matter "distanced" in an artistic perspective.[104]

In other words, music provides an insight, an understanding, a grasp of human emotionality which is a living form of knowledge no less real and useful for its being unexpressed and inexpressible in ordinary prose. Or, to quote Langer again, more briefly:

> A composer not only indicates, but *articulates* subtle complexes of feeling that language cannot even name, let alone set forth; he knows the forms of emotion and can handle them, "compose" them.[105]

Herein lies what appears to be the true importance of music, and the arts in general, to education. It has been argued that the essence of human development, the essence of the *being* mode of education, is the grasp of one's own being through the act of reflexive insight, and one's embracing of it, or assenting to it as a good, by means of what Lonergan terms 'self-appropriation of interiority'. Thus through music, and the Arts in general, children are brought face to face with the hidden depths of human emotionality and longing, including their own, and in this

[104] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 222.
[105] Ibid.

way they gain insight and understanding into what is inexpressible in any other way than through the Arts. The resulting 'self appropriation' of what may be termed 'emotional interiority' is as much a personal enriching process as that of purely 'cognitive interiority'.

Music, like language, is a form of expression. Like language also it facilitates the formulation and the conceptualisation of insight. It does not follow logically, however, that music must therefore be a form of language. Langer, for example, says:

> Yet it is not, logically speaking, a language, for it has no vocabulary. To call the tones of a scale its "words," harmony its "grammar," and thematic development its "syntax," is a useless allegory, for tones lack the very thing that distinguishes a word from mere vocable: fixed connotation, or "dictionary meaning." Moreover, a tone has many aspects that enter into the notion of musical significance, but not of harmony.[106]

All of this integrates well with Lonergan's notion of conception which automatically follows insight in the working of the intellect. Langer's claim can be viewed as further confirmation of Lonergan's separation of insight and conception, which tend to be confused in some interpretations of Thomist philosophy. Conception, according to Chomsky, does not depend on linguistic expression. Rather, according to Langer, language grew out of a need to express; only secondarily does it fulfil the need to communicate; it serves "rather to formulate knowledge than to communicate its finished products."[107]

Music and the Arts in general cannot be just forms of expression, however. In the working of the human mind nothing ever remains on the level of expression. An expression is either true or false, and, if true, it may be perceived also as a good and hence something to be valued. It seems a logical extension of what has been said thus far that in music and in art one finds also an affirmation of the truth expressed. While expression belongs fundamentally to the artist himself, the insight and its affirmation as a truth and a good is perceived and felt not only by the artist, but also by the perceiving subject and, in the case of music, by the performer also. This most vital level of judgment and assent to the perceived good, with the accompanying emotionality which is 'the intentional response to a good', was not

[106] Ibid., pp. 228 - 229. The word "vocable" refers to the form of a word as distinct from its meaning.
[107] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), p. 225.

identified by Langer but follows logically from what has been said thus far. One might say that Lonergan adds the notion of philosophical 'applause' to Langer's notion of artistic conception.

But, in the case of music, the expressed reality is about what? It is perhaps only secondarily about something in the objective world, and is primarily a truth about one's inner self, one's emotional and intentional life, one's inner being. Discursive language and prose are used to express a wide range of things, whether the topic of expression is found in the objective world or within oneself; language is an inherently objective mode of expression. The subject matter of music and the arts in general, on the other hand, are inherently and deeply personal. This, however, in no way takes from the essential 'added value' or "productiveness" of these modes of expression, as Fromm explains:

> The process going on in persons who are aware of themselves in depth, or who truly 'see' a tree rather than just look at it, or who read a poem and experience in themselves the movement of feelings the poet has expressed in words - that process may be very productive, although nothing is 'produced'. ... Productiveness is a character orientation all human beings are capable of, to the extent that they are not emotionally crippled.[108]

One can say that music uses auditory images, in the same way as the plastic arts use visual images, as a basis for understanding, and ultimately for expressing, the subtle nuances of human desire and feeling. These images may be quite different in kind from the normal visually-based mental images employed in everyday thinking, yet they share all the characteristics of images, including their close link with the emotions. Robertson has pointed out that such images are linked more closely to the emotions than the "cool web" of discursive language:

> Image and emotion are intimately linked, for good and ill. Language has a much more distant relationship to emotion, and so if we want to control our emotions, we have to access them through images.[109]

He also maintains that they are the original currency of thought and expression, prior to language acquisition, so that "in the preverbal world of the infant, image is king."[110] He also believes that language, while necessary, has an inhibiting effect on imagery of all kinds, and hence on the expression of emotionality, saying that "it is

[108] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.95
[109] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 148.
[110] Ibid., p. 25.

the nature of words that they tend to transform experiences into a rather bloodless code that can starve our brains of the rich images that wordless imaging can evoke."[111] Fromm appears to support this view when he says:

> The words are vessels that are filled with experience that overflows the vessels. The words point to an experience; they are not the experience. The moment I express what I experience exclusively in thought and words, the experience has gone: it has dried up, is dead, a mere thought. Hence being is indescribable in words and is communicable only by sharing my experience. In the structure of having, the dead word rules; in the structure of being, the alive and inexpressible experience rules.[112]

The arts, one might say, grasp more fully and more faithfully than language "the structure of being, the alive and inexpressible experience."

Lonergan's notion of emotionality as an intentional response to a good or a value adds significantly and seamlessly to what has been said above. In the case of music, for example, the perceived good or value is that of the feelings and emotions conveyed and experienced through performance, and understood through insight. Thus, following Lonergan's scheme, emotion may be said to enter the equation twice. It enters first through the message or content conveyed and understood, which is a truth about the complex, highly personal world of human emotionality. Secondly, emotion reappears through judgment and through assent to the good perceived, through the heartfelt 'Yes!' to a recognised value, to the outburst of spontaneous applause, through the intentional response to the perceived good and beauty of the musical performance, or of the work of art. Thus, both the good perceived and the intentional response to that good speak of, and draw upon, the deepest levels of the human person, where feelings and intellect meet.

Lonergan's notion of insight involves a grasp of the underlying form which is a function of intellect and involves abstraction from sensible data. In music that which is perceived to be 'good' or *'probus'* is the expression of that form which is based on relations of both pitch and rhythm. It is not the pitch or the frequency of a particular sound or note that the intellect grasps, but rather the relation of the frequency of one note to another. Neither does one beat of a drum mean anything to the mind, it is the rhythm, or relation of beats, that the mind grasps, just as the child grasps 'the material dispositions' in an object which she manipulates. Objectively, it is the relations within both frequency and rhythm that constitute "the

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[111] Ibid., p. 2.

[112] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.92.

material dispositions"[113] which lead to the 'significant form' of a melody. The message or subject matter conveyed by music may be a grasp or understanding of the world of emotions, but the response is that of intellect and emotion acting as one, through a natural intentional response to a value.

At this point one needs to pause to reiterate one of the key educational 'uses', if one may use such a term, of the arts in education. Human growth at its highest is a coming to know oneself, and because one knows oneself, coming to self-acceptance and self- mastery. In this way, one achieves the highest level of human maturity, one achieves 'authenticity'. This is the work of self-appropriation of interiority, and this, in turn, is the object of Lonergan's 'generalised empirical method'. What one achieves in the arts is nothing less that the self-appropriation of oneself at one's deepest, the self-appropriation of ones emotional and intellectual interiority acting as one. And because the intentional object of the arts is beauty and because beauty is also 'good', so the arts are another approach to the good and 'the true', with the difference that in this case the sought-for truth is not so much something concrete in the outside world as a truth about one's own deepest interiority, and that of others.

11.11.2 *Lonergan and Langer*

Langer is a conceptualist. For her, thinking stops at expression, formulation, or concept formation. This is apparent when she says:

> The content has been *symbolized* for us, and what it invites is not emotional response, but *insight*. "Psychical Distance" is simply the experience of apprehending through a symbol what was not articulated before. The content of art is always real; the mode of its presentation, whereby it is at once revealed and "distanced," may be a fiction. It may also be music, or, as in dance, motion. But if the content be the life of feeling, impulse, passion, then the symbols which reveal it will not be the sounds or actions that normally would *express* this life; not associated signs, but *symbolic forms* must convey it to our understanding.[114]

Langer's understanding of the working of the intellect is quite consistent with the model so far developed in this study, as far as her thinking goes. Her notion of "insight" appears to mirror that of Lonergan. Her notion of "Psychical Distance"

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[113] Bernard Lonergan, *On the Incarnate Word* (Draft of revised unpublished text), Michael G. Shields (Trans) (Toronto: Lonergan Research Institute, 1987), p. 9.

[114] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), pp. 223 - 224. Italics in original.

seems to correspond to 'objectification'. However, it is clear that she grasps nothing of the role of judgment, or of emotion as an intentional response to a value, according to which the message of music and the arts in general is not just understood, or grasped, but is 'assented to' as something perceived as good, or beautiful.

It is clear, then, that there are certain important differences between Lonergan and Langer, not least of which is her failure to take the final steps of judgment and assent into consideration in her review of mental functioning. While this is neither the time nor the place for a more detailed comparison of Lonergan and Langer, suffice it to say that Joseph Fitzpatrick in a very detailed and closely argued article entitled "Lonergan and Poetry" concluded:

> Mrs Langer's theory of aesthetics is a particular kind of expressionism which is fundamentally Kantian, and for a philosopher like Lonergan who wrote Insight as a correction of Kant to take over without radical qualification a neo-Kantian theory of aesthetics is enough surely to put us on guard. However, to say that Lonergan got his theory of art wrong is, as I say, a bold claim requiring careful substantiation.[115]

It is possible, however, that the corrections and additions already made to Langer's theories in this section, combined with the extracts that follow should be enough to show that Lonergan's theories are well capable of 'sublating' those of Langer without causing any distortion or injury whatever to his overall scheme.

11.11.3 *The Arts as Communication*

In his book *Visual arts in Education* Rod Taylor quotes Dewey to the effect that "the completed artefact is not in itself an aesthetic object but an object that invites an aesthetic response from others." Taylor goes on to say that "the aesthetic meaning resides in the dynamic interaction between the work and those who engage with it." One feels that Lonergan would have no problem agreeing with this. However, he then goes on to summarise Dewey, saying: "No audience - no aesthetic."[116] If by "audience" he includes the artist himself, then there is no problem. But if he is insisting that every work of art, if it is to qualify for the term 'aesthetic', must have an outside audience, then there is an inherent contradiction in what he is saying.

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[115] Joseph Fitzpatrick, "Lonergan and Poetry" in *New Blackfriars* Vol. 59 (1978), p. 523.
[116] Rod Taylor, *Visual Arts in Education* (London: Falmer Press, 1992), p. 4.

It may be argued that a work of art is first and foremost a mode of expression. Whether one terms that expression aesthetic, artistic, or emotional, its prime function is to conceptualise, concretise, formulate, clarify, something within the artist himself, and for himself. Only by formulating one's insights can one truly 'grasp' them. One cannot weigh them up, appreciate them, or assent to them as good or beautiful, without first conceptualising, formulating, or expressing them in some modality, whether that be the linguistic mode of expression, musical form, or a graphic mode. Only secondarily is artistic expression a communication with a larger audience and, even then, there is no guarantee that the larger audience will respond to what the artist is attempting to express. Samuel Beckett, for example, is reported to have been highly indignant when the audience saw humour in his serious, if not agonising, portrayal of the futility of the human condition in *Waiting for Godot.*[117] Besides, many of the world's greatest artists simply had no audience when they were producing some of their finest works. One has only to consider Van Gogh, for example, who by the end of his short life had sold only a handful of his works, and those to his own brother. This is not to deny the importance to the artist , as to the layman, of 'being understood'. However, the human need to express is an intrasubjective need long before it is an intersubjective one.

This apparent dichotomy between the intrasubjective and the intersubjective modes however is neither simple nor clear-cut. It has already been argued that one of the key characteristics of *having* or possessing is, according to Marcel, that one can freely give what one has to someone else, or at least display it to someone else and in the process assert oneself as an owner or possessor:

> The characteristic of a possession is being shewable. There is a strict parallel between having drawings by X in one's portfolios, which can be shewn to this or that visitor, and having ideas or opinion on this or that question.[118]

Thus, in a school examination for example, the child displays the knowledge he possesses. Such an examination or test reaches only the *having* mode of existence. To express oneself in this way, however, means that one has first been able to display what one has to say to oneself, as if one was in fact 'another':

> This act of shewing may take place or unfold before another or before one's-self. The curious thing is that analysis will reveal to us that this difference is devoid of meaning. In so far as I shew my views to myself, I myself become someone else. That, I suppose, is the

[117] Anthony Cronin, *Samuel Beckett, The Last Modernist* (London: Collins, 1996)

[118] Gabriel Marcel, *Being and Having*, Katherine Farrer - Trans (Westminster: Dacre Press, 1949), p.161.

> metaphysical basis for the possibility of expression. I can only express myself in so far as I can become someone else to myself.[119]

Expression, in other words, is not only a formulation of one's mental understanding or insight, it is also an objectification of it. One stands 'outside' one's own mental content, as it were, and looks upon it as if one were 'other'. Without this capacity to mentally "become someone else" expression would be impossible. This is reflexive consciousness in operation; this is a manifestation of the intentional nature of the human mind but, more importantly, this "duplication of ourselves"[120] plays a vital role in the next step - the ability to transcend one's own viewpoint in intersubjectivity.

It is instructive to note that the use of the metaphors "inside" and "outside" in this regard shows the intimate connection between this capacity of mind and the fact of embodiment or corporality. This applies also to many philosophers who do not deal directly with embodiment. Thus Lonergan's use of the word "interiority" implies a central role for corporality just as much as does Feuerstein's use of the terms "input" and "output" even though, as argued elsewhere in this study, Lonergan fails to give due emphasis to corporality in his theory of cognition.

11.11.4 *Language, Music, Art, and What Lies Beneath*

Langer, as has been mentioned already, was quite insistent that Music was not a form of language:

> Yet it is not, logically speaking, a language, for it has no vocabulary. To call the tones of a scale its "words," harmony its "grammar," and thematic development its "syntax," is a useless allegory, for tones lack the very thing that distinguishes a word from mere vocable: fixed connotation, or "dictionary meaning." Moreover, a tone has many aspects that enter into the notion of musical significance, but not of harmony.[121]

Yet both language and music do have a basic foundation in common: they are both expressions or formulations of one and the same human mind. This is the basis for the claim already made above, that musical expression is a conception based on an insight or understanding of human emotionality, that this understanding is not into raw data of sense but involves first the formation of auditory images which are an abstraction from sense data, that the human mind does not reach its term or satisfaction with the musical formulation alone but proceeds to judgement and to

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[119] Ibid.

[120] Bernard Lonergan, *Verbum: Word and Idea in Aquinas* (Univ. of Nortre Dame Press, Notre Dame, 1967), p. 89.

[121] Susanne K. Langer, *Philosophy in a New Key,* pp. 228 - 229.

the assent to the good or value of the truth expressed. If Lonergan's dynamic structure of knowing is true, then it applies to any operation of the human mind, whether it is involved in basic, mundane, everyday activities, or in the highest forms of artistic expression. It follows also that musical and artistic structures have significance and meaning, they relate to something beyond themselves, and, thus, like all mental phenomena, they are intentional. But what they relate to beyond themselves is not some aspect of the external world but rather that part of the inner world of the human person where emotions and intellect meet. What music and the the arts in general express or reveal is a hidden inner dynamic world of emotional and intelligent subjectivity. The arts reveal man to himself; they are the royal route to what might be termed the self-appropriation of cognitive and emotional interiority.

What "lurks beneath" all conscious human activities is the "dynamic structure" of human knowing. But this underlying structure applies equally well to activities like music, art, and poetry, whose content and effect may be said to lie below the surface of consciousness in the sense that they cannot be formulated and objectified in discursive language. It is also a structure whose parts are operations. It is a "self-assembling, self constituting" structure. "It puts itself together one part summoning forth the next, till the whole is reached."[122] These dynamic operations which constitute the structure of human knowing are, once again, experience, understanding, judgment, and assent:

> Experience stimulates inquiry and inquiry is intelligence bringing itself to act; it leads from experience through imagination to insight. In turn, concepts stimulate reflection, and reflection is the conscious exigence of rationality; it marshals the evidence and weighs it either to judge or else to doubt and so renew inquiry.[123]

While these operations work spontaneously in the privacy of each human mind, they can nonetheless be experienced and attended to, and in that way observed by each individual within himself; they can be the object of human understanding; and they can be assented to as a good or a value to be embraced. They can, in short, be made the objects of the 'generalised empirical method'. By the same token, it would be very surprising if they did not leave an identifiable trace, or imprint, on each and every mode of human expression, whether that be discursive language, poetry, music, graphic and plastic arts, or simply the hard-won conclusions of scientific research.

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[122] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection*, p. 17.
[123] Ibid.

Langer, it would appear, is quite correct when she claims that music is not a language. Yet both discursive language and music must share a common foundation in the dynamic operations of the human mind, and these same operations should manifest themselves as underlying influences in both forms of expression. Both music and language have to do with meaning, for example, and since they both relate to something beyond themselves, they are intentional. This section has also suggested that Lonergan's dynamic operations of human knowing constitute a type of 'mentalese' or 'universal grammar' underlying all forms of expression, which manifest themselves as common elements in the structure and logic of these various forms of expression. This contention appears to be supported by Langer herself when she says:

> The upshot of all these speculations and researches is, that there are certain aspects of the so-called "inner life" - physical or mental - which have formal properties similar to those of music - patterns of motion and rest, of tension and release, of agreement and disagreement, preparation, fulfilment, excitation, sudden change, etc.[124]

"Patterns of motion and rest, of tension and release" are of course a very good description of the tension of inquiry, as well as the release which occurs at the moment of insight. One might argue that such insight and release occur just as readily in one's drive to understand, albeit symbolically, one's deepest emotional self with its unresolved yearnings, its joys and fears. Patterns "of agreement and disagreement" could of course be a reflection of one's rationality in operation: judgements of right or wrong, true or false, good or bad, 'yes' or 'no'. One is then tempted to identify "fulfilment" and "excitation" with the triumphant "Yes" of the moment of assent to truth, or a good, or beauty, while the "sudden change" is the overall effect on the subject himself.

11.11.5 *Poetry*

It has already been argued that prose and discursive language have their limitations. They are limited in particular in their ability to express the subtle nuances of human emotionality. These limitations were a source of some frustration to the writer Samuel Beckett. Beckett's very trade, one might say, involved him in exposing the tragedy, the despair, the futility of the human condition. He felt a

[124] Susanne K. Langer, *Philosophy in a New Key,* pp. 227 - 228.

certain frustration with what he saw as the constraints of normal language. In a letter to a friend, for example, he says:

> Grammar and style, to me they seem to have become as irrelevant as a Victorian bathing suit or the imperturbability of a true gentleman. A mask.

He felt a deep need, a compulsion, to express that which he was sure lay beneath language:

> As we cannot eliminate language all at once we should at least leave nothing undone that might contribute to its falling into disrepute. To bore one hole after another in it, until what lurks beneath it - be it something or nothing - begins to seep through; I cannot imagine a higher goal for a writer today.[125]

What "lurks beneath" according to Langer is, first and foremost, metaphor and symbolism. Poetry is significant because, while it uses language, it does so non-discursively. It tends to involve the use of metaphor to conjure up images, memories and feelings which may, in turn, evoke insights. Hugo Meynell explains that

> novels, plays and poems convey insights and stimulate reflection, but by an indirect mode of operation, in which the immediate effect of the words is to evoke images, memories and feelings.[126]

And Robertson supports this view when he says:

> We listen and read using both the language and imagery circuits of our brains. ... So for most words and sentences, there is more than one way in which your brain can understand them.[127]

He goes on to say that "poetry changes the brain in different ways, but most poets trade heavily on the currency of imagery." [128]

In the education of youth in ancient Greece the myths contained in epic poetry Like Homer's *Odessy* were the standard way for conveying and teaching the human values of courage, loyalty, responsibility, for example. Langer explains:

> The origin of myth is dynamic, but its purpose is philosophical. It is the primitive phase of metaphysical thought, the first embodiment of *general ideas*. It can do no more that initiate and present them; for it is a non-discursive symbolism, it does not lend itself to analytic and genuinely abstractive techniques. The highest development of which myth is capable is the exhibition of human life and cosmic

[125] Samuel Beckett, Letter written to a friend Axel Kaun in 1937, quoted in John Calder, *The Philosophy of Samuel Beckett* (London: Calder Publications, 2001), p. 17. The original letter was in German.
[126] Hugo Meynell, *An Introduction to the Philosophy of Bernard Lonergan* (Macmillan, London, 1991), p. 97.
[127] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), pp. 62 - 63.
[128] Ibid., p. 66.

> order that epic poetry reveals.[129]

In an article titled "Lonergan and Poetry" published in *New Blackfriars*, Joseph Fitzpatrick tries to show that "Lonergan's basic cognitional theory, or transcendental method, can be shown capable of integration with the nature and function of literary language". He regards this as an important test of Lonergan's theories "for it is surely a sound test of any account of how language functions that it can explain how and why poetry affects us as it does."[130]

11.12 *The Role of Sports in Education*

Having considered in some detail the role of the arts in education, it is only fitting that some philosophical consideration be given also to that of sports or games. The importance of sport in the development of the young has been part of the received wisdom of education since the time of Plato. Like the arts, however, its justification on the school timetable tends to be based on vague, pious platitudes such as the much quoted maxim "The battle of Waterloo was won on the playing fields of Eton," rather than on any serious reflective thought or theory.

The following quotation from Plato's *Laws* will find an echo in the hearts of educators the world over:

> Virtually all young things find it impossible to keep their bodies still and their tongues quiet. They are always trying to move around and cry out; some jump and skip and do a kind of gleeful dance as they play with each other, while others produce all sorts of noises.

This illustrates very clearly the enjoyment of the *doing* mode of human existence. It is *doing* for the sake of *being*, and so has cognitive and affective aspects as well. Cognitively, Copleston sees in it "the natural instinct of expression,"[131] thus placing it on the same level as artistic expression. But, as was seen in the case of the arts in general, expression and conception follow naturally upon the act of insight. As insight grasps form, and as form is the conveyer of beauty[132] in music as well as painting, what can the form possibly be which is capable of being grasped and expressed in such an overtly physical fashion? Plato goes on to explain:

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[129] Susanne K. Langer, *Philosophy in a New Key*, p. 201. Italics in original.

[130] Joseph Fitzpatrick, "Lonergan and Poetry" in *New Blackfriars* Vol. 59 (1978), pp. 441 - 450, 517 - 526.

[131] Frederick Copleston, *A History of Philosophy*, Vol. 1 (London: Search Press Ltd., 1976), p. 257.

[132] See Section 13.10 for a treatment of beauty according to the model adopted by this study.

> And whereas animals have no sense of order and disorder in movement ('rhythm' and 'harmony', as we call it), we human beings have been made sensitive to both and can enjoy them.[133]

Rhythm and harmony in dance one can appreciate, but rhythm and harmony in a football match? Why not!

John Finnis recognises play as a basic human good or value with a corresponding drive or urge to play manifest from the earliest years of life, describing it as a "large and irreducible element in human culture."[134] This notion appears to be supported by Maritain when he says that play "possesses a value and worth of its own."[135] Bowlby also sees play in childhood as a sign of health and emotional adjustment:

> At two years, securely attached children have a longer attention span, show more positive affect in free play, show more confidence in using tools, and are more likely to elicit their mother's help in difficult tasks compared with anxiously attached children.[136]

However, as shown above, Plato seems to place human playfulness and the arts together, as does Frederick Copleston. Under these circumstances, one wonders if Finnis really needs to postulate the existence of a special value of play as separate from his notion of aesthetic value. It has been shown already that Langer suggests that the unique role of the arts is the expression of the complex and subtle nuances of human emotionality for which normal modes of human expression, including discursive language, are quite inadequate. Does human play serve a similar purpose? One can say that team sports, in particular, allow the free-expression of Lonergan's main forms of intersubjective cognitive and emotional relationships: 'community of feeling', 'fellow feeling', 'psychic contagion', and even 'emotional identification'.[137] These will be dealt with in greater detail in Chapter Seventeen. Suffice it to say for the moment that the notion of psychic contagion captures rather well the emotional involvement of the spectators, as well as the players, in a sporting activity.

Sport is also clearly a type of *doing*. It is also, according to Freire's definition,

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[133] Plato, *The Laws*, 653 - 654, Trevor Saunders -Trans. (London: Penguin Books, 1970), pp. 86 - 87.

[134] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 87. The various human values are dealt with in some detail in Chapter 13 of this study.

[135] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 55.

[136] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), pp. 109 - 110.

[137] These are dealt with in detail in Section 14.5 of this study.

a 'praxis', or the doing of something intelligently.[138] Also, like *work,* it demands effort and adds value. However it adds value not to external things but to the participants themselves, as well as the spectators, giving rise to a growth in the *being* mode of existence. What value is added to the participants? Clearly the joy of intersubjective expression and communication, perhaps also the joy of personal achievement and self-transcendence, as well as the effective cooperative *doing* or 'synergy' which, it will be argued, is a central aspect of all intersubjectivity. Team sports, in other words, are examples of cooperative activity within accepted norms or rules. Dewey points out:

> Children at recess or after school play games, from tag and one-old-cat to baseball and football. The games involve rules, and these rules order their conduct. The games do not go on haphazardly or by a succession of improvisations. Without rules there is no game ... the rules are part of the game. They are not outside of it.[139]

Dewey further observes that sport "illustrates the general principle of social control of individuals without the violation of freedom."[140] As such, not only sports but group activities generally in schools have a very important lesson to teach, and that lesson has to do with human freedom:

> The general conclusion I would draw is that control of individual actions is effected by the whole situation in which individuals are involved, in which they share and of which they are co-operative and interacting parts. For even in a competitive game there is a certain kind of participation, of sharing in a common experience. Stated the other way round, those who take part do not feel that they are bossed by an individual person or are being subjected to the will of some outside superior person.[141]

Thus it is clear that children's play, games, and sports, have an important educational influence, whether one views them from a purely utilitarian social point of view, as does Dewey, or from a deeper and more intellectualist viewpoint as do Maritain and Finnis. One can also add that, just as music, and the arts in general, develop a heightened insight into, and awareness of, one's own private emotional life, so also one can say that sports, and physical games in general, promote a heightened understanding and awareness of one's corporal and intersubjective self. Both contribute to one's self awareness, both heighten one's consciousness of self, and, hence, foster and promote one's self-appropriation of interiority.

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[138] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 60.
[139] John Dewey, *Experience and Education* (Collier Macmillan Publishers, New York, 1938), p. 52.
[140] Ibid., p. 54.
[141] Ibid., p. 53.

And what of the so-called 'competitive spirit' so much lauded in modern capitalist society? In organised sports one sees the *having* and *feeling* modes of human existence subordinated to the *being* and *intersubjective* modes. It is only where the *having* and *feeling* modes dominate that organised sports cease to be play. Dewey puts it rather aptly when he says: "As for example in well-ordered family life, ... it is not the will or desire of any one person which establishes order but the moving spirit of the whole group." [142]

It will be argued in Chapter Thirteen that Finnis regards play as a basic human need or urge. One corresponding 'good of order'[143] which is designed by society to facilitate this urge to play, as well as providing the vehicle to mediate the corresponding good and value is, again, the school. Jacques Maritain, for example, says:

> Play has an essential part, though secondary, in school life; it possesses a value and worth of its own, being the activity of free expansion and a gleam of poetry in the very field of these energies which tend by nature towards utility.[144]

Maritain identifies an important aspect of play which is that it brings a *being* aspect into activities which might otherwise end up having a purely utilitarian or *having* value. In other words, from the viewpoint of the 'triarchic model', play is not *doing* for the sake of *doing*, nor *doing* for the sake of *having*, but *doing* for the sake of *being*.

11.13 *Deficient Cognitive Functions at the Level of Conception*

To gain insight by grasping the relations between things is one thing, but to remember that insight and so make it available for future use is quite another. Lonergan insists that memorisation demands that an insight be clearly formulated, expressed, or conceptualised. The following are some of the deficient cognitive functions identified by Feuerstein which may impede conceptualisation.

11.13. A *Lack of or Impaired Ability to Internalise Events*

The ability to formulate an insight, and so to properly 'grasp' it, depends on the use of language or other symbols, signs, and concepts. In other words, it demands the use of representational mechanisms which are on a higher plane of

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[142] Ibid., p. 54.

[143] This term is defined in Chapter 12.

[144] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 55.

abstraction or interiorisation than pure imagery alone. Many children, however, exhibit a strong reliance on concrete perceptual cues and task-bound concrete behaviour and so lack a readiness to use abstraction and generalisation. Feuerstein explains:

> The child frequently tends to refer back to the initial object or event on which he was operating. In many cases, this concrete approach is the expression of the child's disbelief in his capacity to invoke or "hallucinate" the reality which he seeks and which is not accessible to his sensorial system; to represent to himself the object without having it in front of him; and to retrieve, by way of representation, something that is not in his immediate sensorial field.[145]

In this regard, Feuerstein echoes Piaget's criticism of the educational approach which emphasises sensorial stimuli and concrete motor behaviour as the preferred, if not the only, way to teach children. Feuerstein concludes that

> the lack of interiorized representational behavior not only is the product of a lack of mediated learning experience, at both early and later stages of development, but is reinforced as well by prolonged and exclusive exposure to and reliance upon concrete sensorial data.[146]

Clearly, pedagogic methods like that employed by Montessori schools which place too much stress on concrete sensorial data are what are under attack here, and with some justification. Representational ability is vital for hypothetical (or 'what ... if'?) reasoning, and hence for judgment. Not only does lack of symbolic or abstract representation impede definition and conceptualisation, but it also impedes progress towards Lonergan's third level of cognitive functioning, that of judgment.

In addition, the student who experiences an inability to internalise events may rely too heavily on concrete aids like counting on his fingers and may be unable to solve problems in his head. He may also have difficulty using signs, symbols, and concepts to process data. He may show poor spontaneous concept formation and so have difficulty formulating an insight which he has grasped. In brief, one can say that students who are overly dependent on the concrete cues encountered at the input phase, or at Lonergan's level of experience, may develop limited representational thinking. The net outcome is a poor level of understanding and conceptualisation at the level of intelligence, and lack of ability to process and project various outcomes at the level of judgement. The result at the output stage is an inability to communicate ideas or solutions in a generalised or abstract way.

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[145] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 97.
[146] Ibid.

11.13. B *Lack of or Impaired Ability to Project Virtual Relationships*

The ability to form mental relationships and concepts at Lonergan's second level is one thing, the capacity to generalise, or 'bridge', the application of a newly formed concept or relation to novel situations is quite another. Such relationships and concepts exist "virtually" in the individual, awaiting application. A student with a 'passive-acceptant' approach to learning may not see the need to apply previously learned relations, or concepts, or skills to new information in order to make that new information meaningful. Such a student will tend to experience information as isolated and separated, or as 'episodic' in Feuerstein's terminology. Such a lack of mental flexibility makes the jump to hypothesis testing and mental reasoning, at Lonergan's third level of cognitive functioning, much more difficult.

11.14 *Chapter Conclusions*

Does Lonergan's transcendental precept "Be intelligent," then, really make sense? The precept "Be attentive" seems intuitively to make sound educational sense. Somehow, one is in control of one's attentiveness in a way in which one is not in control of one's intelligence. Insight, after all, does not respond as readily to volitional acts as does attentiveness. However, if one understands the nature of insight and the prerequisites for its achievement, one can intelligently 'nurture' it in a way that the human will appears powerless to 'force'. One can ensure, for example, that the deficient cognitive functions that might interfere with the formation of insights are identified in the individual child and corrected as far as is possible. Feuerstein contributes not just an understanding of these functions, but also proposes a methodology for identifying them in an individual child[147] and an intervention programme[148] for correcting them.

While starting with a detailed examination of Lonergan's central notion of insight, this chapter has attempted especially to examine and understand the place of language and of the arts in relation to the overall philosophical model being developed in this study. Of all the subjects on the school curriculum, the educational value of the arts are arguably the most difficult to understanding, and so are the hardest academic subjects for which to make a coherent and scientific justification, in the face of financial pressures and examination ethic. If the philosophical model

[147] See the Learning Propensity Assessment Device (LPAD), Section 4.4.5.
[148] See Feuerstein's Instrumental Enrichment Programme (IE), Section 4.4.4.

developed in this study can give a plausible account and justification for the importance of the arts in education, then it can be argued that this may be taken as some validation of the philosophical model itself. To achieve this end, the ideas of Susanne Langer have been integrated where possible with those of Lonergan, thus widening at the same time the scope and perspective of both philosophers.

Many teachers would agree that the role of Music and Art in the school curriculum is to widen the child's range of human experience, as well as to enhance his sensibilities. But such high sounding words explain neither the nature of the arts as modes of expression, nor precisely what contribution they make to the development of the child. Nor does it help integrate this aspect of education into a wider cultural and educational model. All too often the aims and objectives of such 'classes' are confined merely to giving the child the practical skills and disciplines which may later allow him to appreciate, or even to produce, some form of artistic expression. This is no doubt useful in itself, but it is too close to the notions of education for *having* and *doing,* as it seems to relegate music and the arts in general to the realm of practical usefulness.

It has been argued in this chapter that the role of the arts in education is to promote the self-appropriation of cognitive and emotional interiority. The study of the arts can be used to enhance the child's understanding of symbolism in general and the role of symbolic expression of emotionality in particular, so that through experience and understanding he heightens his awareness of the private and interior working of his own mind by plumbing the depths of his spiritual and emotional self. This allows him not only to become more aware of the inner dynamics of his own psyche, but also of that of others.

It is important that teachers understand fully these dynamics of the human mind. True mental development entails drawing children's attention to these dynamics in progress, bringing them to the level of rational consciousness and insight so that they will better understand them and, hence, better direct and control them in themselves This is close to what Lonergan means by the term 'self-appropriation of interiority', and this can be mediated to children in the normal classroom situation. Music and Art teachers themselves must not only understand how to impart the skills required by a particular art-form but they must also understand the symbolic nature of the arts so that they can more readily impart or

mediate this depth of understanding to their children. Can children really grasp these abstractions? Feuerstein answers most emphatically: "Yes!" To him, the grasp of apparently difficult abstract concepts is attainable even by the so called 'retarded'. In this he is at one with Lonergan who asserts that it is only in and through such abstractions that one finally reaches "the heart of the real."

The arts in general are characterised by the full, free, uninhibited exercise of the dynamic mental operations, never resting content with one expression or concept, but insight calling to insight, unburdened and unrestrained by the linear, discursive influence of words. It has been argued here that it is this free expression of intellect and emotions in all of their aspects, and the growth in self-understanding, too deep and complex for words, which makes the arts such a valuable ally in the process of human development and education.

Chapter 12

Lonergan's Third Transcendental Precept 'Be Reasonable'

> The purpose of the study of philosophy is not to learn what others have thought, but to learn how the truth of things stand.
>
> Thomas Aquinas[1]

12.1 *Introduction*

Augustine in his *Confessions* says: "I have met many who wanted to deceive, but none who wanted to be deceived."[2] Thus one can say that there is an inherent desire and respect for truth even among the untruthful. Reasoning and judgment, in other words, are a natural part of the ongoing operation of the human mind, even for those who would use it to deceive others. Pope John Paul II summarises the situation well when he says:

> People cannot be genuinely indifferent to the question of whether what they know is true or not. If they discover that it is false, they reject it; but if they can establish its truth, they feel themselves rewarded.[3]

Knowledge originates in experience. One way of extending knowledge, however, without recourse to additional experience, is through the reasoning process. Lipman, who developed the renowned 'Philosophy for Children' programme, says:

> Given what we know, reasoning permits us to discover additional things that are the case. ... Our knowledge is based upon our experience of the world; it is by means of reasoning that we extend that knowledge and defend it.[4]

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[1] Thomas Aquinas, *Commentary on Aristotle, De caelo,* I, 22.

[2] St Augustine, *Confessions*, X, 23, 33, quoted in Pope John Paul II, *Fides et Ratio* (London: Catholic Truth Society, 1998), p.41.

[3] Pope John Paul II, *Fides et Ratio* (London: Catholic Truth Society, 1998), p.41.

[4] Matthew Lipman, *Thinking in Education* (Cambridge: Cambridge University Press, 2003), p. 179. Lipman, like Feuerstein, believes that teaching thinking is just as important as teaching the more traditional school subjects. Underlying his Philosophy for Children programme is the belief that children are intrinsically interested in philosophical and epistemological issues. Unlike Feuerstein, his instructional materials are imbedded in a set of novels. His basic novel, *Harry Stottlemeiers Discovery,* is appropriate for fourth, fifth, and sixth year students.

By 'defending' knowledge Lipman clearly means judging it to be true, having weighed up all the available evidence supporting its correctness.

Judgment follows reasoning, but what is judgment in itself? Again Lipman comes to the rescue. He says:

> Judgments are settlements or determinations of what was previously unsettled, indeterminate, or in some way problematic. We can say that inquiry and judgment are generally related to one another as process and product.[5]

Inquiry and reasoning are the processes involved and judgment is their product. Lonergan would agree with this. However, he would add that a judgment is also the product of yet another insight, this time 'reflective insight', responding to yet another question, "Is it really so?" Judgment, like conception, might be said to be yet another level, another 'rest-point' in the journey of human cognitive endeavour.

Little summarises the situation at this level of mental functioning when he says:

> At level 3, we undertake a longer journey of critical reflection and analysis of what we have understood. We test our insight by relevant questions, against the data of experience to arrive at a confident 'yes'. Logic, language, data: all are used to subject our ideas, insights, formulations, concepts to analysis and testing. In this process, driven by questions, we exercise our powers of judgment. If an insight stands invulnerable against all questions, our insight becomes a judgment. With a correct judgment we can say a definitive 'yes' or 'no' and, in this, exercise publicly our powers of assent.[6]

As already mentioned, the question for Lonergan's third level of the cognitional process is "Is it *really* so?" or "Is the insight which I have just expressed and clarified for myself *really* consistent with the original presenting problem or data? Does it *really* make the situation intelligible, and is that intelligibility satisfactory from the point of view of what I already know, the previous insights that I have had?" This question is obviously about what is *real*. It is a question about truth, about reality, about existence. The 'truth conditions', or the circumstances under which one can give a definitive, unconditional, "Yes" to the question, hinges on the fittingness of the insight, or the grasped intelligibility, to the circumstances or the data presented.

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[5] Matthew Lipman, *Thinking in Education* (Cambridge: Cambridge University Press, 2003), p. 23.

[6] John Little, "Insight, Strategic Thinking and Control", *The Practising Manager* 17:1 (October 1996), p. 23. Little has made extensive use of Lonergan's theories in management training. His writings will be returned to again in Section 17.2 of this study.

In the process of reasoning, one experiments mentally, revisiting one's imagery, insight, and conception, to check if the conditions that would make the proposition true have indeed been fulfilled under all conceivable circumstances that one can think of. When one is satisfied that one has exhausted all the objections or possibilities one can think of, one has reached what Lonergan terms the 'virtually unconditioned'[7] . One can at last assent to the insight and its conception, confirm that one has indeed made an intelligent assessment of available data, confirm that within the limits of one's perceptions and one's horizon, one has indeed reached a truth. There is once again a release of the tension of inquiry, yet another moment of insight. The 'pure desire to know' has a last reached its term, its 'rest point', in an act of assent, a resounding 'yes' to a truth or 'no' to a falsehood.

Jacques Maritain says that "the universe of the child is the universe of imagination - of imagination which evolves little by little into reason."[8] Just as searching the image for intelligibility in the data leads to direct insight, so searching the insight, conception, and data for evidence to support that insight is the function of the reasoning process. This capacity takes a longer time to develop. It demands a greater level of interiorisation of mental functioning. It is attained properly only at Piaget's stage of 'formal operations' and it may be said to be the crowning achievement of adolescence. Maritain says:

> Just as imagination was the mental heaven of childhood, so now ascending reason, natural reason with its freshness, boldness, and first sparkling ambitions, is the mental heaven of adolescence; it is with reasoning that adolescence happens to be intoxicated. Here is a natural impulse to be turned to account by education, both by stimulating and by disciplining reason.[9]

It has been mentioned already that Robertson holds that in the development of the child language and imagery are frequently antagonistic to one another.[10] Lonergan explains this difference between imagery and language as follows:

> The image has a logic of its own. It is not subject to any law of univocity. Words have to have one meaning or a limited series of meanings; if it is not sufficiently clear which meaning one is employing, words become useless. But the image is not tied down to one meaning. It can have a different meaning today from its meaning yesterday. It can have different meanings for different

[7] Lonergan's notion of the 'virtually unconditioned' has already been dealt with in section 5.3.1 of this study.
[8] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 60.
[9] Ibid., p. 62.
[10] See Chapter Ten

people. It can become enriched in meaning as a person develops.[11]

This study has already proposed that it is not language as such which is inimical to imagery but rather it is the reasoning process, which is in turn helped and facilitated by the development of language.[12] It is this reasoning process which tends to judge, delimit, and constrain one's childish images, and the insights which accrue from them. Maritain, again, explains that the child

> must progressively tame the imagination to the rule of reason, whilst ever remembering that the proportionally tremendous work of the child's intellect, endeavouring to grasp the external world, is accomplished under the vital and perfectly normal rule of imagination.[13]

Such reasoning, as has already been said, flourishes not just with maturation but also with the achievement of language.

12.2 *Types of Reasoning*

Arriving at a judgment that a statement or proposition is either true or false demands a process of logical reasoning. Sanguineti explains that "reasoning enables us to realize that something is or ought to be *because* some previous truth makes it necessary."[14] Or more simply he says:

> *Reasoning is a movement of the mind whereby, starting with several judgments which we relate to one another, we arrive at a new judgment which necessarily follows from the preceding ones.*[15]

Reasoning, in other words, is also a relational activity. Every reasoning process relates a number of previously known truths to one another. These truths are called 'premisses'. The reasoning process also involves knowledge of a new truth called a 'conclusion', which is inferred from the premises. For example:

> If we say, "All students in this class are geniuses; Robert and Susan are members of this class," we immediately conclude that Robert and Susan are geniuses. It is not necessary to know Robert and Susan personally in order to reach the conclusion.[16]

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[11] Bernard Lonergan, *Understanding and Being*, pp. 217 - 218.

[12] See Section 10.3 above.

[13] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), pp. 60 - 61.

[14] Juan Jose Sanguineti, *Logic* (Manila: Sinag-Tala Publishers, 1992), p. 131.

[15] Ibid., p. 129. Italics in original.

[16] Reuven Feuerstein in collaboration with Mildred B. Hoffman, *Teacher's Guide to Syllogisms* (Arlington Heights, ILL : IRI/Skylight Training and Publishing, Inc., 1996), p. 16.

Logical reasoning, however, is not a unitary process but consists of different types of thinking including deduction, induction, analogical thinking, transitive relations, and syllogistic reasoning. All of these forms of reasoning come into their own during Piaget's stage of formal operations. In the context of syllogistic reasoning and transitive relations, for example, the child learns to infer new relationships from existing ones through deductive and inductive processes. Deductive inference involves the application of a generalisation or rule to a variety of particular situations, while inductive inference requires the opposite, that is the generalisation of a rule from a number of specific instances.

All of these types of thinking that make up human reasoning are classified by Feuerstein as 'higher mental operations' which are developed from his lower level 'cognitive functions'. It is a contention of this study, as already stated, that while the potential or propensity for these higher mental operations is innate, they still require the proper functioning of the lower cognitive functions for their full realisation. This, it will be argued later, is consistent with Lonergan's 'two ways of mental development', whereby development from 'above downwards', or the 'way of heritage', paves the way for and facilitates development from 'below upwards', or the 'way of achievement'.[17]

12.2.1 *Deductive Reasoning*

Deductive inference involves the application of any generalisation or rule to a variety of particular situations. Logic may be said to be the study of rules whereby related statements can be put together correctly to arrive at new statements. New statements arrived at in a logical way by following the rules of logic from other statements are called deductions. Such deductions may be used as a basis for making other deductions, and so a logical train of thought can be pieced together to arrive at important new information.[18] The initial statements may be termed premisses. If a premiss is assumed to be true because it is regarded as self-evident and if it is taken as a starting point for one's argument, then it is said to be an *a priori* assumption. Thus, "principles which, when once understood, are recognized to be

[17] See Chapter 14 of this study. The terms 'way of heritage' and 'way of achievement' are due to F.E. Crowe.
[18] Hy Ruchlis, *Clear Thinking* (New York: Harper & Row Publishers, 1962), pp. 59 - 60.

true and do not require proof through observation, experience, or experiment"[19] are termed *a priori*. The *principle of non-contradiction* (a thing cannot both be and not be at the same time) and the *principle of identity* (a thing cannot be itself and another in the same sense: a thing is always what it is) are examples of *a priori* assumptions adopted by Aquinas and other Scholastics.[20] The logician deals only with the process of arriving at deductions from premisses, assuming these premisses to be true.

A deduction is one type of mental process classified under the more general heading of inference. An inference is any conclusion arrived at a result of reasoning. A deduction is a special kind of inference which is obtained as a necessary consequence of other statements. It will be argued, inductive reasoning may also be said to be a kind of inferential thinking.[21]

A set of statements or premisses which logically lead to a conclusion by a process of deduction is said to be a syllogism. Thus an argument of the following kind is syllogistic in form:

1. Class 2A is reserved for the really bright girls.
2. Mary is in class 2A
3. Therefore, Mary is really bright.

Another widely used example of syllogistic thinking is:

1. All men are mortal.
2. Socrates is a man
3. Therefore, Socrates is mortal.

Or, in more abstract terms, one can say:

1. All A are B
2. All C are A
3. Therefore, all C are B.

By this method of argumentation, one arrives at conclusions or new knowledge. Such conclusions may also be said to be judgments. Sanguineti explains:

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[19] J. Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper and Row, 1968), p. 44.

[20] See Section 2.4.3.

[21] Hy Ruchlis, *Clear Thinking* (New York: Harper & Row Publishers, 1962), p. 63.

> The simple syllogism is the logical process in which, starting with an antecedent that relates two terms with a third, we necessarily draw a conclusion that unites or separates the first two terms. The conclusion will either be in the affirmative or in the negative, depending on how the terms are related in the antecedent.[22]

While the study of syllogisms has historical roots in the Aristotelian conception of logic, this does not imply that syllogistic thinking is an invention of formal logic. On the contrary, Piaget has shown that children tend to develop formal syllogistic reasoning as they mature through adolescence. While this kind of inferential thinking certainly appears to come into its own during Piaget's period of formal operations, nevertheless Feuerstein maintains that under the right conditions even younger children are capable of deductive and syllogistic thinking. The main obstacles in the younger child, as also in the culturally deprived adolescent, are deficient cognitive functions, particularly, as Feuerstein says, "his episodic grasp of reality, his inability to project relationships, and his lack of spontaneous comparative behavior."[23] These terms have already been dealt with and explained in the last two chapters.

Deductive reasoning is used extensively in mathematics. Any branch of mathematics starts off with just a few definitions, undefined terms, and axioms. Euclidian geometry, for example, builds on the notions of the 'straight line' and the 'point', which cannot be adequately defined. A typical axiom of this geometry is, "There is one and only one straight line that can be drawn between two points." No way has yet been found to prove this statement. One must just accept it as an *a priori* premiss upon which to build this one particular kind of geometry.

A typical problem requiring the application of deductive thinking is given by Robertson in his book *The Mind's Eye*:

> There are three playing cards from a normal deck lying face down on the table. You know the following information about the three cards - each of these statements refers to the same three cards.
>
> To the left of a Queen, there's a Jack
> To the left of a Spade, there's a Diamond
> To the right of a Heart, there's a King
> To the right of a King, there's a Spade

[22] Juan Jose Sanguineti, *Logic* (Manila: Sinag-Tala Publishers, 1992), pp. 137 -138.
[23] Reuven Feuerstein, *Instrumental Enrichment* (Baltimore, MA: University Park Press, 1980), p. 247.

Assign a suit to each of the three cards.[24]

12.2.2 *Reasoning, Relations, and Logic*

Deductive reasoning normally leads to a conclusion, a judgment of fact, a truth. But the answer to such deductive reasoning can also be a relation, as in the following:

1. Fudge is sweeter than chocolate.
2. Ice cream is not as sweet as chocolate.
3. Therefore, fudge is sweeter than ice cream.

Such deductive reasoning applied to the area of relations is the basis of one of Feuerstein's more advanced 'instruments' of his Instrumental Enrichment programme, 'Transitive Relations'.

Relations stem from the earliest activity of the child when she learns to relate things to herself or to compare things with one another. Later, relations themselves, without regard to the character of the terms related, become the object of logical analysis. When a child learns to relate things by their proximity and closure, this gives rise to what is termed 'topological logic'. A child who learns to classify things, that is to compare them by their similarity or difference, exercises what is called 'algebraic logic'. Things, however, may also be related functionally to one another giving rise to ordered structures and what is generally termed 'functional logic'.

Lipman says that

> what logic does beautifully is demonstrate to incredulous students that rationality is possible, that there is such a thing as logical correctness or validity, and that some arguments are better than others.[25]

To Piaget, however, the chief value of logic lies in helping to specify psychological structures by putting into calculus form those operations and structures which are central to actual thought processes. His concern is with the qualitative analysis of the actual structures underlying intellectual operations, rather than with the quantitative treatment of their behavioural outcomes. He says:

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[24] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 91.

[25] Matthew Lipman, *Thinking in Education* (Cambridge: Cambridge University Press, 2003), p. 179.

> The algebra of logic can therefore help the psychologist, by giving him a precise method of specifying the structures which emerge in the analysis of the operational mechanisms of thought.[26]

Thus, logic may be regarded as complementary to the study of Piaget's psychology while remaining distinct from it. Logic represents a self-contained, refined or purified model of the operations of thought, while psychology may be said to study these operations in their living context.[27]

Piaget's treatment of logic falls into two parts: the actual calculus of logic itself, with its 'groupings', 'groups' and 'lattices', and the examination of its foundations, including the foundations of mathematics. It is this latter, the study of the foundations of logic, which psychologists would regard as the more basic study.[28]

In his book, *Genetic Epistemology*, Piaget considers the three "mother structures" which the Bourbaki mathematicians discovered to be common to all branches of mathematics, including number theory, calculus, geometry, and topology. Their search led to three independent structures that are not reducible one to the other. They found that by making differentiations within each one of these structures, or by combining two or more of them together, all the other structures could be generated. These three fundamental, irreducible, and independent structures are:

1) **The Algebraic Structure**

The prototype of this structure is the mathematical notion of a group. Algebraic structures are characterised by their form of reversibility, which is inversion and may be expressed as: $p * p^{-1} = 0$.

2) **The Order Structure**

This structure applies to relationships, whereas the algebraic structure applies essentially to classes and numbers. The prototype of this structure is the lattice, and the form of reversibility characteristic of order structures is reciprocity. There is nothing negated in this case. Relations of the functional type belong to an 'order' structure. Functions may be simple ones like

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[26] Jean Piaget, *Logic and Psychology* (1952), from: *The Essential Piaget*, Howard Gruber & Jacques Vonéche (Eds.), (London: Routledge & Kegan Paul, 1977), p. 452.

[27] N. Isaacs, "Critical Notice: *Traité de Logique* by Jean Piaget", *British Journal of Psychology* 42, 1951, p. 185.

[28] Ibid., p. 186.

'bigger' or 'smaller', or more complex ones.

3) **The Topological Structure**

Such structures are based on notions such as neighbourhood, borders, and approaching limits. Topology is a matter of proximity. This structure applies not only to geometry but to many other branches of mathematics. According to Piaget, the "spontaneous geometry of the child is not Euclidean. It is topology."[29]

While these three types of structure appear to be highly abstract, nonetheless Piaget claims that "in the thinking of children as young as 6 or 7 years of age we find structures resembling each of these three types."[30]

12.2.3 *Inductive Reasoning*

As was already mentioned above, induction is also a form of inferential reasoning. Inductive reasoning involves the formation of generalisations from a number of observations about similar events. It is a very important form of reasoning because all of the generalised facts with which a child learns about the real world are said to be obtained in this way. As the child makes more and more observations about the real world, she begins to make generalisations about it. This is inductive reasoning in action. One obvious difference between this and deduction is that one can never be sure that the conclusions are absolutely true; after all, one can never claim to observe *all* similar, relevant events that have occurred or will occur.[31] The insight one obtains by induction is never enough. One must always progress to judgment. And even when one has made an assent to the truth of one's conclusions, one has achieved only a probability in this case, not a certainty.

Most of the facts about his environment are gleaned by the child through experience, involving observation, experimentation, and even measurement. The child sees, hears, and feels events. If, after many such experiences with a certain type of event, the child observes that the same things consistently occur, then he summarises the separate observations in the form of a generalisation. This mental

[29] Bernard Lonergan, "Piaget and the Idea of a General Education", Robert Doran & Frederick Crowe (Eds.) *Collected Works of Bernard Lonergan - Book 10: Topics in Education* (Toronto: University of Toronto Press, 1993), p. 194.

[30] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 26.

[31] Hy Ruchlis, *Clear Thinking* (New York: Harper & Row Publishers, 1962), p. 66.

process is inductive rather than deductive. The generalisation obtained is itself a type of insight, an insight which can be affirmed only by recourse to further experience and experimentation with the same type of event. In this way the child brings not only order but also simplicity to a complex world. Wojtyla compares this exercise of induction to that of factorisation in algebra. Through the mechanism or function of comparison, one identifies the factor which is common to all the elements in an algebraic expression and places it outside the bracket, as it were. In this way "the operation underlines and enhances the significance of the factor isolated from the expression. If it were not placed outside the brackets, it would remain hidden among the other terms of the expression; but it is now brought to light and given prominence."[32] One could also say that the common factor has been 'abstracted' from the individual cases or occurrences.

Wojtyla explains that "induction consists in grasping mentally the unity of meaning from among the multiplicity and complexity of phenomena." Thus, it leads "to that simplicity in the experience of man which we find in it in spite of all its complexity."[33] As implied above, however, the problem with induction is that when a conclusion is reached from many observed facts it does not necessarily follow that it will be true of *all* further cases. Unlike a deduction which necessarily follows from the premises, the results or insights obtained by induction can never be proven by logic. As was said above, in the case of induction one can only speak of probability, not certainty.

Both deductive and inductive thinking are used in the experimental sciences. First careful observations are made, experiments are performed, data are gathered. On the basis of these observations and data, insights or generalisations are formulated. This is inductive reasoning. Then to test these generalisations, or rules, or insights, one formulates them into premises from which to make deductions. To judge the truth of these deductions one returns to original data as well as to observation and experimentation. The Scholastics term for this is *'resolutio ad principia'* . Thus from this inductive/deductive process there emerges new ideas, new facts, new truths about the world. Matthews says that this "search for adequate evidence and the process of marshalling and weighing the evidence is organised

[32] Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 13. This also appears to be the origin of the phenomenological term 'to bracket', meaning to leave 'outside the brackets', or to leave in abeyance as unproven anything which is not clearly obvious or 'apodictic'. (See also Section 3.3.3)
[33] Ibid., p. 14.

by our critical and reflective wonder." It is organised, in other words, by the same spirit of questioning which marshalled the insight, but at a new reflective level. The intentional object at this level is the abstract rule or concept or law. He continues: "Data becomes evidence when it is recognised as the source of a further and significant relevant question."[34]

12.2.4 *Analogical Reasoning*

In the last public interview before his death, Bruno Bettelheim made the apparently simple statement: "You can fix a broken arm, but you can never make it as if it had never been broken in the first place."[35] Taken at face value, this is a simple truism about broken arms. Taken as an analogy, however, which it is meant to be, it speaks volumes about his lifetime of experience with children under psychotherapy and, given the tragic circumstances of his own death, it might also say something about his own unresolved unconscious conflicts.[36] This is an example of analogical reasoning, the extension or generalisation of a lesson learned in one area of life (orthopaedics in this case) to another generally similar or related area (paediatrics).

Making judgments and decisions by analogy is extremely important for a child. It is one of the means by which the lessons learned in one area of his life are generalised to others. In educational theory, this is what is generally termed 'transfer of learning', and in Feuerstein's system it is what is simply termed 'bridging'. Besides, as Ruchlis says, "the reason people make wide use of analogies in discussions or arguments stems from the fact that we gather most of our facts about the world by looking for similarities or differences among things and events."[37] This again hinges on the child's basic ability to compare one thing with another.

Forming analogies, then, depends on identifying similarities between things; this in turn rests on the ability to compare one thing with another, or one concept with another. This may be illustrated by the following sample test from Feuerstein's

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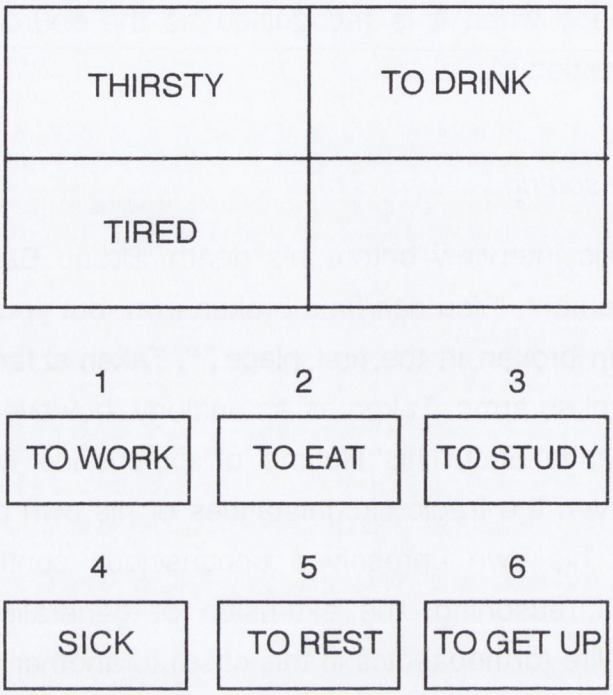
[34] W. A. Mathews, *Questioning and its Object* (Univ. of Leeds, Dept. of Philosophy, Ph.D. Thesis, 1980), p. 99.

[35] Daniel Karlin, "Last Interview with Bruno Bettelheim," recorded in June 1989, quoted in Nina Sutton, *Bruno Bettelheim: The Other Side of Madness* (London: Duckworth, 1995), p. 211.

[36] Bettelheim, who had been suffering from depression for some time, committed suicide on March 13th. 1990. He was founder of the famous Orthogenic School attached to the University of Chicago.

[37] Hy Ruchlis, *Clear Thinking* (New York: Harper & Row, Publishers, 1962), p. 149.

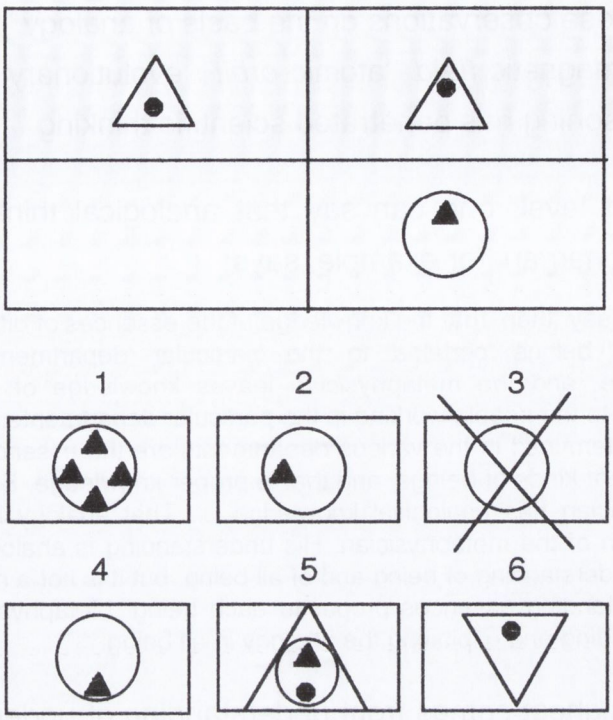
LPAD[38] in which the child is asked to select the one response out of the six which will complete the given verbal analogy:



Clearly, 'thirsty' is to 'drink' as 'tired' is to 'rest'. One first finds the relation between 'thirsty' and 'drink' which one might describe as 'a release of tension' or 'fulfilment of a need'. One then attempts to apply the same relation or 'rule' to a second pair of terms or concepts, one of which is the word 'tired'. The only term which satisfies the conditions laid down by the previous relation is number five, i.e. 'to rest'.

This same process can be employed in the solution of a problem demanding an even higher level of abstraction, using symbols or shapes as follows. Again, one must first find the underlying relation or 'rule' in the first pair of symbols, and then find the missing symbol which best satisfies the same relation in the second pair of symbols. In this case, number four provides the only acceptable solution.

[38] The questions are taken from "Trimodal Analogies - Experimental Version," part of Feuerstein's *Learning Propensity Assessment Device*, published by The International Centre for the Enhancement of Learning Potential, Jerusalem.



Children's fairy tales are also an interesting example of what might be termed unconscious analogical reasoning.[39] Through the medium of symbols, they speak to the child's unconscious mind and reassure him that his fears and anxieties are universal, understandable, and resolvable. Like music and the arts in general, fairy tales express the inexpressible - the complex nuances of human longing and emotionality. Bettelheim explains:

> The child intuitively comprehends that although these stories are *unreal* , they are not *untrue*; that while what these stories tell about does not happen in fact, it must happen as inner experience and personal development; that fairy tales depict in imaginary and symbolic form the essential steps in growing up and achieving and independent existence.[40]

But children are not the only ones who use analogical reasoning. The scientist makes constant use of analogy. Ruchlis says: "Scientific laws and principles are evolved through the process of observing various objects and events and drawing

[39] Strictly speaking, children's fairy tales involve the use of metaphor rather than analogy. The two are, however, related. An analogy refers to likeness or similarity. A metaphor, on the other hand, may refer to things that are quite different, but where one thing stands for the other as a symbol. Metaphor, like symbol, may be a carrier of emotionality. To say: "The boat moved through the water like a plough turning up the earth", is a simile or an analogy. However, to say: "The boat ploughed through the water," would be a metaphor. Again, to say that the motion of electrons around the nucleus of an atom may be compared to the motion of the planets around the sun, is an analogy. To say the electrons 'orbit' the nucleus, on the other hand, is to use the word 'orbit' metaphorically.

[40] Bruno Bettelheim, *The Uses of Enchantment* (London: Penguin Books, 1991), p. 73.

conclusions about these observations on the basis of analogy."[41] One could point to scientific terms like 'magnetic *field*', 'atomic *orbit*', 'evolutionary *tree*' to see just how much analogical reasoning has penetrated scientific thinking.

At the highest level, one can say that analogical thinking is the basis of metaphysics itself. Lonergan, for example, says:

> One may say, then, that the knowledge of the essences of different types of beings pertains to the particular departments of knowledge, and the metaphysician leaves knowledge of those essences to the people working in the particular departments. What will be determined in the various departments are the essences of the different kinds of beings, and that is proper knowledge. But the metaphysician has analogical knowledge. ... That analogy is the occupation of the metaphysician. His understanding is analogous. It is an understanding of being and of all being, but it is not a matter of understanding essences proper to each being. Metaphysics is understanding and exploiting the analogy in all being.[42]

Such analogy at its highest comes from understanding of understanding. Lonergan continues: "The metaphysician's understanding is analogous, and fundamentally the analogies come from an understanding of understanding."[43] In other words, it is from the standpoint of what Feuerstein terms 'metacognition' that one achieves a perspective from which one can identify the commonality, the common characteristics of all being. Perhaps the deepest and widest analogy of all is that between potency, form, essence, and act on the side of the object, and experience, insight, conception, and judgment on the side of the human mind.

Such analogical reasoning allowed Aristotle to say that the soul is to the whole animal as sight is to seeing.[44] In *Understanding and Being* Lonergan comments:

> Aristotle ... remarks that the soul is to the whole animal as sight is to seeing. Existence is to essence as judgment is to conception, as affirmation is to what is the affirmed content. As conception results from the combination of insight and data, so essence results from the combination of form and potency.[45]

In other words, following from the works of Aristotle, Lonergan identifies an analogy between the mental operations of experience, understanding, and judgment, and

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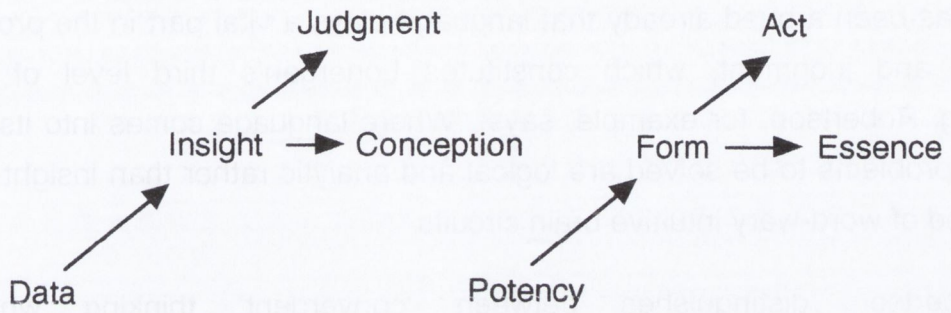
[41] Hy Ruchlis, *Clear Thinking* (New York: Harper & Row, Publishers, 1962)
[42] Bernard Lonergan, *Understanding and Being*, pp. 201 - 202.
[43] Ibid., p. 202.
[44] Aristotle, J.L. Ackrill (Ed.), *De Anima*. 431a, 7., (Oxford: Clarindon Press, 1974), p. 233.
[45] Bernard Lonergan, *Understanding and Being*, p. 203.

the metaphysical concepts of potency, form, and act. He would say, for example, that existence is to essence as judgment is to conception, as affirmation is to what is affirmed. He would also say that as conception results from the combination of insight and data, so essence may be regarded as a combination of form and potency. The following schematic attempts to illustrate this analogy of Lonergan's between his structure of cognition and that of Aristotelian and Thomist metaphysics.



Lonergan continues:

> Metaphysics is the integral heuristic structure of proportionate being. ... What is this heuristic structure? It is the use of a set of analogies, where the analogies have a fundamental determination from cognitional process. The use of cognitional process as the fundamental instance is justified by the relation between knowing and known. Why can we say that all proportionate being lies within these analogies? It is because proportionate being is what we can know by experience, understanding, and judgment.[46]

In other words, this fundamental analogy between the structures of cognition and the foundational elements in metaphysics stems from the basic isomorphism between knower and known, the fact that both the knower and the known belong to the same realm of being.[47] Aquinas appears to support this equivalence or analogy between the cognitional and the ontological when he asserts: *"Omnis res est vera et nulla res est falsa."*[48] Put more briefly, one could say instead: *"Omne ens est verum."* How can one claim that all that is real is true, unless one also views the ontological and the cognitional as equivalent. The true is what one grasps by clear understanding and accurate reasoning. The real is what exists prior to any cognitive

[46] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 206.

[47] The isomorphism of knower and known has already been discussed in Chapter 5 of this study.

[48] St. Thomas Aquinas in *Questiones disputatae de veritate*, I, 10. says: "All that exists is true, and nothing that exists is false." Descartes, however, despite his analysis "On Truth and Falsehood" in his fourth mediation, stayed well clear of any hint of an equivalence between the true and the real. (Pieper, *The Living Truth*, p. 16).

investigation. The obvious implication is that what puts one in touch with the real, with being, is not sense experience alone, not the empirical, not any intuitive grasp of reality, but sense experience, intelligent understanding, and accurate reasoning - the normal operations of the human mind acting in unison.

12.3 *Reasoning and Language*

It has been argued already that language plays a vital part in the process of reasoning and judgment, which constitutes Lonergan's third level of mental functioning. Robertson, for example, says: "Where language comes into its own is when the problems to be solved are logical and analytic rather than insight-hungry and in need of word-wary intuitive brain circuits." [49]

Robertson distinguishes between 'convergent' thinking which is characteristic of language, reasoning, and logic, and where there is normally a single answer, and 'divergent' thinking which is characteristic of "insight problems", where there can be more than one answer. Insight, after all, produces only hypotheses, while it is the function of reasoning to test those hypotheses and settle on the most plausible answer. [50] This is just another way of describing deductive and inductive thinking. Language aids the reasoning process; it helps the weighing up of the evidence for and against the insight that one grasps, and it also helps the conception or expression which follows. Robertson continues:

> In most western societies, we give the big cheers to children who are good at the convergent, analytic and word-based types of brain activity. They are the ones who come top of the class in our largely convergent, analytic and word-based exams, but - take Einstein as an example - they may not be the ones who break the mould in later life, whether in science, music, technology, engineering, art, fashion or business.[51]

12.4 *Reasoning and Illusion*

Lonergan's theory highlights the difference between intellect and reason. Human history has shown that intelligence is no guarantee of rationality, and that irrational decisions may be made by otherwise intelligent people. It may be argued

[49] Ian Robertson, *The Mind's Eye* (London: Bantam Press, 2002), p. 90.
[50] Ibid., p. 91.
[51] Ibid., p. 95.

that a central problem of the human condition is not so much a lack of intelligence, a lack of a capacity to form insights, but rather a lack of respect for the process of reasoning and rationality. Men who are capable of reasoning well when it comes to solving everyday problems or attaining short-term goals may sometimes seem utterly incapable of applying the same norms to the larger problems of life, and the attainment of goals that really matter.

One problem may be that reasoning and self-knowledge, according to Lonergan, demands the highest level of consciousness, and hence the greatest expenditure of effort. Frederick Hertzberg says:

> One would think that if it is so easy to spot the illusions of children, it should be equally easy to grasp the illusions of adults.
>
> Strangely, the reverse is true. Adults are incredibly blind. Perhaps this is because adult illusions are most pronounced in the area of self-awareness or self-concept. Men can strip themselves of the mysteries that attach to their conceptions of the physical universe, of their own bodies, even of their religious beliefs, but what they cannot give up are the illusions of who they are.[52]

12.5 *Deficient Cognitive Functions Related to Reasoning and Judgment*

The young child's mind may grasp an insight in the form of a relation and conceptualise that insight in some symbolic form. This formulation, however, is merely a hypothesis. The mind must now answer the question "Is it really so?", *An sit?* This presents as a problem, a feeling of 'cognitive dissonance' (Feuerstein), of 'disequilibrium' (Dewey, Piaget), generated by the incompatibility or incompleteness of data in a given situation. To answer the question, then, requires a logical reasoning process, a 'marshalling and weighing of the evidence' (Lonergan), as well as a return to original data, a *resolutio ad principia* (Aquinas). In other words, there is now a felt need to search for logical evidence to support one's hard-won insight and conception. In a passage already quoted, Matthews says that this

> search for adequate evidence and the process of marshalling and weighing the evidence is organised by our critical and reflective wonder. It is organised, in other words, by the same spirit of questioning which marshalled the insight but at a new reflective

[52] Frederick Hertzberg, *Work and the Nature of Man* (London: Staples Press, 1968), pp. 68 - 69.

level. [53]

Many of the lower level cognitive functions already dealt with in the previous two chapters can interfere with cognitive functioning at this level. However, there are also a number of deficient cognitive functions that appear consonant with this level. These are:

12.6. A *Lack of, or Impaired Need for Pursuing Logical Evidence*

According to Feuerstein, the felt need to search for logical evidence in support of a hypothesis may be deficient or completely lacking in a child. This might not be due to any lack of intelligence on the child's part. On the contrary, it might simply be due to a lack of positive mediation, or even the presence of active discouragement, by parents and significant others regarding this most central critical attitude. Feuerstein explains:

> The lack of need for logical evidence does not necessarily reflect a low level of intelligence, even though it certainly impairs cognitive functioning. Rather, it should be understood as as an attitude of the individual toward the quality of interaction between himself and his external and internal environment.[54]

The problem, in other words, is a faulty or poorly developed need system in which rationality and logical proof is not prominent and pertinent. The attitude of such a child may be 'passive-acceptant', with no felt desire to challenge and to question the way things are. The underlying 'pure desire to know', in other words, has either never been adequately developed at this level or may even have been actively discouraged or thwarted by significant others in the child's life.

Briefly, a student who displays such a lack of need for logical evidence may not be able to support judgments, responses, or assertions with adequate explanations. He may display a "So what?" or 'passive-acceptant' attitude when faced with problems. He may not be inclined to instigate an active search for a solution even when the existence of a problem is evident. While he may be able to display some insight or understanding, he may fail to apply the same logic to finding solutions. He may be inclined to respond to situations prematurely or irrationally, or may be easily persuaded to adopt the solutions of others to particular problems

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[53] W. A. Mathews, *Questioning and its Object,* p. 99.

[54] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 96.

without thinking them through.[55]

12.6. B *Lack of, or Restricted Use of, Inferential-Hypothetical Thinking*

The logical reasoning process used in making judgments involves "what if ..." or "if ... then" types of thinking. Implied in this type of reasoning is the close examination, or weighing up, of evidence in support of different alternative hypotheses or solutions to a problem. Feuerstein explains:

> The proposition "if ... then" is the expression of hypothetical thinking ... and (requires) a readiness to seek alternatives by which to explain phenomena.[56]

In other words, the child should be able to make valid generalisations and inferences, and to generate and test a number of different theories or hypotheses, based on available evidence.

The student who experiences a restricted use of inferential-hypothetical thinking may be unable to link events or see similarities among things in order to make generalisations and inferences. He may be inclined to view his world as disconnected, or 'episodic', and have difficulty drawing conclusions. He may not see other alternatives or explore other possibilities to explain phenomena. He may not even look for evidence to create hypotheses.[57] Once again, according to Feuerstein, the problem is not that the child does not have the propensity for inferential-hypothetical thinking or reasoning, but that he has never developed the skill to apply it in his everyday existence.

Feuerstein has not only identified a potential problem in a young person's reasoning, but he has also developed what might be termed a remedial method. Many of his IE instruments, among other things, draw the child's attention to the importance of the different forms of reasoning in forming judgments, and highlight any deficiencies in the child's own performance as they occur. Some of the instruments actually provide direct practical exercises in what he terms "what - if ..." reasoning.

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[55] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom* (Arlington, IL: SkyLight Publishing, 1996), p. 128.

[56] Reuven Feuerstein *et al*, *L.P.A.D.: Learning Potential Assessment Device Manual* (Jerusalem: Hadassah-Wizo-Canada Research Institute, 1986), section 3.13.

[57] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom,* p. 132.

12.6. C *Impaired Ability to Use Strategies for Hypothesis Testing.*

At Lonergan's third level of cognitive functioning, the level of judgment, not only must the child have the felt need to search for logical evidence for his judgment (12.6. A), and have the capacity to formulate alternative hypotheses for testing (12.6. B), but he must clearly also have developed the strategies and skills to actually test and weight up these various alternative hypotheses. Feuerstein explains that "in hypothesis testing, competing possibilities must be kept in mind, tested and either accepted or rejected before a valid hypothesis is finally selected from among them."[58]

A student with impaired strategies for hypothesis testing may fixate on a specific method for solving a problem, for example, instead of trying alternatives. In general, the student who experiences impaired ability to use strategies for hypothesis testing may be unable to devise or select the most appropriate method for testing a particular hypothesis. He may rely on guesses or estimates, for example, rather than on empirical evidence. He may use unsystematic or inefficient approaches to testing alternative hypotheses. Many children prefer to work out problems in the concrete, for example, rather than the more efficient means of interior reflection. He may also experience difficulty making decisions among alternatives because alternative hypotheses have not been successfully tested. As a college student, he may experience difficulty with multiple-choice questions and be impulsive in selecting what he regards as the most valid response, for example.[59]

12.7 *Chapter Conclusions*

This chapter has attempted to throw some light on the meaning of the precept "Be reasonable." Human reasoning is a complex and many faceted mental operation. The chapter has attempted to detail the different forms of reasoning involved in human thinking. Reasoning demands a new and different level of consciousness and intentionality. As it sublates the cognitional levels below, however, it also demands a new attentiveness, a new form of insight, and a form of conception which must decide among alternative statements like "Yes" or "No," "Probably" or "Probably not."

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[58] Reuven Feuerstein *et al*, *L.P.A.D.: Learning Potential Assessment Device Manual* (Jerusalem: Hadassah-Wizo-Canada Research Institute, 1986). See also Section 3.13 of this study.

[59] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom,* p. 134.

While it is clear that full development of reasoning skills makes its appearance only at Piaget's level of formal operations, yet many things still can and do go wrong with the proper functioning of reasoning and judgment even in adulthood. Again, some of Feuerstein's cognitive functions were examined in an effort to understand what can go wrong at this level of cognitive functioning. Once again a certain 'isomorphism' was apparent between the three functions considered and Lonergan's third level operations of reasoning and judgment.

Chapter 13

Lonergan's Fourth Transcendental Precept 'Be Responsible'

"All things are ready, if our minds be so."

William Shakespeare[1]

13.1 *Introduction - From Experience to Action*

It has already been argued in this study that Lonergan views questioning as an operator[2], or an organising principle. Experience is organised by answers to questions for intelligence of the type "*quid est?*", which in turn reach their term as increments of knowledge when they are sublated by questions for reflection of the type "*an sit?*", and correctly answered. But knowing is for the sake of doing, so judgements of fact give way to questions for deliberation of the type "is it good?", "is it worthwhile given these particular facts?". These are questions of value. One can say that, having satisfactorily answered the question "Is it so?" at the third level with a definitive "Yes", one can then go on to ask the next question for the fourth level of conscious intentionality, the question for value, "Is it good?" "Is it *probus*?" "Is it worthwhile?" or even, "Is it beautiful?" This leads to evaluation and decision, the stage of intentionality analysis whose term is responsible action in which the self may be said to consciously constitute itself. This overall picture or framework may be described as "the trajectory of human becoming, in its normative development."[3]

13.2 *The Affective Roots of Decision*

It has also been argued already that Lonergan rejects Scholastic faculty

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[1] William Shakespeare, *King Henry V*, Act IV Scene III, A.L. Rowse (Ed.), *The Annotated Shakespeare* (Orbis Publishing Ltd., London, 1978), p. 581.

[2] In Lonergan's philosophy a mental 'operator' may be described as a type of precognitive driving force, or motive power. As such, it is more fundamental and more basic than the cognitional and volitional operations of the mind: experience, understanding, judgment, and assent. Thus, it influences or 'operates' over the whole range of cognitive levels and mental operations. Lonergan's 'pure desire to know', also termed the 'spirit of wonder and inquiry' or 'Eros of the mind', and manifest as an innate questioning attitude, is just such an operator. It may be said to be the motive power which guides, marshals, and propels the cognitional process from one level of mental operation to the next.

[3] Glen Hughes & Sebastian Moore, "Hamlet and the Affective Roots of Decision", *Lonergan Workshop 7* (1988), p. 180.

psychology with its serviceable but rather simplistic separation of the mind into intellect, passions, and will. Because of its descriptive separation of these three components, Lonergan argues that this classical account of mind is incapable of giving a satisfactory explanation of the fundamental unity and cohesion of mental operations, and of the underlying unifying thrust of the 'pure desire to know', or the drive to self-fulfilment. Faculty psychology can also be viewed as a type of 'naive realism', associating the powers of the soul with something like an "already in here now" to be introspected.

Lonergan's view is supported by many modern psychologists including Goleman in his now famous book *Emotional Intelligence* and, more importantly, by serious researchers like Haywood. Haywood is well known for his attempts to integrate Feuerstein's theory and method of cognitive modifiability into the realm of cognitive psychotherapy. He says:

> Cognition is not the whole problem, nor is it the whole solution. People think, but they also feel and they also will. Traditional psychology had consciousness divided into the three components of cognition (thinking), conation (feeling), and volition (willing - the motivational component). Although it it unproductive to conceive of these as separate or even separable parts or processes, it is also unproductive to deny or ignore any of these aspects of human functioning.[4]

Piaget himself describes affectivity on the one hand and the intellectual functions on the other as "two indissociable aspects of every action"[5] and sees both areas as being influenced from earliest childhood by socialisation. According to him, there is never a purely intellectual act that is unaffected by emotion and, similarly, there is never a purely affective act totally devoid of comprehension.[6] However, while clearly identifying the importance of the affective particularly with regard to socialisation and, in turn, the interdependence of social and intellectual development, he fails to propose a theory of how affect and intellect are integrated in the production of human decision making, and subsequent action.

The importance of finding a theory which can integrate intellect and affect was also recognised by Vygotsky. In *Thought and Language,* for example, he says:

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[4] H. Carl Haywood, "Cognitive-Developmental Therapy: Overview", Alex Kozulin & Yaakov Rand (Eds.), *Experience of Mediated Learning* (New York: Pergamon, 2000), p. 292.

[5] Jean Piaget, *Six Psychological Studies* (New York: Random House, 1967), p. 33.

[6] Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy". In L.S. Segal & Brainerd (Eds.) *Alternatives to Piaget* (New York: Academic Press, 1978) p. 29.

> Their separation as subjects of study is a major weakness of traditional psychology, since it makes the thought process appear as an autonomous flow of "thoughts thinking themselves," segregated from the fullness of life, from the personal needs and interests, the inclinations and impulses, of the thinker. Such segregated thought must be viewed either as a meaningless epiphenomenon incapable of changing anything in the life or conduct of a person or else as some kind of primeval force exerting an influence on personal life in an inexplicable, mysterious way.[7]

Lonergan's approach to the integration of intellect, heart, and will transposes the phenomenon of will into the context of the fourth level, or fourth operation, of the dynamic unfolding of rational conscious intentionality. This has been described by Hughes and Moore as a "revolutionary framework" for interpreting human activity:

> It is revolutionary in explaining how the soul's powers operate under the design of a single principle whose vector is the desire to know and love, and whose major levels or operations are specified by the subsidiary principles that are the elemental types of question in which that desire refracts.[8]

The thrust or substance of Lonergan's theories in this area is that for decision to give rise to action the subject must first recognize and assent to a good involved. The initial apprehension of values is given in feelings, feelings that respond to a good like beauty, virtue, truth, or even good deeds. A feeling, which Lonergan describes as an 'intentional response to a good or a value' comes to the aid of decision in producing action. One could say that "judgements of value and responsible decisions cannot move into action without the current of affectivity to support them."[9]

Judgements of value, one can argue, are a matter of knowing, but not yet of doing. Only doing makes actual the good decided upon, the course of action known to be worthwhile. But doing good does not issue automatically from knowing good. This is best expressed in the following more complete quotation from Hughes and Moore:

> Indeed, this is the very area in which the upward movement of the human spirit notoriously hesitates; and this is largely due to the fact that it is here that the role of affectivity becomes crucial. Judgements of value and responsible decisions cannot move into

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[7] Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. 10. According to Kozulin, the problem of the interrelation between intellect and affect was addressed directly by Vygotsky in his last, unfinished work, *A Study of Emotions* (1933). This has been published in Vol. 6 of the Russian version of his *Collected Papers*, but is not yet translated into English.

[8] Glen Hughes & Sebastian Moore, "Hamlet and the Affective Roots of Decision," p. 179.

[9] Ibid., p. 180.

action without the current of affectivity to support them.[10]

Without feelings to support decision, our intentions have little or no chance of becoming the concrete reality of deeds, much less becoming habitual virtue. While Lonergan may differ from other Thomists in the clarity of this overall scheme, nonetheless it will be argued that his theories are perfectly consistent with the works of neo-Thomists like Josef Pieper, for example, who views the central core of love as the assent to the goodness or value of the being of another, as exemplified in his expression: "It is good that you exist."[11]

13.3 *Affectivity and Images*

The idea that imagination is vital for thinking because "without images understanding is impossible" has already been introduced in some detail,[12] and stems from Aristotle's *De Anima*. This was later adopted by Aquinas in his *Commentary on Aristotle's De Memoria et Reminiscentia.*[13] In *Method in Theology* Lonergan emphases that at the fourth level of conscious intentionality feeling is vital, and the reason why feeling is so essential if one is to move from judgement to decision has to do with symbols. For Lonergan, a "symbol is an image of a real or imaginary object that evokes a feeling or is evoked by a feeling."[14] Affectivity, in other words, is carried by images[15] . The imaginal life of the individual is, therefore, crucial for affectivity and for the decision which depends on affectivity. Just as the reaching of a judgement of fact requires a return to the relevant image or images that released the insight, so choice and decision also send a person deep into the world of internal images for support and, at the same time, deep into the world of feeling. Such images, according to Lonergan, are also symbols. Hughes and Moore explain:

> A person's images and dreams reflect the person's connections with family, with culture, with race, with earth, with God. ... And the images that are liable to present themselves when a time for crucial decision is approaching will reflect one's relationships with mother and father and other archetypal presences. From them must be released the flood of psychic energy needed.[16]

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[10] Ibid., p. 180.

[11] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), pp. 139 - 281. See also Section 14.5.

[12] See Section 10.6.

[13] Aristotle, *De Memoria et Reminiscentia*, $449^{b}30 - 450^{a}25$.

[14] Lonergan, Bernard J.F., *Method in Theology* (London: Darton, Longman and Todd, 1972), p. 64.

[15] Ibid., pp. 64 - 67.

[16] Glen Hughes & Sebastian Moore, "Hamlet and the Affective Roots of Decision", p. 182.

As Freud proposed, and as many others have since confirmed, fantasies and dreams have meaning. Lonergan would add that they also have intentional status. So, as well as deriving self-knowledge through insight into the explanatory structure of cognitional operations, one can also derive self-knowledge through dramatic and aesthetic insight into a "forest of symbols"[17], whether these arise as dream images or personal reactions to particular people or situations. This study has already examined the role of music and the arts in general in producing what has been termed 'self-appropriation of emotional interiority'. Lonergan's 'pure desire to know' can operate just as readily, just as 'instinctively', in this area as in the purely cognitive. Here also, it operates as part of the vibrant "intentional thrust of conscious being towards its fulfilment"[18] . Such fulfilment derives from self-knowledge and the deep personal freedom which accompanies it, the ability to chose the self one ought to be. According to Hughes and Moore: "It is in the world of primal images, those in which the whole of our affect as parented and related beings is stored, that our emergence into a full selfhood is permitted or continually frustrated."[19]

Lonergan, then, holds that affect[20] is necessary to translate decisions into action, and that images are necessary for the proper operation of intentional affect. He claims that judgement and decision can be undone, and human development frustrated, by affective dissonance, emotional confusion, caused by a maze of self-contradicting images and self-contradicting feelings. Freud and his followers gave many examples of arrested development due to such emotional dissonance. In their paper quoted here, Hughes and Moore take the example of the character of Hamlet in Shakespeare's play to illustrate the practical usefulness of Lonergan's scheme in exemplifying this most complex aspect of the human psyche.

And as regards the educational implications of this aspect of Lonergan's theories, Hugo Meynell is his book *An Introduction to the Philosophy of Bernard Lonergan* explains that "novels, plays and poems convey insights and stimulate reflection, but by an indirect mode of operation, in which the immediate effect of the words is to evoke images, memories and feelings,"[21] and that the Arts in general "provide images from which one can reach insights, rather than formulating the

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[17] Ibid.

[18] Ibid., p. 183.

[19] Ibid.

[20] The terms 'feeling' and 'emotion' are used interchangeably in this study. The term 'affect', on the other hand, refers only to feelings and emotions which lead to action.

[21] Hugo Meynell, *An Introduction to the Philosophy of Bernard Lonergan* (Macmillan, London, 1991), p. 97.

insights explicitly in the manner of a scientific treatise." [22] Bruno Bettelheim devotes his book *The Uses of Enchantment* to formulating and explaining this same principle in regard to children's fairy tales. In this book he says:

> When all the child's wishful thinking gets embodied in a good fairy; all his destructive wishes in an evil witch; all his fears in a voracious wolf; all the demands of his conscience in a wise man encountered on an adventure; all his jealous anger in some animal that pecks out the eyes of his arch rivals - then the child can begin to sort out his contradictory tendencies. Once this starts, the child will be less and less engulfed by unmanageable chaos.[23]

13.4 *The Human Good or Value as the Intended Object of Education*

It has already been argued that the 'pure desire to know' intends as its object being in all its fullness. But to Lonergan being and the good are convertible. He explains simply: "The good exists, and what exists is good."[24] Thus, one can say that the 'pure desire to know', the 'Eros of the mind', intends the good. It follows that the intended object of the process of coming to know, the process of learning and, by extension, the process of education itself, is being or 'the good' in all its fullness.

What is under consideration here is not any objective ethical or moral 'good' or 'evil', but good and evil as they are perceived so by a particular culture or by a particular individual in that culture. What is being regarded here, in other words, is a response to a perceived good, a response which is both cognitive and emotional and corresponds to Lonergan's fourth level of conscious intentionality. A value may then be described as a cognitional and emotional attitude towards something which is perceived to be good. It implies a subjective appreciation of what is good. Thus the word 'value', whether verb or noun, implies a human response to a perceived good. It follows that the words 'value' and 'good' are not, strictly speaking, interchangeable. Values can be taught, communicated, or mediated by parents, teachers, or institutions, while good and bad inhere in particular things, goals, conditions, or situations. Lonergan explains that "true and false are in the mind but good and evil are in things."[25] The degree of confusion which surrounds the two terms, 'good' and 'value', is due to the fact that a value is itself a good, and most societies consider it a value, valuable, or highly desirable, or simply 'good', to

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[22] Ibid., p. 101.

[23] Bruno Bettelheim, *The Uses of Enchantment* (London: Penguin Books, 1991), p. 66.

[24] Bernard Lonergan , *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education*, p. 27.

[25] Ibid., p. 29.

communicate the values of that particular culture to their children.

Lonergan strives to bring order into the realm of good and values, using his dynamic cognitional structure. In Volume Ten of his *Collected Works* he identifies three levels of good, corresponding to the three levels of cognition - experience, understanding, and judgment. For the sake of completion, however, the fourth cognitive level, decision/action, and its corresponding good have been added here. Related to each level of consciousness and intentionality one can say there is a corresponding 'particular good':

Level of Conscious Intentionality		*Corresponding Good Intended*
1.	Experience	Object of Human Appetite
2.	Understanding	Good of Order
3.	Judgement	Good of Value
4.	Decision/Action	Virtue

Since this follows closely his invariant structure of cognitional and volitional functioning, Lonergan categorises the above differentiation of the corresponding types of good as his 'invariant structure of the good'. What follows is a more detailed examination and explanation of each type of good identified, and its relation to the corresponding level of consciousness and intentionality.

13.4.1 *The Good as Object of Human Appetite*

In Lonergan's view, an appetite is any intentional response to a good at the elementary level of experience. These goods are not so much the appetites themselves but the particular goods which satisfy these appetites in man. For appetite one could substitute the words 'drive', or 'need'. Thus the human person may be said to have an appetite for food, for sex, and for emotional warmth and security. Lonergan classes each of these as a 'particular good' for man. "When attained, it is experienced as enjoyable, pleasant, satisfying."[26] However, at this level there is also the 'down side'; Lonergan explains: "We experience aversions no less than desire, pain no less than pleasure. Consequently, on the elementary

[26] Bernard Lonergan, *Understanding and Being,* p. 225.

level, the good is coupled with its opposite, the bad." [27]

13.4.2 *The Good of Order*

Thankfully, the human person also has the 'pure desire to know' which drives him beyond experience, beyond the mere empirical, beyond mere appetite, to grasp the intelligible. One can say that understanding also has its pleasures; this time it is the joy of insight which produces satisfaction. This corresponds to Lonergan's second level of good, "the good of order." Thus, "through knowledge-generating desire there comes to light a second meaning of the good."[28]

By the good of order Lonergan means the order, or series of orders, which ensure the regular recurrence of the particular goods for man through coordinated schemes of human operations. The family, for example, may be regarded as a good of order. It is a coordinated structure in which there is a flow of particular goods like food, affection, warmth, security and education, on an ongoing and regular basis, not just to the children in the family but also to father and mother themselves. The family in turn is recognised as a value in most societies. In the same way, the school can also be regarded as a good of order, and because it is a good, it is also valued, or is a value. The particular goods disseminated in the latter case, in can be argued, are not just education and 'acculturation' but also the social good of affection and warmth of peers, and the emotional good of satisfaction of approval and achievement.

According to Lonergan, there are four different conditions which are necessary if a good of order, like the family or the school, is to fulfil its function to guarantee the regular flow of particular goods to those involved. These are: "a regular recurrence of particular goods, coordinated human operations, a set of conditions of these operations, and personal status." [29] This quotation mentions that certain "conditions" must be fulfilled if the regular recurrence of particular goods is to be guaranteed. According to Lonergan, these conditions are threefold:

(1) The establishment of habits in the subject (whether cognitional habits, volitional habits, or skills),

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[27] Ibid.

[28] Ibid., p. 226.

[29] Bernard Lonergan S.J. in Robert M. Doran & F.E. Crowe (Eds.), *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education* (University of Toronto Press, Toronto, 1993), p. 34.

(2) The existence of institutions which are mechanisms "set up for making decisions", and

(3) The presence of the requisite material equipment - the material means of facilitation co-operation, like school buildings and offices.

The final aspect of the good of order, "personal status", mentioned by Lonergan in the above quotation arises when coordinated operations resulting in a flow of particular goods give rise to personal relations that are congruent, or conformable, or consistent, with the structure of the good of order.

13.4.3 *Good of Value*

But the 'pure desire to know' is transcendent; it heads beyond the satisfaction of insight to the further question as to whether the insight is correct: "Is it so?" This is the level of judgment. And if the answer is "Yes", then the existence, the reality, the being, of the insight is affirmed. But to Lonergan, the being and the good are synonymous: "The good exists, and what exists is good".[30] So the same act of assent that affirms the existence, or truth, or being, of the insight, may also affirm the goodness, or the value, of the object or truth grasped by the same insight.

This third aspect of the invariant structure, value, can come from any one of three points of view or from a combination of all three. The good of order represented by a school, for example, may be evaluated on the basis of whether or not it runs smoothly and satisfies everyone, then it is said to have "aesthetic value." It may be judged on the basis of whether or not it works towards developing the individual who is part of the system into a human person, intelligent, rational, free, responsible, able to take a stand on the basis of true and false, right and wrong; then it is said to have "ethical value". Finally, it may be judged on the basis of whether or not it goes one step beyond ethical value in helping the autonomous member of the system to stand before his God in free and loving submission; then it is said to have "religious value."[31]

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[30] Ibid., p. 27.

[31] James W. Sanders, "A New Approach to a Catholic Philosophy of Education", *Jesuit Educational Quarterly*, (October 1962 - January 1962), p. 96.

13.4.4 *The Good of Virtue, or Human Values as Guiding Principles for Action*

Values are a vital consideration in any treatment of the development and education of the human person because such values ultimately give rise to general principles of action which, in turn, become strong motivating factors in one's living. Most people, for example, will accept that knowledge is a good thing to *have*; being well informed and clear headed is a good way to *be*, while muddle and ignorance are to be avoided[32] . Thus the human reaction to the good of knowledge is not just an isolated value, or an inoperative mental attitude, but is in itself a guiding principle for action or *doing*. Thus, in Lonergan's scheme, the question *An sit?*, "Is it so?" is followed by a question of value "Is it worth while?". If the answer is "Yes!", the emotion which accompanies the act of assent to the perceived good carries the individual forward to action. It is of the general nature of values that they give rise to such practical principles. And, Finnis insists, such a guiding principle as "knowledge is a good to be pursued and ignorance is to be avoided," in turn, "serves to orient one's practical reasoning, and can be instantiated (rather than 'applied') in indefinitely many, more specific, practical principles and premises."[33]

However, it is equally clear that not everyone actually recognises knowledge as a value. For example, it is one characteristic of what Feuerstein terms 'the culturally deprived' that knowledge in this particular case is simply not valued. The attitude of respect for truth and knowledge has to be mediated to children by significant others in their lives. The innate 'pure desire to know', in other words, is a necessary but insufficient condition for the emergence of such a value. John Finnis explains that:

> On the contrary, the value of truth becomes obvious only to one who has experienced the urge to question, who has grasped the connection between question and answer, who understands that knowledge is constituted by correct answers to particular questions, and who is aware of the possibility of further questions and of other questioners who like himself could enjoy the advantage of attaining correct answers.[34]

As suggested above, however, such experience does not come unsolicited. It is

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[32] One can show that any statement to the contrary: "Human knowledge is *not* a good thing" is 'an operationally self-refuting proposition'; that is, a proposition which contradicts itself. "For one who makes such an assertion, intending it as a serious contribution to rational discussion, is implicitly committed to the assertion that he believes his assertion is worth making qua true; he thus is committed to the proposition that truth is a good worth pursuing or knowing." John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 74.

[33] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 63.

[34] Ibid.

normally mediated to the child by parents, family, and teachers.

However, given that each and every individual has the 'pure desire to know' as an inner urge or appetite, is a respect for knowledge not inevitable if one has the proper motivating conditions in one's environment? The answer of course is "No". One still has the level of decision, and decision involves will and habituation. Will can be quite perverse at times and habituation can be weak. Lonergan says:

> Knowledge, of itself, grounds different possible courses of action. Because knowledge has that polyvalence, so to speak, that multiplicity of uses, we are led to posit a distinct type of operation, habituation, act.[35]

13.5 *The Variant Structure of the Human Good - The Differentials*

The above categories of the good have been described by Lonergan as 'invariant'. They derive from the invariant structure of human cognition and volition and are the same in all cultures and in all ages. However, Lonergan holds that the human good is not static or fixed or permanent for all time, but changes as human knowledge or human culture changes. This is what Lonergan means by the human good being a "historical process". We can also say that the human good is 'comprehensive' in that it includes everything about everything, the fullness of being. Lonergan also maintains that the good is not abstract but 'concrete' in that it inheres in things. It is also concrete, however, in the sense that the good is not ideal or utopian but must be both tangible and attainable.

The human good, then, is not static but 'dynamic'. It is dynamic in the sense that in life one is always in process of knowing more and more of what is good. It is dynamic also in the sense that frequently, according to Lonergan, "the good in this world comes out of evils."[36]

The variant structure of the human good is essentially open; the particular good, the type of order, the specific values, have not been determined. These will vary according to time and place, but they will vary according to certain patterns. There are certain variables which determine how the variant structure will be concretised within any given society at any particular time. According to Lonergan, these variables or 'differentials' are:

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[35] Bernard Lonergan, *Understanding and Being*, p. 227.

[36] Bernard Lonergan , *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education*,p. 30.

1) The level of intellectual development which has been attained in a particular culture.

2) The degree to which evil has penetrated into man and his world.

3) The degree to which redemption has liberated man and his world from evil.

1) Man's intellect and reason, according to Lonergan, develop or move towards more complete actuation with time. They can be viewed on a social as well as on an individual plane. On an individual plane intellect finds its term in insight. On a social plane, it develops through an ever accumulating and expanding collection of insights. The combined effect of these insights on the invariant structure at any time constitutes the level of 'civilisation' at that time. The level of 'cultural' development, on the other hand, is determined by the way in which the human good is apprehended. As such it takes place within the subjects who live in the developing civilisation. It is a critical, reflective process which finds its expression in art, science, philosophy and theology. Similarly, Feuerstein's 'cultural deprivation' is the state of the individual who has failed to apprehend the human good of his own culture because of a failure in the normal human process of 'mediation' whereby insights and values are normally conveyed to the young. Sometimes this can happen because of social upheavals or natural disasters.

2) The second variable or 'differential' which effects the variant structure of the human good is the degree to which evil or 'sin' has penetrated into man and his world. By sin Lonergan means any form of evil, like poverty or social unrest, not only moral and religious evil. Evil can enter at any time into any or all of the four aspects of the invariant structure.[37] In place of 'particular goods' there can be particular evils of every nature and description. Evil can likewise penetrate into the good of order in as many ways as there are aspects of the good of order. A teacher, for example, may become preoccupied with his own convenience, pride, and selfishness to the detriment of his students' welfare and development. Thus sin perverts the object for which a school exists in the first place. Evil can also negate the good of value. Thus an educator in the day-to-day organisation of his school and its curriculum can easily lose sight of the development of the spiritual or *being* aspect of his students as the central factor in the equation, thrusting instead the lesser, more secondary value of examination results to the centre of importance and attention.

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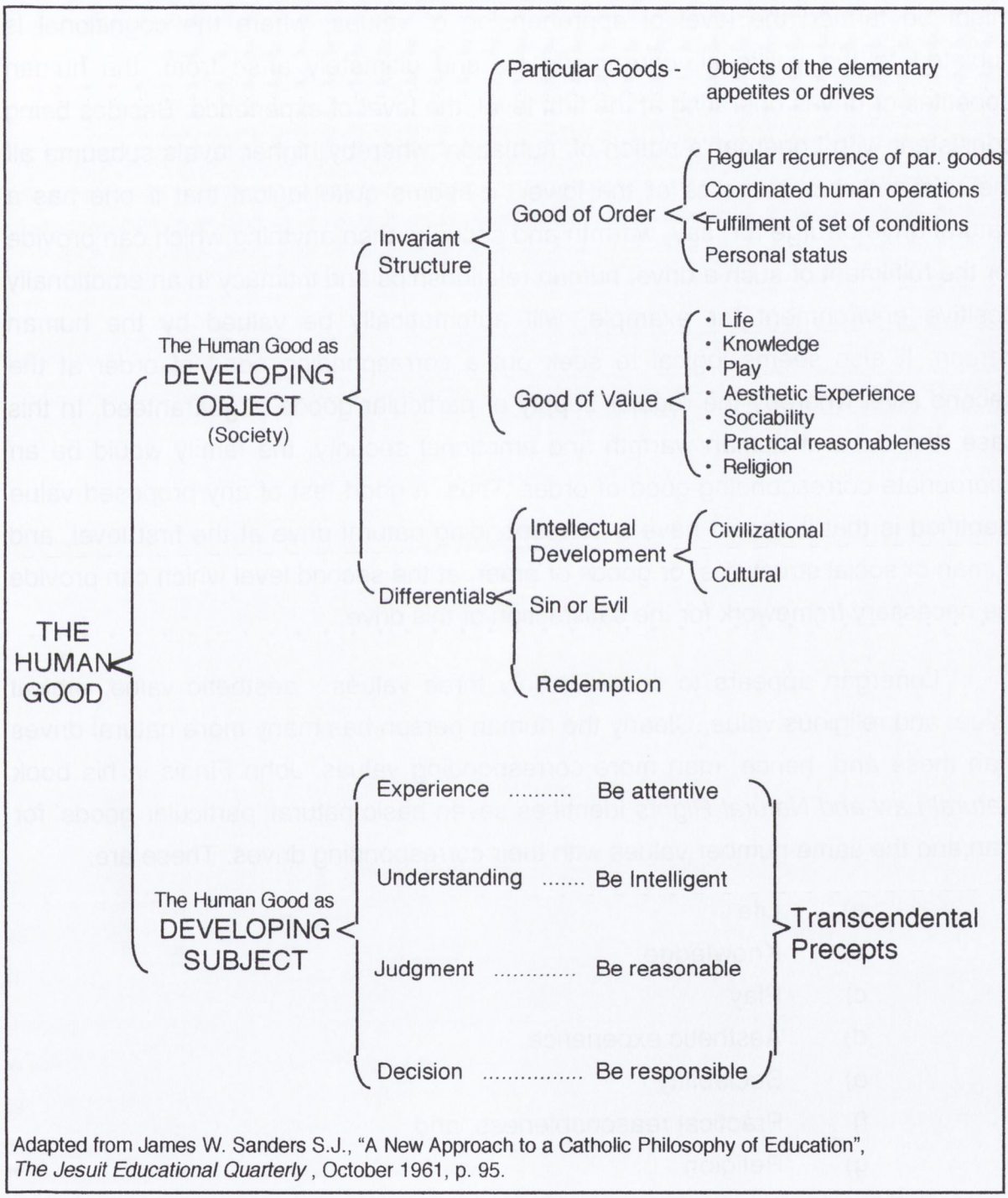
3) The third variable or differential of the variant structure of the good is the degree to which redemption has liberated man and his world from evil. By redemption Lonergan means any attempt or effort to overcome evil. More specifically, he means redemption in the Christian sense according to which reason alone is not equal to the task of redeeming the social order, but direct Divine help is also necessary in the form of grace, which perfects nature and ensures the human good even in this life.

13.6 *Values, Work, and the Human Good as Subject*

According to the definition used in this study, *work* is said to be done if an action (a *doing)* adds value to the subject himself, to something in his environment, or both. Thus, adding knowledge to either oneself or another, for example, may be termed *work*. Similarly, enhancing the good of order in, say, a school through good management systems or a good computer record system is adding to a perceptible value with regard to the school; in the process, the school is made more efficient and even, perhaps, more effective, and so such activity must also qualify as *work*. Clearly, according to this definition, *work* has a direct bearing on the good of the subject performing the action. This is not simply a question of reward or remuneration but also of the inner growth which results from the exercise of his dynamic operations of experience, understanding, judgment and decision, in the course of his *work*. Then, there is also the inner growth in personal integration and self-esteem resulting or ensuing from a job well done.

Most of what has gone before relates to what Lonergan terms 'the human good as developing object', by which he means everything to which the human subject relates, or what may be loosely termed 'society'. One must also bear in mind, however, that all of these objective goods, all of this interaction with the world around, with society, is the means by which the individual subject himself grows, both by direct interaction with the environment and by intentional and reciprocal mediation by significant others in that society. These subjective goods which are a product of his interaction with society and which make for personal growth Lonergan terms 'the human good as developing subject'. That 'the human good as object' exists by and for 'the human good as subject' is a central tenet of this study. This is by no means universally accepted, however, as has already been discussed

in that part of the study involved in relating what is termed the *being* aspect of education with its *having* and *doing* aspects. The schematic diagram below illustrates a summary of what has been dealt with thus far relating to values:



Adapted from James W. Sanders S.J., "A New Approach to a Catholic Philosophy of Education", *The Jesuit Educational Quarterly*, October 1961, p. 95.

This diagram also gives an overview of Lonergan's 'conceptual scheme' or framework of his treatment of the human good and values:

13.7 *The Seven Basic Forms of Human Good and their Corresponding Values*

Lonergan maintains that the human values operating at this fourth level, what might be termed the level of apprehension of values, where the cognitional is sublated to the volitional, correspond to, and ultimately arise from, the human appetites or drives operating at the first level, the level of experience. Besides being consistent with Lonergan's notion of 'sublation' whereby higher levels subsume all the relevant characteristics of the lower, it seems quite logical that if one has a natural drive or urge for, say, warmth and security, then anything which can provide for the fulfilment of such a drive, human relationships and intimacy in an emotionally positive environment for example, will automatically be valued by the human person. It also seems logical to seek out a corresponding good of order at the second level whereby the regular supply of particular goods is guaranteed. In this case, the case of human warmth and emotional security, the family would be an appropriate corresponding good of order. Thus, a good test of any proposed value identified is that it should have a corresponding natural drive at the first level, and human or social structures, or goods of order, at the second level which can provide the necessary framework for the satisfaction of this drive.

Lonergan appears to consider only three values - aesthetic value, ethical value, and religious value. Clearly the human person has many more natural drives than these and, hence, man more corresponding values. John Finnis in his book *Natural Law and Natural Rights* identifies seven basic natural 'particular goods' for man,and the same number values with their corresponding drives. These are:

a) Life
b) Knowledge
c) Play
d) Aesthetic experience
e) Sociability
f) Practical reasonableness, and
g) Religion

He further claims that all other goods or values can be reduced to these seven, either considered singly or in various combinations. He explains:

> Now besides life, knowledge, play, aesthetic experience, friendship, practical reasonableness, and religion, there are countless objectives and forms of good. But I suggest that these other objectives and forms of good will be found, on analysis, to be ways or combinations of ways of pursuing (not always reasonably) and realizing (not always successfully) one of the seven basic forms of good, or some combination of them.[38]

Gordon Allport in his book *Pattern and Growth in Personality* quotes "six major value types."[39] These, with the omission of "Play", correspond very well with those of Finnis, although he uses different names for these values and his descriptions tend to be more personalistic and psychological. It can also be shown in what follows that all seven of Finnis' basic forms of good and value can be viewed in terms of one or other of the three basic modes of human existence, *being*, *having*, and *doing*.

a) *The Value of Life*

Finnis explains:

> The term 'life' here signifies every aspect of the vitality which puts a human being in good shape for self-determination. Hence life here includes bodily (including cerebral) health and freedom from the pain that betokens organic malfunctioning or injury.[40]

Clearly, this includes the good or value corresponding to the drive or urge for self-preservation, which Fromm talks about when he says:

> It seems that nature ... has endowed every living being with the wish to live, and whatever he believes to be his reasons are only secondary thoughts by which he rationalizes this biologically given impulse.[41]

The value, however, is deeper and wider in its scope than the basic urge from which it derives. It deals with such questions as "*how* we want to live - what we seek from life, what makes life meaningful for us."[42] One can say that this value has 'sublated' the more basic urge or drive, just as both insight and judgement deepen, widen, and generally improve upon the knowledge gleaned from mere data of sense, under the impetus of the 'pure desire to know'.

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[38] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 90. Finnis is Professor of Law and Legal Philosophy at the University of Oxford. This book is particularly useful and relevant to this study as it makes frequent reference to classical and scholastic sources, as well as to more contemporary philosophers.

[39] Gordon Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 296.

[40] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 86.

[41] Erich Fromm, *The Art of Being* (London: Constable, 1993), p. 1.

[42] Ibid., p. 2.

Some of the goods of order identified as serving this basic drive are:

1. Hospitals and "the teamwork of surgeons and the whole network of supporting staff, ancillary services, medical schools, etc."
2. Road safety laws and programmes.
3. Lifeboat service and personnel.
4. Famine relief organisations.

Controversially, Finnis places the values associated with "the transmission of life by the procreation of children" under the heading of this basic good of life. Against those who object that this should belong to the sexual urge rather than to that of self-preservation, he counters by pointing out that the urge to copulate is not simply related to one particular value, saying that "as a human action, pursuit and realization of value, sexual intercourse may be play, and/or expression of love and friendship, and/or an effort to procreate." [43] One can distinguish the urge and decision to have children from the sexual urge, just as one can also distinguish the urge and decision to have children from the urge and decision to cherish and educate them. The latter, according to Finnis, could belong more to the good and value of sociability and friendship.

One aspect of the urge for self-preservation not touched upon by Finnis is the secondary urge simply to *have*. It has been shown elsewhere how Marcel demonstrated that the urge to *have* stems from the basic experience of corporality. Allport agrees with this view when he says that the person who holds this value of *life*

> is characteristically interested in what is useful. Based originally upon the satisfaction of bodily needs (self-preservation), the interest in utilities develops to embrace the practical affairs of the business world - the production, marketing, and consumption of goods.[44]

This attitude or value frequently comes into conflict with other values. The person with a *having* attitude towards life, for example, "wants education to be practical, and regards unapplied knowledge as a waste."[45]

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[43] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 86.
[44] Gordon Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 297.
[45] Ibid.

b) *The Value of Knowledge*

It has been argued already that the basic drive of the pure desire to know gives rise to the good or value of knowledge. Lonergan would point out that not only does each urge have at least one corresponding good or value, but that each urge, with its particular good, can also have many corresponding goods of order. In the case of 'knowledge', the goods of order would naturally be institutions or structures like schools, universities, and libraries.

Since what Finnis is discussing is "knowledge considered as desirable for its own sake, not merely instrumentally," this value belongs to the *being* mode of living, more than to that of *having*. Allport, however, gives a much more practical description of this value in terms of the 'mind-set' of the 'ideal' individual driven by this value:

> In the pursuit of this goal he characteristically takes a "cognitive" attitude, one that looks for identities and differences, one that divests itself of judgments regarding the beauty or utility of objects, and seeks only to observe and to reason. ... His chief aim in life is to order and to systematize his knowledge.[46]

c) *The Value of Play*[47]

Surprisingly, Finnis recognises play as a basic human good or value with a corresponding drive or urge to play manifest from the earliest years of life. He describes it as a "large and irreducible element in human culture."[48] This notion appears to be supported by Maritain when he says that play "possesses a value and worth of its own."[49] Allport, however, while recognising equivalent values to the other six, proposes nothing similar to Finnis' value of 'play'.

Piaget it must be remembered also recognised the importance of play as 'pure assimilation' whereby the child widens the scope of each newly acquired schema or grouping of schemas by exercising them on as many new objects or situations as possible, thus reinforcing schemes of operation which have already been established or learned. It also implies minimal effort on the child's part.

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[46] Gordon Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 297.

[47] See also "The Role of Sports in Education", Section 11.12.

[48] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 87.

[49] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 55.

Looking at things from Lonergan's perspective, it is possible that play is the free flowing, uninhibited exercise of the dynamic mental operations of experience, understanding, judgment and decision, exercised for exercise's sake. Finnis puts things more mundanely when he says that

> each one of us can see the point of engaging in performances which have no point beyond the performance itself, enjoyed for its own sake. The performance may be solitary, or social, intellectual or physical, strenuous or relaxed, highly structured or relatively informal.[50]

One corresponding good of order which is designed by society to facilitate this urge to play, as well as providing the vehicle to mediate the corresponding good and value is, again, the school. Jacques Maritain, for example, says:

> Play has an essential part, though secondary, in school life; it possesses a value and worth of its own, being the activity of free expansion and a gleam of poetry in the very field of these energies which tend by nature towards utility.[51]

Maritain identifies an important aspect of play which is that it brings a *being* aspect into activities which might otherwise have a purely utilitarian or *having* value. In other words, from the viewpoint of the 'triarchic model', play is not *doing* for the sake of *doing*, nor *doing* for the sake of *having*, but *doing* for the sake of *being*.

To explain this latter point more fully, one can say that while the good lies most often in some object which is being valued, and while values lie in the subjective response of the subject, the good of play lies in some activity of the subject himself which the subject perceives as good. However, having said that, it is clear that since all values are a response to basic human needs and urges, and since all goods are the satisfaction of both, then it is clear that the mediation of these same values at home or at school in fact enhance the *being* mode of a child's existence. Finnis implies as much when he says:

> The basic forms of good are opportunities of *being*; the more fully a man participates in them the more he is what he can be. And for this state of being fully what one can be, Aristotle appropriated the word *physis*, which is translated into Latin as *natura*. So Aquinas will say that these requirements are requirements not only of reason, and of goodness, but also ... of (human) nature.[52]

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[50] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 87.

[51] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 55.

[52] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 103

d) *The Value of Aesthetic Experience*

The fourth basic good, or value, or component in the flourishing of the individual person is, according to Finnis, 'aesthetic experience'. Aesthetic experience, like play, is not totally passive and does entail action, or *doing*, of one's own. Finnis says that

> what is sought after and valued for its own sake may simply be the beautiful form 'outside' one, and the inner experience of appreciation of its beauty. But often enough the valued experience is found in the creation and/or active appreciation of some *work* of significant and satisfying form.[53]

For Lonergan, the good and the beautiful are synonymous; the good is always beautiful and the beautiful is always good. In the same way, he sees that being is always good: "The good exists, and what exists is good."[54] So, in the same way being is always beautiful and, by extension so also is truth. Aesthetic experience, then, applies to the whole realm of existence and not just to the artistic; it is none other than the cognitive and emotional response to a truth, or a good, or a value which constitutes Lonergan's fourth level of conscious intentionality.

Assenting to the beautiful involves exercising a faculty which also loves and assents to the good and the true. Thus, an elegant solution in mathematics is just as capable of eliciting an aesthetic assent of love as is a beautiful melody. The matter which is communicated or expressed is quite different, but the response is similar. What the mind grasps in each case is form. However, the mind cannot respond in this way without some prior knowledge of mathematics or music. This begs the question, are there forms which are inherently beautiful in themselves, as Finnis seems to be suggesting above, or is form merely a vehicle by which beauty and aesthetic experience is communicated? The answer appears to be both "yes" and "no". There are musical cords which are said to be attractive in themselves. Music, however, like the other arts is, according to Langer, a mode for the expression of human affect or emotionality.[55] The same certainly cannot be said of mathematics. These ideas and the notion of beauty itself are considered in more detail later in this chapter.[56]

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[53] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 88.

[54] Bernard Lonergan , *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education*, p. 27.

[55] See Section 11.11.

[56] See Section 13.10.

As a value, aesthetic experience is a guiding principle of action. Gordon Allport describes the 'ideal' person driven by this value:

> The aesthetic man sees his highest value in *form* and *harmony*. Each single experience is judged from the standpoint of grace, symmetry, or fitness. He regards life as a manifold of events; each single impression is enjoyed for its own sake. He need not be a creative artist; nor need he be effete; he is aesthetic if he finds his chief interest in the artistic episodes of life.[57]

e) *The Value of Sociability*

Much of what is to be said about sociability and its role in education will be dealt with in Part IV of this study, dealing with 'intersubjectivity'. Viewed as a value, however, sociability may be said to be a response to that basic human drive or urge which might be termed 'the need for human warmth and security'. Like all values, it involves both the cognitional and the affective. In its weakest form it is "realized by a minimum of peace and harmony amongst men." It ranges through all the various forms of human community to "its strongest form in the flowering of full friendship."[58] Allport says:

> The highest value for this ideal type is *love* of people, whether of one or many, whether conjugal, filial, friendly, or philanthropic. The social man prizes other persons as ends, and is therefore himself kind, sympathetic, and unselfish.[59]

Clearly, the goods of order which facilitate the satisfaction of this basic need of sociability are many and varied, including the family, the school, and all the various clubs and groups which provide a sense of belonging and camaraderie. In adult life, the work-place provides one of the most important sources of the good of sociability. It is in the work-place that Lonergan's intersubjective feelings, 'community of feeling', 'fellow feeling', 'psychic contagion', and 'emotional identification' combine with *work* to provide the necessary 'synergy' for effective human co-operation. Synergy itself may be regarded as a value, but it may be argued that it is actually a composite of several more basic values, including that of 'practical reasonableness'.

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[57] Gordon Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 298.
[58] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 88.
[59] Gordon Allport, *Pattern and Growth in Personality,* p. 298.

f) *The Value of Practical Reasonableness*

Just as 'the pure desire to know' drives or impels the human person to be intelligent and, hence, to value knowledge, so the same basic drive, according to Lonergan, impels him to be both responsible and decisive; that is, to exercise 'practical reasonableness', or 'prudence'. Society in general not only requires that its members be responsible and decisive but also offers them the structure, the opportunity, the 'good of order', through which to realise this value. According to Finnis, 'practical reasonableness'

> is the basic good of being able to bring one's own intelligence to bear effectively (in practical reasoning that issues in action) on the problem of choosing one's actions and lifestyle and shaping one's character.[60]

This is as good a definition as one can find of the so called 'cardinal virtue' of prudence. It might be objected that this 'virtue' belongs by right to 'the human good as developing subject', as also does the value of knowledge. However, society, 'the human good as developing object', requires that both values be enshrined in its various institutions, if it is to achieve its end. To this purpose, for example, most communities insist that compulsory schooling be required of all its citizens up to a certain minimum age.

Viewed negatively, practical reasonableness demands that one has a measure of effective freedom. Lonergan, for example, says:

> Bringing up the child, educating the boy, the adolescent, the young man, is a matter of gradually enlarging the field in which he does things for himself, finds out for himself.[61]

This latter aspect of the value of practical reasonableness tends to be taken in isolation by some progressive educator's. Viewed positively, on the other hand, the value also demands "that one seeks to bring an intelligent and reasonable order into one's own actions, habits, and practical attitudes."[62] Finnis continues:

> This order in turn has (i) an internal aspect, as when one strives to bring one's emotions and dispositions into the harmony of an inner peace of mind that is not merely the product of drugs or indoctrination nor merely passive in its orientation; and (ii) an external aspect, as when one strives to make one's actions (which are external in that they change states of affairs in the world and

[60] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 88.

[61] Bernard Lonergan, *Collected Works of Bernard Lonergan - Book 6* (Toronto: University of Toronto Press, 1996), p. 171

[62] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 88.

> often enough affect the relations between persons) authentic, that is to say, genuine realizations of one's own freely ordered evaluations, preferences, hopes, and self-determination.[63]

Thus, he sees not just freedom, but freedom with responsibility as the core of practical reasonableness. More completely, he sees this value as "involving freedom and reason, integrity and authenticity."[64]

13.8 *Values and Work*

One can say that a 'thing' is valued because someone values it. If someone values it, it qualifies as a 'particular good' for that person at that time. Gold is valued because everyone has accepted it as a standard of wealth. It has no inherent value of and by itself; it is valuable simply because people value it. This value may vary with the law of supply and demand, that is with market forces. If someone finds something good, or if he values that something, it is because it answers a personal need for that person at that time. A child might value an old rag-doll because it enhances her sense of security, or it offers her an outlet for role play or a need to display affection. This is a particular good for a particular person at a particular time. The child's father, who recognises her need for warmth and security and assents to it as a good, transforms it into a guiding operative value, exercising what Finnis terms "practical reasonableness." By trying to make his home a bright, ordered, and cheerful place so that she might have her needs for warmth and security guaranteed during the formative years of her life, he is in fact mediating her development through what Lonergan terms "a good of order."

Again, one can say that food is generally regarded as a good. Food, after all, is a universal need and so it is valued by all people everywhere; it is a universal good or value for man. But when someone is hungry, it is invariably more highly valued. One can say, then, that there are goods which are universal, that is, apply to all people at all times. This is because there are basic needs or urges which apply to all people at all times. What are termed values may be regarded as acts of assent of the intellect and affect to recognised goods. The father who has recognised 'warmth and security' as a need for his child by judging it good (or *probus)*, and deciding to act on it responsibly, translates it into a value. Finnis, as indicated above, recognises seven such basic values into which all other values can be

[63] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 88.
[64] Ibid.

differentiated. This does not mean, however, that there cannot be a variation in the intensity of such desires and, so, a variation in the hierarchy of importance of the various recognised goods or values over time. Thus, a desire can become more demanding; a good can become more of a good; something of value can become more highly valued; a personal value can be enhanced.

As already defined, *work* is the means *par excellence* by which the value of a 'thing' is increased or enhanced. Such increased value can apply to the object of an action and/or it can apply to the subject of the same action (or *doing).* A piece of wood, for example, becomes a greater good for a person by being made into a chair. It is the *work* performed that has added this value. Not all actions or *doing* can enhance value in this way. Some actions can be be neutral or even negative. The carpenter responsible can become richer in monetary terms (*having* mode) but also enhances his sense of self-worth and personal dignity (*being* mode) as a result of his *work.* Thus *work* is a *doing* which adds value to 'things'.

g) *The Value of Religion*

The above argument, however, still leaves unanswered a very important question. If things are valuable simply because people value them, where then does the value of the human person come from? If the value and dignity of the individual child stems solely from the fact that his parents and society in general values him, what happens if these same persons and institutions at some stage cease to value him? Do his dignity, his needs, his life cease to be good simply because others no longer find them so? This is no minor consideration. The human good alone cannot be the ultimate criterion of value, otherwise not only would the individual person cease to have inherent value of his own, but in such circumstances so also would everything else which he personally regarded as valuable, and which depended upon him in turn for their value.

Finnis phrases this dilemma somewhat differently when he says:

> There arise such questions as: (a) How are all these orders, which have their immediate origin in human initiative and pass away in death, related to the lasting order of the whole cosmos and to the origin, if any, of that order? (b) Is it not perhaps the case that human freedom, in which one rises above the determinism of instinct and impulse to an intelligent grasp of worthwhile forms of good, and through which one shapes and masters one's environment but also ones' own character, is itself somehow subordinate to something

> which makes that human freedom, human intelligence, and human mastery possible (not just 'originally' but from moment to moment) and which is free, intelligent, and sovereign in a way (and over a range) no human being can be?[65]

His question seems to be, where do the goods of order, which form such a central part in turning values, as attitudes of assent, into guiding principle of action, stand with regard to the greater cosmic order of the universe. Goods of order, after all, can pass away with the individuals or cultures which temporarily instantiate them. He suggests the need to postulate the existence of a higher order which will provide the same ordering and organising function to the values viewed as a whole as the individual goods of order do for the values viewed individually. Again, without such a greater order, none of the individual goods of order, and hence, none of the values which depend on them, can rest secure. He is proposing the existence of a higher good from which all other goods take their meaning and purpose. Clearly, the widespread human belief in a God is an indication of the necessity for postulating the existence of such an overarching and foundational good.

If the value of religion, then, belongs to the list of fundamental human values, it follows that, like the other values, there is a corresponding human need from which the value is derived. If there is a fundamental human need for religion, it follows that there is a corresponding need for goods of order (churches, prayer groups etc.) through which this need can be satisfied. Just as a school provided the most natural good of order for other human desires and values, it is important to consider if it is not also the natural venue for mediating the value of religion.

Allport also recognises "religion" as a value, but describes it in terms of the 'ideal' religious man who is mainly inspired by this value:

> The highest value for the religious man may be called unity. He is mystical and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality.[66]

For Lonergan and Finnis this description, while certainly poetic, would probably ring a little hollow.

The following table provides a summary of human needs, goods, goods of order, and values, based on the works of Bernard Lonergan and John Finnis. At the same time, an attempt is made to illustrate how this model might integrate with the 'triarchic model' of Yaacov Rand:

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[65] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 89.

[66] Gordon Allport, *Pattern and Growth in Personality* (London: Holt, Rinehart and Winston, 1963), p. 299.

	Value	Corresponding Human Drive	Particular Goods	Goods of Order	Dominant Mode
a)	Life	The need or urge to preserve one's life and to procreate	Food, shelter, personal property, etc.	Hospitals etc.	Having
b)	Knowledge	The pure desire to know.	The true, the good, the beautiful, being in all its fullness	Schools, libraries etc.	Being
c)	Play	The delight in activity	The subject's own activity	Schools, clubs etc.	Doing for the sake of Being
d)	Aesthetic Experience	The pure desire to know.	The true, the good, the beautiful, being in all its fullness	Schools, concert halls, art galleries etc.	Being
e)	Sociability	The need for human warmth and emotional security	Friendship	The family, schools, clubs, etc.	Having
f)	Practical Reasonable-ness	The pure desire to know and to do.	Personal freedom, integrity and authenticity	The family, schools, clubs, etc.	Being for the sake of Doing
g)	Religion	The pure desire to know and to be.	The true, the good, the beautiful, being in all its fullness	The family, schools, churches, etc.	Being

13.9 *Values Education*

One of the most striking outcomes of the above examination of the notion of values according to the theories of Lonergan and Finnis is the number of occasions in which the school was cited as an appropriate 'good of order' for the satisfaction of a particular drive, as well as the realisation of its corresponding value. It follows that, apart from the family, which is arguably the main educator or mediator of values, the school is by far the most appropriate place in which to disseminate, mediate, teach, and inculcate values. There is nothing new in this discovery, however, since values education has traditionally been regarded as an important aspect of the school's function.

Values, however, are quite different from the usual material on a school's curriculum. Firstly, one must consider Crowe's contention that "values are caught ... more than taught;"[67] the implication is that values are something which are mediated by the overall ethos of the school rather than by talks given in Religious Knowledge class or at school assembly. The old adage that "The battle of Waterloo was won on the playing fields of Eton." might be a case in point. However, relegating values to the realm of the influence of 'good example' would not do justice to their central role as 'guiding principles of action'.

The next point is that while values arise from natural innate human drives or urges, they are themselves based upon an understanding and evaluation of the objects of these desires, and upon an assent to the goodness or fittingness of these same objects by human subjects. It is as a result of this rational reflection and assent that these objects are deemed 'good' and so worthy to be called 'values' to be acted upon. Thus values are first and foremost cognitive; in other words, they are based on experience, understanding, judgement, as well as on assent. It follows that the proper approach to the inculcation of values is one involving the full exercise of one's cognitive operations. Absorption of values 'by osmosis' may be a factor in both home and school, but it cannot be the only, or even the main, process whereby values are communicated or mediated. The mediation of values to the child demands the prior, or at least the parallel, formation of the intellect, the will, and the emotions. In other words, the self-appropriation of cognitive interiority and self-appropriation of emotional interiority are both necessary foundations for the proper grounding of values.

This does not gainsay the importance of personal example. It will be shown in Chapter Fourteen that belief is based on human trust which is first and foremost an assent to the being of another: "I believe what you tell me because I find it good that you exist." So, an acceptance of the values being taught at home or in school depends first and foremost upon an acceptance of the person teaching or mediating them, more than on the inherent reasonableness of the message being conveyed.[68]

The next point is that the terms 'mediating' and 'teaching' have been used interchangeably so far in this section. In fact, as will be dealt with at length in Chapter Fifteen of this study, what is termed 'mediated learning experience'

[67] Frederick Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 76.
[68] See section 14.5.8 below.

proposes a very different approach to education from the lesson, or 'chalk and talk', approach usually associated with the word 'teaching'. It will be shown that values can be 'mediated' to a child in a way, and with an effectiveness, that could never be applied to what is generally meant by the term 'taught'.

13.10 *Beauty, Form, and the Teaching of Values*

It has been argued already that what the mind grasps through insight is 'form' and that this form is not something imposed on reality by a subjectivist mind but rather represents actual material and intelligible relations perceived and intelligently grasped within the object intended. In a further act of insight this form is assented to as a real or accurate expression of the object originally perceived. At this point what is assented to is a truth, a reality, or an existent. Merging almost imperceptibly with this act is the realisation that this truth answers a personal need and so is a good or a value to be embraced cognitively, volitionally, and affectively. Thus, with this intellectual and rational assent one experiences emotionality which, in Lonergan's terms, is the 'intentional response to a value'. Love, it will be argued in the next chapter, can be described as an intentional assent to the perceived good or value of another, saying "It is good that you exist". Thus the intellect, whose nature it is to grasp relations or forms, grasps such relations or forms in the world which it is consciously intending. It is the perception and apprehension of these relations or forms which are first judged to be 'true', and then, in a further act, embraced as 'good', or 'loveable', or even 'beautiful'.

Truth, goodness, love, beauty, and responsibility are accepted by most cultures as things to be valued in themselves, as desirable human values. The mistake made by many philosophers of form, however, is to conclude that it is a characteristic of form itself which makes these values inherently attractive, loveable, beautiful, or *probus*: Kirwan, for example, says:

> There is ... a long tradition of just such explanations of beauty, going back to the Pythagorean idea, partly scientific and partly religious, of proportion and measure, which made harmony a property of the cosmos, and musical harmony, which could be directly related to mathematics, immanent in the very structure of things.[69]

For Plato, in the *Philebus*, it is measure and symmetry which are perceived as

[69] James Kirwan, *Beauty* (Manchester: Manchester University Press, 1999), p. 21

eternally and absolutely beautiful. Augustine too defines beauty as a measure, form, and order determined by number. His concept of form, however, is more dynamic than Plato's. To Augustine proportion is conceived of as rhythm, not only in sounds but also in visual perception, memory, action, as well as an innate rhythm in the mind itself which does the perceiving.

But why, one may ask, should the beauty of a piece of music, for example, lie in the relations of one note to another, or in the rhythm with which it is played. What is so special about relations in themselves that they should seem 'good' or *probus* to the human mind. Is it really the balance and proportion of form, the blending of colour, form and shading, which so thrills and excites one about a particular painting? Or is there rather something deeper, a something of which form is merely the vehicle of expression? Is there not something essentially unsatisfactory, even 'cold', in defining beauty as "a certain harmonious proportion."[70] James Kirwan points out that what is described in this way is not 'beauty' as such but rather how something is seen to be beautiful, how it manifests or expresses beauty. To Lonergan, truth and beauty are both certainly grasped in the act of insight. And, as has already been discussed, it is form or relations within the intended object which insight seizes upon and makes its own. But it must also be remembered that it is experience, understanding, judgment, and assent, operating in unison, which places one in contact with the "heart of the real", not experience or perception alone, not insight alone, not reasoning or judgment alone. Beauty, like love, involves a response of the whole person to the essence of a real object.

More recent philosophers have also fallen into the same trap or misconception as both Plato and Augustine, identifying beauty with form. Kant, for example, says:

> In painting, sculpture, and in fact all the formative arts, in architecture and horticulture, so far as fine arts, the *design* is what is essential. Here it is not what gratifies in sensation but merely what pleases by its form, that is the fundamental prerequisite for taste.[71]

Again, Kant appears to confuse the instrument (form) with the reality (beauty). He forgets that, to a degree at least, "Beauty is in the eye of the beholder." Beauty involves a response of the whole person to the perceived good in another person, or in a landscape, or work of art; it is an assent to the being of another: "How good it

[70] Ibid.

[71] Immanuel Kant, *Critique of Judgement* (Oxford, Oxford University Press, 1973), p. 23.

is that you exist." It is also an intentional response to a value which carries with it a personal act of emotionality. Just as love is not pure assent but involves also fulfilment of a deep personal need, so a response to beauty involves not just the release of tension of reflective insight, but also the gratification of the deepest of personal human needs.

It appears more likely that form, as the vehicle or instrument of intentionality, allows the mind to embrace the essence of the intended object, both at the level of the senses *(Senus is actu est sensible in actu)* and on the level of intellect *(Intellectus in actu est intelligible in actu)* and facilitates one's coming to know the object. However, except at the level of the animal, knowing does not lie in the grasp of form alone. It incorporates and integrates all the various levels of the human intellect and feeling acting as one and 'sublates' them into the final act of assent, which puts one in touch with truth, reality, the good, as well as beauty. It involves the joint operation of perception, imagery, understanding, formulation, rational reflection, and culminating in an act of assent to a truth, and the joyful embrace of something which it judges to be good, or loveable, or beautiful.

An object may certainly be perceived as beautiful because its form is pleasing, stimulating, exciting, harmonious, but this is merely what makes an object attractive to the human intellect; it is not beauty *per se*. Beauty, like all values, lies in the living, vital, vibrant 'Yes' of the human response and its attendant emotionality. Beauty is not just in the eye of the beholder; it is also in his act of understanding, in the act reflection which judges the truth or otherwise of his understanding, and in the act of assent in which he says 'yes' to being. Langer largely supports this view, although as pointed out previously, her view of cognitive functioning tends to terminate with expression or conception:

> Apparently primitive mankind has a "vegetative" period of artistic activity, as he has of linguistic and mythological and ritual growth. A crude pre-Athenian peasant makes a Herm for the protection of his home, and produces a statue of archaic beauty; an Indian carves a totem-pole, and achieves a composition; he fashions a canoe or moulds a water-jar, and creates a lovely form. His model is the human body, the tree-trunk, the curled dry leaf floating, the shell or skull or cocoanut from which he drinks. But as he imitates such models for practical ends he sees more than the utilitarian import of their shapes; he literally *sees* the reflection of human feeling, the "dynamic" laws of life, power, and rhythm, in forms on which his attention is focussed; he sees things he cannot name, magical imports, rightness of line and mass, his hands unwittingly express

> and even overdraw what he sees, and the product amazes and delights him and looks "beautiful".[72]

It follows that one cannot teach these basic human values of goodness, or beauty, by somehow making them the topic for a class discussion or, least of all, the subject of a long boring lecture in Religious Knowledge class or school assembly. One can only put children in contact with the good, the loveable, the beautiful, the harmonious, the responsible, and leave it to their well-developed minds and affections to do the rest. It follows that the proper development of the intellect is a prerequisite for the development and growth of these basic human values, including the appreciation of goodness and beauty.

Children can certainly be shown what is generally accepted as beautiful, or good, or to be valued in their particular cultures. This is what is usually termed 'inculturation', and it is generally accepted that it must play some part in the education process. But children will know beauty, or goodness, or value, only when they not only experience these things in their surroundings, but are also induced to exercise their minds on them, and learn to assent to the beautiful, the good, and the valuable in their everyday dealings with others. Values, like virtues, have to be lived if they are to be truly assimilated; they must be 'appropriated' into one's very being. John Finnis encapsulates this notion well when he says that "the basic forms of good are opportunities of *being*; the more fully a man participates in them the more he is what he can be." [73] In other words, the essence of education and human development according to the *being* mode is to become "fully what one can be". The key to education for *being* is the development in the individual of these basic, natural, human virtues. Aristotle used the word *physis* to describe this state of *being*. This is translated into Latin as *natura*.[74] So one finds Aquinas saying that these goods or values are requirements not only of reason, and of goodness, but also of human nature itself.

It follows from what has been said above that not only are these basic human values dependent upon the prior and parallel development of the human intellect, but that these very 'natural' values themselves are the foundation for the development of the moral virtues. Maritain appears to support this view when he

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[72] Susanne K. Langer, *Philosophy in a New Key* (Cambridge, MASS: Harvard University Press, 1979), pp 251- 252
[73] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 103
[74] Ibid.

says: "It is by virtue of the allure of beautiful things and deeds and ideas that the child is led and awakened to intellectual and moral life." [75] It follows that virtues like 'loyalty', 'industriousness', 'honesty', 'cheerfulness', 'positive attitude', 'generosity', 'courage', all have their basis in the prior grasp of the values of 'goodness', 'love', 'beauty', 'truth', and 'responsibility'.

Initially, the young have not yet achieved these values and virtues, and so Newman says:

> At first they have no principles laid down within them as a foundation for the intellect to build upon; they have no discriminating convictions, and no grasp of consequences. And therefore they talk at random, if they talk much, and cannot help being flippant, or what is emphatically called 'young.' They are merely dazzled by phenomena, instead of perceiving things as they are.[76]

It has been argued that the Arts are the means *par excellence* for communicating or mediating these latter virtues or attitudes. Crowe appears to agree with this when he says:

> And so we must raise the question in general, of what tradition, what values and judgments, we wish to communicate to the young of our nation in our schools and to new generation in our human race in the accumulating tradition of the global village. The human, of course, will be the all-pervasive category. ... The broad category, then, will be human nature: not human nature as a sociologist might conceive it, but as an artist does, human nature alive in particular people. And the values and judgments will be those learned in stories and poetry on how people behave; on what they are like, what their weaknesses, what their possibilities of greatness. And the general lessons will be on living with people and dealing with them.[77]

It follows that the Arts in general (music, the plastic and graphic arts, poetry.) have a very central function indeed to play even in the development of the moral virtues and, as such, it follows that they must have a prominent place in the curriculum of the school. It is vitally important, however, that their role and function be properly examined and understood rather than be left at the mercy of vague platitudes and uncritically received wisdom.

Clearly, theology would have much more to say about the human good and its relationship to God. This study, however, must confine itself to the realm of the

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[75] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 61.

[76] John Henry Newman, *The Idea of a University* , p. xvi, quoted in Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, Georgia: Scholars Press, 1985), p. 85.

[77] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 79

philosophical and the psychological, thus hopefully avoiding the confusion which almost invariably occurs when one science trespasses on the territory of another, whose methods, procedures, and objectives may be quite different.

In summary, one can say that to affirm that "beauty is in the eye of the beholder" is to take a distinctly idealist and subjectivist stance. On the other hand, to affirm that beauty lies in form alone, solely in the material dispositions of an object, is to err in the direction of 'naive realism'. The 'critical realist' approach of Lonergan seems to achieve the correct balance between the characteristics of the object and the subjective response. Nor can one say that the balance and harmony of form come first and that this is subsequently recognised and assented to as beautiful by the observing subject. The subject, by his very nature, is in continuous and active pursuit of the true, the good, and the beautiful, impelled by the 'pure desire to know'; this in turn has its origin on an ontological level in Lonergan's 'notion of being'.[78]

Finally, one can say that "the fourth level has two moments: the moment of the value judgment and the moment of decision."[79] Judgments of value, after all, are premised upon the truth and reality of what one has already affirmed. Likewise, one's authentic decisions for action must be based upon what one has come to value. It follows that just as *doing* is the natural consequence of decision, so virtue follows naturally from value.

13.11 *Values and Virtues*

One is reminded again that this study seeks to avoid the perennial confusion of theology with philosophy which has so often led to an uncritical or unscientific view of the world and, consequently, to a view of education as a type of received wisdom, rather than as a science in its own right. This separation of philosophy and theology is even more critical where, as in the case of the human qualities or virtues, philosophy appears to encroach or trespass on the realm of theology. However, one feels that a clear philosophical and scientific examination of what might be termed the underpinnings of moral life, would be just as well to the advantage of theology as it would be to philosophy.

A value has already been described as an attitude or orientation towards a

[78] See Section 5.8 of this study.

[79] William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing,1990), p. 22.

good based on a fundamental human need. Virtues, however, lie in good deeds or in good inclinations following an assent to a recognised good. Thus, virtues lie in the realm of deciding and doing, at Lonergan's fourth level of mental functioning, which is also the level of moral action and conscience.

Virtues may also be termed 'excellences' which is the meaning of the Greek word αρετη (areté), translated by the Romans as *virtus*. A virtue may also be described as a capacity which has, or can have, an effect. André Compte-Sponville, for example, says:

> What is a virtue? It is a force that has or can have an effect. Hence the virtue of a plant or a medication, which is to cure, or of a knife, which is to cut, or of a human being, which is to will and to act in a human way.[80]

This description allows the term to be applied to things as well as to people. Thus a knife may be said to have the virtue of sharpness, or a couch the virtue of softness. A virtue, therefore, is itself a good and may be viewed as a value. A sharp knife may be valued by a particular person at a particular time. Even though a thing may be said to have value because someone values it, nevertheless this value as virtue or excellence is inherent to the object itself and does not depend on the use to which it is put. This is not a question of moral values as the knife, for example, may be of value to a murderer just as much as to a hobbyist. In addition, one may regard the furniture manufacturer who makes a soft couch to be making something of value, something that is valued by someone, somewhere. The virtue of the couch lies in its softness; the virtue of the man's activity lies in the creation and addition of value. Such an activity qualifies as *work* according to the definition used in this study.

Virtues in things, as was said above, have clearly nothing to do with moral values. For that, one must ask in what or where man's distinctive excellence lies. For Aristotle, the answer was the rational life, which sets man apart from the animals.[81] But the term "rational life" implies many things. It implies desire, education, habit, memory, and all the qualities that make up what is generally termed one's 'humanity'. André Compte-Sponville writes that

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[80] André Compte-Sponville, *A Short Treatise on the Great Virtues - The Uses of Philosophy in Everyday Life* (London: Random House, 2003), p. 4. Compte-Sponville is Professor of Philosophy at the Sorbonne University in Paris and is author of many works of classical philosophy.

[81] Aristotle, *Nicomachean Ethics*, I, 6, 1098a, 1 - 10, Richard McKeon (Ed.), *Introduction to Aristotle* (Chicago: University of Chicago Press, 1973), p. 356.

> in the virtuous man, humanity and virtue inevitably converge. It is a man's virtue that makes him human, or rather it is this specific capacity he has to affirm his own excellence, which is to say, his humanity, in the normative sense.[82]

Virtue, then, is a way of *being*. One might say that it is an acquired habitual capacity to *do* for the sake of *being*. Compte-Sponville continues:

> Virtue is a way of being, Aristotle explained, but an acquired and lasting way of being: it is what we are (and therefore what we can do), and what we are is what we have become.[83]

This study has already made a beginning of dealing with what may be loosely called the human virtues. Love will be dealt with in some detail in the next chapter, as will the virtues of belief, trust, and hope. Thus, one could say that what in religion or theology are termed the three 'theological virtues', faith, hope, and charity, will be dealt with from a purely human or philosophical perspective.

Another group of virtues which have already been dealt with in some detail in this study, but which would be somewhat less familiar to the theologian, are derived from what Lonergan calls his 'transcendental precepts'. These might just as well be termed the 'cognitive virtues' and are the habits of attentiveness, intelligence, reasonableness, and responsibility. Not only may these be regarded as virtues in their own right but, as will be argued, they constitute the foundation for all of the other virtues.

Reasonableness and responsibility together constitute what Scholastics term the virtue of 'prudence'. It follows that prudence is what may be termed a cognitive and volitional virtue. Prudence is also the first of the next grouping of four virtues known to be foundational, or pivotal, or 'cardinal'. This group are: prudence, justice, fortitude, and temperance. When one says that they are pivotal, one means that they are foundational to all the other human traits which are called virtues. It will be argued in this section that while the virtues of reasonableness and responsibility are fundamental or integral to the human cognitive structure according to Lonergan, they are also a foundational root for what are termed the 'pivotal' or 'cardinal' virtues. Likewise, since each of Lonergan's levels sublates the one below it, one can say that being attentive and being intelligent are also foundational to the 'cardinal' virtues and so foundational to all other human virtues.

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[82] André Compte-Sponville, *Great Virtues: The Uses of Philosophy in Everyday Life* (London: Vintage, 2003), p. 3.
[83] Ibid.

If Lonergan's cognitive structure is natural or fundamental to human nature, then so also are the virtues which are an integral part of it. And as reasonableness and responsibility are foundational to the cardinal virtues, then by extension these virtues are also natural or fundamental to human nature. It follows that the whole edifice of human virtues lies on a foundation of what have been termed the cognitive virtues. First one must develop the mind - the capacity to be attentive, intelligent, and reasonable - then the rest of education can follow from that foundation. To attempt to develop the child without first attending to his cognitional formation would be failing to follow the natural course of the human virtues.

13.12 *Deficient Cognitive Functions at Lonergan's Fourth Level*

Clearly the virtues of being decisive and being responsible do not come naturally to human beings. One can not deny that they are natural in the sense that they are necessary for the full flowering of one's nature; nevertheless, the acquisition of these virtues demands effort. One way of mediating these precepts and consolidating these virtues is the removal of those deficiencies which impair their development. As with the other transcendental precepts, the study turns to Feuerstein for a clear exposition of the relevant 'deficient cognitive functions'.

13.12. A *Lack of or Impaired Planning Behaviour*

Few would disagree that planning belongs at the level of decision. Planning behaviour involves not only setting goals for oneself "that are located both temporally and spatially at a given distance from the 'here' and 'now',"[84] but also involves differentiating and dissociating these goals from the means necessary to achieve them. Such dissociation requires a further differentiation of the means in terms of the steps that are necessary to achieve the final goal. These steps, in turn, "must be planned according to a certain degree of detail, must be ordered in terms of their temporal sequence, and must be judged for suitability in terms of investment, feasibility, economy, and other criteria that may be critical for the individual."[85]

The student who manifests a lack of planning behaviour may be unable to

[84] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability*, p. 98.
[85] Ibid., pp. 98 - 99.

delay gratification in order to plan and invest in the long term. He tends to rush into situations impulsively without prior planning. He fails to see the need to plan but rather lives in the 'here and now', solving only immediate problems. Because he is unaware of the techniques and processes involved in setting, seeking, and reaching goals, he needs to have these clearly mediated to him. One way of doing this is getting him to state explicitly the steps involved in solving a particular problem.[86]

The inability to plan may also be due to lack of ability to anticipate the outcome of behaviour which, in turn, may be due to lack of representational ability. However, one must also bear in mind that many children live and grow in life situations that are inherently disordered and difficult to predict. In such a 'hand-to-mouth' existence the outcome of their behaviour is difficult, if not impossible, to anticipate so that the habit or skill of planning may never develop properly:

> Children who live under very poor or dangerous environmental conditions and experience a hand-to-mouth existence do not develop the need to plan for the future or predict and invest for the long term. Their environment forces them to live in the "here and now," in which planning ahead is unnecessary.[87]

Similarly an over indulged child who is used to having his needs immediately satisfied does not develop the attitude or skills required for planning ahead and delaying immediate gratification. This cognitive function of "planning", then, clearly belongs with Lonergan's fourth cognitional level, that of decision and doing.

13.12. B *Egocentric Communicational Modalities*

The modality of communication may be termed 'egocentric' when the student involved is self-centred and fails to take into account the points of view of others. When relating with others, such a student may ignore or even spurn their needs, demanding instead that everyone does it 'his way'. He tends to act alone and to neglect to share and explain his methods to the group. Such egocentricity is often labelled 'selfish' and judged as a character defect. But in practice, very often such

> egocentric communication is a function of lack of differentiation, which does not allow the individual to see his partner as different from himself. This differentiation is a necessary condition for making communication explicit by producing all the evidence necessary for

[86] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom* (Arlington, IL: SkyLight Publishing, 1996), p. 136.
[87] Ibid.

the listener's comprehension of the information conveyed to him.[88]

Feuerstein believes that children, in particular, tend to think that others can see precisely what they see and so regard detailed explanations as superfluous and unnecessary.

The student who displays egocentric communication may have difficulty accommodating opinions or approaches that differ from his own. He may believe that others think the same way as he does, and therefore he has difficulty elaborating, expanding, or giving reasons for his responses. He may also be insensitive to social cues and, as a consequence, may respond inappropriately.[89]

The egocentric communication modality is also apparent when there is a necessity to provide evidence for claims, arguments, and hypotheses. In such a case, an impaired need for logical evidence may further aggravate this impaired communication modality.

13.12. C *Trial and Error Output Responses*

Feuerstein maintains that there is nothing wrong with the trial and error approach to learning as such. In fact, trial and error behaviour, or "discovery learning," may be an appropriate approach for efficient students. An efficient student is one who has "mastery of the prerequisites of cognitive processes such as precise perception, comparing, summation, reflective thinking, and an orientation to search for causal relationships" and so he "can relate the obtained effects of his behavior to the specific antecedent behaviors that have produced them." In other words, trial and error learning is effective when carried out by a student who is attentive, intelligent, reasonable and decisive. However, the student who has 'an episodic grasp of reality' cannot benefit from random and arbitrary learning because he does not possess the necessary thinking skills to interpret his data properly.

A student who gives purely trial-and-error responses is one who may randomly and impulsively guess at answers. He may not think ahead or plan a strategy. He tends to repeat errors and not learn from his mistakes. He learns little from unstructured learning environments and has difficulties with defining and keeping his goal in mind, or he may change strategies repeatedly. He also tends to

[88] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability,* p. 99.
[89] Mervyn Skuy (Ed.), *Mediated Learning In and Out of the Classroom,* p. 150.

communicate data in a random, unplanned manner until by chance he finds a solution. Feuerstein warns:

> To a certain extent, then, exposure to, or encouragement of, trial-and-error learning may actually reinforce a kind of probabilistic, random behavior, diverting the attention of the individual and distracting him from the relationships to be discovered.[90]

13.13 *Chapter Conclusions*

This chapter has examined Lonergan's notion of decision as a prerequisite for action. At the same time Lonergan's notion of the good was explored in some detail. The good was defined as anything that answered a basic human need. This led inevitably to a consideration of the notion of human values, and how to teach them. Following from values, one was inevitably led to a consideration of the virtues in general, and of beauty in particular. It was proposed that the prior development of what this chapter termed the 'cognitional virtues', or Lonergan's 'transcendental precepts', was necessary for the development of all other virtues and values.

The subject matter of this study to date has ranged widely in an attempt to appraise the suitability of Lonergan's conceptual scheme as a foundation for a science of education. The last four chapters in particular have attempted to deal with Lonergan's transcendental precepts in 'slow motion', as it were. The object of the exercise has been to attempt to appropriate and assimilate existing educational and psychological theory to Lonergan's scheme. In so doing one is necessarily assimilating Lonergan's system to one's own theoretical scheme and, in the process, advancing one's own 'self-appropriation of interiority'. It has been argued that Lonergan's scheme provides an excellent unifying system in which to incorporate the works of many different philosophers and psychologists.

That an isomorphism exists between Lonergan's "invariant and normative structures of the human mind" and Feuerstein's learned cognitive functions has been argued extensively in the last four chapters, which attempted to show that each of Feuerstein's learned cognitive functions could be allocated to one of Lonergan's innate levels of mental functioning. The theory is that, when there is a failure to mediate these functions in a child's early life, the innate natural mental

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[90] Reuven Feuerstein, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, Maryland: University Park Press, 1980), p. 100.

operations will not function efficiently and properly. Where a learning problem is encountered, in other words, and where a child is failing to utilise is innate talents, then the cause of the deficiency must be sought among the cognitive functions and corrected by addressing those functions which are found to be deficient. This has been elaborated throughout the last four chapters by a rather detailed look at each of these cognitive functions as they appeared in turn.

By way of summary of the last four chapters, a schematic diagram of Lonergan's mental operations with their corresponding transcendental precepts is provided in Appendix C, showing where each of Feuerstein's cognitive functions belongs most properly in the overall scheme.

Part IV

The Intersubjective Nature of the Human Person

Chapter 14

The Complementarity of the Two Ways of Human Development

14.1 *Introduction*

Part II of this study attempted to deal with what might be termed the 'Intrasubjective' nature of the human person, the inner dynamics of the human mind as it struggles to gain knowledge of the world around it, including the world of other human beings, other persons, other intrasubjective minds. One conclusion from that part of the study was that the human mind is inherently 'intentional', that it naturally reaches out to transcend self and encounter 'other'. Part III of the study examined this notion of human transcendence and argued that the human person is transcendent even in his organic and genetic development. Now Part IV of the study will attempt to build on this foundation in an effort to describe and explain the realm of human intersubjectivity, or the human person in his relationship to other human persons, and the role which this relationship plays in human development and education. Of necessity, this part of the study must be approached from both a philosophical and psychological viewpoint. It must also return to the affective medium or environment, which Crowe describes as "the color and tone and power of feeling, that fleshes out and gives substance to what otherwise would be no more than a Shakespearian 'pale cast of thought'."[1] It will also be argued in this section that the emotional or affective aspect of the human psyche constitutes a vital linkage, or tie, or bond, between the "two ways of human development."

The previous four chapters dealing with Lonergan's 'transcendental precepts' have sought to demonstrate how Lonergan's cognitional philosophy provides a unifying system or scheme in which it is possible to incorporate, or assimilate, the works of many different philosophers and psychologists. However, during the final stage of his career (1974 to 1980) Lonergan introduced yet one more important unifying principle, that of the "two ways of human development," which Crowe characterises as "the two vector forces of education."[2] While this

[1] Bernard Lonergan S.J., "Mission and the Spirit", F.E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan S.J.* (Geoffrey Chapman, London, 1985), p. 30.

[2] Frederick E. Crowe, *Old Things and New: A Strategy for Education*. See also Section 13.2 of this study.

theme of the 'two ways' was made explicit in Lonergan's later articles, it was, according to Rusembuka, already implicit in his earlier writings. In his Doctoral thesis for the Gregorian University in Rome, Rusembuka explains that "Lonergan's understanding of these two ways of human development, operative in *Method in Theology*, thematic in his post-*Method* articles, was anticipated in *Insight*."[3] The following quotation from one of Lonergan's "post-*Method*" articles gives a concise description of what he means by the two ways of human development:

> For human development is of two different kinds. There is development from below upwards, from experience to understanding, from growing understanding to balanced judgement, from balanced judgement to fruitful courses of action, and from fruitful courses of action to new situations that call for further understanding, profounder judgement, richer courses of action. But there also is development from above downwards. There is the transformation of falling in love: the domestic love of the family; the human love of one's tribe, one's country, mankind; the divine love that orientates man in his cosmos and expresses itself in worship.[4]

14.2 *Lonergan and the Two Ways*

The first way of human development, that from "below upwards", has already been dealt with in quite some detail. It refers, of course, to Lonergan's dynamic process of coming to know, and to his 'transcendental precepts'. However, Lonergan did not pretend that his dynamic and invariant normative structures of experience, understanding, judging, and deciding, as introduced in *Insight*, accounted for all there was to be known about human cognitive development. Instead, he characterised them, and most of what has been dealt with so far in this study, as "development from below upwards." This is what Crowe in *Old Things and New* also describes as "the way of achievement." In addition, Lonergan, like Vygotsky, Erikson, and Feuerstein, emphasised the very important role played by the social, cultural, emotional, and intersubjective factors in the development of the human person. In *Method in Theology*, he characterised this as "development from above downwards." Crowe calls this "the way of heritage," and it appears to correspond roughly with what is generally termed 'inculturation'.

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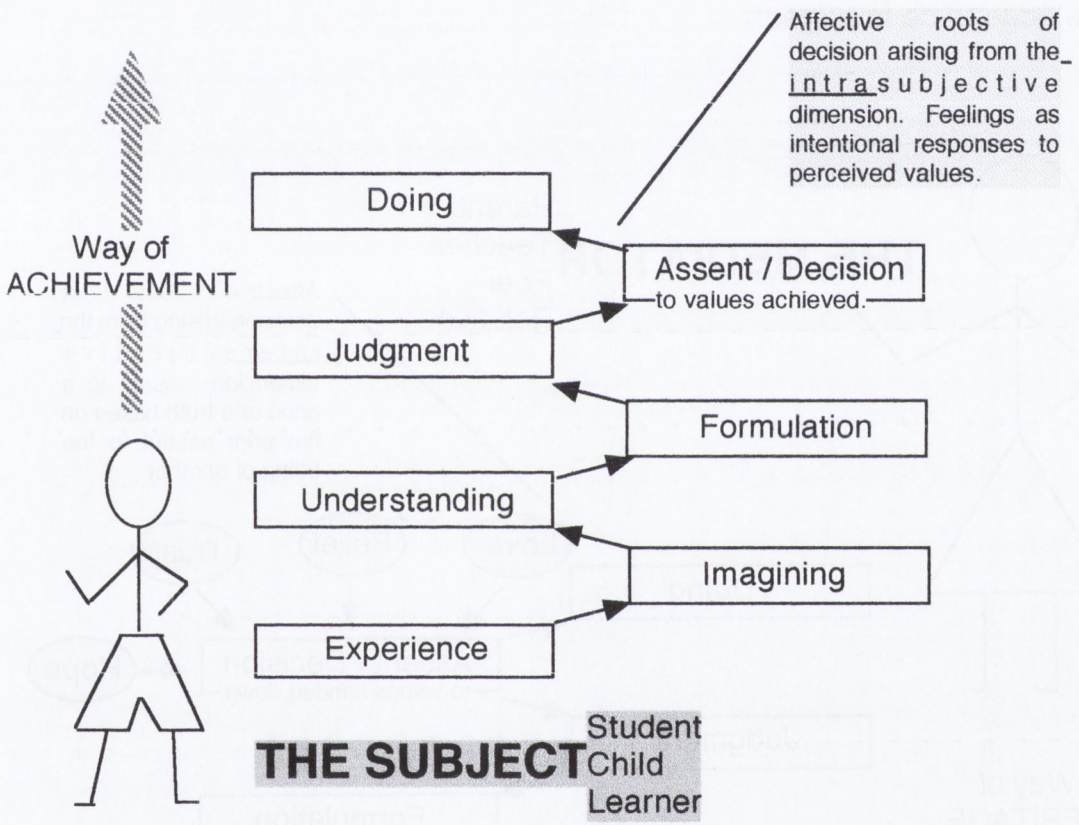
[3] Muhigirwa F. Rusembuka, *The Two Ways of Human Development According to Bernard Lonergan* (Rome, Editrice Pontificia Gregoriana, 2001), "Thesis Abstract".

[4] Bernard Lonergan, "Healing and Creating in History" quoted from Muhigirwa F. Rusembuka, *The Two Ways of Human Development According to Bernard Lonergan* (Rome, Editrice Pontificia Gregoriana, 2001), p. 7.

Development "from below upwards" might be represented by the following diagram showing the relationship between Lonergan's four levels of conscious intentionality, ending with assent to the good or value intended, where cognition, volition and affectivity act seamlessly as one. According to Lonergan, each level is sublated by the one above so that all the characteristics of the lower level continue to manifest themselves in the higher, but in a changed and developed form which blends seamlessly and naturally with the new propensities of the higher. Thus insight or understanding bears all the hallmarks of attentive alertness, while judgment itself may be viewed as involving a new and even higher form of insight.

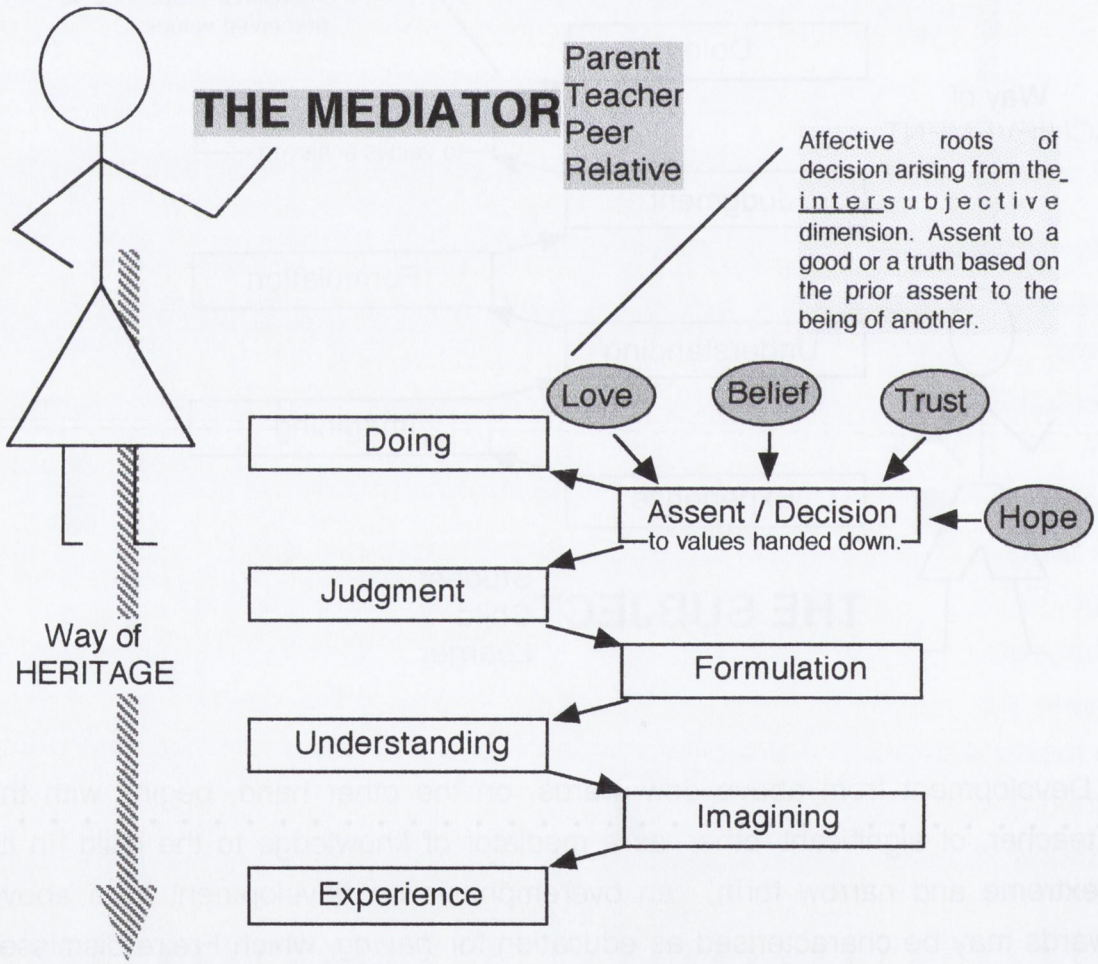


Development from above downwards, on the other hand, begins with the adult, teacher, or significant 'other' as a mediator of knowledge to the child. In its more extreme and narrow form, an overemphasis on development from above downwards may be characterised as education for *having,* which Freire dismisses rather aptly as "the banking concept of education" in which "knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom

they consider to know nothing."[5] No doubt Crowe had Freire in mind when he asked:

> Should education be a kind of banking procedure in which the teacher hands over parcels of information that the pupil duly stores in the safety deposit box of the mind, and draws out as occasion demands, especially the occasion of examinations? Or should education be a freely developing evolution of inner resources, where the pupil is put in a sandbox and left to grow in self-realization with the expectation that he or she will advance steadily from sandbox to, say, a laboratory for nuclear physics?[6]

Thus, development from "above downwards" might be represented by the following complementary schematic in which the teacher is the mediator or originator of the knowledge to be imparted:



[5] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 53.

[6] Frederick E. Crowe, *Old Things and New: A Strategy for Education,* pp. ix - x.

This diagram again displays what might be termed the synergy of cognition, volition, and affectivity, operating as one at Lonergan's fourth level of conscious intentionality. This time, the child is led to accept on trust what the teacher is conveying and arrives at his insight and understanding from there. This will be explained in greater detail below.

In *Old Things and New,* Frederick Crowe answers his own question quoted above, insisting that both the 'way of achievement' and 'way of heritage' are essential for a full understanding of human development. Neglect of either one he described as "trying to clap with one hand." After all, one must bear in mind that the human person is one and undivided. This means that the two ways of human development must form a single dynamic process made up of two complementary aspects. In this regard, Crowe maintains that

> the upwards and downwards movements [vectors] of development constitute two processes of one and the same reality which Lonergan calls "the truly human development"[7]

And Rusembuka agrees that "for Lonergan, the two ways of human development constitute the two complementary phases of one and the same human development."[8]

Crowe seeks to demonstrate not only the complementarity of the two ways, but also the inherent flexibility of the resulting model of human development. He says, for example:

> In such a view of how we are constituted and how we operate, there is nothing to prevent development from starting at either end of the structure, to proceed along a given path and arrive at the other. That is, it may start with sight and sound in the infant and progress through understanding and reflection to judgements and values that are its own achievements; or it may start with a heritage of values and judgements and proceed through growing understanding to more mature experience. As values may be created, so also may they be handed on; as judgements may result from weighing the evidence, so also may they be accepted in trust; as understanding may puzzle over what is observed, so it may puzzle over what is believed to be true. [9]

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[7] Muhigirwa F. Rusembuka, *The Two Ways of Human Development According to Bernard Lonergan,* p. 12.
[8] Ibid., p. 63.
[9] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 24.

14.3 Vygotsky and the Two Ways.

Further clarification of the inherent complementarity and relative importance of the two ways of human development is offered by Vygotsky's notions of "scientific" and "spontaneous" concepts.[10] According to Vygotsky, spontaneous concepts emerge from a child's own reflections on his or her immediate everyday experiences. Such concepts are rich but unsystematic and highly contextual. Scientific concepts, on the other hand, originate in the structured and specialised activity of classroom instruction and are characterised by systematic and logical organisation. Vygotsky's translator, Kozulin[11] , explains more fully what Vygotsky meant by the term scientific concept:

> The concepts themselves do not necessarily relate to scientific issues - they may represent historical, linguistic or practical knowledge - but their organisation is "scientific" in the sense of formal, logical, and decontextualized structures. [12]

This in turn seems to be similar to Lonergan's distinction between what he terms "commonsense meaning and scientific meaning." Commonsense knowledge for Lonergan "does not consist in universal definitions." He goes on to explain:

> It consists simply in understanding when the term may be used appropriately, and such understanding is developed by adverting to the response others give to one's statements. As it does not define, so too common sense does not enounce universal principles; it offers proverbs, i.e., pieces of advice it may be well to bear in mind when the occasion arises.[13]

Besides the world mediated by commonsense meanings, Lonergan identifies "another world mediated by scientific meanings, where terms are defined, systematic relationships are sought, procedures are governed by logics and methods."[14]

Unlike Piaget and his followers, who assume that only when a certain natural or genetic developmental level is achieved can conceptual learning start, Vygotsky proposes that such systematic 'scientific' learning can itself promote cognitive

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[10] Lev Vygotsky, *Thought and Language* (Cambridge, MASS: MIT Press, 1986)

[11] Alex Kozulin is a renowned authority on the work of Vygotsky. He has edited and updated the translation of the most recent edition of *Thought and Language* for MIT Press. He was formerly a Professor at the Massachusetts Institute of Technology, but now lives in Jerusalem where he works with Feuerstein at The International Centre for the Enhancement of Learning Potential (ICELP).

[12] Alex Kozulin, Creating Powerful Thinking in Teachers and Students" in John N. Mangieri & Cathy Collins Block (Eds), *The Cognitive Revolution in Learning: Piaget and Vygotsky* (1994), p. 278.

[13] Bernard Lonergan, *Doctrinal Pluralism* (Milwaukee: Marquette University Press, 1971), p. 16.

[14] Ibid., p. 17.

development. This depends, in turn, on the child having acquired some experience of generalisations in interaction with parents, siblings and others, which can then take the form of spontaneous, everyday concepts. However, once the learning of scientific concepts gains momentum, it begins to exercise a reciprocal influence on everyday cognition. In words reminiscent of both Lonergan and Crowe, Kozulin explains:

> Scientific concepts move from "top" downward - from verbal-logical formulae to concrete material. Spontaneous concepts move in the opposite direction, from the "bottom" upward - from contextual everyday experience to the formal structures of well-organized thought.[15]

More fully, in his introduction to Vygotsky's *Thought and Language*, Kozulin explains: "Spontaneous concepts in working their way 'upward,' toward greater abstractness, clear a path for scientific concepts in their 'downward' development toward greater concreteness."[16] Or, as Vygotsky himself explains it:

> In working its slow way upwards, an everyday concept clears the path for a scientific concept in its downward development. It creates a series of structures necessary for the evolution of a concept's more primitive, elementary aspects, which give it body and vitality. Scientific concepts, in turn, supply structures for the upward development of the child's spontaneous concepts towards consciousness and deliberate use.[17]

Vygotsky argued at length against Piaget's preoccupation with spontaneous concepts or 'development from below upwards' to the neglect of scientific concepts or 'development from above downwards'. Instead, Vygotsky, like Lonergan and Crowe, sees the relationship between the two ways of human development as a type or 'mutual mediation'. Also, his so-called 'zone of proximal development' (ZPD) can be viewed as "the place in which the child's empirically rich but disorganized spontaneous concepts 'meet' the systematicity and logic of adult reasoning."[18] The depth of the ZPD varies depending on the child's relative abilities to appropriate adult structures. Thus, estimation of a child's ZPD gives a measure of his untapped potential or propensity for future growth.[19]

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[15] Alex Kozulin, Creating Powerful Thinking in Teachers and Students" in John N. Mangieri & Cathy Collins Block (Eds), *The Cognitive Revolution in Learning: Piaget and Vygotsky* (1994), p. 278.

[16] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. xxxiv.

[17] Lev Vygotsky, *Thought and Language* (Cambridge, MASS: MIT Press, 1986), p. 194.

[18] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language,* p. xxxv.

[19] See Section 4.4.2 for a more complete treatment of Vygotsky's 'Zone of Proximal Development'.

Kozulin makes the point that "in practice a considerable amount of school-based learning does not transcend to the limits of empirical concept formation."[20] Like Lonergan in *Insight*, he takes as an example the formation of the concept of the circle. He points out that there is an enormous difference between teaching the empirical notion of a circle by the comparison of a number of round objects, for example, and giving the theoretical or scientific definition of a circle as a figure produced by the rotation of a segment of a line with one end free and one fixed end. The difference is that the latter definition is "generative" in the sense that it is possible to generate from it a number of different empirical outcomes. In addition, it is "universal" in that all the relevant empirical data are explainable through it; in other words, all possible circles can be generated from this broader theoretical formulation. The first approach which is inductive is narrowly 'product' oriented; the second more generative approach is deductive and focuses on the 'process' involved. Of immense significance for the relevance of all of this to Lonergan's scheme is Kosulin's observation that:

> This process helps the child construct the essence of the object and thus liberates him or her from the domination by the empirically given. The child starts to realize that essential characteristics of objects do not necessarily lie on the surface but should be uncovered.[21]

What Kozulin appears to be implying in this last statement is that insight and conception are essential requirements if the child is to penetrate below "the surface" and uncover the heart of the real; the more theoretical concepts provided by the teacher "help the child construct the essence of the object." Kozulin adds: "This is an important lesson for understanding scientific truth, where the lack of coincidence between empirical appearance and theoretical essence is the norm, and not the exception."[22] Feuerstein would add, however, that it is not enough simply to feed the child with ready made conceptions, rather he must be led to insights, conceptions, and judgments through the process of 'mediated learning experience'. This latter stance would also be close to the mind of Lonergan.[23]

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[20] Alex Kozulin, Creating Powerful Thinking in Teachers and Students" in John N. Mangieri & Cathy Collins Block (Eds), *The Cognitive Revolution in Learning: Piaget and Vygotsky* (1994), p. 282.

[21] Alex Kozulin, *Psychological Tools: A Sociocultural Approach to Education* (Cambridge, MASS: Harvard University Press, 1998), pp. 55 - 56.

[22] Ibid., p. 56.

[23] Vygotsky's main work, *Thought and Language*, was first translated into English in the 1962. This author has found no indication, however, that Lonergan knew anything of Vygotsky's theories. Despite the close similarities, it is probable that Lonergan developed his theory of 'the two ways' independently.

One could also say that in the process of the formation of spontaneous empirical concepts the child uses a simple process of inductive thinking or generalisation necessary for understanding and insight. Through learning the mediated scientific concepts from 'above downwards', however, the child is introduced to the deductive reasoning necessary for hypothesis testing and judgment formation.

14.4 *Feuerstein and the Two Ways*

In his book *Instrumental Enrichment*[24] Feuerstein introduces an idea that throws some light on Lonergan's two ways of mental development. To Feuerstein, the "two ways in which basic cognitive processes are acquired"[25] are:

> a) through 'direct exposure' learning; that is, the child learns through direct encounters with environmental events and without any appreciable external mediation by significant others on his life; and
>
> b) through 'mediated learning experience' (MLE); that is, through the mediation by significant others (parents, teachers, peers, siblings etc.) of the generalised meaning of these events.

Feuerstein's two ways not only appear to be identical with those of Lonergan, but, as will be argued below[26], his theory of Mediated Learning Experience (MLE) supplies a model and a mechanism for the integration of the two ways, which Crowe terms 'the way of heritage' and 'the way of achievement'.

The two ways of human development also throw light on the difference between, and the complementarity of, Lonergan's dynamic mental operations and the learned cognitive functions of Feuerstein. Lonergan's mental operations are essentially innate and unfold under the impetus of the 'pure desire to know'. On the other hand, it has already been argued in the previous four chapters dealing with the 'transcendental precepts' that for their proper realisation and implementation

[24] Feuerstein, R., Rand, Y., Hoffman, M.B., *Instrumental Enrichment* (Baltimore MA: University Park Press, 1980)
[25] Prof. Carl Haywood, "A Mediational Teaching Style", *International Journal of Cognitive Education & Mediated Learning,* Vol. 3, No. 1, 1993, pp. 27 - 38.
[26] See Section 14.8.

Lonergan's dynamic operations from 'below upwards' require the parallel mediation and learning of Feuerstein's learned cognitive functions from 'above downwards'. One can argue that it is precisely these learned cognitive functions mediated from above downwards which pave the way for the natural unfolding of Lonergan's more innate mental operations, functioning from below upwards.

14.5 *The Way of Heritage and Love, Belief, Trust, and Hope*

14.5.1 *Affectivity and Family*

Crowe says of the 'way of heritage' that

> besides development through experience to understanding, judgment, and values, there is development in which values and judgments are communicated in an atmosphere of love and trust, to guide while understanding slowly forms to render experience mature and perceptive.[27]

Clearly, the 'way of heritage', as the name implies, has its origins in the family and thus "begins in the affectivity of the infant"[28] and "rests on trust and belief."[29] But what specifically is the source of this belief and trust, and what is the source of the love which, it is argued, underpin both? Crowe maintains that

> it comes from the parents, beginning in their total commitment to one another and extending to their children, to include them all in one strong circle, to make of the home a single unit, knit together by manifold bonds, bonds of common interests and concerns, surely, but still more bonds of an affection that finds its object rather in the family as a whole rather than in individual members. This love of parents the children learn to reciprocate; *cor ad cor loquitur* in mutual exchange; and prior to all exchange of messages, words and deeds of love, there is the gift of love itself.[30]

Such a family teaches, or rather 'mediates', many things to the child. The mediation may not be structured, formal, or, at times, even conscious. Yet through the family the child is taught many things from practical skills, including how to behave in society, to deeper lessons of values, meanings, and attitudes that become part of the young personality and which guide future conduct. According to Crowe "the lessons may be only implicit, the guidance may be only that of a remembered scene

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[27] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 17
[28] Ibid.
[29] Bernard Lonergan, "Theology and Praxis" in Frederick E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan, S.J.* (New York: Paulist Press, 1985), p. 197.
[30] Frederick E. Crowe, *Old Things and New: A Strategy for Education,* p. 18

or event, rather than of a precept, but the influence is nonetheless real."[31] Such mediation by the family, or significant others within the child's milieu, are vital to the proper cognitive development of the child. This is treated in some detail in the Section 14.8 below which deals with "The Two Vector Forces and Mediated Learning". Suffice it to say here that where children are lacking such mediation, proper cognitive growth is impaired. Feuerstein terms this lack, or impairment, "cultural deprivation."[32]

14.5.2 *Love as an Affirmation of Being*

Josef Pieper, in his exhaustive study of the phenomenon of love, concludes:

> In every conceivable case love signifies much the same as approval. This is first of all to be taken in the literal sense of the word's root: Loving someone or something means finding him or it *probus*, the Latin word for "good". It is a way of turning to him or it and saying, "It's good that you exist".[33]

Thus, Pieper places love at the level of an affirmation of a value or a good, that is at Lonergan's fourth level of consciousness and intentionality. This is the point at which the action of the will or volition comes into its own. It is also the point at which the intellect, will, and emotion act as one; although Pieper sees it in narrow volitional terms, as when he says:

> The approval I am speaking about is rather an expression of the *will*. It signifies the opposite of aloof, purely "theoretical" neutrality. It testifies to being in agreement, assenting, consenting, applauding, affirming, praising, glorifying and hailing.[34]

According to Pieper, the intellect comes first. The will acts in response to an imperative command of the intellect: "The wholly concrete moral action of the will is entirely and immediately formed by and dependent upon the concrete "command" of the practical reason."[35] Or, as Lonergan himself explains more clearly: "Traditionally, will is defined as an appetite that follows reason, an intellectual appetite."[36] Lonergan views intellect and will as inextricably linked, with the will sublating the powers of the intellect.

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[31] Ibid., p. 19

[32] See Section 14.6 below.

[33] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 164.

[34] Ibid.

[35] Josef Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 156.

[36] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 226.

Like Lonergan, Pieper sees love not only as an assent to something that already is, and so is without "tension towards the future," but also as a striving force, a "*vis appetitiva*"[37]. Unlike Lonergan, however, he is unable to combine these two aspects of what he admits to be one and the same faculty of love. This is because his model does not allow a synthesis of the affective and the cognitional. He does not see, in other words, that the driving force of love stems from the combined impetus of cognitive assent and affect, as is found in Lonergan's 'intentional response to a good'.

14.5.3 *Love and Care*

As already argued above, Pieper's definition of love is an assent to the being of another as a good, which affirms that "It's good that you exist." This places it at Lonergan's fourth level of consciousness and intentionality with its transcendental precept "Be responsible." It is also common experience that love involves a willingness to take responsibility for another. Thus, one finds Martin Buber defining love as just that, a willingness to take responsibility for the one loved.

The commonly used word for the love which feels responsible for, or anxious about, the welfare of another is the verb 'to care'. To 'care' is not just the affectionate assent to the being of another, not just "It's good that you exist": it is also a response to the perceived needs of another. In other words, it involves a responsible attitude towards another, as well as an assent to the perceived good of that other, with its attendant emotionality.

14.5.4 *Self-Love*

Is this assent to the being of another, and willingness to take responsibility for that other, all there is to love? Clearly human love is more than assenting to the perceived good of another. Love, as was said above, is also a response to the perceived needs of another. But one of the greatest needs of human beings is just that - the need to be loved by another. Pieper states that "what we need over and above sheer existence is to be loved by another person."[38] and Eric Fromm says:

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[37] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 165.

[38] Ibid., p. 174.

"human beings are more afraid of being outcasts than even of dying."[39] To be, to exist, in other words, is not enough; one has a basic need to have that existence affirmed, or assented to by another as a good or value.

This is no longer self-transcendent love, however; this is what may be termed 'need-love'. This brings one down from the level of self-transcendent love to a mode of self-fulfilment which falls far short of self-transcendence. Yet, love it most certainly is, as Sartre attests: "This is the basis for the joy of love ... : we feel that our existence is justified."[40] Pieper goes even further when he says: "For a child, ... being loved by the mother is literally *the* precondition for its thriving."[41] And, even more fundamentally: "What being loved makes being do is precisely: be."[42] This is also, as will be argued later, a basic part of the foundation of John Bowlby's notion of 'attachment'.[43]

Is human love, then, something which is at once altruistic and selfish? Is Pieper's phrase "It's good that you exist" consistent with "It's good *for me* that you exist"? Is self-transcendent love consistent with need-love, in other words? Freud, for one, regarded this preoccupation with being loved (need love) as a wholly groundless and irrational reaction from which people ought to free themselves by bringing it to consciousness and 'analysing' it. Yet, not even Freud would have the temerity to say to his wife: "I love you dearly, but I don't need you!" He would recognise immediately the basic contradiction contained in these words, and that the need to be needed is just as strong a part of human nature as the need to be loved. Pieper explains:

> Man does not wish to be loved "purely unselfishly." Not at all. Of course he wants to be affirmed and loved as a person, not just as the holder of certain qualities and abilities. In short, he wants to be loved for himself. But he is also concerned with being of value to the other.[44]

Human nature, even mature human nature, has many needs, the fulfilment of which are an essential part of human growth and self-realization. It has been argued already that, at an organic or psychic level, these needs form the basis for

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[39] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.108.
[40] Jean-Paul Sartre, *Being and Nothingness* (New York: , 1956), p. 371
[41] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 174.
[42] Ibid., p. 176.
[43] See Section 17.9.4 of this study.
[44] Josef Pieper, *Faith, Hope, Love,* p. 248.

human values at a higher cognitive level. Thus, self-transcendence, while it is the highest form of self-realization, is, nonetheless, 'a necessary but insufficient condition' for full self-realization. Bowlby[45] and others have shown, for example, that the person who has not received in his early life the warmth and security needed to make him a confident and integrated person, will not be capable of the self-transcendence necessary to love others in a mature and effective way in later life.

14.5.5 *Self-Love as the Foundation for all Other Forms of Love*

All values, it has been argued, have their origin in basic human needs. This is as true for the value of love and security, as for the others. Thus, it would appear that self-love is not only acceptable in a weak and vulnerable human nature, but it is itself the foundation or prototype of all other forms of love. Pieper is quite emphatic about this when he says:

> This desire for existential fulfilment ... is really "self-love." It is the basic form of love, on which all others are founded and which makes all others possible. At the same time it is the form of love most familiar to us from our inner knowledge of ourselves.[46]

Aristotle appears to agree with this when he says that "the relations that serve to define the various kinds of friendship seem to be derived from our relations to ourselves."[47] And both are consistent with the writings of Aquinas when he says:

> We do not feel friendship for ourselves but something greater than friendship. ... Everyone is at one with himself; and this being one is more than becoming one. Just as unity is closer to the source than union, so the love with which a person loves himself is the origin and the root of friendship. For the friendship that we have for others consists in this, that we behave toward them as we do toward ourselves.[48]

If one compares these statements with the following quotation from Marcel, one can see immediately that this is just one facet of a wider and more general truth, one that stems from human corporality or embodiment:

> To say that something exists is not only to say that that it belongs to the same system as my body (that is bound to it by certain connections which reason can define), it is also to say that it is in

[45] John Bowlby, *Child Care and the Growth of Love* (London: Penguin, 1976)

[46] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 235.

[47] Aristotle, *Nicomachean Ethics*, 9, 4; 1166a in Richard McKeon (Ed.), *Introduction to Aristotle* (Chicago: University of Chicago Press, 1973), p. 539.

[48] Thomas Aquinas, *Summa Theologica,* II, II, 25, 4

some way united to me as my body is.[49]

What Marcel seems to be implying is that the reality of embodiment is so fundamental to the nature of man that it colours even his very grasp or notion of being. The notion of embodiment, in other words, is an integral part of one's notions of all other things, whether they are material and impenetrable or merely constructs of the mind like concepts, mental images, or even emotions. This must include, in other words, one's notion of other persons and of one's dependency on them, one's relationships to them. These must also bear the same relationship to one's self as one's body; they are "in some way united to me as my body is."

But Marcel's notion of *having* stems from his notion of corporality.[50] The foundation or prototype of all *having* is the 'having' of one's own body, just as the prototype of all love is self-love. Human affectivity also has its origin in the corporeal nature of man. Human emotion is an intimate part of the experience of corporeal self. One cannot separate the corporeal from the affective. It follows that Marcel's notion of *having* must include an affective dimension. Marcel's notion of *having* is also constituted by a tension between the 'haver' and the 'had', between the *qui* and the *quid*, between a "within" and a "without," and, more fundamentally, between the self and the 'other-qua-other'. This is because the relation of *having* is essentially *threatened*. For so far as what is had is a "without" for a self which is "within" and is maintained constantly as a "without" (as disposable), the 'had' is essentially open to the possibility of being lost, stolen, or destroyed. This applies just as well to the *having* of relationships as to the *having* of property or possessions. This threat is intrinsic to *having*, Marcel believes, and reveals itself as the "hold" of the other-qua-other:

> There is in having a double permanence: of the qui and of the quid. But this permanence is essentially threatened ... And this threat is the hold of the Other qua Other - which can be the world in itself - and in the face of which I feel myself so painfully as *me*. I hug to myself this thing which may be taken from me; I attempt desperately to incorporate it to me, to form with it a unique, indecomposable complex. Desperately, vainly.[51]

Here, following a philosophical route, a route which appears consistent, or at least reconcilable, with Lonergan's theories, one arrives at the very foundations of human affective bonding, attachment theory. One's loves, like one's *having*, are

[49] Gabriel Marcel, *Being and Having* (Glasgow: The University Press, 1949), p.11.

[50] See Section 3.4 of this study.

[51] Gabriel Marcel, *Being and Having* (Westminster: Dacre Press, 1949), pp. 162 - 163.

inherently insecure. Bonding, psychological attachments, are a natural instinctive reaction to the fundamental insecurity at the core of human nature. Through the contribution of Marcel one begins to see how even human intersubjectivity relates at core to the realm of the ontological.[52]

It was already argued in Section 7.7 that if self-communication is a fundamental aspect of all real being, so too must receptivity, the complementary pole of self-communication. Clarke says that

> without receptivity no communication can become actual and complete itself. It must therefore be a primordial dimension of reality as a whole, even though it follows upon the substantial and self-communication aspects of being in the ontological order.[53]

Such receptivity is not necessarily a sign of poverty or imperfection in the receiver, but viewed as an essential complementarity in the natural world, as one pole in a relation of being, it attains an essentially positive meaning. This compares, for example, with the essential complementarity of 'care' and 'need' in relations between parent and child, and teacher and student.[54]

Each being then tends to spin out a web of relationships with the beings around it, interactive relationships of communicating and receiving. One could say that beings tend to form networks or systems of such interactions. Clarke attributes to such systems the notion of some kind of community in its widest sense:

> Real being, as intrinsically self-communication and relational through action, tends naturally towards modes of being together that we can justifiably call the mode of community. To be, it turns out, means *to-be-together*. Being and community are inseparable.[55]

This expresses on an ontological plane the intersubjective notion of 'intentional bonds' developed in this study to explicate the concepts of human community and intersubjective attachments.[56] This level of intersubjectivity, however, is the level of personal being where social consciousness enters the equation. At this level "the ontological community of beings turns into conscious social community in the full sense, as a natural expression and fulfilment of the self-communicating dynamism

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[52] This is considered in more detail in that section of Chapter Seven of this study dealing with the works of W. Norris Clarke, and as summarised in in his book *Person and Being*.

[53] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 20.

[54] See Section 14.5.9 below.

[55] W. Norris Clarke, *Person and Being,* p. 23.

[56] See Section 17.9 of this work.

of being."[57] But at a deeper, more profound level, the level of substance, these conscious relations form deeper, more permanent relational and intentional bonds. This is the level at which a community of beings becomes a communion of beings. Clarke explains that "at its deepest and most intimate level the conscious bonds of human togetherness turn into *communion.*"[58]

To explicate this difference between community and communion still further one must examine first what is meant by the term community. Lonergan says:

> The community reveals itself to itself by its living, by the way it meets its problems, by its revisions of its common sense, its common meaning, its common commitment, by the way things work out in development and breakdown, by growth and disintegration. [59]

A community then arises from shared insights, beliefs, values, tasks. It derives also from a sense of community. But there is also what Lonergan would term "community of feeling" and "fellow feeling." From such empathy and sympathy permanent emotional and psychic ties or bonds can grow; community, in other words, becomes communion, and such communion in turn becomes, according to John Paul II, "the foundation and soul of the *community.*"[60] Just as community in its broadest sense is the aim of all being, according to Clarke, so he also maintains that "personal being ... *tends ultimately towards communion* as its natural fulfilment."[61]

14.5.6 *John Bowlby's Attachment Theory*

Bowlby was an analytical psychotherapist, but he is best known for his work in experimental psychology in which he examined in detail the devastating effects of emotional deprivation on children. He is included in this study because his theories link in a very clear and unambiguous way the fields of intersubjectivity, human development, affectivity, and education. He also illustrates how the dual aspects of development from 'below upwards' - homeostasis and transcendence - interact one with the other on a psychological plane. Finally, his theories provide the basis for the development of the notion of the 'intentional bond' which forms a

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[57] W. Norris Clarke, *Person and Being,* p. 23.
[58] Ibid., Italics in original.
[59] Bernard Lonergan, *Collected Works of Bernard Lonergan - Book 6* (Toronto: University of Toronto Press, 1996), p. 173
[60] John Paul II, *Familiaris Consortio* (London: Incorporated Catholic Truth Society, 1981), pp. 34 - 35.
[61] W. Norris Clarke, *Person and Being*, p. 24. Italics in original.

central part of the educational model developed in this study.[62]

While Bowlby was central to the Psychoanalytical movement in England in the 1950s, he distanced himself from the two competing camps of Anna Freud and Melanie Klein. He attempted to form a balanced and authentic view of human development, one based on observations of 'normal' human growth rather than on studies of psychopathology. The following quotation from Bowlby links well his own theories of human development with those dealt with thus far in this work:

> Without someone specifically oriented to his needs the infant cannot find a working relation to external reality. Without someone to give satisfactory instinctual gratifications the infant cannot find his body, nor can he develop an integrated personality. Without one person to love and to hate he cannot come to know that it is the same person that he loves and hates, and so cannot find his sense of guilt, and his desire to repair and restore. Without a limited human and physical environment he cannot find out the extent to which his aggressive ideas actually fail to destroy, and so cannot find out the difference between fantasy and fact. Without a father and mother who are together, and who take joint responsibility for him, he cannot find and express his urge to separate them, nor experience relief at failing to do so.[63]

This study will take as given the immense amount of experimental work conducted by Bowlby and others and will dwell instead on the theoretical framework which his researches have led him to develop.

Bowlby is best known for his work on 'maternal deprivation' by which he means that "the prolonged deprivation of a young child of maternal care may have grave and far reaching effects on his character and so on the whole of his future life."[64] His notion of maternal deprivation appears to have much in common with Feuerstein's notion of 'cultural deprivation'. Also, like Lonergan and Feuerstein, Bowlby views the child's world as mediated by meaning, saying that "environmental failure is not merely impressed on a passive organism, but is experienced and given meaning by the afflicted individual." [65] He sees maternal deprivation not just as the lot or fate of institutionalised children, but all too often the natural consequence of the modern culture of *having* where both parents are caught up in the world of work. In contradiction to the widely held belief in the notion

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[62] This will be dealt with in more detail in Section 17.9.2 below.

[63] John Bowlby, "A Two-Year-Old Goes to Hospital", *Proceedings of the Royal Society of Medicine*, (1952), 46: pp. 425 - 427.

[64] John Bowlby, "The Roots of Parenthood", Convocation Lecture of the National Children's Home (July, 1953), quoted from Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 37.

[65] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), pp. 37 - 38.

of so-called 'quality time' with one's kids, he holds that it is the ordinary small things of life that have the real impact on the child's development, or lack of it:

> All the cuddling and playing, the intimacies of sucking by which a child learns the comfort of his mother's body, the rituals of washing and dressing by which through her pride and tenderness towards his little limbs he learns the values of his own, all these have been lacking.[66]

A measure of the impact of Bowlby's research on educational thinking is the fact that his finding that "bad homes are better than good institutions"[67] resulted in a complete redrafting of the whole child-care system in Britain. Of equal importance for the future of society, however, is his contention that

> today's emotionally deprived child becomes tomorrow's neglectful parent: adverse experiences become internalised by the growing child in a way that leads on to further adverse experiences, thus perpetuating the vicious circle of neurosis.[68]

Deprivation is not an exclusively maternal problem, however, as Jeremy Holmes explains:

> The reality is that the child has a hierarchy of attachment figures, of whom the mother is usually the most important, but that fathers, grandparents, siblings and other relations and friends also play a part, and that in the absence of one, the child will turn to another in a way that does not equate with the emotional promiscuity of the institution-raised child.[69]

Frequently, it is lack of a supportive father, or the presence of an abusive one, which is the main cause of deprivation. Holmes continues:

> The problems facing the modern family are not so much maternal deprivation as of paternal deprivation due to weak, absent or abusive father, and 'implosion' of the children onto unsupported mothers.[70]

Again, it is important to emphasise that Bowlby maintained that what matters is not so much the separation or the abuse itself but its meaning for the child, how the child 'comes to terms with it', and the context in which it happens.[71] By "context" is meant the various other factors impinging on the child's life: his other

[66] John Bowlby, "A Two-Year-Old Goes to Hospital", *Proceedings of the Royal Society of Medicine,* (1952), 46: pp. 425 - 427, quoted from Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 40.
[67] Ibid., p. 41.
[68] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 42.
[69] Ibid., p. 45.
[70] Ibid., p. 47.
[71] Ibid., pp. 49 - 50.

relationships, his school life, his academic success or otherwise, the presence or absence of specific learning disabilities, his character or personality type. In later life, a warm supportive spouse can go a long way towards compensating for earlier deprivation. However, "in general ... these problems perpetuated themselves in a cycle of disadvantage as such children themselves became parents."[72] Holmes continues:

> Subsequent studies have also confirmed Bowlby's concept of cycles of disadvantage. People brought up in unhappy or disrupted homes are more likely to have illegitimate children, become teenage mothers, make unhappy marriages and to divorce. Parents who physically abuse their children tend to have had childhoods characterised by neglect, rejection and violence. Girls from disrupted homes when they become mothers tend to talk less to their babies, touch them less and look at them less. ... But not all children from unhappy homes suffer and fail in this way.[73]

As mentioned above, temperament also plays an important part: children who are less adaptable and more prone to negative moods are more likely to be targets of parental criticism than more easy-going siblings, and are more likely to develop a childhood psychiatric disorder. Even in discordant homes, if the child has a good relationship with one parent or with a grandparent, this may act as a protective factor against conduct disorder.[74]

The child is not a passive recipient, however. The stable environment, the happy state of homeostasis, is important only because it provides a stable, secure base from which the child can reach out to the world with confidence. To Bowlby, in other words, homeostasis and transcendence are merely two sides of the same coin. Only in the insecure and deprived do we find a fear of exploration and a tendency to cling tenaciously to one's insecure and unstable base. "All of us, from the cradle to the grave," says Bowlby, "are happiest when life is organised as a series of excursions, long or short, from the secure base provided by our attachment figures."[75]

Bowlby's theory of maternal deprivation and its consequences for human development is summarised in diagrammatic form on the following page. Of real importance to the educator is the clear implication that good school experience can have a very powerful influence on mitigating the effects of childhood deprivation.

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[72] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 49.
[73] Ibid., p. 51.
[74] Ibid., p. 53.
[75] John Bowlby, *A Secure Base: Clinical Applications of Attachment Theory* (London: Routledge,1988), p.

Psychoanalysis offered two different accounts of the infant-mother bond: drive theory and object-relations theory. In Bowlby's eyes, both theories were seriously flawed. The first, 'classical' drive-theory account came from Freud's early formulations. According to this, the bond which links mother to infant is 'libido', or psychical energy. In this view, the new-born infant lives in a solipsistic world of 'primary narcissism' and experiences a build-up of tension - the need to feed, to suck the breast as an expression of his infantile sexuality. The mother provides the vehicle for the discharge of this libido. If she, or her breast, is absent, tension arises due to undischarged libido which is felt by the infant as anxiety. The baby learns to love the mother because she feeds him, and so reduces the inner tension which is felt as anxiety. Bowlby dismisses this as the "cupboard love" theory of relationships. In his second 'object-relations' model Freud changed his theory of anxiety from one of dammed up libido to the theory of 'signal-anxiety' where even threatened separation from someone who is loved or longed for is enough to trigger anxiety. This shift towards regarding anxiety as based on object-loss is the central pillar of the 'object-relations' viewpoint that has become the prominent psychoanalytical paradigm today. For Bowlby, Freud and others failed to take the all-important step of seeing attachment between infant and mother as a psychological bond in its own right, and not merely an instinct derived from feeding or infantile sexuality.[76] Bowlby explains:

> The young child's hunger for his mother's love and presence is as great as his hunger for food. ... Attachment Theory provides a language in which the phenomenology of attachment (he) experiences is given full legitimacy. Attachment is a 'primary motivational system' with its own workings and interface with other motivational systems.[77]

14.5.7 *Belief*

Even a cursory glance at the educational process will support the common sense experience that much of what a child learns at home and at school is taken on trust; it is accepted on the word of parents and teachers without proof and, most often, without even very close examination of the material. This is an extreme case of 'development from above downwards', or what Crowe describes as the 'way of heritage'. This type of learning involves what is variously described as 'belief', or

[76] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 63.

[77] John Bowlby, *Attachment and Loss, Vol. 2 - Separation, Anxiety and Anger* quoted in Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 63.

'trust', or 'faith'. Because the theological implications of the word 'faith' give it a rather special meaning, this study will confine itself to the terms 'belief' and 'trust'. These two words in turn have important differences in connotation which must be addressed when considering the development of the child.

In his book *Faith, Hope, Love* Josef Pieper makes the observation:

> To believe always means to believe someone and to believe something. The believer - in the strict sense of the word - accepts a given matter as real and true on the testimony of someone else. That is the essence of the concept of belief.[78]

In other words, the reason for believing "something" is that one first believes "someone". But believing "someone" is assenting to the trustworthiness of that individual. One is then assenting to the truth and goodness of a piece of knowledge (on Lonergan's third and fourth levels) on the basis of the fact that one has first assented to the being of the one imparting the knowledge (on the fourth level). In other words, one is saying "What you say is true and good" because one has first said "It's good that you exist." In addition, Lonergan would say that one cannot assent to a good or a value, one cannot, for example, say "It's good that you exist", without an accompanying emotional response, which is the intentional response to that good or value. This good or value is first and foremost the good or the value of the existence or being of the person mediating the knowledge.

14.5.8 *Belief and Trust*

Herein lies an essential difference between the words 'belief' and 'trust'. This distinction was not really considered by Pieper in his otherwise very comprehensive and insightful treatment of 'belief'. However, the difference is central to the more developmental and educational treatment adopted in this study. One might ask, are the two statements "I believe you" and "I trust you" really equivalent? Suppose child who considers that he has been accused in the wrong pours out his tale of woe to his mother, which response would he find the more reassuring, "I believe you", or "I trust you"? 'Trust' says more about one's attitude to the person himself, 'belief', on the other hand, leans more on one's attitude to the 'subject matter' in question. Belief is on Lonergan's third level of cognitive functioning, the level on which one assents to a truth; trust, however, is more on the fourth level, the

[78] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 29.

level in which the cognitive, volitional, and the affective meet. Trust, in other words, has affective and volitional aspects to it. More importantly, children don't normally 'believe' their parents or their friends without first 'trusting' them. Crowe himself puts his finger on the nature and origins of trust when he says:

> The love that is a trust, that bathes the child in an atmosphere of security, also surrounds father and mother with an aura almost of divinity. They are after all the eternal ones, forever grownup, there from the beginning; they are the almighty ones, the providers, who can do anything, who do not need to ask others if they can stay up late.[79]

'Belief' may be an assent to what someone says, based essentially on the reasonableness of the message; 'trust', on the other hand, always carries with it an element of feeling or emotion, which is an intentional response to the perceived good of the other, "It's good that you exist, so what you say is OK by me." Trust is essentially an underlying prevalent attitude towards a person; 'belief' more an attitude to the message based on the initial attitude to the person. Pieper would probably agree with this and say that 'trust' is inherent in his own concept of 'belief'. However, such a distinction between the two terms appears to be in keeping with common usage, as well as with Lonergan's cognitional model.

Not even in children, however, is critical judgment completely suspended in belief or trust: Pieper says that "an element in his acceptance is their inner probability, their concordance with what he already knows."[80] A child will still judge whether the message conveyed sounds reasonable or not, even though his final acceptance rests on his confidence in the knowledge of the other, based on his trust of the other. A young child will normally accept whatever his parents say as being so. As he matures, however, and as his powers of reasoning develop, his critical faculties play an increasing role. Pieper explains that "the very fact that a child has no other reason for regarding things as true is, precisely, the measure of his immaturity."[81] In the same vein, Crowe sees adolescence not just as the period in which reasoning and rationality develop, but also the period in which development from below upwards, 'the way of achievement', comes into conflict with development from above downwards, 'the way of heritage'.[82]

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[79] Frederick E. Crowe, *Old Things and New: A Strategy for Education,* pp. 19 - 20.
[80] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 32
[81] Ibid.
[82] See Section 11.6 below.

14.5.9 *Trust, Hope, and Care*

A further examination of the word 'trust' reveals an additional hidden element. The *Chambers 21st Century Dictionary* defines "to trust someone" as "to have confidence, or faith in them; to depend or rely on them." The words 'depend' and 'rely' in particular have distinct connotations of 'hope'. Even the word 'faith' is inseparable from 'confident expectation', which, in turn, denotes 'hope' as well as 'belief'. This hidden element of hope in the word 'trust' is more clearly apparent in the expression, "I trust you have all done your homework for today."

What is this preoccupation with the word 'trust' as evidenced in this rather lengthy preamble? The reason is that, just as the proper attitude of the teacher towards his students was found to be one of 'care', so the proper and necessary attitude of the student towards his teacher or 'mediator' should be one of 'trust'. Indeed, one might argue that real education "from above downwards", real 'mediation', as the term is employed in this study, is impossible without a prior attitude of trust on the part of the child or young person.

Both 'trust' and 'care' have in common an affectional assent to the being of the other. The word 'care' has the additional connotation of 'active responsibility' towards the perceived need of the other. The word 'trust' has the additional connotation of awareness of the more passive, more ego-centric, perceived need in oneself. Both 'care' and 'trust' in their active forms may be termed self-transcendent. Both are intentional, since both are cognitive and conscious as well as affectional and self-transcendent.

These complementary modes of conscious intentionality are central to the dynamism of education in its broadest sense. In essence, together they form what Lonergan terms a 'mutually self-mediating system': trust elicits care, and care elicits trust. From this affective milieu emerges what Freire terms "co-intentional education." He explains:

> Teachers and students ... , co-intent on reality, are both Subjects, not only in the task of unveiling that reality, and thereby coming to know it critically, but in the task of re-creating that knowledge. As they attain this knowledge of reality through common reflection and action, they discover themselves as its permanent re-creators. In this way, the presence of the [students] in the struggle for their liberation will be what it should be: not pseudo-participation, but

committed involvement.[83]

The partnership between teacher and student, however, is not an equal one, as Freire seems to insist, but is complementary in nature, even though it is, and ought to be, mutually beneficent - self transcendence according to the nature of each leading to self-realisation of each.

14.5.10 *Belief and Knowledge*

Feuerstein maintains that much of what we know has been mediated by significant others in our lives. What is grasped in this 'way of heritage', by participating in the knowledge of parents, teachers and friends, is no less a form of valid knowledge than that which is the product of Lonergan's experience, understanding, and judgment. Aquinas says that "it [the act of belief] does not stop at something that is said but something that is."[84] And what Lonergan says of grasping 'the virtually unconditioned', Pieper says of belief:

> What the act of belief truly aims at is reality and not a message or a report; ... The believer partakes truly of this reality; he touches it, and it becomes present to him - all the more so the more he is capable, by loving identification with the witness, of seeing with the latter's eyes and from his position.[85]

Is there no difference, then, between the knowledge gained by belief and that gained through the hard graft, as it were, of experience, understanding, and judgment? Both Pieper and Aquinas assert that there is a difference. What Aquinas says, essentially, is that knowledge based on belief is never quite as satisfying, as self-fulfilling, as that based on insight and judgement. Pieper explains: "the believer's intellect is not really satisfied, rather, the mind, insofar as it believes, is operating not on its own but alien soil."[86] Or to explain the matter according to Lonergan's scheme, one can say that in the case of belief inquiry may not reach its full term in the attainment of the 'virtually unconditioned.' This also means that the release of the tension of inquiry does not take place, leaving a lingering dissatisfaction. In other words one can say that, in the case of belief, inquiry does not reach satisfactory 'closure'. The element of hope which one finds in trust is a

[83] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 51. Italics in original.
[84] Thomas Aquinas, *Summa Theologica*, II, II, i, 2 ad 2
[85] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 53
[86] Ibid., p. 52.

partial compensation for this lack of certainty. Phrasing the case somewhat differently, one can say that the *having* mode of knowledge which comes from accepting the word of another (by belief) is never as satisfying or conducive to human growth as that which comes from one's direct knowing, from ones own experience, understanding, and judgment. Such direct knowing enhances the *being* mode of existence. This in turn throws some light on the value of the practical, exploratory, and experiential pedagogical methods recommended by contemporary theorists like Dewey, Pestalozi, and Montessori.

But most of what a child learns is mediated by others. Does this mean that most of the knowledge a child attains in school is of an inferior, less satisfying kind than that attained by his own efforts? Herein lies the essence of what Feuerstein describes as 'mediated learning experience' and which Freire terms 'problem posing education', and which Lonergan highlights as the centrality of insight in learning. The task for the enlightened teacher is to bring the child through all the various stages of true discovery, through experience, understanding and judgement, on his way to the attainment of firm knowledge. This is the teacher as 'mediator' rather than the teacher as 'master'. The task is to ensure that the same thrill of discovery that motivated the great explorers and scientists of history enlivens the classroom. This is also the essence of Freire's "co-intentional" education.[87]

14.5.11 *Belief as a Prerequisite for Action*

In his book, *Don't accept Me as I Am,* Reuven Feuerstein wisely states that

> only a person strongly motivated by a belief will be liable to persist in an action. Why? Because belief is anchored in a need. Knowledge alone of a path or activity will not necessarily trigger action, because it is not anchored in a need of the individual.[88]

What Feuerstein appears to be implying here is that the need to believe is a fundamental need in human nature. This is affirmed by Pieper, when he says: "believing is one of the needs of human nature."[89] Feuerstein is also affirming Lonergan's contention that the natural consequence of the affirmation of a truth are questions for value: "Is it good?", "Is it worth while?". This, in turn, with the accompanying emotionality, is a pre-requisite for action; thus Lonergan's stages

[87] This will be dealt with in more detail in Section 15.5 below.

[88] Feuerstein, Rand & Rynders, *Don't Accept Me as I Am* (New York, Plenum Press, 1988), p. 5.

[89] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), pp. 37 - 38.

can be more fully expressed as experience, understanding, judgment, assent, action. Pieper again says that "we believe, not because we see, perceive, deduce something true, but because we desire something good."[90] This 'need to believe' , in other words, is nothing other than Lonergan's 'pure desire to know' manifest in the mode of belief and trust, and mediated by the intervention of those significant others in the child's life whom he trusts.

14.5.12 *Belief and Trust as Vital for Learning*

Erikson sees the development of basic trust and hope as a central attribute of infancy.[91] According to Erikson, there happens at the stage of infancy a fundamental struggle between basic trust and mistrust. The resolution of this first 'psychosocial crisis' in the child's life is performed primarily by maternal care. The new-born infant's more or less coordinated readiness to incorporate by mouth and through the senses meets the mother's and society's more or less coordinated readiness to feed him and to stimulate his awareness; in this way, 'trust 'meets 'care'. "The mother must represent to the child an almost somatic conviction that she (his first "world") is trustworthy enough to satisfy and to regulate his needs."[92] Thus, the trusting demeanour of the child elicits the care of the parents. Hanaghan goes even farther when he traces the development of the first human community, the family, to the parental response to the child's cry. Rather poetically, he says:

> *Thus it is that the utterly undefended human baby is more adequately self-preserved , through his helpless cry, than all non-human babies; and his self-preservation cry has created the ... human community.*[93]

But the infant's demeanour also inspires hope in adults and makes them wish to give hope; it awakens in them a strength which they, in turn, are ready and needful to have confirmed in the experience of care. Erikson claims that this "is the ontogenic basis of hope, that first and basic strength which gives man a sense of instinctive certainty in his social ecology."[94]

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[90] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 37.

[91] See Section 17.8.3 below

[92] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences,* Vol. IX (The Macmillan Company, 1968), p. 288.

[93] Jonathan Hanaghan, *Society, Evolution & Revelation* (Dublin: The Runa Press, 1957), p. 21. Hanaghan was responsible for introducing psychoanalysis into Ireland and was a founder member of the Irish Psychoanalytic Association.

[94] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences,* Vol. IX (The Macmillan Company, 1968), p. 288.

Unavoidable pain and delay of satisfaction, however, and the inexorable weaning make this stage also prototypical for a sense of abandonment and senseless rage. This is the first of the human estrangements against which hope must maintain itself throughout life. Like Pieper, Erikson also keeps using the word 'hope' as both synonymous with, and arising from, basic trust: "Hope, then, is the first psychosocial strength. It is the enduring belief in the attainability of primal wishes in spite of anarchic urges and rages of dependency." [95]

14.5.13 *Trust, Hope, and Love as Undifferentiated in Childhood*

It is important to point out at this stage that love, trust, and hope are undifferentiated in the infant. One can even make the case that they are never fully differentiated even in the adult. Gordon Allport points out that it is only as the child grows and develops that differentiation of feelings occurs. It has already been argued that just as differentiation and integration are dual aspects of organic development; so also one finds the same processes in operation in the human mind and in the development of the human personality. Thus the word 'trust' implies not only an openness to love, but in the infant in particular it involves also the whole area of 'need love'.[96]

14.5.14 *Hope and Becoming*

As already mentioned, both belief and hope, in the common everyday meaning of these words, are basic constituents of the attitude of 'trust' as the term is used in this study. 'Hope' itself refers to something that goes right to the core of human nature and of the education of the child - the fact that human beings are always in process of becoming. This includes both a negative and a positive element: the negative element is the fact that one never really fully arrives at self-fulfilment or self-realization; the positive element is the fact that, despite this, one is always oriented towards such self-fulfilment and self-realization. Pieper says that human beings are constantly in what he terms '*status viatoris*', or "the state of being on the way."[97] He also maintains that

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[95] Ibid.

[96] Allport's schematic representation of the differentiation of feelings with age has already been shown in section 8.8.1 of this study.

[97] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 92.

> hope, like love, is one of the very simple, primordial dispositions of the living person. In hope, man reaches "with restless heart", with confidence and patient expectation, toward the bonum arduum futurum, toward the arduous "not yet" of fulfilment.[98]

This notion of 'becoming' or 'being on the way' is central also to the philosophy of Paulo Freire who

> affirms men and women as being in the process of *becoming* - as unfinished, uncompleted beings in and with a likewise unfinished reality. Indeed, in contrast to other animals who are unfinished, but not historical, people know themselves to be unfinished; they are aware of the incompletion. In this incompletion and this awareness lie the very roots of education as an exclusively human manifestation. The unfinished character of human beings and the transformational character of reality necessitate that education be an ongoing activity.
>
> Education is thus constantly remade in the praxis. In order to *be*, it must *become*.[99]

This aspect of the philosophy of Freire and Pieper is also completely in accord with that of Lonergan whose very 'notion of being', arguably the most central idea in his cognitional theory, contains this same notion of the "not yet" of the human condition, the *status viatoris*: Lonergan explains:

> The notion of being, then, is essentially dynamic, proleptic, an anticipation of the entirety, the concreteness, the totality, that we ever intend and since our knowledge is finite never reach.[100]

Thus, it is also in line with Lonergan's dynamic theory of knowing which, as was explained at the beginning of this study, is really a theory of coming to know. Freire, however, takes a much stronger social and intersubjective view than either Pieper or Lonergan, as when he says:

> Nor yet can dialogue exist without hope. Hope is rooted in men's incompletion, from which they move out in constant search - a search which can be carried out only in communion with others. Hopelessness is a form of silence, of denying the world, and fleeing from it.[101]

At its highest, in the mature 'authentic' person, Pieper says that hope reaches out in an act of self-transcendence that always

> decides in favour of what is, at any given moment, the greater

[98] Ibid., p. 100.

[99] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 65.

[100] Bernard Lonergan,"The Subject". In William Ryan and Bernard Tyrrell (Eds.), *A Second Collection,* p. 75.

[101] Paulo Freire, *The Pedagogy of the Oppressed,* p. 72.

> possibility of the human potentiality for being ... In this way, every virtue is borne along on a current that receives and guards the courageous unrest of our natural hope.[102]

This notion of "becoming", the inherent *status viatoris* or state of "being on the way" of human nature, and the drive to self-realization and self-fulfilment, which are characteristics of the philosophies of Lonergan, Pieper, Aquinas, Aristotle, and Freire, has already been examined from the perspective of developmental and social psychology in Chapter Eight dealing with "Human Development and Self-Transcendence."

14.6 *The Way of Heritage and Cultural Deprivation*

John Bowlby is not the only one to have researched the effects of poor or inadequate parenting on child development. While Bowlby and his followers have coined the phrase 'maternal deprivation', Feuerstein and his group have initiated many cross-cultural studies into the causes of what he terms the 'syndrome of cultural deprivation'. Most of these were studies of Jewish families from different countries and cultures who were migrating to Israel. Some, however, involved native American communities, like the Navaho, and the 'First Nation' peoples of Canada. Feuerstein found that "the more a group has preserved its cultural values (often the preservation of its language), the more it has been able to maintain a high level of cultural cohesiveness, and, more importantly, the greater has been its capacity to cope successfully with the unfamiliarity and complexity of a new environment."[103]

What Feuerstein does not mean by 'cultural deprivation', however, is the once prevalent notion that some cultures and subcultures are inherently 'depriving' with respect to some necessary component of 'good' child rearing, and that children from such cultures are thus necessarily 'culturally deprived'. Haywood explains:

> Feuerstein has maintained that such a notion of cultural deprivation is false and misses the essential point. He asserts that every culture and subculture that has been around long enough to warrant the name contains all the social elements that are essential for adequate cognitive development. In the vast majority of families, these elements are transmitted to the children through a broad set of processes that he calls "intergenerational cultural transfer" - the passing of a culture's essential elements from one generation to the next - that relies heavily on MLE as its chief tool. It is when

[102] Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), p. 101.
[103] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 69.

> environmental events interrupt that transfer, that is, when children are somehow denied the benefits of their own culture, that the children can be regarded as "culturally deprived."[104]

In other words, most cultures do have all the essential ingredients for adequate cognitive development of its children, if properly transmitted or mediated by the adult generation. According to Feuerstein, it is a failure to give adequate mediation of culturally defined ways of perceiving and organising the world, thinking about thinking, and defining and solving problems, that constitutes the 'syndrome of cultural deprivation' in the children of a particular culture.

Cultural deprivation, like Bowlby's maternal deprivation, may apply to deprived children anywhere, even in relatively wealthy societies. Even though both Bowlby and Feuerstein would accept that research appears to show a much higher prevalence of mild mental retardation among children from poor families, yet it is clear that it is not poverty as such that causes mental retardation but "the social circumstances of poverty,"[105] the fact that adequate mediated learning experience is less likely to be provided, for a variety of reasons, when families are economically and socially deprived. In Feuerstein's opinion, it is lack of Mediated Learning Experience or MLE which is mainly responsible for children's failure to achieve in school:

> How many teachers are puzzled by certain children's inability to become affected by the learning processes to which they are exposed? Some children with retarded performance seem to repeat the same errors and show the same incapacity for learning even after having been exposed to cause-and-effect conditions many times. [106]

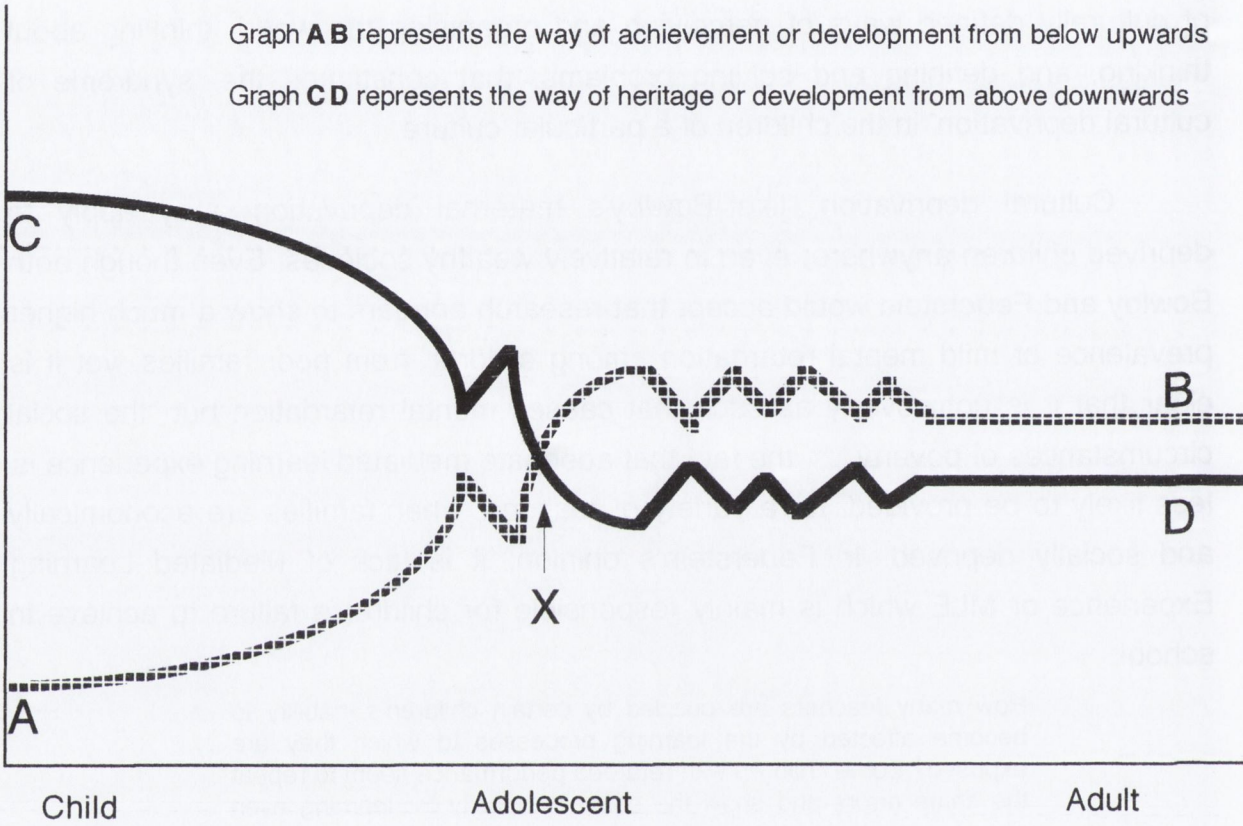
14.7 *Variation of the Relative Importance of the Two Ways with Age*

The diagram below is taken from *Old Things and New* by Frederick Crowe. It displays Crowe's estimate of the relative importance with age of development due to heritage or tradition, that is 'development from above downwards', and 'the way of achievement', or 'development from below upwards'. Crowe explains:

> The line, AB, moves along a base that measures years of life but rises on the graph to show the increasing importance of personally achieved development; the line, CD, moves along the same time

[104] Prof. Carl Haywood, "A Mediational Teaching Style", *International Journal of Cognitive Education & Mediated Learning*, Vol. 3, No. 1, 1993, p. 30.
[105] Ibid, p. 28.
[106] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 55.

base but descends on the graph to show the decreasing importance of development that depends on tradition. The two lines become jerky as they near one another, cross at the point, X, which ordinarily occurs in adolescence, and then follow erratic paths for a while till they achieve some equilibrium, represented by the parallel lines of a further development that combines heritage with achievement.[107]



14.8 *The Two Vector Forces and Mediated Learning*

While Crowe accepts that "in principle, the development achieved through personal experience and the development based on accepting a heritage can be conceived as complementary to one another,"[108] he nonetheless provides no clear mechanism for how the two ways cooperate and work together. It is not surprising, therefore, that he emphasises the "all-out war between opposing approaches,"[109] particularly in adolescence. For Crowe the main problem lies in the question: "on what basis can we unite tradition and innovation, gift and achievement, heritage

[107] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p.26
[108] Ibid., p.24
[109] Frederick E. Crowe, *Old Things and New: A Strategy for Education,* p.24

and development, docility and personal creativity."[110] After all, "As life is one, then, so is the educational process."[111]

One possible answer to Crowe's problem can be found in Feuerstein's notion of 'Mediated Learning Experience'. Using MLE as a guide, one can say that from a practical educational point of view development 'from below upwards', or "the way of achievement", does not in many instances happen by itself, even if the impetus or impulse to do so, the 'pure desire to know', is spontaneously operative in the child. In practice, it is the caring parent, teacher, or sibling who, mediating from above downwards, induces, guides, and develops the innate capacity of the child to be attentive, intelligent, reasonable, and decisive. Even though spontaneous and independent learning in the child can and does happen, yet one can say that the intersubjective dynamics of mediation from above downwards is the normal way in which the intrasubjective dynamics of coming to know, development from below upwards, is induced and facilitated in the child. And even where spontaneous development from below upwards does happen, Feuerstein would say that it is due in large part to the changes induced in the human organism by such top-downwards mediation in the first place. This is the essence of Feuerstein's notion of 'mediated learning experience' and, as will be argued later,[112] it is also one way in which Lonergan's 'self-appropriation of cognitive interiority' may be facilitated and induced. In addition, Feuerstein maintains that mediated learning experience, as opposed to learning by direct exposure to stimuli, or 'immediate' learning in Lonergan's terminology, is the principal avenue by which the individual may undergo meaningful change or transformation, and become 'structurally modified'.

Again, Lonergan appears to imply this when he says that development from above downwards is the "chronologically-prior phase."[113] Not only can it be said to be first in time, but Lonergan also insists that development is also more "fundamentally,"[114] more "importantly,"[115] from above downwards. Crow explains:

> The unity of consciousness is prior to its components, and so, the communication between levels is prior to the direction that

[110] Ibid., p. x.
[111] Ibid., p.22
[112] See Section 15.10 of this study.
[113] Bernard Lonergan, "Theology and Praxis" in Frederick E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan, S.J.* (New York: Paulist Press, 1985), p. 196.
[114] Bernard Lonergan, "Christology Today" in Frederick E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan, S.J.* (New York: Paulist Press, 1985), p. 77.
[115] Ibid., p. 79.

> communication takes. ... what the child is given in the fourfold structure of consciousness is something like potencies, but the potencies await actuation.[116]

And he adds:

> Ontologically, there is a further building to be done on the fundamental framework, a realization to be achieved of what is not yet in being. And this, of course, takes time; it is a matter of slow growth, of directed effort, of persevering application. There seems a need for gift to precede achievement.[117]

With this "need for gift to precede achievement," it is quite clear that the natural built-in structure of human consciousness is not by itself a guarantee of human success, and does not by itself provide an adequate foundation for human development. Feuerstein's work on what he terms 'deficient cognitive functions' shows quite clearly the very many things that can, and do, go wrong with human cognitional development. Speaking of development from below upwards which he describes as development by "direct exposure to stimuli', he says:

> Organisms limited in their interaction solely by direct exposure to stimuli, of necessity, display a high level of uniformity. Their development is easily and highly predictable. Very little deviation from normative development can ever be expected. The course of life of such an organism is marked by a uniform process of unfolding of innate characteristics for which even the environment, the eco-system in which he will best exist is already chosen for him. Changes in the order and succession, as well as diversity, of development are not conceivable in the single direct exposure modality of interaction.[118]

What Lonergan has termed the two ways of human development Feuerstein calls the "two modalities hypothesis," where both direct exposure to stimuli and MLE coexist. It is this coexistence of the 'two ways' or 'two modalities' which explains both the high level of modifiability (or educability) of the human being and "the rate of diversification which distinguishes his development from the relative uniformity of development in the animal world."[119] In other words, raw intelligence or 'native ability' alone is not a sufficient condition to provide for effective perceiving, attending, imagining, understanding, judging, and assenting. There are a finite number of fundamental processes of thinking that, combined with certain affective,

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[116] Frederick E. Crowe, *Old Things and New: A Strategy for Education,* p.15

[117] Ibid.

[118] R. Feuerstein and S. Feuerstein, "Mediated Learning Experience: A Theoretical Review." in Reuven Feuerstein, Pnina S. Klein, Abraham J. Tannenbaum (Eds.), *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 11.

[119] R. Feuerstein and S. Feuerstein, "Mediated Learning Experience: A Theoretical Review.", p. 11.

motivational, and attitudinal factors as well as particular habits of intellectual work, constitute what Feuerstein terms 'basic cognitive functions'. These functions, as already argued in Chapters Ten, Eleven, Twelve, and Thirteen, are also necessary for effective attending, perceiving, understanding, and judging. These basic cognitive functions are not genetically given and must be acquired in the child through learning. These are learned primarily by mediational processes 'from above downwards', by the 'way of heritage'. In short, there is a direct 'causative' link between development by the 'way of achievement' and that by the 'way of heritage', and that link is Feuerstein's 'mediated learning experience' (MLE) which involves the learning of cognitive functions which are mediated largely by the adult world, working in and through a particular cultural "heritage".

MLE is then is an essential element in the lives of all children. However, Haywood explains that

> the amount, quality, intensity, frequency, and duration of what is needed for adequate cognitive development will vary as a function of individual differences in children (e.g. genetic intelligence levels, sensory integrity, emotional stability, environmental support).[120]

When such MLE, and command of the resultant cognitive functions, is insufficient for a child's individual developmental needs, then the result is an inadequate level of cognitive development. Such deficient cognitive development will manifest itself in the way of achievement, which is dependent on the way of heritage and on MLE for the necessary growth in cognitive functions. The result is 'cultural deprivation' and relatively inadequate academic and social learning. When MLE is adequate for a child's individual developmental needs, however, the retarding effects on academic and social learning of such conditions as poverty, mental retardation, emotional disturbance, and low parental education levels may be significantly offset and compensated for. "The result is a higher level of cognitive development and relatively more effective academic and social learning."[121]

Providing an adequate level of MLE is generally an essential role of parents, grandparents, and older siblings, in a process Feuerstein describes as 'intergenerational cultural transfer'. This process, he maintains, is repeated in every culture, and all cultures have within them the essential elements for the adequate

[120] Prof. Carl Haywood, "A Mediational Teaching Style", *International Journal of Cognitive Education & Mediated Learning*, Vol. 3, No. 1, 1993, p. 30.
[121] Ibid., p. 31.

cognitive development of their children. Failure of transmission, for whatever reason, results in 'cultural deprivation'. However, where some aspects of cognitive development have not been stimulated adequately through MLE, it is possible for teachers and others to mediate these deficient aspects at a later stage through carefully structured mediational-style teaching. Such teaching may involve simply using Feuerstein's parameters of MLE applied in and through a normal school curriculum, or it may require the use of specially designed programmes like Feuerstein's Instrumental Enrichment (IE) programme or Haywood's Bright Start programme for younger children.[122]

Feuerstein's main cognitive functions have already been considered in some detail in Chapters Ten, Eleven, Twelve, and Thirteen, where they were arranged according to Lonergan's dynamic operations of coming to know, rather than according to Feuerstein's more simplistic and mechanistic 'input - elaboration - output' model.

14.9 *The Two Ways of Development and Language*

What Lonergan terms 'mental operations', like experience, insight, and judgment, Vygotsky calls 'natural functions', which operate and unfold from below upwards. In the child, these 'natural functions' become what he terms 'social functions' under the influence of adult mediation from 'above downwards'. Thus Feuerstein's cognitive functions correspond to what Vygotsky terms 'social functions' and, as has already been argued, they may be said to bear the imprint of the natural functions or mental operations with which they are associated.[123] Vygotsky's initial notion of higher mental functions focused on the transformation of natural functions into cultural functions under the influence of what he terms 'psychological tools'[124]. However, his research convinced him that of even greater importance was the interaction of the different higher mental functions among themselves, forming in the process so-called 'functional systems'. Although Vygotsky's theory embraced all higher mental functions, "Vygotsky himself was primarily interested in the development of language in its relation to thought."[125] This

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[122] Feuerstein's Instrumental Enrichment has already been described in Section 4.4.4.

[123] Vygotsky's notion of mental functions was introduced in Section 4.3.2 of this work.

[124] Vygotsky's notion of 'psychological tool' is dealt with in more detail in Section 15.6.

[125] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. xxxi.

is evidenced in the name given to his seminal work, *Myshlenie i rech* or *Thought and Language*[126]. His main objective in this book was to show that "thought and speech have different roots merging only at a certain point in ontogenesis, after which these two functions develop together under reciprocal influence."[127] What changes with time is the relationship between these two higher mental functions, rather than the functions themselves.

Vygotsky objects that one cannot adequately analyse the higher functions of thought and language separately. To try to do so would be to ignore "the unitary nature of the process under study"[128] and would be like trying to understand water, for example, by a separate analysis of hydrogen and oxygen. Just as this would tell nothing about the nature of the unified compound H_2O, so also "this type of analysis provides no adequate basis for the study of the multiform concrete relations between thought and language that arise in the course of the development and functioning of verbal thought in its various aspects." [129] The living union of sound and meaning which we call the 'word' cannot be broken up into two parts which are assumed to be held together merely by mechanical associative connections, which was basically Chomsky's position. Vygotsky proposes that the unit of verbal thought, the analogue or equivalent of the chemical molecule, which is further unanalysable and yet retains the properties of the whole, be termed the 'word meaning'. It is in this "internal aspect, in word meaning, that thought and speech unite into verbal thought."[130]

Vygotsky holds that "the primary function of speech is communication, social intercourse." This at first glance may appear quite obvious. However, when one accepts with Lonergan that experience, understanding, conception, judgment, and assent are primary, innate mental operations, or 'natural functions' in Vygotsky's terminology, then another primary function of speech is expression, conception, or formulation, which is 'speech-for-oneself' rather than 'speech-for-another'. In other words, as argued already in Section 11.10 above, the need for speech or verbal expression could also stem from the very *modus operandi* of the mind itself, under

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[126] While Alex Kozulin continues to use the title *Thought and Language* in his 1986 translation of Vygotsky, he insists that a more accurate English translation of the Russian title *Myshlenie i rech* would be *Thought and Speech*.

[127] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language,* p. xxxi.

[128] Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. 5.

[129] Ibid.

[130] Ibid., pp. 5 - 6.

the impetus of the pure desire to know. After all, speech or verbal expression is as much a need of the intrasubjective mind as it is of the mind viewed from the standpoint of its intersubjectivity. This, it will be argued, is not necessarily in conflict with Vygotsky's own view of mental functioning.

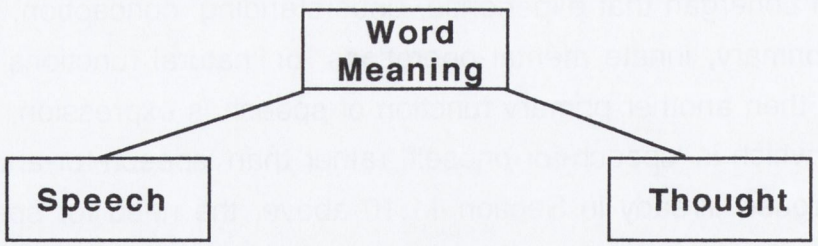
Vygotsky, like Lonergan, holds that the world of the child is mediated by meaning. He says, for example, that "study of the development of understanding and communication in childhood ... has led to the conclusion that real communication requires meaning."[131] Lonergan concurs with this, as when he says:

> I would not dispute that, for the child learning to talk, his little world of immediacy comes first, and that the words he uses are only an added grace. But as the child develops into a man, the world of immediacy shrinks into an inconspicuous and not too important corner of the real world, which is a world we know only through the mediation of meaning.[132]

One can say that a thought, broadly speaking, is an abstraction from data of sense, or as Vygotsky terms it, "a *generalized* reflection of reality."[133] He continues:

> (This) is also the essence of word meaning; and consequently that meaning is an act of thought in the full sense of the term. But at the same time, meaning is an inalienable part of word as such, and thus it belongs in the realm of language as much as in the realm of thought. A word without meaning is an empty sound, no longer a part of human speech.[134]

Thus meaning constitutes part of speech and part of thought. One can say that both language and thought are mediated by meaning.[135] One can also say that the higher functions of speech and thought are related or connected through the medium of 'word meaning', as represented in the following diagram:



[131] Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. 7.
[132] Bernard Lonergan, "Dimensions of Meaning", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 234.
[133] Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. 6. Italics in original.
[134] Ibid.
[135] The term 'mediation' is dealt with in some detail in the following chapter.

Vygotsky says that "since word meaning is both thought and speech, we find in it the unit of verbal thought we are looking for."[136]

Vygotsky, however, distinguishes between the 'meaning' of a word and its 'sense'; he distinguishes between 'word meaning', which reflects a generalised concept, and the 'word sense', which depends on the context of speech. "The sense of a word is the sum of all the psychological events aroused in a person's consciousness by a word. It is a dynamic, complex, fluid whole, which has several zones of unequal stability."[137] It was already mentioned in Chapter Eleven[138] that Vygotsky's notion of 'sense' appears to have certain parallels with Lonergan's notion of insight, and that the difference between 'meaning' and 'sense' can be explained in terms of Lonergan's distinction between conception and insight. Vygotsky explains that "meaning is only one of the zones of sense, the most stable and precise zone,"[139] indicating again a possible parallel between Vygotsky's 'meaning' and Lonergan's notion of conception, or definition, or *verbum*. Lonergan explains "The data of sense provoke inquiry, inquiry leads to understanding, understanding expresses itself in language."[140]

One can say that a word, a sentence, an event, a thing, can have meaning for a child. That meaning is the child's intellectual grasp of, understanding of, or insight into that word, or sentence, or event, or thing. This mental grasp can remain at the level of insight in which case the child may be said to have a "sense" of the thing or word, to use the Vygotskian term. The context, the peculiarities of this particular situation with its associations of time and place, imagery and emotionality, value and interest, form an integral part of that which is grasped or understood, an integral part of its 'sense'. There is also a dynamism, a spontaneity, a fluidity about this 'sense' of the thing or situation, just as there is to what Lonergan would term the insight, or grasp of the form of the thing, or situation. Vygotsky would also call this insight 'a spontaneous concept', a concept as yet unstraightened, unformulated, unrestricted, undefined by socialised language and definition. This again is as yet the 'sense' of a word, or event, or thing. For Vygotsky, 'meaning' as opposed to 'sense' arrives with socialised definition, with 'scientific concepts' mediated from

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[136] Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. 6.
[137] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language,* p. xxxvii.
[138] See Section 11.10.4 of this study.
[139] Ibid.
[140] Bernard Lonergan S.J., *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 10.

above downwards to the child by the society in which he lives. This for Lonergan corresponds to conception or definition proper, or *verbum*. This also demands a higher level of abstraction as one's intellect selects what is relevant for definition and representation of the essence of the word, or thing, or situation.

Thus, according to Vygotsky, "while meaning stands for socialised discourse, sense represents an interface between one's individual (and thus incommunicable) thinking and verbal thought comprehensible to others."[141] Lonergan would also say that one cannot communicate an insight directly to another. A teacher, for example, must simply arrange the necessary information in the most suggestive way possible and leave it to each student to grasp, or fail to grasp, the relevant insight:

> A teacher cannot undertake to make a pupil understand. All he can do is present the sensible elements in the issue in a suggestive order and with a proper distribution of emphasis. It is up to the pupils themselves to achieve understanding, and to do so in varying measures of ease and rapidity.[142]

Again, Lonergan sees conception as a higher level of generalisation and abstraction than insight, as when he says that "the general conception, the general formulation, is not the same as the insight into the particular case. To get the general formulation, one has to imagine the whole series of cases."[143] And Vygotsky says that "the single experience lodges in an individual consciousness and is, strictly speaking, incommunicable."[144] Unlike 'sense', meaning for Vygotsky is "a *generalised* reflection of reality."[145] Conception, formulation, and communication demand such abstraction or generalisation, as Vygotsky explains:

> In order to convey one's experience or thought, it is imperative to refer them to some known class or group of phenomena. Such reference, however, already requires generalization. Therefore, communication presupposes generalization and development of word meaning; generalization thus becomes possible in the course of human communication. The higher, specifically human forms of psychological communication are possible because man's reflection of reality is carried out in generalized concepts.[146]

Lack of the required "generalized concepts" may mean that certain thoughts cannot

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[141] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language,* p. xxxvii.

[142] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans, 1964), p. 5.

[143] Bernard Lonergan, *Understanding and Being*, p. 38.

[144] Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. 8.

[145] Ibid., p. 6. Italics in original.

[146] Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), pp. 7 - 8.

be communicated to children even if they are familiar with the necessary words. On the other hand, Vygotsky holds that "there is a word available nearly always when the concept has matured."

It is important to repeat that Lonergan's level of conception, formulation and definition appears to be at the same plane of mental functioning as Vygotsky's level of 'generalised reflection of reality' and communication. At this level, meaning-for-oneself and meaning-for-others are the same. Thus word meaning is not only a union of thought and speech, as indicated in the diagram above, but also "a union of generalization and communication, thought and communication."[147]

One of the key topics dealt with by Vygotsky in *Thought and Language* is the notion of 'inner speech' or 'speech for oneself'. This is also an area in which his conclusions depart quite radically from those of Piaget. For Piaget, the earliest form of thought demonstrated by the child is 'autistic' or egocentric in nature, rooted ultimately in the pleasure principle. This autistic thought-form manifests itself in egocentric speech. In the course of the child's development, however, this individual speech, this speech-for-oneself, dies out , giving way to socialised speech, which is easily understood by others, and which is ultimately connected with the reality principle. Piaget, it must be remembered, was primarily concerned with development from below upwards, the 'way of achievement'.

For Vygotsky, on the other hand, the relationship between development from below upwards and mediation from above downwards was his main concern. In other words, the relationship between interpersonal communication and intrapersonal communication, between intersubjectivity and intrasubjectivity, was central to his theories. He believed that outward, intersubjective, or interpsychological relations give rise to or become the inner, intrapsychological functions. So, in this view, the process in the child works quite differently from that proposed by Piaget. For Vygotsky, overt, social dialogue comes before, and gives rise to, internal dialogue. Kozulin explains: "Vygotsky, who repeated some of Piaget's experiments, insisted ... that the earliest speech of the child is already social."[148] At a certain age this early social speech becomes divided into egocentric speech, or speech-for-oneself, and communicative speech, or speech-for-others.

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[147] Ibid., p. 9.

[148] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language* (Cambridge MASS: MIT Press, 1986), p. xxxv.

Egocentric speech which is splintered off from social speech gives rise to inner speech. Kozulin concludes: "Inner speech is therefore a rather late product of the transformation of a speech that earlier had served the goals of communication into individualized verbal thought."[149] The transition from egocentric to inner speech manifests the 'internalisation' of an originally communicative function, which becomes an individualised, inner mental function; communication-for-others becomes individualised reasoning-for-oneself. Or, in Kozulin's words: "Culturally sanctioned symbolic systems are remodelled into individual verbal thought."[150]

This individual verbal thought, or inner speech, is not an internal aspect of talking. It is a function in its own right. It is still a form of speech, however, in that it is comprised of thought connected with words. In external speech thought may be said to be embodied in words; "in inner speech words must sublimate in order to bring forth a thought."[151] All of this is consistent with Lonergan's contention that development from above downwards (socialised speech) is prior to development from below upwards (interiorised speech).[152] This once again supports a contention of this study that the theories of Vygotsky are more consistent with Lonergan's cognitional philosophy than are the theories of Piaget, even though Lonergan was probably not aware of the works of Vygotsky.[153]

It has already been suggested that growth in human reasoning must await the development of language. It is clear from what has been said above that the necessary language skills which are a prerequisite for reasoning are more related to internal speech-for-oneself than to socialised speech. This internal speech-for-oneself is, according to Vygotsky, a relatively late development in the child.

14.10 *Chapter Conclusions*

Lonergan's notion of the two ways of human development is an important unifying principle in that it brings together what has been said in Part II of this work,

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[149] Ibid., pp. xxxv - xxxvi.

[150] Ibid., p. xxxvi.

[151] Ibid., p. xxxviii.

[152] Bernard Lonergan, "Christology Today" in Frederick E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan, S.J.* (New York: Paulist Press, 1985), p. 77.

[153] While, as argued in this study, there are close parallels between the theories of Lonergan and Vygotsky, particularly as regards the 'two ways of human development', Lonergan makes no reference to Vygotsky in any of his works. However, the first English translation of *Myshlenie i Rech* was published by MIT Press in 1962, so one cannot rule out the possibility that Lonergan had read this work of Vygotsky's prior to working on *Method in Theology* (1972) in which his 'two ways' make their first explicit appearance.

regarding man's intrasubjective nature and his dynamic structure of knowing, with his transcendent, intentional, and affective natures as outlined in Part III. It demonstrates also how the premise of Part II, the existence of an intrasubjective nature, and that of Part III, the reality of the inherent transcendence of that nature, merge clearly to form the foundation for the premise of Part IV of this study, that man has an intersubjective nature which derives naturally from both his intrasubjectivity and his transcendence.

Much extra support for the conclusions of this chapter has come from the work of Lev Vygotsky who has a similar theory to that of Lonergan's "two ways" and, in places, even uses terminology similar to that of Lonergan. The fact that the notion of the "two ways" also provides a valuable compensation or correction to the works of Piaget is significant and must lend extra support to another contention of this study, that Lonergan's system is much more consistent with the work of Vygotsky than that of Piaget.

This chapter has also provided an opportunity for an expansion of Lonergan's idea of how the affective and the cognitional work together. From this standpoint, the chapter dealt with Bowlby's notion of 'emotional deprivation' and Feuerstein's notion of 'cultural deprivation', and with the deleterious effects of both on the cognitive development of the child. This led naturally to a short introduction to Feuerstein's notion of 'mediated learning experience' (MLE) and to a discussion of how the model of the "two ways" could account for the effectiveness of MLE in correcting or remediating the effects of cultural deprivation.

The theory and practice of MLE itself, as identified and developed by Feuerstein, Rand, and others, is described in detail in the next chapter of this study, where it will be integrated with Lonergan's wider notion of mediation. It is sufficient for the moment to say that MLE appears to provide the necessary framework for a consideration of the social aspects of human cognitional development in general, as well as providing a theoretical and practical 'bridge' between the 'two ways' of human development.

Chapter 15

The Notion of Mediation

15.1 *Introduction*

'Mediation' is a term which has already been used extensively in this study. It appears, for example, in the context of Feuerstein's 'mediated learning experience' (MLE). However, the notion did not begin with Feuerstein; it was already to be found in the writings of Aristotle, Hegel, and Vygotsky. The clearest exposition of Lonergan's own ideas on mediation are to be found in his 1963 Gonzaga University lecture entitled "The Mediation of Christ in Prayer."[1] Lonergan begins his account of mediation with a brief consideration of Aristotle's and Hegel's uses of the term. Aristotle, according to Lonergan, confined mediation to the field of classical logic, while Hegel's idealist philosophy extended the notion of mediation to everything by endowing it with a universal role. To Hegel, mediation is a characteristic feature of human reason.[2] To him, mental concepts, for example, can be related either 'mediately' or 'immediately'; but since everything, according to Hegel's idealism, can be reduced to mental concept, it follows that everything that exists can be related either mediately or immediately.

Lonergan also attempts to use the term mediation in this universal manner, but without Hegel's idealist connotations. He defines mediation as "what comes in between; what somehow helps something else that is distinct."[3] For him, mediation may be regarded as a relationship; it can be said to be a relation between a source, or origin, or ground of some kind, and whatever results from it.

Lonergan insists that mediation is "the most useful word for bringing to light the relationships between ... different worlds."[4] As such, it provides a serviceable vehicle for considering, analysing and describing the dynamic structure of complex systems, including living organisms and even the human mind itself. In the living

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[1] The lecture was first published in *Method: Journal of Lonergan Studies*, Vol. 2, No. 1 (March 1884). However, it was later republished in Bernard Lonergan, *Collected Works of Bernard Lonergan - Bk. 6* (Toronto: Univ. of Toronto Press, 1996), pp. 160 182. All quotations in this chapter are taken from the latter publication.

[2] L.S. Vygotsky, *Mind in Society* (Cambridge, MASS: Harvard University Press, 1978), p. 54.

[3] Bernard Lonergan, *Collected Works of Bernard Lonergan - Bk. 6* (Toronto: Univ. of Toronto Press, 1996), p. 115

[4] Ibid.

cell, for example, the various functions of the different components are interlinked to one another in a very complex manner. This complexity is such as to make simple one-to-one causal explanations of limited practical usefulness. The notion of mediation, on the other hand, is of much more serviceable value. The concept of mediation is also more appropriate than that of causality for delineating the more complex patterns of mental structures and their operations. It will be argued in this chapter that the notion of mediation can be of immense practical value even in explicating the complex dynamics of intersubjective relations.

15.2 *Mediation and Causality*

While Lonergan regards 'mediation' as "materially a vague notion"[5], he nonetheless insists that it is more general and, to that extent at least, a more useful notion than causality. It must be remembered that he was writing at a time when those involved in modern science were also beginning to realise the limitations of the more simplistic notions of causality. The philosopher of science, Sanitt, for example, bemoans the fact that the "causal principle that the same cause produces the same effect is entrenched in science as a doctrine."[6] And, writing in *Causality and Modern Science*, the philosopher of science, Bunge, suggests that "rigid causal chains exist only in our imagination."[7]

The notion of causality is inextricably linked to the notion of 'invariance', mentioned by Sanitt above. The notion of invariance, in turn, is a very ancient one, and is fundamental to what might variously be termed the commonsense view of the world, or 'folk psychology', or the 'natural attitude'[8] towards life, the world, and the universe in general. The early Ionian philosophers, for example, believed that "in spite of all the change and transition, there must be something permanent."[9] Whether that "something permanent" was water (Thales), air (Anaximenes), fire (Heraclitus), being (Parmenides), the four elements of earth, fire, air and water

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[5] Martin Joseph Matustik, *Mediation of Deconstruction: Bernard Lonergan's Method in Philosophy* (New York: University Press of America, 1988), p. 17.

[6] Nigel Sanitt, *Science as a Questioning Process* (London: Institute of Physics Publishing, 1996), p. 7.

[7] Mario Bunge, *Causality and Modern Science* (New York: Dover, 1979), p. 133. Bunge is here echoing Hume.

[8] 'Natural attitude' is a term used by Husserl to denote the natural, everyday, naive, commonsense view of the world. Daniel Dennett, on the other hand, tends to use the term 'folk psychology' to describe the same phenomenon. Dennett accepts an 'intensional' or everyday 'folk' vocabulary as a sort of "heuristic overlay" upon the facts. This is no more than using 'intensional' language simply because it is useful to do so and not because it relates to anything real or actual. It would appear that Dennett does not believe in the reality of internal mental states; brain states or processes are all that exist for him.

[9] Frederick Copleston, *A History of Philosophy*, Book 1 (New York: Image, Doubleday, 1985), p. 20.

(Empedocles), *nous* (Anaxagoras), or atoms (Democritus), the underlying concept of invariance was the same. Similarly, in later centuries one finds the same notion of invariance applied to energy (Descartes), matter (Bacon), least action (Fermat and Maupertuis), and the velocity of light (Einstein). It is significant, for example, that Einstein originally termed his special theory of relativity 'invariance theory'.[10]

Inextricably linked to the idea of invariance is that of causality, a concept that is still heavily effected and influenced by seventeenth century Newtonian ideas. With it comes the notion that the same cause always produces the same effect. Such invariance may certainly apply to simple systems under ideal (and hence non real) conditions. But even under Newtonian 'billiard ball' conditions "outcomes cannot be fully derived from input conditions."[11] Real everyday situations just do not live up to the ideal. This has given rise in modern times to what is generally termed 'chaos theory'. In so-called 'chaotic' situations arbitrarily small differences in initial conditions can lead to strikingly different outcomes.[12] Stephen Hawking explains:

> If scientific determinism holds, we should in principle be able to predict the future ... . Of course, in practice even something as simple as Newton's theory of gravity produces equations that we can't solve exactly for more than two particles. Furthermore, the equations often have a property known as chaos, so that a small change in position or velocity at one time can lead to completely different behavior at later events.[13]

What most scientists mean by the term 'cause' is what philosophers like Aristotle, Aquinas, and Lonergan would term 'efficient cause' and which Lonergan in *Verbum* describes as "the agent which reduces potency to act."[14] One can say with Aristotle that the man who builds a house is the efficient cause of the house. Again, to use a different analogy, we are told that "Abraham begot Isaac", in which case Abraham may be said to be the efficient cause of Isaac. Likewise, it can be argued that Isaac was the efficient cause of Jacob. Abraham did not beget Jacob, however, and so can not be regarded as a direct efficient cause in this case, although clearly there is a causal relationship of some kind between Abraham and Jacob. It can be said that Abraham was an 'immediate' efficient cause of Isaac but a

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[10] Nigel Sanitt, *Science as a Questioning Process* (London: Institute of Physics Publishing, 1996), p. 5.
[11] Ibid., p. 8.
[12] This notion has already been introduced in Section 8.9 above.
[13] Stephen Hawking, *The Universe in a Nutshell* (New York: Bantam Press, 2001), p. 104.
[14] Lonergan, Bernard J.F. *Verbum: Word and Idea in Aquinas* (Notre Dame: University of Notre Dame Press, 1969), p. 134.

'mediate' efficient cause of Jacob. Likewise one can distinguish between the 'immediate' efficient cause of this page of writing, which is its author, and the 'mediate' efficient cause, which is the computer or word processor employed in its production.

Lonergan spells out what he means by the term 'immediate' cause as follows:

> The 'immediate' involves a negation of a *medium*, a middle, a means; and such a negation may be either 'not being a means' or 'not using a means'. [15]

Extending his distinction between what is 'mediate' and what is 'immediate' to the cognitive plane, Lonergan explains:

> Operations are said to be immediate when their objects are present. So seeing is immediate to what is being seen, hearing to what is being heard, touch to what is being touched. But by imagination, language, symbols, we operate in a compound manner; immediately with respect to the image, word symbol; mediately with respect to what is represented or signified. In this fashion we come to operate not only with respect to the present and actual but also with respect to the absent, the past, the future, the merely possible, ideal or normative or fantastic.

And in the same section in *Method in Theology*, he continues:

> As the child learns to speak, he moves out of the world of his immediate surroundings towards the far larger world revealed through the memories of other men, through the common sense of community, through the pages of literature, through the labors of scholars, through the investigations of scientists, through the experience of saints, through the mediations of philosophers and theologians.[16]

15.3 *Mediation as a Dynamic Structure*

Lonergan's 'dynamic structure' of human knowing has already been considered in detail in Chapter Five. To Lonergan, mediation itself also involves such a dynamic structure. It has also been argued that Lonergan's notion of structure is consistent with the notion of structure found in the theories of Piaget and Feuerstein.[17] Lonergan says that the idea of structure "is the old idea of the whole and the part." To Piaget, a structure is a totality; that is, "it is a system governed by

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[15] Bernard Lonergan, "On God and Secondary Causes", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 55.

[16] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 28.

[17] See Section 4.4.7 above.

laws that apply to the system as such, and not only to one or another element in the system."[18] Elsewhere Piaget says that "the notion of structure is comprised of three key ideas: the idea of wholeness, the idea of transformation, and the idea of self-regulation."[19] What is said about a source and an outcome, as in mediation, may be expressed in structural terms. A whole of mediation consists of elements or parts which relate to one another in Piaget's sense above, and thus forms a structure or a system. Feuerstein also sees a structure or system in the following terms:

> A psychological structure can be viewed as a system composed of a number of elements that are interconnected and that mutually affect each other. Moreover, psychological structures are linked with a variety of other systems of the individual's personality.
>
> As opposed to physical structures, which are static by nature, psychological structures contain dynamic components that are expressed through several characteristics: [20]

In general, Lonergan would say that in such a structure "the whole is related to each of the parts, and each of the parts is related to the other parts and to the whole"[21].

Parts of a structure may be considered as either materially or functionally related, and the whole of mediation as either materially or functionally dynamic. Lonergan says:

> Each part is what it is in virtue of its functional relations to other parts; there is no part that is not determined by the exigencies of other parts; and the whole possesses a certain inevitability in its unity, so that the removal of any part would destroy the whole, and the addition of any further part would be ludicrous. Such a whole is a structure.... The whole itself may be self-assembling, self constituting; then it is formally dynamic. It is a dynamic structure.[22]

One can say that material parts are arrived at by division of the whole, like slicing a piece of pie, for example. Such a pie also consists of functional parts like the crust and the filling, which can be termed the functions of containing and being contained. Functional parts can be expressed in a proportion such as "The crust is to the filling as the container is to the contained." Analogically, a materially dynamic whole may consist of material parts, e.g., components of an architectural structure, or of activities like a song, a dance, a symphony, or a drama. On the other hand, a formally dynamic structure is not restricted to the parts of that structure, but exhibits

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[18] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 22. See also

[19] Jean Piaget, *Structuralism* (New York: Harper and Row, 1970), p. 5.

[20] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), pp. 9 - 10.

[21] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection*, (Darton Longman & Todd, London, 1967), p. 16.

[22] Ibid.

an additional ability to assemble and constitute itself as a whole of 'mutual - mediation' and 'self-mediation'.[23]

15.4 *Mediation as an 'Implicit Definition'*

In Chapter One of *Insight* Lonergan distinguishes between three different types of definition[24] :

a) The first is a 'nominal definition' which merely specifies "the correct usage of names,"[25] as is implied by the word 'nominal'. A nominal definition may be said to be a description rather than an explanation. It must be remembered that 'description' expresses intelligible relations of things to oneself, whereas 'explanation' addresses intelligible relations of things to one another. Lonergan claims that a science needs both types of intelligible relations, both description and explanation.

b) The second type of definition is an 'explanatory definition' which supposes further determinations of the objects to which language refers, and so mixes descriptive and explanatory elements. Lonergan explains that "both nominal and explanatory definitions suppose insights. A nominal definition supposes no more than an insight into the proper use of language. An explanatory definition, on the other hand, supposes a further insight into the objects to which language refers."[26]

An example of this type of definition given by Lonergan is the Euclidean definition of the circle. Nominally, the circle is defined "as a perfectly round plane curve"; but explanatory definition affirms that "all radii in a circle are equal", thus relating parameters to one another as required by the term 'explanation'. Note that the explanatory definition asserts something more about the entity 'circle' than does the nominal definition.

c) The third type of definition, the 'Implicit definition', on the other hand, contains all the elements of an explanatory definition but without the nominal or descriptive content. "The exclusive use of explanatory ... elements concentrates

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[23] Martin J. Matustik, *Mediation of Deconstruction: Bernard Lonergan's Method in Philosophy* (New York: University Press of America, 1988), p. 15.

[24] These have already been introduced in Section 11.6 above.

[25] Bernard Lonergan, *Insight: A Study of Human Understanding* (London: Longmans, 1958), p. 11.

[26] Ibid.

the attention upon the set of relationships in which the whole scientific significance is contained."[27]

To give an example from Lonergan, one can derive the meaning of both the notions of the point and the straight line by establishing the relation "that two and only two points determine a straight line". Thus, in an implicit definition the terms fix the relations and the relations fix the terms, and the function fixes both.

One can say that an explanatory definition works within imaginable and describable limits, but that implicit definitions eliminate these limits for the sake of strictly relational delimitations. Again, a description refers to how an idea, or thing or event relates to oneself, to the subject; an explanation, on the other hand, refers to how ideas, or things, or events relate to one another. A scientific definition would normally have both descriptive and explanatory elements. Sometimes, however, definitions may be purely nominal or descriptive, as in the case of the use of terms or scientific categorisation.

The names of the different parts of the cell, for example, would be purely descriptive or nominal definitions. However, how the different parts of the cell work depends on how they relate to one another, and so a complete explanatory definition would need the addition of an explanation of how the elements relate to one another. When it comes to considering the human cell as a whole, however, and the relation of the whole to the parts, the situation is quite different. Here the whole can be considered only in relation to the parts; it is the parts that define the whole, and the whole, in turn, defines the operations of the parts. In such a case it is not how things relate to the self that matters, but solely how they relate to one another. This is an implicit definition; it is confined to explanation alone; description plays no part in its definition. Such is the type or category into which mediation falls. Such is the way in which mediation itself is defined.

Piaget's notion of adaptation, with its duel functional invariants of assimilation and accommodation, may also be regarded as an example of an implicit definition. It also happens to be an example of what Lonergan would term 'mutual mediation'.

[27] Bernard Lonergan, *Insight: A Study of Human Understanding* (London: Longmans, 1958), p. 13.

15.5 *Types of Mediation*

Lonergan identifies four different types or levels of mediation.[28] These are:

1. Simple Mediation
2. Mutual Mediation
3. Self-Mediation
4. Mutual Self-Mediation

15.5.1 *Simple (or General) Mediation*

In his lecture "The Mediation of Christ in Prayer"[29] Lonergan illustrates his general theory of mediation by examples taken from mechanics, from organic life, from psychic life, and from logic. One very clear everyday example of what he terms 'simple mediation', however, which is not included in Lonergan's account but comes instead from McLuhan, is the role of the electric light in the work of the office.[30] The electric light cannot be said to cause the work of the office in any direct way, yet clearly it can be said to facilitate or 'mediate' the work of the office. In such circumstances, Marshall McLuhan[31] would also term electric light a 'medium'. Indeed, most of what McLuhan terms 'media' in his book *Understanding Media* are examples of what Lonergan would term 'simple mediation'. Thus while the written word, for example, is a 'medium', in McLuhan's sense, it may also be said to simply 'mediate' human communication. This will be dealt with in greater detail below.

15.5.2 *Mutual Mediation*

The supply of oxygen or respiration, the flow of blood or circulation, nutrition and digestion, as well as locomotion and nervous control are all examples of organic functions in the animal body. The supply of oxygen may be said to be immediate in the respiratory system, but to be mediated by the respiratory system to

[28] Bernard Lonergan "The Mediation of Christ in Prayer", in Robert C. Croken, Frederick E. Crowe, & Robert M. Doran (Eds), *Collected Works of Bernard Lonergan, Vol. 6 - Philosophical and Theological Papers 1958-1964* (Toronto: University of Toronto Press, 1996), pp. 160 - 182.

[29] Ibid., p. 160.

[30] In the opinion of this author, the examples selected by Lonergan in his article are not very clear and do not do justice to the importance of his theory.

[31] Marshall McLuhan, *Understanding Media* (London: Sphere Books Limited, 1964)

the body as a whole. Likewise, the flow of blood may be regarded as immediate in the pumping of the heart, but as mediated by the circulatory system with regard to the rest of the body. Nutrition may also be said to be immediate in the digestive system, but mediated by that same digestive system to the whole body and, through the body as a whole, to the other constituent systems of the body. Likewise, locomotion is immediate in the skeleto-muscular system, but mediated in the movement of the whole body. Finally, nervous control is immediate in the nervous system, but may be said to be mediated by the nervous system to the whole body and its parts. Likewise, one can say that in psychic life, what is immediate in the intelligence, will, imagination, affections, and memory, is mediated by these particular psychic functions in the rest of consciousness, as well as in bodily expressions. In general, Lonergan proposes that

> anything is immediate insofar as it is a source, basis, ground; anything is mediated in so far as it is a result, consequence, outcome, in so far as it arises in a field of radiation, expansion, influence, insofar as it manifests, expresses, reveals, the basis.[32]

The description in this paragraph is summarised and represented more schematically by the diagram on the next page.

What was described here in this consideration of the human organism is a type of mediation in which the functional whole of a structure or system is constituted by mutually mediating parts. Such a functional whole tends to close in on itself, like the different departments of government which form a functional unity by virtue of the contribution of each. Lonergan explains: "you have a number of immediate centres, and from each centre there flows over the whole the consequences of that centre." [33] To take the case of the human organism introduced above, for example, one can say that the organism is a functional whole which is mediately supplied with oxygen by the respiratory system, with nutrition by the digestive tract, with locomotion by the skeleto-muscular system, and with control by the nervous system. One can say that the functional whole is mediated in this way because each one of the systems involved is mediately supplied with oxygen, blood, nutrition, locomotion, and control, in the same way through the agency of the whole organism.

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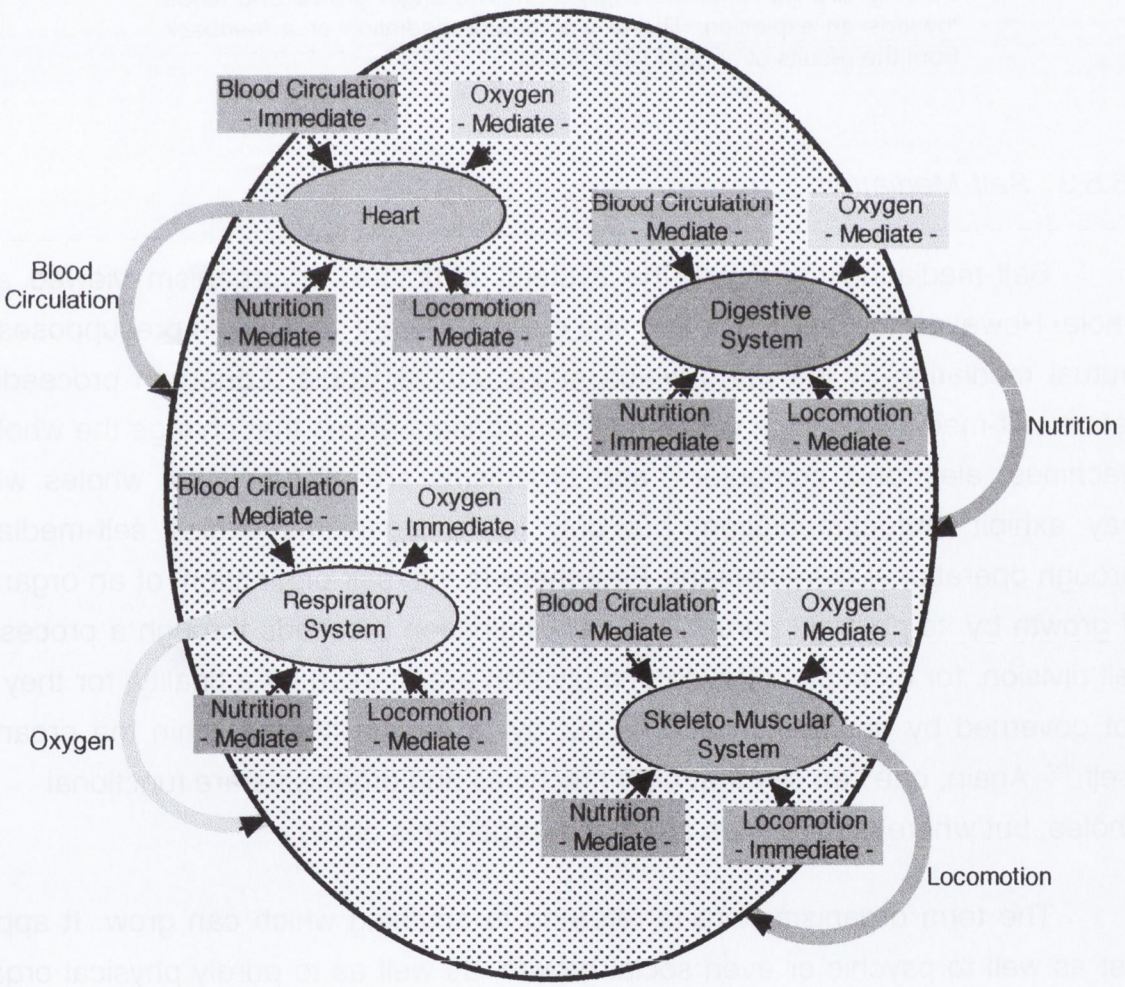
[32] Bernard Lonergan "The Mediation of Christ in Prayer", in Robert C. Croken, Frederick E. Crowe, & Robert M. Doran (Eds), *Collected Works of Bernard Lonergan, Vol. 6 - Philosophical and Theological Papers 1958-1964* (Toronto: University of Toronto Press, 1996), p. 174

[33] Ibid., p. 166.

This situation may be represented schematically by the following diagram in which the whole system of mutually mediating elements is represented. A number of centres (ovals) make a contribution to the whole system which in turn mediates the contribution of each of the centres to all of the others. Thus, the supply of oxygen is immediate in the respiratory system, but is mediated by the respiratory system with regard to its use in each of the other systems of the body and, hence, in the body as a whole. Likewise, nutrition is immediate in the digestive system but mediated by that same digestive system to each of the other systems, and to the whole body viewed as a system of mutually mediating sub-systems. The extended arm from each sub-system or "centre" represents the fact that "there flows over the whole the consequences of that centre." [34]



From the point of view of mutual-mediation and the functional whole, one

[34] Bernard Lonergan, *Collected Works of Bernard Lonergan, Bk. 6* (Toronto: Univ. of Toronto Press, 1996), p.166

prescinds from taking into account the organism as a living entity at this stage. For a system to be a living one, 'self-mediation' is also a requirement; that is, the whole system must also mediate its own growth and development as well as mediating the contribution of each of the parts to the other parts.

The principle of mutual-mediation could just as well apply to an organization like a school, or to a purely mechanical entity like a computer or a clock. On the emotional or affective level, anger may also be regarded as immediate in aggressivity and mediated in the look in one's eyes, in the tone of one's voice, violent images and memories, vigour of the will. Anger may be a case of mutual mediation because, as Lonergan says,

> one's posture, one's look, one's imagination, one's will, one's thinking, are typical of the angry man. The anger grows, one tends towards an explosion. There is a mutual mediation or a feedback from the results of anger to its causes.[35]

15.5.3 *Self-Mediation*

Self-mediation considers the system, structure, or organism viewed as a whole. However, the self-mediation of a system viewed as a whole presupposes the mutual mediation of the parts which make up the whole. Lonergan proceeds to define self-mediation as: "a whole that has consequences that change the whole."[36] Machines, electronic computers, and organisms are all functional wholes which may exhibit mutual-mediation, but only living organisms exhibit self-mediation through operational development. First there is the 'self-origination' of an organism of growth by its physical parts. This self-origination proceeds through a process of cell division, for example. Growth and division are marked by a finality, for they are not governed by geometric patterns but by "a certain finality within the organism itself."[37] Again, one can say that both machines and organisms are functional wholes; but whereas machines are made, organisms grow.

The term organism here is referring to anything which can grow. It applies just as well to psychic or even social growth, as well as to purely physical organic growth. To take cognitional growth as an example, a very clear description of what

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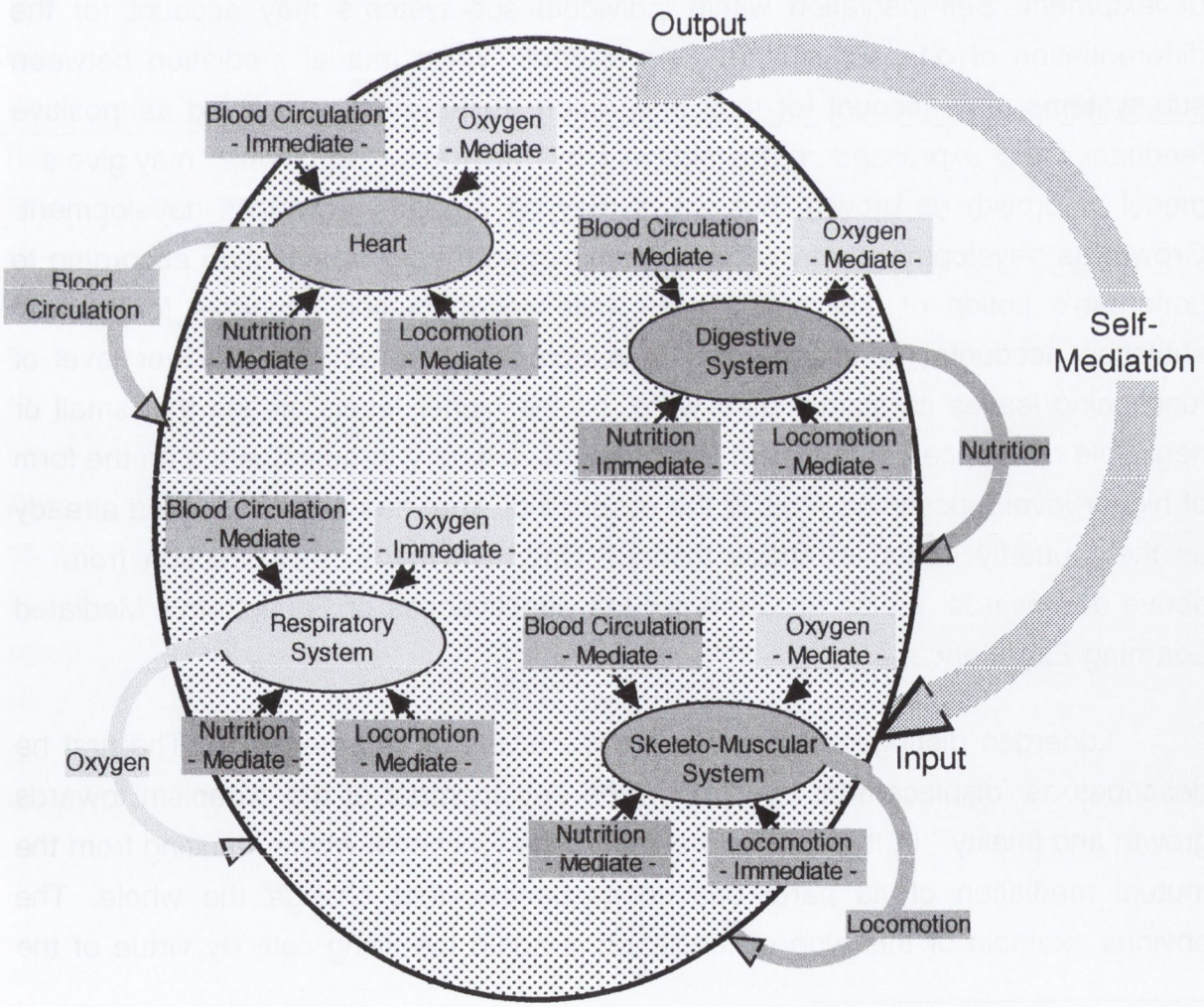
[35] Bernard Lonergan "The Mediation of Christ in Prayer," *Collected Works of Bernard Lonergan, Vol. 6,* p. 166.
[36] Ibid., p. 167
[37] Ibid.

Lonergan means by mutually mediating parts in a system which is a self-mediating whole comes from Lonergan's article "Cognitional Structure," referring to the dynamic structure of the human mind:

> Each part is what it is in virtue of its functional relations to other parts; there is no part that is not determined by the exigencies of other parts; and the whole possesses a certain inevitability in its unity, so that the removal of any part would destroy the whole, and the addition of any further part would be ludicrous. Such a whole is a structure.... The whole itself may be self-assembling, self constituting; then it is formally dynamic. It is a dynamic structure.[38]

Thus, Lonergan's dynamic cognitional structure, with its mutually mediating functions of experience, understanding, and judgment, is a growth producing, self-mediating structure. This means that the system, viewed as a whole, can mediate its own growth and development through the instrumentality of its mutually-mediating parts, of which it (the whole) is the formal organising principle. Extending the original schematic above to include self-mediation, one gets the following:



[38] Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection*, p. 16.

Such a self-mediating system may be pictured as a system in which the product or output of the system as a whole is fed back as input in a self-mediating 'feedback loop'. Thus, it was shown in Chapter Eight, for example, that Lonergan's levels of experience, understanding, judgment, and decision, form a cycle, the end product of which (the act of decision and doing) changes the experience for the next cycle of experience, understanding, judgment, and decision. The overall effect on the system as a whole may be described as one of self-mediation. In the same way, Lonergan's notion of 'sublation' may be viewed as the end product of the effects of the mutual-mediation of the cognitional levels on one another in an overall system which is also mediating its own growth and development.

Self-mediation and mutual-mediation, combined with differentiation and integration seem to account for many aspects of organic and psychological development. Self-mediation within individual sub-systems may account for the differentiation of one sub-system from another, while mutual mediation between sub-systems may account for their integration. Self-mediation, viewed as 'positive feedback' and expressed mathematically by the fractal equation,[39] may give a model of growth as growth, but not, it may be argued, growth as development. Growth as development may require a developed theory of sublation according to Lonergan's notion of the term. Thus, while self-mediation accounts for growth, sublation accounts for change and development. The fact that a lower level of functioning leaves its stamp, as it were, on the higher levels means that small or negligible differences at the lower level may have a very large influence on the form of higher level functioning. This is the essence of what has been described already as the "butterfly effect" in chaos theory.[40] Operating in the other direction, from above downwards, it also accounts for the effectiveness of Feuerstein's Mediated Learning Experience.

Lonergan distinguishes between three levels of self-mediation. The first he describes as "displacement upwards in the development of the organism towards growth and finality." In this type of mediation, the functional whole resulting from the mutual mediation of its parts has consequences that change the whole. The obvious example of this type of mediation is again the living cell. By virtue of the

[39] See Sections 8.9 above.
[40] See Sections 8.9 and 8.19 above.

mutual mediation of its parts or elements, the cell attains not just a functional unity but a life of its own, it grows and multiplies. The same may be said to apply to all multi-cellular organisms. Lonergan explains:

> The growth of an organism is a self-mediation. It originates itself by giving rise to physical parts within itself. The process is a process of division. The organism starts from a single cell, and by a process of division it proceeds to a structure of 2^n cells. That process of division is governed by a finality, ...[41]

At any stage in its growth, the organism is alive and preparing future stages. It is a set of functional parts in a functional whole. Lonergan again explains:

> There are different centres of immediacy, and the centres make the whole, giving the whole all the properties of each of the centres of immediacy. ... there is something more to the organism than mutual mediation. There is the structuring that regards functioning at the moment *and* future functioning.[42]

One characteristic of such an organism is that it also exhibits transitional developments as it moves from one stage of growth to the next. These developments may be useful for a time but later disappear, or become 'sublated', in future developments. An obvious example of such stages of growth and their accompanying transitional developments are Piaget's stages of psycho-physical development of the child. When one compares the successive stages, one finds not merely an increase in size, since the displacement upwards is not merely the multiplication of cells, but also involves a process of increased specialisation and differentiation. This process of specialisation also involves the creation and exploitation of entirely new possibilities. Lonergan explains: "What earlier is performed in rudimentary, global fashion by single parts, later is performed in a specialized, highly efficient fashion by different parts."[43] An example already cited[44] is the global reflexive response of the neonate to an outside stimulus in which she responds in a broad and undifferentiated fashion with her whole body. As the child matures, however, her responses become more refined, differentiated, and distinguishable: separately reaching with her hands, looking with her eyes, kicking with her feet.

The second level of self-mediation Lonergan describes as "displacement

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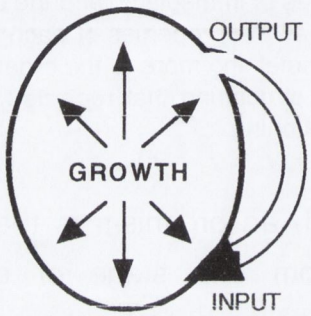
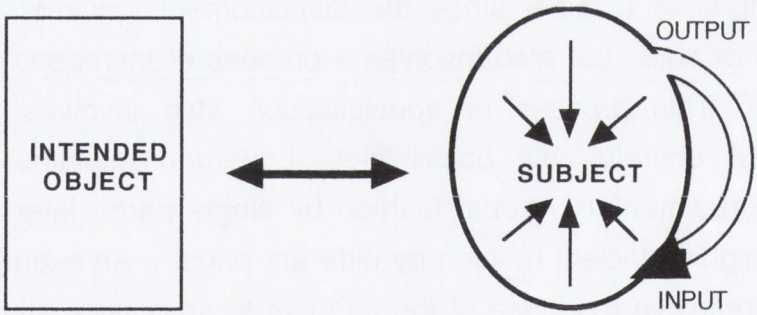
[41] Bernard Lonergan, *Collected Works of Bernard Lonergan - Bk. 6* (Toronto: Univ. of Toronto Press, 1996), p. 167
[42] Ibid.
[43] Ibid., p. 166
[44] See Section 8.8 of this study.

inwards in the animal by consciousness." The organism mediates itself by developing physical parts, and it functions by the functioning of these parts. Such a development of physical parts demands a differentiation of function and an internal integration within each part. But the conscious animal mediates itself not only physically and organically, but also psychically and intentionally[45]. It must be remembered[46] that while the intended object is made present to the human subject by the act of intending, the subject is also constituted as present to himself by the same act of intending. Thus, if the displacement upwards through growth and finality were represented by the following diagram:



then the displacement inwards by consciousness may be represented schematically by:



Again, the intended object is made present to the human subject by the act of intending. But the subject is also constituted as present to himself by the same act of intending. This type of self-mediation can be pictured as a displacement inwards. Such a displacement inwards may also be viewed as a prototypical 'interiorisation'.[47]

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[45] Lonergan's notion of intentionality has already been dealt with in some detail in Sections 2.7, 5.4, 5.6, 5.9, 5.11, 9.3, and 9.4.

[46] See Chapter 9 of this study.

[47] The notion of interiorisation has already been dealt with in some detail in Section 9.9 of this study

This interior growth, however, has additional characteristics which must be considered. According to Lonergan, intentional elements can be added or "summated"[48] as follows:

a) The summation of intentional acts or operations into a living, self-correcting process of learning, accumulation of experiences, acquisition of new skills and habits or ways of doing things. These, according to Lonergan, constitute one's 'living'.

b) The summation of intended objects into 'situations', these situations into one's 'environment', and the environments into one's 'world'.

c) The summation of subjects into the intersubjectivity of community, into 'we', into the family, the group, "who live together and perform all the operations of life, not singly as so many isolated monads, but as 'we'."[49] Lonergan says:

> We apprehend together the common situation, act together in the common situation, communicate together about the common situation, live a common life and share a common destiny.[50]

The third level of self-mediation Lonergan describes as "deliberate transposition of centre that occurs when one becomes a fully autonomous being." Lonergan explains that the animal mediates itself by intentionality, but the intentionality of the animal is not autonomous. The animal lives by instincts which translate into consciousness the needs and functions of the animal. It does not plan; it does not adapt its thinking strategies to meet new situations. Human development, on the other hand, is mediated by autonomy. The child wants to do things for himself, to make his own decisions. "There is the emergence of willpower and won'tpower."[51] Lonergan explains:

> Bringing up the child, educating the boy, the adolescent, the young man, is a matter of gradually enlarging the field in which he does things for himself, finds out for himself.[52]

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[48] Bernard Lonergan, *Collected Works of Bernard Lonergan - Bk. 6,* p. 170
[49] Ibid.
[50] Bernard Lonergan, "The Mediation of Christ in Prayer" (unpublished notes) quoted from Martin Joseph Matustik, *Mediation of Deconstruction: Bernard Lonergan's Method in Philosophy* (New York: University Press of America, 1988), p. 74. This quote does not appear in the later published version in Bk. 6 of *The Collected Works*..
[51] Bernard Lonergan, *Collected Works of Bernard Lonergan - Bk. 6,* p. 171
[52] Ibid.

According to Lonergan, this process reaches its climax, "its critical and decisive phase", when one finds out for one's self what one can make of one's self and makes the mature decision to act in fidelity to one's insight and succeeds in doing so. This "development that reaches its goal in the existential decision and in fidelity to that decision, is the emergence of the autonomous subject"[53].

But all of this occurs in community and "human community, materially, is an aggregate of human beings" who share common insights. "But, formally, it is an intentional reality,"[54] and that intentional reality is not merely a matter of insights and of knowing but also of deciding, of commitment. A community, in other words, becomes what a particular people decide it should be. If one were to change this "normative meaning" of community, one would change the possible attainment of community. Thus, a "community mediates itself in its history".

> The community, like the individual, reveals itself to itself by its living, by the way it meets its problems, by its revisions of its common sense, its common meaning, its common commitment, by the way things work out in development and breakdown, by growth and disintegration. By their fruits you shall know them.[55]

But the individual has his existence from and in community. From community he has his concrete possibilities and opportunities as well as the various constraints that hem him in. Thus he works out his destiny, his individual autonomy, always within community. What Lonergan says of his "cognitional structure" might just as well apply to his notion of community:

> It is self-assembling, self constituting. It puts itself together one part summoning forth the next, till the whole is reached. And this occurs, not with the blindness of natural process, but consciously, intelligently, rationality. [56]

15.5.4 *Mutual Self-Mediation*

With mutual self-mediation one comes at last to that aspect of Lonergan's theory of mediation which is directly related to a consideration of human intersubjectivity. One also arrives at that level at which, it will be argued, Lonergan's theories provide a useful expansion of Feuerstein's notion of 'mediated learning experience'.

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[53]Ibid.

[54] Ibid., p. 172

[55]Bernard Lonergan, *Collected Works of Bernard Lonergan - Bk. 6* (Toronto: Univ. of Toronto Press, 1996), p. 173

[56]Bernard Lonergan, "Cognitional Structure", F.E. Crowe (Ed.), *Collection,* p. 17.

It was argued above that the human organism displays a mutual mediation of its parts which facilitate the self-mediation of the organism as a whole. This self mediation is not just towards physical growth, not just towards differentiation and integration of organic function, but also towards growth of consciousness and autonomy. There is also, however, a 'mutual self-mediation'. One's self-discovery and self-committment may be a personal matter accessible to oneself alone, but they can also be accessible to those to whom one choses to reveal them in an act of trust, confidence, love, belief, hope and friendship. Lonergan explains:

> In the process from extroversion, from being poured out on objects, to existential self-committment, to fidelity, to a destiny, we are not Leibnizian monads with neither doors nor windows. We are open to the influence of others, and others are open to the influence from us.[57]

Mutual self-mediation occurs to a greater or lesser extend in a wide variety of human situations. Meeting, falling in love and getting married involve the exercise of mutual self-mediation. There is a mutual self-mediation in the relationships of mother and child, father and son, brothers and sisters, husband and wife. But also, importantly for this study, there is mutual self-mediation in the education of children: in the relationship of teacher to pupil, and in the peer relationship of students to one another. Finally, it will be argued that mutual self-mediation is at the core of Feuerstein's notion of 'mediated learning experience' (MLE).

As in mutual mediation, each person acting as a 'centre' makes his contribution to the whole group or social situation, and it is this resulting total situation which mediates the contribution of each member to each of the others. It is the resulting growth produced in each of the members as a result of this living interaction that qualifies it as 'mutual self-mediation'. In other words, the self mediation of each individual with its "displacement upwards" towards growth, "displacement inwards" towards consciousness, and "transposition of centre" towards autonomy, is mediated mutually by another or others involved, who may themselves also be similarly self-mediated.

As already mentioned, such 'mutual self-mediation' is one way of describing the relationship not only between the teacher and the pupil, but also between any two people involved in a common task. The latter relationship, which might be

[57]Bernard Lonergan, "The Mediation of Christ in Prayer", F.E. Drowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 6* (Toronto: University of Toronto Press, 1996), pp. 174-175

termed 'symmetrical', is a characteristic of Freire's "problem-posing" education and of Mazur's "peer instruction" and will be further described as 'co-intentional' in Chapter Seventeen of this study. In a so called symmetrical relationship, each person mediates the other more or less equally, while both are mediated also by the task at hand. Freire explains:

> Teachers and students ... , co-intent on reality, are both Subjects, not only in the task of unveiling that reality, and thereby coming to know it critically, but in the task of re-creating that knowledge. As they attain this knowledge of reality through common reflection and action, they discover themselves as its permanent re-creators. In this way, the presence of the oppressed in the struggle for their liberation will be what it should be: not pseudo-participation, but committed involvement.[58]

And again he says:

> 'Problem-posing' education, responding to the essence of consciousness - *intentionality* - rejects communiqués and embodies communication. It epitomizes the special characteristic of consciousness: being *conscious of*, not only as intent on objects but as turned in upon itself in a Jasperian 'split' - consciousness as consciousness *of* consciousness.
>
> Liberating education consists in acts of cognition, not transferrals of information. It is a learning situation in which the cognizable object (far from being the end of the cognitive act) intermediates the cognitive actors - teacher on the one hand and students on the other. Accordingly, the practice of problem-posing education entails at the outset that the teacher-student contradiction be resolved. Dialogical relations - indispensable to the capacity of cognitive actors to cooperate in perceiving the same cognizable object - are otherwise impossible.[59]

In the mutual self-mediation described above both people involved are equally mediator, and both equally learner. This is what Freire means by the resolution of "the teacher-student contradiction."

In what might be termed 'asymmetrical' mediation, on the other hand, one person is more definitely and predominantly the mediator while the other adopts the role of the learner. This is the normal situation within a school, for example, or within a family where the parent is the mediator and the child the learner. However, it can be argued that at no stage can any mediational situation be ever totally asymmetrical. A good mediator, after all, is constantly on the alert to identify the needs of the person being mediated and, as such, is himself also open to mediated learning from the person (pupil or child perhaps) being mediated. This is the

[58] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 51. Italics in original.
[59] ibid., pp. 60 - 61

essence of 'reciprocity' which, as will be argued below,[60] is one of the key elements in Feuerstein's 'mediated learning experience'.

15.6 *Mediation and the Notion of Tool*

15.6.1 *Tool, Mediation, and the Triarchic Model*

A tool may be described as anything that extends the range of human activity or *doing*. Kozulin explains, for example, that "the material tool ... serves as a mediator between the human hand and the object of action." It can also be said to act as a mediator between the human mind and the intentional object. The first tools developed by man were simple extensions of the human body itself, such as flint blades, stone axes, or spears. They were a means by which man added to the range and efficiency of his actions, adding value to himself and to the things around him and, in the process, enhancing the *being* mode of his existence. The intimate role which tools played in the day-to-day life of 'primitive' man, as extensions of his body, may be seen from the frequency with which a man's tools were buried with him after his death, almost as if they *were* regarded as parts of his own body.

Man's use of tools changed not only the *doing* mode of his existence but also changed the *having* mode, by providing him with the material essentials for living, such as clothing, food, shelter, or protection. They also provided him with many things that might not be regarded as materially essential but seem to have had the purpose of enhancing the quality of his inner life, the *being* mode of his existence. Such tools could be musical instruments, for example, but there were also what might be termed aesthetic enhancements of the tools themselves. Lewis-Williams, for example, commenting on the increasingly ornate additions to Palaeolithic man's everyday tools, says: "It seemed as if art was being used to enhance, or beautify, technology."[61]

One may say that what a man *has* he may either *use* or *share* or both. What he *uses* instrumentally may be regarded as a tool. Wojtyla says: "*To use means to employ some object of action as a means to an end*" [62] The word 'tool', used in this sense, cleary indicates something that is merely instrumental, that merely acts to

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[60] See Section 15.8

[61] David Lewis-Williams, *The Mind in the Cave* (London: Thames and Hudson, 2002), p. 32.

[62] Karol Wojtyla, *Love and Responsibility*, H.T. Willits (Trans.), (London: Collins, 1981), p. 25. Sic.

mediate or to facilitate something else. It is to this sense of tool as mediator, or medium, that McLuhan is referring when he says:

> After three thousand years of explosion, by means of fragmentary and mechanical technologies, the Western World is imploding. During the mechanical ages we had extended our bodies in space. Today, after more than a century of electric technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned. Rapidly, we approach the final phase of the extensions of man - the technological simulation of consciousness, when the creative process of knowing will be collectively and corporately extended to the whole of human society, much as we have already extended our senses and our nerves by the various media.[63]

15.6.2 *Society, Culture, and Technological Mediation*

McLuhan's prescient reference to the internet or 'world-wide-web' at the end of the above quotation is impressive. His main point, however, is that the tools or 'media' that a society employs have a radical effect on the culture of that society. The development in the design of material tools throughout human history, as well as the variations from culture to culture, have had a reciprocal effect on the life of the individual. McLuhan states that "any extension, whether of skin, hand, or foot, affects the whole psychic and social complex."[64] The tools people use, in other words, changes their environment and their way of life, which in turn changes themselves and the tools they use. Vygotsky writing in 1930 gives the following examples:

> The entire existence of an Australian aborigine depends on his boomerang, just as the entire existence of modern England depends upon her machines. Take the boomerang away from the aborigine, make him a farmer, then out of necessity he will have to completely change his life style, his habits, his entire way of thinking, his entire nature. [65]

This idea is also supported by Carl Jung who makes the point that the use of human persons as mere instruments, as tools, had a radical effect on Roman culture:

> Every Roman was surrounded by slaves. The slave and his psychology flooded ancient Italy, and every Roman became inwardly, and of course unwittingly, a slave. Because living constantly in the atmosphere of slaves, he became infected through the unconscious with their psychology. No one can shield

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[63] Marshall McLuhan, *Understanding Media: The Extensions of Man* (London: Sphere Books Ltd., 1967), p. 11.
[64] Ibid.
[65] L. Vygotsky & A. Luria *Studies on the History of Behavior* (Hillsdale: NJ: Lawrence Erlbaum Ass., 1993), p. 74.

himself from such an influence.[66]

One can say that there is a mutual mediation between a culture and the technology which that culture employs. Society is not only mediated by the various forms of intersubjectivity and by meaning, it is also mediated by the fruit of its own *doing*, its *work*, and the technology which facilitates it. Man by his work alters his environment, and this changed environment, in turn, brings about external and internal changes in the man who created it. Technology seen in this way as a tool may be deemed to be anything which extends the scope of man's *doing*, whether physical or mental. Thus the development of literacy must be regarded just as much a technological advance in human history as was the development of stone axes and other tools, for example, in prehistory.

Lonergan's notion of the two ways of human development which were dealt with in Chapter Fourteen demands that one recognise not only the intentional dynamic operations of experience, understanding, judgment and decision, operating 'from below upwards' in the 'way of achievement', to be integral parts of the cognitional system, but also that the same cognitional system has a "sociocultural character" represented by mediation 'from above downwards', or 'the way of heritage'. Extending the notion of tool to include, as McLuhan does, the various media used by man, one can say that just as the development of language allowed a sharing of insights between people, which in turn allowed the development of the great cultures of ancient Greece and Rome, so also the development of literacy, or the command of reading and writing, increased the capacity for conceptualisation and so also for objectification, the ability to distance oneself and one's subjectivity from the task at hand. This was vital to the development of the empirical sciences, for example. McLuhan argues, however, that it was also responsible for man's increased alienation from self and from others.

Now, today, with the development of the various electronic media (TV, Radio, Internet) one can also argue that human society has transcended Lonergan's levels of insight and conceptualisation, and risen to the levels of judgment and rational responsibility. The fact that the human community is instantly aware of world events

[66] C.J. Jung, *Contributions to Analytic Psychology* (London: 1928), quoted in Marshall McLuhan, *Understanding Media: The Extensions of Man* (London: Sphere Books Ltd., 1967), p. 30.

even as they are happening and, with the aid of the media, gain insight into these events and conceptualise them in terms that are meaningful for them, means that they may also decide and demand that responsible action be taken with regard to what they have understood and evaluated. Hence, one sees the comparatively recent development of such institutions as The World Bank, The World Health Organisation, and The International Court of Justice.

Literacy, viewed as command of the written word, is termed a 'medium' by McLuhan. A 'medium' to McLuhan has the same meaning as 'tool' to Vygotsky. It is anything which is a non-causal facilitator of the interaction between man and his environment. Thus it is an example of what Lonergan would term 'simple mediation'. Thus, electric light, as already mentioned above, may be classed as a medium. The electric light facilitates the work of the factory or office but does not itself directly cause it. McLuhan explains:

> Electric light mediates many other things. It may be regarded as a medium. The thing which gives rise to mediation may be termed a medium. This is a very useful concept because many things which have a catalysing or facilitating influence on something may, nevertheless, not be regarded as the 'cause' of that thing. Thus electric light facilitates the operation of many things (factories, shops, offices etc.) of which it is not the direct cause. Electric light may be different from other media in that it has no content:
>
> "The electric light escapes attention as a communication medium just because it has no "content".[67]

According to McLuhan, not only is literacy a medium, but speech may be said to be its content:

> The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph. If it is asked, "What is the content of speech?," it is necessary to say, "It is an actual process of thought, which is in itself non-verbal.[68]

Lonergan, however, would explain further that while speech is certainly a medium, its content is meaning, and meaning, in turn, is the medium which mediates the world, the universe, and everything to man.

For McLuhan, it is the medium, not its content, which "shapes and controls the scale and form of human association and action." And, as regards the content, "the content or uses of such media are as diverse as they are ineffectual in shaping

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[67] Marshall McLuhan, *Understanding Media: The Extensions of Man* (London: Sphere Books Ltd., 1967), p. 16.
[68] Ibid.

the form of human association."[69] Hence his famous statement: "The medium is the message". He explains further:

> For the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs. The railway did not introduce movement or transportation or wheel or road into human society, but it accelerated and enlarged the scale of previous human functions, creating totally new kinds of cities and new kinds of work and leisure. This happened whether the railway functioned in a tropical or northern environment, and is quite independent of the freight or content of the railway medium. The airplane, on the other hand, by accelerating the rate of transportation, tends to dissolve the railway form of city, politics, and association, quite independently of what the airplane is used for.[70]

Of all the great media of the modern era that shape and control the scale and form of human association and action the development of the computer must be the one that opens up the greatest propensity for change, not only in the organisation of the external world in which one lives and moves, but also in the way man himself thinks and works. Few will doubt the enormous influence which the computer has already had on childhood in the Western World. Papert, for example, says:

> Across the world children have entered a passionate and enduring love affair with the computer. What they do with computers is as varied as their activities. The greatest amount of time is devoted to playing games, with the result that names like Nintendo have become household words. They use computers to write, to draw, to communicate, to obtain information. Some use computers as a means to establish social ties, while others use them to isolate themselves. In many cases their zeal has such force that it brings the word *addiction* to the minds of concerned parents.[71]

Papert, in other words, implies that there is a relation, a bond, an "identity", between the child and his computer which constitutes a mode of *having*, a *having* which represents a close extension of his own body and intellect, as when he says:

> The love affair involves more than the desire to do things with computers. It also has an element of possessiveness and, most importantly, of assertion of intellectual identity. Large numbers of children see computers as "theirs" - of something that belongs to them, to their generation.[72]

The human changes induced by the computer can also run deep because, according to McLuhan:

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[69] Ibid.

[70] Ibid.

[71] Seymour Papert, *The Children's Machine - Rethinking School in the Age of the Computer* (London: Harvester Wheatsheaf, 1993), p. ix.

[72] Ibid.

> the effects of technology do not occur at the level of opinions or concepts, but alter sense ratios or patterns of perception steadily and without any resistance. [73]

It must be emphasised that, while computers cannot in themselves produce an *enhancement* of man's consciousness (that must depend on heightening self-reflective processes), they can, however, produce an *extension* of the human mind into a larger, wider, and more all-embracing world.

15.6.3 *Vygotsky's Notion of the Psychological Tool*

The term 'tool' may be generally applied to anything which mediates or facilitates something else as a 'medium' by way of 'simple mediation', even if that something else belongs to the intrasubjective realm. Thus, the notion of tool has also been extended by Vygotsky and Kozulin into the psychological field. Speaking of what Vygotsky means by the term 'psychological tool', Kozulin explains:

> Psychological tools are those symbolic artefacts - signs, symbols, texts, formulae, graphic-symbolic devices - that help individuals master their own "natural" psychological functions of perception, memory, attention, and so on. Psychological tools serve as a bridge between individual acts of cognition and the symbolic sociocultural prerequisites of these acts.[74]

Like material tools, psychological tools are artificial formations. Both have to do with *work* and both are naturally social. But "while material tools are aimed at control over processes in nature, psychological tools master natural forms of individual behavior and cognition." Material tools are oriented towards one's action on the external world; "psychological tools are internally oriented, transforming the natural human abilities and skills into higher mental functions."[75] Thus, while work with material tools mediates the addition of value primarily to one's environment, work with psychological tools may be said to mediate the addition of value primarily to one's self.

Vygotsky's concept of 'higher mental functions' focused on the transformation of natural functions into cultural functions under the influence of psychological tools. Such psychological tools might be gestures, language and sign systems, or mnemonic techniques, which help or aid the transformation of one's cognitive

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[73] Marshall McLuhan, *Understanding Media: The Extensions of Man* (London: Sphere Books Ltd., 1967), p. 27.
[74] Alex Kozulin, *Psychological Tools* (Cambridge MASS: Harvard University Press, 1998), p. 1.
[75] Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language*, p. xxv.

functioning. Vygotsky made a distinction between "lower" or natural mental functions and those higher functions which are a product of the action of psychological tools. Kozulin explains:

> Vygotsky made a principal distinction between "lower," natural mental functions, such as elementary perception, memory, attention, and will, and the "higher," or cultural, functions, which are specifically human and appear gradually in a course of radical transformation of the lower functions. The lower functions do not disappear in a mature psyche but are structured and organised according to specifically human social goals and means of conduct. Vygotsky used the Hegelian term "superseded" *(aufgehoben)* to designate the transformation of natural functions into cultural ones.[76]

It is interesting to note that this same Hegelian notion *aufgehoben,* or *aufhebung,* is also the basis for Lonergan's notion of 'sublation', even though Lonergan takes some pains to point out that his personal understanding of the underlying 'dialectic' which undergoes resolution or 'sublation' is quite different from that of Hegel.[77]

15.7 *Feuerstein and Mediated Learning Experience (MLE)*

It has already been stated that Lonergan has described mediation as a "vague notion"[78] . He also says that it is "the imponderable in education that does not show up in charts and statistics."[79] Yet it is precisely such mediation in the form of 'mediated learning experience' that Feuerstein identifies as central to the educational process, and as a necessary prerequisite for genuine cognitive growth. While Lonergan has certainly laid a good theoretical foundation with his cognitional philosophy, providing a system or "pattern of structures" which allow one to make sense of the whole process of mental growth, it will be argued that Feuerstein's clinically based psychological theories and methods are also necessary if Lonergan's ideas are to be expanded readily and effectively into the practical pedagogical domain.

Lonergan's notions of 'self-mediation' and 'mutual self-mediation' have been dealt with in detail above. One can say that, wherever the object of mediation is a human subject, there is a special quality of interaction between the subject organism and his environment. This special quality is such that it may be influenced

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[76] Ibid.

[77] Bernard Lonergan, *Insight* (London: Longmans, 1958), pp 141-142.

[78] Bernard Lonergan, *Collected Works of Bernard Lonergan - Bk. 6* (Toronto: Univ. of Toronto Press, 1996), p. 162

[79] Ibid., p. 176

and enhanced by the interposition of another human subject who mediates the world (or the stimuli, to use a behaviourist term) impinging on the organism. This is what Feuerstein terms 'mediated learning experience'(MLE). He explains:

> By mediated learning experience (MLE) we refer to the way in which stimuli emitted by the environment are transformed by a "mediating" agent, usually a parent, sibling, or other caregiver. This mediating agent, guided by his intentions, culture, and emotional investment, selects and organises the world of stimuli for the child. The mediator selects stimuli that are most appropriate and then frames, filters, and schedules them; he determines the appearance or disappearance of certain stimuli and ignores others. Through this process of mediation the cognitive structure of the child is affected.[80]

Some of what a child learns may, no doubt, be learned from direct exposure to stimuli, according to the behaviourist stimulus/response (S-R) model, without mediation by parent or any other human mediator; in this case the stimuli may be regarded as having an 'immediate' influence on the child, to use Lonergan's terminology. Such 'immediate' learning, however, has a rather limited usefulness, as Lonergan himself explains:

> I would not dispute that, for the child learning to talk, his little world of immediacy comes first, and that the words he uses are only an added grace. But as the child develops into a man, the world of immediacy shrinks into an inconspicuous and not too important corner of the real world, which is a world we know only through the mediation of meaning.[81]

Much learning, however, also results from the maturation and activity of the human organism, characterised by the model stimulus-organism-response (S-O-R) of the Piagetian school. This would correspond to 'self-mediation' under Lonergan's scheme. It would also correspond to a rather limited 'development from below upwards' or to what Crowe terms "the way of achievement." According to Feuerstein, in both the stimulus-response (S-R) scheme of the narrow behaviourists, and the S-O-R scheme of the Geneva School, the emphasis is on direct exposure to stimuli, and there is a relative neglect, or at least an underestimation, of the mediating role played by adults or 'significant others' "in the process of unfolding growth and change which characterizes human development"[82].

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[80] Feuerstein, Rand, Hoffman and Miller, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, Maryland: University Park Press, 1980), p. 16.

[81] Bernard Lonergan, "Dimensions of Meaning", F.E. Crowe & R. Doran (Eds.), *Collected Works of Bernard Lonergan - Book 4* (Toronto: University of Toronto Press, 1967), p. 234.

[82] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 9.

Feuerstein and Lonergan both certainly recognise the importance for the development of the child of 'direct exposure to stimuli'. However, they would also agree on the unique importance of the role of a human mediator in the child's growth and development. For Piaget, however, the rest of human kind have little more significance for the child's development than any other part of the environment which he struggles to assimilate and accommodate. Following the terminology so far used, Feuerstein would characterise his own view of 'mediated learning experience' (MLE) by the formula as S-**H**-O-**H**-R, where **H** stands for the human mediator interposing himself not only between the stimulus (S) and the learning organism (O), but also mediating and helping the production of the correct learned response (R). Thus, Feuerstein's S-H-O-H-R scheme is compatible with what Lonergan defines as 'mutual self-mediation'. Importantly, it also expresses the process whereby the two ways of human development interact with one another and work together to forward the development of the child.

Feuerstein defines 'mediated learning experience' as follows:

> MLE is defined as a quality of interaction between the learner and the world of stimuli he/she is coping with, when this interaction is mediated by an adult or a more competent or initiated individual who selects, emphasises, changes, and interprets the stimuli for the learner.[83]

He claims that an insufficient amount, or an inadequate type, of parental or school based mediated learning experience is responsible not only for a lack of knowledge, but also for a reduced learning potential of some individuals. Lack of proper mediation or MLE, in other words, renders the human being less 'modifiable', less educable, and consequently less influenced even by those situations which involve 'direct exposure to stimuli'. Conversely, a well-structured teaching programme designed around MLE principles can render the child more modifiable and, hence, more educable. Such a programme of mediation by a human agent does not stand apart from direct exposure to stimuli, however. On the contrary, through MLE the child acquires behaviour patterns and learning strategies which in turn become important ingredients of his capacity to become modified even through direct exposure to stimuli; that is, increasing his capacity to learn through the very many experiences of his life which are not mediated by intentional human agency, but rather mediated through Lonergan's lower levels of 'simple mediation', 'mutual mediation' or 'self-mediation':

[83] Alex Kozulin & Yaacov Rand (Eds.), *Experience of Mediated Learning* (Oxford: Pergamon, 2000), p. xi.

> Since direct exposure to stimuli quantitatively constitutes the greatest source of the organism's experience, the existence of sets of strategies and repertoires that permit the [human] organism to use this exposure has considerable bearing upon cognitive development.[84]

Mediated learning experience (MLE), as opposed to learning by way of direct exposure to stimuli or 'immediate learning', in Lonergan's terminology, is the principal avenue by which the individual may undergo meaningful transformation and become 'structurally modified'. MLE is the normal process used by a mother, for example, interacting with her child, a carpenter training his apprentice, or a student helping a friend with his homework. Carl Haywood gives the following examples:

> These interactions have the function of "mediating" the generalised meaning of the world to the children; that is, they help children understand that events, objects, and persons have meaning beyond themselves, that the universe has predictable structure, that understanding that structure helps one to know what to do in a wide variety of future situations, that it is possible to make explanatory rules that help one to organise observations, and that it is essential to test the applicability of such rules in a wide variety of circumstances.[85]

According to Feuerstein, MLE also provides the most effective mode of classroom teaching. By identifying and isolating the characteristic processes involved in MLE, as is attempted below, one can endeavour to develop a model of this most central of all educational instruments.

Further, one can say that the purpose of mediation is to assist in the transition from exterior to interior locus of control. An individual controlled by externals, whom Feuerstein terms 'alloplastic', tends to be compliant, dependent, and fragmented over time as environmental reinforcers satiate or disappear. Alloplastic individuals also tend to base their social behaviour on present considerations, and live predominantly in a sensorial bound existence. Theirs, one can say, is primarily a *having* mode of existence. 'Autoplastic' individuals, on the other hand, are able to transcend the material world in their search for insights and, once these are found, they are able to make reasoned decisions, based upon time honoured systems of value. One could say that they are dynamic, changeable

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[84] Feuerstein, Rand, Hoffman and Miller, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, Maryland: University Park Press, 1980), p. 16.

[85] Carl Haywood, "A Mediational Teaching Style", *International Journal of Cognitive Education Mediated Learning*, Vol. 3, No. 1, 1993, p. 27. Haywood is Professor of Education at Vanderbilt University, USA, and is author of the noted Bright Start programme, which applies Feuerstein's methods and theories to the education of pre-school children.

organisms, capable of being modified. Their behaviour grows out of an interior locus of control, and so they are less confined or limited by primary sensorial experience. Theirs, one could say, is primarily a *being* mode of living.

15.8 *Primary Characteristics of Mediated Learning Experience*

Feuerstein and his collaborators have identified a number of features that characterise Mediated Learning Experience. Of these characteristics, three are regarded as essential for proper MLE:

1) Intentionality and Reciprocity
2) Transcendence
3) Meaning

15.8.1 *Mediation of Intentionality and Reciprocity*

Intentionality and reciprocity are the main conditions of a mediated learning interaction. For Feuerstein, a human interaction which is animated by an intention and by an effort to create a relationship of reciprocity can be viewed as powerful in that it is rich in behavioural, mental, and emotional components.[86] This latter implies that, as well as taking place at the mediational level of mutual self-mediation, this interaction also takes place at Lonergan's third and fourth levels of cognition, where the child assents not only to the content being taught but also to the person of the mediator himself, as a good or value. As has already been argued, belief (in the sense used in this study) is first and foremost an assent to the person who is the source of the message, and only secondarily is it an assent to the content of the message itself.

The term 'intentionality' is not used here in Lonergan's sense. Instead, for Feuerstein "intentionality refers to the goals and objectives of the mediator during the interactional process with the mediated."[87] Thus, in this case the word 'intentionality' possesses the ordinary, every-day, dictionary, meaning, implying an

[86] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 17.

[87] Y. Rand, "Deficient Cognitive Functions and Non-cognitive Determinants - An Integrated Model: assessment and Intervention." in Feuerstein, Rand, Hoffman and Miller (Eds.), *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, Maryland: University Park Press, 1980), p. 72.

element of deliberateness and consciousness on the part of the mediator, as when a mother corrects a mispronounced word or a wrong grammatical usage on the part of the child, or as when a teacher structures a situation to teach a particular lesson or to mediate a particular insight. This meaning of the term merges with that of Lonergan, however, in the well-known dictum: "Begin with the end in mind,"[88] in which the teacher 'intends' (in both meanings of the word) the object of the lesson. It is this aspect of mediation to which Dewey appears to refer when he says:

> The greater maturity of experience which should belong to the adult as educator puts him in a position to evaluate each experience of the young in a way in which the one having the less mature experience cannot do. It is then the business of the educator to see in what direction an experience is heading. There is no point in his being more mature if, instead of using his greater insight to help organize the conditions of the experience of the immature, he throws away his insight. Failure to take the moving force of an experience into account so as to judge and direct it on the ground of what it is moving into means disloyalty to the principle of experience itself. [89]

On the other hand, "reciprocity denotes the like-minded attitude expressed by the mediated (person) towards the ongoing situation."[90] Reciprocity is a way to turn an implicit intention into an explicit, volitional, and conscious act. Clearly this implies that the child must be aware of the aims of the learning situation and be committed to attaining its goals. This in turn also hinges on a prior attitude of trust and belief on the part of the child towards the mediator.

Feuerstein identifies three elements or partners involved in a mediated learning interaction: "the stimuli to be perceived, the child, and the mediator."[91] The stimulus is what is to be taught or mediated. It may be a given content, a method of organisation, an attitude of some kind, a way of thinking, or a practical way of doing something. The mediator, on the other hand, may be the teacher, the mother, or another significant person in the child's life. What Feuerstein calls the 'mediatee' is the child, student, the one undergoing mediation. The interaction of these three elements may be said to constitute a 'mutually self-mediating' structure in which all three play their part in the growth and development of the child. This dynamic system of mutually mediating elements may be represented by the diagram below.

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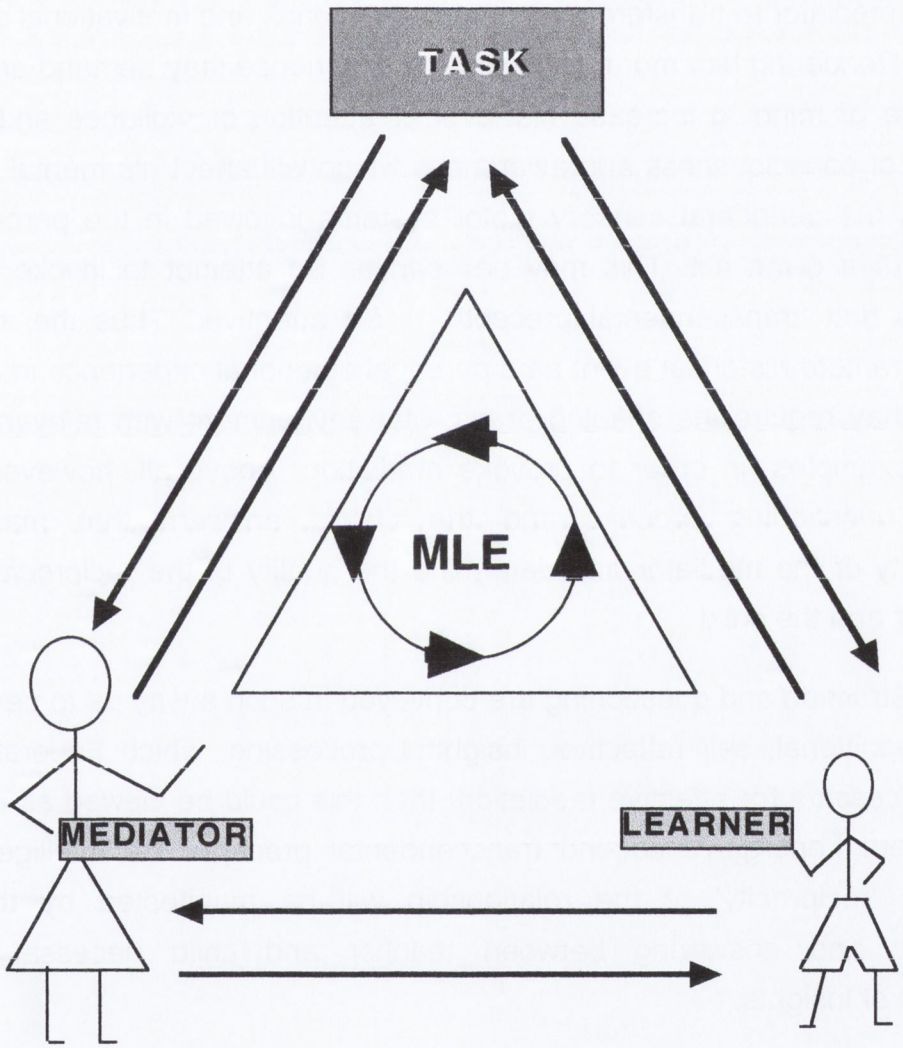
[88] Stephen R. Covey, *The 7 Habits of Highly Effective People* (London: Simon & Schuster, 1999), p. 99

[89] John Dewey, *Experience and Education* (New York: Collier Macmillan Publishers, 1938), p.38.

[90] Y. Rand, "Deficient Cognitive Functions and Non-cognitive Determinants - An Integrated Model", p. 72.

[91] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 62.

The type of mediation employed by the mediator is determined not only by the child, but also by the nature of the task itself. This means that the mediator must be aware not only of the child's possible difficulties in the form of his deficient cognitive functions, but also of the particular demands of the task itself in terms of the level of abstraction it requires, the particular modality employed (verbal, written, schematic), and the cognitive functions required; these constitute what Feuerstein terms 'the cognitive map'.



The critical determining element if the mediation is to be successful is the quality of the interaction between the three elements: stimuli (or task), mediator, and mediatee. The intention of the mediator, and the resulting reciprocity, transforms these three elements. Firstly, with regard to the transformation of what he has been

termed the stimulus or task, Feuerstein explains:

> The particular event is transformed in some of its characteristics by the mediator's intention to make it experienced (not only incidentally registered) by the mediatee. The amplitude, tonality, and saliency of a stimulus are modified in order to make sure it is observed and perceived. The rhythm of appearance of certain stimuli, the frequency and redundancy of exposure to the activity to be mastered are altered by the intention to make it become a part of the behavioural repertoire of the individual.[92]

This transformation of the stimuli to be mediated is accompanied by efforts on the part of the mediator to transform the mental, emotional, and motivational state of the mediatee. Rendering him more accessible to experience may demand an alteration of his state of mind to increase his level of attention or vigilance and to create conditions of consciousness and awareness which will affect his mental processes as well as the peripheral sensory motor systems involved in the perception and execution of a given act. This may be seen as an attempt to invoke and effect Lonergan's first 'transcendental precept' - "Be attentive." Thus the intention to mediate a remote historical event as a personal emotional experience in a child, for example, may require the shaping of his total environment with relevant teaching aids and examples, in order to provoke mediation. Above all, however, it is the teacher's questioning process and the child's answers that manifest the intentionality of the mediator and determine the quality of the reciprocity between the teacher and the child.

If instruction and questioning are conveyed in such a way as to permit a high level of cognitional, self reflective, insightful processing, which Feuerstein would insist is necessary for effective mediation, then this could be viewed as an attempt to implement Lonergan's second transcendental precept: "Be intelligent." Once again, the 'reciprocity' of the relationship will be manifested by the mutual questioning and answering between teacher and child necessary for the occurrence of insights.[93]

Feuerstein's 'intentionality and reciprocity' create in the child being mediated an awareness or consciousness of the learning process and of the didactic principles underlying it. Such a heightening of reflexive consciousness Feuerstein terms 'metacognition'. He says for example:

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[92] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 18.

[93] For a discussion of the relationship between mediation and questioning see Chapter Sixteen of this study.

> The metacognitive components form an important part of the mediational interaction, taking the form of induced self-reflection, insight and articulation of the total field into its components. This orientation, once internalised, becomes the steering power towards more efficient learning and, in turn, leads to higher levels of modifiability.[94]

Thus, as already discussed,[95] the term "metacognition", as used by Feuerstein, appears to correspond to the raised level of awareness or consciousness involved in attending to and understanding one's own mental operations in action. This, in turn, appears to parallel what Lonergan means by inducing "insight into insight". In other words, what Feuerstein is describing in very detailed and practical terms is nothing other than the mediation to the child of the process of self-reflection, or the 'self appropriation' of his cognitive interiority. This Lonergan describes as:

> (1) experiencing one's experiencing, understanding, judging, and deciding, (2) understanding the unity and relations of one's experienced experiencing, understanding, judging, deciding, (3) affirming the reality of one's experienced and understood experiencing, understanding, judging, deciding and (4) deciding to operate in accord with the norms immanent in the spontaneous relatedness of one's experienced, understood, affirmed experiencing, understanding, judging and deciding.[96]

Finally, mediation of intentionality and reciprocity appears to have something in common with Freire's notion of 'dialogue', as when he says:

> Authentic education is not carried on by "A" *for* "B" or by "A" *about* "B", but rather "A" *with* "B", mediated by the world - a world which impresses and challenges both parties, giving rise to views or opinions about it.[97]

and

> Only dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue, there is no communication, and without communication, there can be no true education. Education which is able to resolve the contradiction between teacher and student takes place in a situation in which both address their act of cognition to the object by which they are mediated.[98]

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[94] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning implications* (London: Freund Publishing House Ltd., 1994), p. 20.

[95] See Section 9.8.2 of this study.

[96] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), pp. 14-15.

[97] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 74.

[98] Ibid., pp. 73 - 74.

15.8.2 *Mediation of Transcendence*

Transcendence in this context refers to the fact that in most learning interactions what is communicated to a child goes beyond, or 'transcends', the narrow mediational goals of the particular interaction. Making an individual acquire a skill or become competent in a particular area of knowledge is the goal of the interaction between parent and child, or teacher and student. However, the secondary intention of making him feel more competent and of enhancing his self-confidence, for example, or of mediating the practical notions of tidiness or sharing behaviour, goes beyond the immediate skill or competence aimed at by the interaction. Yet to Feuerstein this transcendence plays a vital part in the mediated learning of the child.[99]

Feuerstein considers that it is this transcendent nature of the interaction between the mediator and the child that produces a real flexibility in the child's thinking. Additionally, the transcending elements produced by the mediator address culturally determined goals in which the mediator acts as a mediating agent of his culture. For example, a mother feeding her child may have his survival as her main goal, at least initially. However, feeding the child after certain preparations, such as cleaning, changing or bathing him and then preparing a particular place for him to eat that she has cleaned carefully and arranged attractively, is transmitting something beyond mere survival. For survival, after all, he can eat anytime and anywhere. Feuerstein explains:

> Transcendence, established by cultural imperatives, preferences, or styles, enriches the mediational interaction with components of time, space, succession, order, culture, and other dimensions that have importance to the development of the child's cognitive structures.[100]

Feuerstein believes that of the eleven components of 'mediated learning experience' that have been identified, "it is transcendence which is the most humanizing."[101] He also maintains that it is the component which is most likely to be neglected in the modern world, "with the decline in promoting cultural richness and transmission as both a societal and an individual goal." It is among the economically poor, however, with the emphasis on the 'here and now' of survival,

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[99] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE),* pp. 20 - 21.
[100] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 65.
[101] Ibid.

and where "very little energy is left for less urgent matters,"[102] that mediating transcendence is especially difficult. Feuerstein reserves his main criticism, however, for some teachers of the mentally 'retarded' who neglect to teach important cognitive strategies that would enable the individual student to transcend his current level of functioning.

By way of summary, then, one can say that intentionality changes all three partners of the interaction - stimuli, the child, and the mediator. The mediation of transcendence, however, changes the primary goals of the interaction, widening them by including more remote, and in certain cases more important, goals than those which are regarded as the primary ones.

15.8.3 *Mediation of Meaning*

It has been contended already that Lonergan assigns a very central role to meaning in his cognitional system. He maintains that, as the child grows, his world becomes more and more mediated by meaning. In this respect, Feuerstein is in complete agreement with him. According to Feuerstein, the first two essential parameters of 'mediated learning experience' (MLE) - intentionality and reciprocity, and mediation of transcendence - respond to practical questions of *how* mediated learning experience is to be imparted. Mediation of meaning, on the other hand, answers questions regarding the purposes of MLE. In others words, it "answers the questions of why, what for." Feuerstein adds:

> MLE, animated by the intention to transcend, mediates to the mediatee the meaning of the interaction, its significance, its "why" and is "what for", and it renders explicit the implicit reasons for the changes produced, and the primary and secondary goals of, the interaction.[103]

Lonergan says that the questions "Why?" and "What?" are natural expressions of human intelligence; they are natural in the sense that they emerge, not because a person is trained in a certain way, but directly from the innate 'pure desire to know' itself. They are to do with causes and so they grope towards insight or understanding. They may also be said to be 'conceptual' because they are also concerned with, and give rise to, concepts, ideas, definitions and logical connections between things.

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[102] Ibid., p. 66.

[103] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 24.

Feuerstein, then, would agree with Lonergan that the world in which we live and move and have our being is a world mediated by meaning. He also believes that the mediation of meaning starts from the very beginning of the mother-child relationship, when the interaction is still essentially on a preverbal level:

> The mother makes the child aware of the importance she ascribes to certain dimensions of the reality which she mediates, using paralinguistic modes of communication, through kinaesthetic, body language, changes in the amplitude of her voice, alteration of movements, and frequency and redundancy of the stimuli mediated.[104]

As soon as verbal understanding appears, however, the mother accompanies her paralinguistic communication modality with words, which in turn designate meaning and significance and act "as the energetic, motivating determinant of behaviour."[105] Feuerstein believes that further development of more complex verbal modalities used for the mediation of meaning "creates in the mediatee an orientation toward the search for 'meaning'."[106] This mediation of meaning, in other words, acting on the child's mind from 'above downwards', deals not only with the cognitional aspect, but also with the energetic and affective dimension of the interaction:

> The mediation of meaning represents the energetic, affective, emotional power that will make the mediational interaction overcome resistance on the part of the learner and thereby ensure that the stimuli mediated will indeed be experienced by the learner. Meaning mediated verbally, gesturally, or by mimicry, and reflected in the organization of the universe of objects and events, ensures that the child not only becomes receptive to the world but also is engaged in a mutual and reciprocal interaction with it.[107]

This latter view differs somewhat from that of Lonergan who recognises in the 'will to meaning' an aspect of the 'pure desire to know', acting 'from below upwards', which is present in the child as a natural orientation, or drive, or instinct from birth, rather than something that is itself mediated 'from above downwards'. However, even in Lonergan's system, the actualisation of 'the pure desire to know' in the young person must be encouraged, facilitated, and, to a degree, 'taught' by significant others. The idea that the will to meaning is already present as a natural instinct or propensity awaiting only the action of a mediator to bring it to life is

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[104] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 24.

[105] Ibid., p. 25.

[106] Ibid.

[107] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 66.

consistent with Lonergan's notion of development from above downwards. It is also consistent with his notion of consciousness which requires the presence of an intentional object to induce at once both a subjective and an objective awareness. The following dramatic quotation from the life of Helen Keller previously quoted in Chapter Five brings these ideas of meaning, mediation, and consciousness into startling relief:

> She brought me my hat, and I knew I was going out into the warm sunshine. This thought, if a wordless sensation may be called a thought, made me hop and skip with pleasure.
>
> We walked down the path to the well-house, attracted by the fragrance of honeysuckle with which it was covered. Someone was drawing water, and my teacher placed my hand under the spout. As the cool stream gushed over one hand she spelled into the other the word *water*, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten - a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that "w-a-t-e-r" meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! There were barriers still, it is true, but barriers that could in time be swept away.
>
> I left the well-house eager to learn. Everything had a name, and each name gave birth to a new thought. As we returned to the house every object which I touched seemed to quiver with life. That was because I saw everything with the strange, new sight that had come to me.[108]

Clearly Helen already had an orientation to meaning, a propensity to insight, as evidenced by the fact that when the hat was produced she "knew" that she was going for a walk in "the warm sunshine." What was mediated to Helen in this case is also much more than the mere meaning of water itself, much more than the rich insight into the symbols traced on her hand by her teacher. More significantly, what was mediated was the 'metacognitive' meaning of meaning itself, insight into insight, so that she now searched for meaning in everything that she touched, so that all the old familiar objects "seemed to quiver" with new life.

All of this raises an ethical question: What gives one the right to mediate, to impose one's own meaning and significance on another? The only direct answer is that without mediation of meaning the quality of the relationship between adult and child is impoverished and, as a consequence, the emotional and mental development of the child is impeded. It is impeded in two ways. Firstly, it renders

[108] Helen Keller, *The Story of my Life* (London: Hodder & Stoughton, 1956), p. 28. Helen Keller, it should be remembered, was blind, deaf, and dumb from an early age. This quotation has already been used and commented on in some detail in Section 5.3.1 of this study.

inefficient the mediator's attempts to convey to the mediatee the stimulus event, relationship, and concepts which are the purposes of the interaction. Secondly, the child fails to learn (or to develop) the 'need' to search for meaning in the wider aspects of his life. "This includes the search for causal as well as teleological relationships between events and not just the 'meaning' of the mediator's efforts to convey them to him."[109] Feuerstein continues:

> A parent who is reluctant to impart to his children the "meaning" of existence impoverishes their lives, not only by certain contents, values, and motivations, but by denying them the very faculty and need to search and even construct for themselves the meanings of their lives and their activities. In the absence of these meanings, any substitute, no matter how noxious, comes to fill up the void and becomes acceptable even if it is self-destructive.[110]

In other words, Feuerstein considers that the mediated propensity of the individual to search and construct meanings for his life is the energetic determinant of the changes that he will undergo, and of the transformations produced in the immediate and the more remote goals of life and of the means to achieve them. This is particularly important in the modern world of rapid change which will be a topic of consideration in the conclusions of this study. Also of immediate importance for teacher education is the following conclusion from Feuerstein:

> It is very difficult to recommend as mediators individuals who are not committed to their own values, mores, goals, styles of life, past heritage, and future goals that represent intergenerational imperatives.[111]

Thus, for Feuerstein, the mediation of meaning to children by parents is both a right and a duty, not just to satisfy the parents often unconscious need to continue their own existences in and through their children, but because it is vital for the development of the human subject, as a flexible, adaptable and modifiable being.[112]

To summarise this last section, then, one can say that the three essential aspects of any proper mediation of a learning experience by a parent, teacher or caregiver are that (1) the mediator should be aware of, make known, and ensure that the learner has understood what he or she is going to do (intentionality and reciprocity); (2) the mediator should explain why he or she is going to do it

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[109] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE)*, p. 26.

[110] Ibid., p. 27.

[111] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 68.

[112] Ibid., p. 70.

(investment of meaning); and (3) the act should be conveyed as having value beyond the here and now (transcendence).[113] Feuerstein maintains that these three aspects are vital in all forms of human learning and are not special or specific to his various remedial intervention techniques.

15.9 *Parameters of Reinforcement of Mediated Learning Experiences*

The remaining nine parameters of mediation, in contrast to the first three, are not strictly necessary conditions for mediated learning experience (MLE). Instead, they are responsible for the diversification of cognitive styles, of affective modes of experiencing oneself and others, and of ways of responding to stimuli emerging from both internal as well as external sources. However, "only when all of these become an integral part of the teacher's repertoire and are used constantly and appropriately can true mediation be said to be occurring."[114]

15.9.1 *Mediation of Feelings of Competence*

One must distinguish clearly between the *feeling* of competence and *actual* competence. The child with an overoptimistic assessment of his own abilities is all too familiar to educators. So too, however, is the opposite, the child of good ability who carries with him a tragic and crippling sense of self-doubt. Feuerstein comments:

> Unhappily, this confusion between competence and feeling of competence has left little room for a deeper understanding of the paradoxical, and yet so often observed, phenomenon that competence does not necessarily imply a feeling of competence, even when it leads to high achievement.[115]

In another place he laments: "We are often surprised at how many highly competent people are tortured by a profound feeling of inadequacy"[116] .

Feuerstein considers that such feeling of competence is not the direct and inevitable outcome of the perception of one's capacity, but rather that the engendering of this feeling requires the intervention of a human mediator who

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[113] Prof. Robert Burden, "Learning How to Learn: An Introduction to Feuerstein's Instrumental Enrichment Programme." (Unpublished college notes , University of Exeter), p. 6.
[114] Ibid., p. 7.
[115] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 29.
[116] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 70.

interprets and explains the mastery and the competence to the student and turns it into an awareness and feeling of his own ability. Feuerstein holds that this mediation of competence is a complex activity that can be easily missed in the way an adult interacts with a child. There are two major elements which have to be considered in this case:

1) There is a need to equip the child with the phase specific prerequisites of competence. The child, in other words, has to be helped succeed in some task in which he had previously not been successful. The struggle of the child with a certain task, for example, might be 'made successful' by the mother's discrete intervention. It is important, however, that the mediator keep her assistance within strict limits of what is necessary for the child to succeed. Thus, when teaching a child to eat, for example, the mother might support the underside of the spoon slightly for a time so that the child might successfully get the food to his mouth. Or, in much the same way, in a child's learning to ride a bicycle, the father might discretely support the bicycle for a time before letting the child take off on his own.

2) The mediator must select the task and the manner of presenting it to the child so that it will not only enhance his competence but also so that she can mediate to him the meaning of his mastery. One has to explain to him the implications of what he has managed to do: "Do you see what you have done now?" In watching Feuerstein himself in action in a clinical setting, one frequently sees him mediate competence through his sincere delight at the success of the child, often accompanied by a beaming, booming "Bravo!". The immediate goal is competency in the task, the transcendent goal is the feeling of competency. There is also, Feuerstein would add, an optimal degree of novelty, complexity, and challenge that is required in order to experience a feeling of competency.

In his book *Don't Accept Me as I Am* Feuerstein gives the following excellent example of mediation of feelings of competency:

> In a survey of tasks offered to young adults with Down syndrome who were ready to enter a semi-independent living situation, we found that none of them had been taught to strike a match to light a stove. The reasons invoked by parents were multiple: Its dangerous; they may not know when to do it (deficient decision making); they cannot blow it out (supposedly because of the poor

> muscle tone of lip and tongue); they don't know how to hold the match so that it won't burn their fingers. As we demonstrated to parents how easily these difficulties are overcome (teaching the child to keep the flame upward when igniting, or to blow it out by moving the hand), we witnessed the joy their sons or daughters experienced in mastering this task as well as the boost in their feeling of competency.[117]

15.9.2 *Mediation of Regulation and Control of Behaviour*

According to Feuerstein, regulation of behaviour is the way in which an individual weighs up various sources of information in deciding if, when, and how to respond to a given situation. This is Lonergan's level of judgment in action. Regulation of behaviour embodies two opposing aspects: the control of impulsivity on the one hand and the initiation of behaviour on the other.[118] Impulsivity does not merely consist in the child replying too quickly and thoughtlessly to a question, but it may also show itself in Lonergan's level of experience as a certain carelessness in the way the child collects the data or information necessary to give an appropriate response. Feuerstein believes that impulsiveness, like all deficient cognitive functions, is amenable to change, but that a high level of investment is required to do so. A mediator can restrain impulsiveness by drawing the child's attention to it, by demanding that the individual devote more time to studying the problem before giving a response, by restraining the child physically (e.g. asking the child to sit on his hands, or even holding the child's hands).[119] This author has personally witnessed Feuerstein deliberately (intentionally) exercising restraint on a child by gently placing his own hand on the child's, thus mediating the need for restraint of impulsivity.

'Initiation of behaviour' means accelerating the response "by overcoming inhibition, which is often due to an individual's lack of knowledge or lack of confidence."[120] This lack of confidence on the part of the child may, in turn, be due to feelings of incompetence. Mediation of initiation, however, must be such that "the act becomes self-initiated and autonomously controlled,"[121] and not forced or

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[117] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), pp. 72 - 73

[118] Ibid., pp. 74 - 75

[119] Clinicians have expressed some surprise to this author regarding the degree of pressure used by Feuerstein to aid and encourage the child in his achievement of his goals. In this author's experience, such pressure and persistence is always gentle, and most often produces a very positive effect on the motivation of the child.

[120] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 73.

[121] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE)*, p. 37.

impelled from outside. This does not prevent the mediator from gently insisting that the child can do better: "Now, why don't you try that again. I just know you can do it."

As regards the control of behaviour, whether it is mediated restraint of impulsivity or is overcoming inhibition, Feuerstein also emphasises that

> the teacher's imposing control and acceleration of student behavior is rendered more acceptable when it has the quality of mediation. This is true particularly when reciprocity makes the mediatee able to understand the *meaning* of the inhibitory action of the mediator and offers him the extension of this meaning to the transcending goals set up by both the mediator and mediatee. This quality of regulation affects the individual's behavior in a structural way that is more permanent and is generalizable over future situations which he will confront.[122]

He also goes on to draw the following very important educational conclusion:

> The teacher whose concern is most centred on the "product" of his student encourages very little cognitive control of behavior. He all too often shows signs of impatience with "thinking" processes, which he considers to be signs of lack of mastery by the child who manifests hesitation to respond to a learning challenge immediately; so the teacher passes on to the more efficient respondent. **This makes the more reflective "thinking" individual disadvantaged and frustrated.**[123]

In other words, a *having* attitude or bias on the teacher's part can sometimes actually reinforce a child's impulsivity, and his consequent feelings of incompetence.

15.9.3 *Mediation of Sharing Behaviour*

Feuerstein claims that sharing behaviour "reflects the need of the individual to go out of his own self in the direction of participating with others and to make others participate with him."[124] His use of the word "need" is interesting. Clearly, he sees sharing as a self-transcendent drive or instinct. If it can be regarded as an urge or drive, then one would expect it to manifest itself even an an early age. Feuerstein claims that this is indeed the case and that sharing behaviour to be found even in infancy:

> This need is an extension of the early mother-infant bonding process. Indeed, it is amazing to see how early a child is able to share with his mother, following the mother's eyes as she focuses

[122] Ibid., p. 38.
[123] Ibid.
[124] Ibid., p. 40. The emphasis is this author's own.

on a toy.[125]

Erikson also points out that such mutual mediation of sharing behaviour at an affectional level is instrumental in the building up of trust, which manifests itself as faith or belief at a later stage in the child's life.[126]

As the child matures, his mother mediates the need for him to share with other children by firstly showing how she feels when he shares his feelings with her, thus making sharing an extremely important reciprocal experience. Affective modes of sharing, in particular, "are the modes by which the self projects itself into another person and attempts to make the other share his feelings." [127] The latter would constitute a good definition of what is generally termed 'empathy', and which Lonergan calls 'fellow feeling'[128] . Thus, mediation of sharing behaviour is, at its highest, mediation of empathy or 'fellow feeling'. According to Feuerstein, mediation of sharing behaviour is also, to a large degree, culture bound, depending on the mores and traditions of a particular culture.

15.9.4 *Mediation of Individuation and Psychological Differentiation*

Individuation and psychological differentiation is, in some respects, the opposite of sharing behaviour. Individuation represents the need of the individual to become an articulated, differentiated 'self' as opposed to the 'other' with whom he shares himself. Individuation is, nonetheless, "a transcendent phenomenon," at least in its aetiology, since

> children whose level of security is increased by a process of bonding and mediation show a much better capacity to perceive themselves as separated, articulated and independent entities with emotional ties which persist above and beyond the spatial and temporal separation.[129]

Feuerstein insists that in educational systems it is very important that teachers mediate to the children how to perceive themselves as individuals as distinct from others. Such mediation takes place not only when children learn to be individualistic but also in the ways by which a teacher becomes a model for the

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[125] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 76.
[126] See Section 8.15, above.
[127] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE),* p. 41.
[128] This will be dealt with in some detail in Section 17.5 below.
[129] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE),* p. 42.

children, portraying himself as having an authoritative position while reflecting the possibilities that other's views also have a legitimate place in classroom discussions. However, Feuerstein feels that in "the majority of cases, individuation is blocked by requirements for conforming submission to the hierarchically superior partner."[130]

15.9.5 *Mediation of Goal Seeking, Goal Setting, Goal Planning and Achieving Behaviour*

Feuerstein considers that mediation of goal seeking behaviour can begin at a very early age. Even before a child learns to speak one can observe goal oriented responses in the child and build on them. Development of language, however, which allows the child to interact verbally, makes such mediation much easier.

According to Feuerstein, seeking out a goal and striving towards it requires the enlargement of one's sphere of experience by entering into a world which is beyond the sensorial, immediately perceived reality. This type of mediation then

> widens the individuals thinking in terms of time and space, creating in him a future-directed orientation. Goals are sought with the help of the mediator, who points out the alternate ways of reaching a goal.[131]

Choosing a specific goal from a number of alternatives demands making judgments about the relative advantages of different possible goals, which in turn demands a high level of representational thinking and reasoning (or "what ... if" type skills), all of which are aided and facilitated by language acquisition.

15.9.6 *Mediation of Challenge: The Search for Novelty and Complexity*

Challenge and meaning are closely linked to one another. Nietzsche's words: "He who has a *why* to live for can bear with almost any *how*" find an echo in the following account of Frankl's experiences in Auschwitz and Dachau:

> *It did not really matter what we expected from life, bur rather what life expected from us.* We needed to stop asking about the meaning of life, and instead to think of ourselves as those who are questioned by life - daily and hourly. Our answer must consist, not in talk and meditation, but in right action and in right conduct. Life

[130] Ibid., p. 43.

[131] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 79.

> ultimately means to take the responsibility to find the right answer to its problems and to fulfil the tasks which it constantly sets for each individual.[132]

Parents, teachers, and even whole cultures, differ widely in the extent to which they mediate such a positive response to challenge. Some parents tend to be overprotective of their children; some educational systems tend to be over systematised and overly "realistic" in their expectations; some cultures discourage their members from seeking out challenges and responding to them. However, Feuerstein maintains that the mediation of challenge should be the goal of all education and an essential part of the enrichment of all programmes which aim to prepare the individual for the novelty, demands, and complexity of modern living. He says that "a readiness to learn and a propensity to change states from the known to the unknown is a vital requirement in a world of change."[133]

Feuerstein also says that mediation of challenging behaviour is best done by allowing the individual to confront a novel situation in a gratifying way. He maintains that encouraging children to start tasks that they know they will not be able to master immediately is a very important element in widening intellectual, language, motor, socialisation, and other competencies:

> Many children ... , when asked to do something, will say "But I haven't learned it. How can I do it?" "If you won't try it, you will never learn it" would be the appropriate answer. But in many cases, a negative response from the child is accepted, resulting in even greater reluctance on the child's part to involve himself in challenging tasks. Thereafter, the task is modified, usually "watered down," which renders it uninteresting and meaningless from the standpoint of learning.[134]

One of the most important elements in all mediation is the belief, on the part of both the child and the mediator, that the child *can* go beyond, and *can* transcend his present observable level of functioning; one must bear in mind that

> the ultimate goal of the teaching process is to transcend the world of the concrete, to teach richer and more effective levels of abstract thinking rather than to create an "artificial world" to which the student may easily adapt.[135]

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[132] Viktor Frankl, *Man's Search for Meaning* (New York: Washington Square Press, 1984), p. 98. Italics in original.

[133] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE),* p. 45.

[134] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), pp. 80 - 81

[135] Ibid., p. 21.

15.9.7 *Mediation of the Awareness of the Human Being as a Changing Entity*

It has been argued already in Chapter Seven that to exist as a human person means to have an identity that stays the same, beyond the changes one might produce in oneself. To live, on the other hand, is to be in a constant process of change. Fromm says: "Living structures can be only if they become; they can exist only if they change. Change and growth are inherent qualities of the life process."[136] The balance between these two antagonistic needs (the need to stay the same, and the need to change) requires a constant reappraisal and readjustment on the part of the child if he is to reach self-fulfilment. It is the way to fulfilment because "it is the way by which new cognitive structures become active in the individual making him able to produce changes in himself on an intentional basis."[137] Feuerstein adds:

> The idea that the individual is a "modifiable existence", irrespective of biologically determined development and that these changes are not just the predictable unfolding of characteristics existing in him "in potentia" is not a commonly shared view in many cultures. ... The belief that intelligence is modifiable is probably the least accepted, even by those who adhere to the view of modifiability in other domains of human growth.[138]

By mediating to the individual, and to society in general, this phenomenon of "cognitive modifiability" as a unique characteristic of human beings, it should be possible to influence educators in particular to search for signs of change as a way to evaluate the individual child and, as a consequence of this change, to give a more hopeful, positive, and dynamic prognosis than that which relies too much on the registered manifest level of functioning as predictive of future performance, as static tests tend to do. Feuerstein says:

> In the absence of belief in modifiability, or in the reluctance to engage in applying it, the educational system becomes anaemic, manifesting at best a passive accepting approach that is accepting the individual as he is. At worst, the school rejects him in a Spartan way when his condition doesn't fulfil society's expectations of him.[139]

This dichotomy between the dual need for change and for stability, for self-transcendence and for homeostasis, goes to the core of the distinction between the *being* and the *having* modes of existence and their corresponding approaches to

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[136] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.34

[137] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), p. 82.

[138] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE),* p. 46.

[139] Ibid., p. 47.

education. Eric Fromm explains:

> The process of learning has an entirely different quality for students in the being mode of relatedness *to* the world. To begin with, they do not go to a course of lectures, even to the first one of a course, as *tabulae rasae*. They have thought beforehand about the problems the lectures will be dealing with and have in mind certain questions and problems of their own. They have been occupied with the topic and it interests them. Instead of being passive receptacles of words and ideas, they listen, they *hear*, and most important, they *receive* and *respond* in an active, productive way. What they listen to stimulates their own thinking processes. New questions, new ideas, new perspectives arise in their minds.[140]

15.9.8 *Mediation of the Search for an Optimistic Alternative*

This type of mediation which emphasises the way that the individual views the future is an important determinant of cognitive modifiability. Confronted with a number of alternatives as to what can happen in a given situation, the individual may chose an optimistic alternative or a pessimistic one. Mediating a positive choice to a child involves mobilising him to search for those elements in a situation that will substantiate the positive choice. A negative alternative requires little or no mobilisation. Feuerstein says:

> Adhering to an optimistic alternative is the point of departure for a series of cognitive steps, the aim of which is to produce evidence for the chosen alternative. A sharp, perceptive, systematic search on the input level results in a greater efficiency in unravelling otherwise neglected dimensions of the perceived reality. Knowing that *something is possible* makes the involved individual become committed to the search for ways to turn the possible into a materialized experience.[141]

An example from this author's own experience may be useful. In Hong Kong children are allocated to secondary schools according to a crude 'banding' system, determined by an '11 plus' type assessment in Primary Six. Those allocated to a school at the lowest level, bands 4 and 5, quickly develop an attitude of hopelessness which is very deep seated and tends to colour all aspects of their lives. This is extremely difficult to overcome. These children have already had a very negative or pessimistic choice mediated to them, a choice which is confirmed again and again throughout their schooling. In this author's experience, it is extremely difficult to replace this stance or attitude with a more positive and

[140] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.38.
[141] Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE),* p. 48.

optimistic one. To convince such students that their lot is not hopeless, but that on the contrary they are capable of being modified would be a real test of 'mediated learning experience', involving not just mediation of an optimistic alternative, but involving all of the other types of mediation, to varying degrees. Feuerstein says:

> Choosing an optimistic alternative will sharpen the thinking process, orienting an individual to search for the cognitive support needed for testing an optimistic hypothesis, a process that might be particularly important for the high-risk child.[142]

Mediating an "optimistic alternative" to children is very much a matter of mediating the virtue of hope. Freire says that "hopelessness is a form of silence, of denying the world, and fleeing from it."[143] He also says: "Hope, however, does not consist in crossing one's arms and waiting. As long as I fight, I am moved by hope; and if I fight with hope, then I can wait."[144]

One of the most striking memories of this author's visit to Feuerstein's clinic in Jerusalem[145] was the sight of a young French boy of about eight years of age who, according to the chief therapist, Stephen Gross, had only the week before "trashed the place." When I saw him, he still bore the scars from a broken window on his forehead. However, he was now in delighted, joyful, enthusiastic absorption in a task with his therapist. They were both seated on the floor while the boy's mother softly translated the therapists instructions from Hebrew into his native French. He never even looked up as the chief therapist and the author entered the room to observe. Such a transformation in the child was, no doubt, the result of many forms of mediation, but the most apparent characteristic of the situation was the pure delight and joy that lit up the child's face. As Lonergan would describe it, he was at last assenting to himself as a learner. The concomitant acceptance of a positive optimistic alternative was for him a deep and radical change of mental outlook, akin to a radical 'conversion'.

15.9.9 *Mediation of the Feeling of Belonging*

Cultures vary widely in the priority and importance placed on the mediation by family, school and public institutions of a sense of belonging. Modern technological societies tend to stress the individual's autonomy, self-sufficiency and

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[142] Feuerstein, Rand & Rynders, *Don't Accept me as I Am* (New York, Plenum Press, 1988), pp. 85 - 86.
[143] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 72.
[144] Ibid., p. 73.
[145] The author spent some time in Feuerstein's clinic in December 2003.

essential privacy, while more tradition-oriented societies give the need to belong a higher priority. In the experience of this author, *real* alienation tends to be more prevalent among children in the West, while the *fear* of alienation, of being ostracised, of 'loosing face', tend to play a larger role among Oriental children. Thus in Chinese society one finds among children a greater sense of identification with, and loyalty towards, and dependence upon, one's school, one's club, or even one's gang ('triad'), than one finds in the West. Uniforms, badges, titles of responsibility, speech-days, sports-days, school clubs, while all very familiar in European schools, nevertheless tend to play a larger part in the life of a young Chinese child. The life-world to be mediated by the family and the school lies in a balance between these two extremes: being autonomous while yet belonging. Maritain attempts to strike such a balance when he explains:

> Man finds himself by subordinating himself to the group, and the group attains its goal only by serving man and by realizing that man has secrets which escape the group and a vocation which is not included in the group.[146]

In concluding this section it is important to emphasise again that these parameters of mediation, operating from 'above downwards', apply to all areas of teaching and pedagogy, and not just to Feuerstein's pedagogical system. Thus, the general principles of MLE are applicable to all circumstances of human development, and to the teaching of all subjects on the school curriculum. They are a concrete manifestation of intersubjectivity in education. One characteristic they all have in common is that they are based on a transcendent view of the human person, and based on a practical pedagogy which is itself also transcendent. The practical pedagogy is transcendent because it is based on the notion of 'cognitive modifiability' and, in practice, entails making demands on the child continuously beyond what, at least initially, he can comfortably attain by his own unaided efforts.

15.10 *Self-Appropriation and Mediated Learning Experience*

To 'appropriate' something, in Lonergan's sense, means to make it ones own. In *Insight* he says:

> To appropriate a truth is to make it one's own. The essential appropriation of truth is cognitional. However, our reasonableness demands consistency between what we know and what we do;

[146] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 15.

> and so there is a volitional appropriation of truth that consists in our willingness to live up to it, and a sensitive appropriation of truth that consists in an adaptation of our sensibility to the requirements of our knowledge and our decisions.[147]

Hugo Meynell says that "attention to one's acts of consciousness *heightens* them." If such attention, or advertance, to the experience of one's own conscious interiority, or to one's intentional nature, is followed by an insight into one's own conscious nature and an assent to what one has grasped about oneself as a knower, then Lonergan would term the overall exercise 'self-appropriation of interiority', or self-appropriation of intentionality. Once the necessary conditions have been satisfied as far as one can judge, once the 'virtually unconditioned' has been reached by reference to the data of consciousness, then the reality of oneself as knower is a "fact" and not some necessary *a priori* assumption. This appears to be what Lonergan means when states in *Insight* that "It is not that I exist necessarily, but merely that in fact I do. It is not that I am of necessity a knower, but merely that in fact I am." [148]

For Lonergan, self-appropriation of interiority represents the ultimate level of human development. The question has already been asked in Chapter Nine: "How does one go about 'teaching' self-appropriation in school?" The object of the exercise would appear to be to get students to attend to, or advert to, their normal thinking and reasoning processes as they bring them to bear on their ordinary academic studies, or as they grapple with the usual problem-solving activities of the laboratory, or of everyday life. Lonergan would obviously cite his 'transcendental precepts' as part of his *modus operandi:* be attentive, be intelligent, be reasonable, be decisive. But still the question remains: "How does one actually do this in practice?" How does one develop such a habit of attention, insightfulness, reasonableness and responsibility in a group of school leavers, for example, who have neither the discipline, the maturity, nor the motivation to care about such matters of the intellect and whose education, for the most part, has done little or nothing to cultivate a love of learning? Even more, how does one cultivate such virtues in a group of culturally and educationally deprived young adolescents?

Yet it was specifically for this latter group that Reuven Feuerstein developed his Instrumental Enrichment programme in Israel towards the end of the Second

147 Bernard Lonergan S.J., *Insight*, p. 558.

148 Ibid., p. 319.

World War, and elaborated at the same time his theories of 'cognitive modifiability' and 'mediated learning experience'. Feuerstein's method of cognitive development is best described as learning how to learn by gaining insight into one's own cognitive functions. This compares well with Lonergan's aim of self-appropriation and self-affirmation: "to discover, to identify, to become familiar with the activities of one's own intelligence."[149] While Lonergan would concentrate on one's ordinary every-day cognitive activity as philosopher, scientist, or student, Feuerstein's method normally involves the use of specially designed exercises or "instruments," although, as already mentioned, his method can also be employed in ordinary everyday classroom learning.

While Lonergan sees self-appropriation as an essentially personal affair, Feuerstein's method can be used with whole classes, and his instruments are mediated by specially trained teachers. At the heart of Feuerstein's work is this need for a specially trained human intervener, or mediator, or teacher.

Finally, Feuerstein states that the major goal of his system is "to increase the capacity of the human organism to become modified through direct exposure to stimuli and experiences provided by the encounters with life events and with formal and informal learning opportunities."[150] This still appears to be very much in line with what Lonergan aims to achieve through his 'self-appropriation of interiority'.

15.11. *Characteristics of an Effective Mediator.*

A detailed reading of Feuerstein's works highlights just how much a teacher needs to learn to become a truly effective educator. As well as having an intimate understanding of the human mind and its learned cognitive functions, one must also grasp the dynamics of mediation to the degree that they become second nature to one's actions. To become an effective mediator, and not just an imparter of knowledge, a teacher must, for example:

1) Supply the information that may be needed for the child to learn relationships or find solutions. In other words, he must make sure that all relevant data is provided for the child and

149 Bernard Lonergan S.J., *Insight*, p. xix.

150 Ibid. p. 115

that the experience provided is consistent with the child's developmental level;

2) Elicit insights and answers through a proper and natural process of questioning (This will be dealt with more thoroughly in the next chapter);

3) Bring about an induction of explanatory rules by calling attention to similarities among isolated events;

4) Guide deduction of applications of relevant rules;

5) Build the confidence of children by communicating belief in their competence as thinkers;

6) Maintain a 'metacognitive' emphasis; that is, he must focus attention on the child's own thinking processes, enhancing his "insight into insight," and 'self-appropriation of interiority.'

It will be argued in the concluding chapter of this work that all of this hinges on the teacher becoming what Schön calls a "reflective practitioner."[151]

15.12 *Chapter Conclusions*

The notion of mediation has appeared again and again throughout this study. This chapter, however, has sought a more systematic examination of this notion. In the process, it has examined carefully what Lonergan means by the term 'mediation' and found the notion to have explanatory value on the biological, psychological, and sociological levels.

The notions of mediation and causality were compared. It was argued that a system of mediation, unlike causal systems, could be viewed as a dynamic structure. From there, the chapter progressed to a detailed examination of Lonergan's four main types of mediation. Of particular note is the correspondence found between Lonergan's notion of 'mutual self-mediation' and Feuerstein's notion

[151] See Section 18.4 below.

of 'mediated learning experience'. Because they appear to offer a practical methodology for Lonergan's theories, the characteristics and parameters of Feuerstein's mediated learning experience were examined in some detail. Even these appear to display a level of correspondence or conformity with the theories of Lonergan.

Vygotsky's notion of 'psychological tool' was also examined in some detail as a way of linking Lonergan's notion of mediation with the "triarchic model' used extensively in this study. The same section considered the related and topical notion of technological mediation, relating the works of McLuhan and Papert with those of Lonergan.

It has already been argued that everything that exists exists in relation to 'other', either in space, time, or as mediated and mediating.[152] In the words of Clarke, "being as substance, as existing *in itself*, naturally flows over into being as relational, as turned *towards others* by its self-communicating action. *To be* fully is to be substance in relation."[153] In the next chapter it will be argued that questioning intends an answer. One can also say that the answer is mediated by the question. There is a certain equivalence, then, between mediation and intentionality. This connection, it will be contended, resides in the concept of relation. It will be argued in the next chapter that it is the questioning process which links, relates, or mediates the data perceived with the act of intellectual understanding, and which then relates what is understood and conceptualised with the act of rational insight and judgment.

[152] See Chapter 7 of this study.

[153] W. Norris Clarke, *Person and Being* (Milwaukee, Marquette University Press, 1998), p. 14

Chapter 16

Mediation, Intentionality, and Questioning

I keep six honest serving men
(They taught me all I knew);
Their names are What and Why and When,
And How and Where and Who.

Rudyard Kipling

16.1 *Introduction*

In his *Metaphysics,* Aristotle says:

> For its is owing to their wonder that men both now begin and at first began to philosophize; they wondered originally at the obvious difficulties, then advanced little by little and stated difficulties about the greater matters, e.g. about the phenomena of the moon and those of the sun and the stars, and about the genesis of the universe. And a man who is puzzled and wonders thinks himself ignorant.[1]

It is not surprising then to find that, from earliest times, questioning has been part of the philosophical method itself. The 'dialectic' method employed by Socrates (469 - 399 BC), for example, was a method of conversation[2] whereby truths were explored through a process of questioning and logical discussion. This is still very much a standard procedure in philosophy today. Yet, despite the fact that questioning seems an unavoidable component of the philosophical method itself, philosophers of mind have, according to Mathews, largely tended to ignore it as an object of philosophical study in itself, and have continued instead to "concentrate on the traditional topics of perceiving, understanding, thinking, reasoning, meaning and asserting."[3]

It has already been argued that questioning forms an integral part of Lonergan's dynamic theory of knowing, and that one of the major differences between the theories of intentionality of Lonergan and Husserl was precisely the existence in the theory of Lonergan of questioning as an 'operator' which marshals the process of knowing from experience, through insight, and on to judgment and

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[1] Aristotle, *Metaphysics*, 982b, 13-18. (Clarendon Aristotle Series, Oxford, 1974), p. 281.

[2] Frederick Copleston, *A History of Philosophy , Vol.1 - Greece and Rome* (New York, Image Books, 1962), p. 127

[3] William Mathews, *Questioning and its Object* (Univ. of Leeds, Dept. of Philosophy, Ph.D. Thesis, 1980), p. 9.

decision. Lonergan would assert that Socrates' method of arriving at truth was simply an overt reflection of a covert mental operator, an operator which is responsible for directing and organising the whole process of learning or coming to know.[4] This is of even more direct relevance to this present study when one considers that the practical procedure adopted instinctively by enlightened parents, teachers, and educators the world over is this same tried and trusted method of questioning as a vehicle of mediation.

Lonergan also maintains that the questioning process is itself inherently intentional, and that this intentionality of the question is in turn a manifestation of the deeper, more primordial intentional nature of the 'pure desire to know' or 'spirit of wonder and enquiry'. Lonergan is not alone in this opinion: Nigel Sanitt, for example, implies much the same thing when he states: "A scientific question is an active process of conscious direction no matter how theoretical the entities involved." And, significantly, he adds: "This applies also to the precognitive stage."[5]

It will be argued in this chapter that a question always intends an answer, and that the answer is mediated, facilitated, and framed by the question asked. It was already implied at the end of the last chapter that there appeared to be a certain equivalence between mediation and intentionality. The link between intentionality and mediation can be shown to be the concept of relation. It is because of the inherent intentionality of the mind that the questioning process links, relates, or mediates what is perceived with the intellectual process, what is understood with the reasoning process, and what is judged with the valuing process. To say that the mind is intentional means that it is capable of forming a relation with an intended object whereby the mind, in a sense, becomes that object.[6] Thus, the mind mediates the world to the child; it puts the child, in other words, in

[4] For Lonergan, the 'operator' of man's cognitional development "is his detached, disinterested, unrestricted desire to know." (*Insight*, p. 636) In Lonergan's philosophy, then, a mental 'operator' may be described as a type of precognitive driving force, or motive power. As such, it is more fundamental and more basic than the cognitional and volitional operations of the mind: experience, understanding, judgment, and assent. In fact, it influences or 'operates' over the whole range of cognitive levels and mental operations, and its object is being in all its fullness; "the detached and disinterested desire to know is unrestricted." (*Insight*, p. 546) Lonergan's 'pure desire to know', also termed the 'spirit of wonder and inquiry' or 'Eros of the mind', which manifests itself as an innate questioning attitude, is then such an operator. It may be said to be the motive power which guides, marshals, and propels the cognitional process from one level of mental operation to the next. It is also that which "deeply and powerfully holds our sensitive integrations open to transforming change." (*Insight*, p. 546)

[5] Nigel Sanitt, *Science as a Questioning Process* (London: Institute of Physics Publishing, 1996), p. 72.

[6] Aquinas, for example, says: *"Anima quasi transformata est in rem perspeciem"* meaning that the soul becomes, so to speak, transformed into the real object, Thomas Aquinas, *De natura verbi intellectus*, quoted in Joseph Pieper, *Living the Truth* (San Francisco: Ignatius Press, 1989), p. 127.

direct contact, not with appearances only, not with data alone, but with "the heart of the real". It is through the process of meaning that the mind does this; and meaning is always the answer to a question. It can be argued that one can define mind itself as that which questions reality, or is questioned by reality. Jonathan Lear paraphrases Aristotle when he says:

> Man is by nature a questioner of the world: he seeks to understand why the world is the way it is. The world for its part reciprocates. It answers man's questions ... And the world's answers are not merely responses to man's probing: they manifest the ultimate intelligibility of the world.[7]

16.2 *The Philosophy of Children's Questions*

In his book *Science as a Questioning Process* Sanitt says:

> Asking questions has been part of the human condition since time immemorial. One only has to look at child development and see the incessant curiosity that youngsters display in their quest for knowledge to see that questioning is an integral part of human intellect.[8]

Sanitt implies that questioning not simply a learned response or habit but is a deeper, more fundamental part of the very functioning of the mind itself. Lonergan also says that there are questions which are a natural expression of human intelligence; they are natural in the sense that they emerge, not because a person is trained in a certain way, but directly from the impetus of the 'Eros of the mind' or 'pure desire to know'. These questions are "What is it?", "Why is it?", and "Is it so?". These are questions which, as has already been argued, have an important function in the dynamic process of coming to know. In *Verbum* [9], however, Lonergan identifies not three but four types of questions. It will be argued that there is no contradiction here. On the contrary, in this regard he is in complete agreement with Aristotle when he says:

> The kinds of question we ask are as many as the kinds of things which we know. They are in fact four :- (1) whether the connection of an attribute with a thing is a fact, (2) what is the reason of the connection, (3) whether a thing exists; (4) what is the nature of the thing.[10]

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[7] Jonathan Lear, *Aristotle: The Desire to Understand* (Cambridge University Press, New York, 1988), p. 26.

[8] Nigel Sanitt, *Science as a Questioning Process* (London: Institute of Physics Publishing, 1996), p. 20.

[9] Bernard Lonergan, *Verbum*, pp. 12 - 16.

[10] Aristotle, *Posterior Analytics*, Book II, Ch 1, 89b, 22- 26. (Clarendon Aristotle Series, Oxford, 1974), pp. 74-75

When a child asks a question, then, it can be one of four main kinds: "questions of fact, cause, existence and essence."[11] So any answer or any item of knowledge can also be related to the same four categories.[12] In the examples that follow, those questions in italics are actual children's' questions, quoted from Piaget's *Language and Thought of the Child:*

	Type of Question:	Examples:
(a)	Whether there is an X. (Aristotle's Question Type 3)	Are there such things as ghosts? Is there really a man on the moon? Does God exist? *" Are there really any* [men who cut up children]?"[13]
(b)	What is an X? (Aristotle's Question Type 4)	What's a triangle? What is refraction? What is an eclipse? "*What are these balls with 1* [quavers]?"[14]
(c)	Whether X is Y? (Aristotle's Question Type 1)	Do dogs have souls? Is a bat a mammal? *"Black coffee, why black? All coffee is black."* *"Why do people say 'strayed? Does it mean lost?"*
(d)	Why X is Y. (Aristotle's Question Type 2)	"*Why is it so heavy* [a two frank piece]?"[15] What causes an eclipse of the moon? "*Why do they* [bodies] *always fall?*"[16] What makes the sun rise?

The question "What is an X?" can be rephrased as "What is it that makes this to be an X?" Questions of type (d) can also be rephrased as "What is it that makes an X a Y?" Thus, questions of types (b) and (d) above have to do with causes and, as such, they grope towards insight or understanding into given data. They may also be termed 'conceptual' since they are to do with concepts, ideas, definitions and logical connections between things. Questions of types (a) and (c), on the other hand, are questions for reason and judgment, rather than for intellect. They can be

[11] Nigel Sanitt, *Science as a Questioning Process* (London: Institute of Physics Publishing, 1996), p. 21.

[12] Bernard Lonergan, *Verbum*, p. 12.

[13] Jean Piaget, *The Language and Thought of the Child* (London: Routledge and Kegan Paul,1959), p.200

[14] Ibid., p. 202.

[15] Ibid., p.167.

[16] Ibid.

termed empirical type questions, however, in that they involve a return to observation, a recall of previous facts, and possible experimentation. Deductive-type reasoning may be used to confirm the facts (Is it so?) or to show the connections between the facts and observations (Is X a Y?). One could say that such questions elicit additional empirical information rather than shape understanding.

In *Verbum,* Lonergan points out that when Aristotle asked himself what was meant by the question "What is it?", he concluded that the word "what?" really means "why?", because when one asks "What is an eclipse?", for example, one really means "Why is the sun or moon darkened in this strange manner?". Lonergan maintains, then, that "the questions *what* and *why* are the same." [17] So, when a child asks "why?", she is really looking for an explanation of a cause. When a child asks "What is it?", she is also looking for a cause. For example, when the child asks "What is thunder?", she is really asking "What is making it thunder?", or "Why is it thundering?" Questions of type (b) and (d), then, are both to do with causes and are, to a degree, equivalent.

Questions of type (d), as already said above, are what Lonergan calls questions for insight or understanding. He explains:

> An insight, an act of understanding, is a matter of knowing a cause ... that stands between the sensible data and the concept whose definition is sought. ... the cause in question is the formal cause.[18]

It has already been pointed out that for neo-Scholastics like Lonergan the formal cause of a substance and its form are one and the same thing, just as the plan of a house, for example, is at once its form and its *causa essendi.*[19] What the child seeks through her "What?" and "Why?" questions is understanding or insight. The object of a child's inquiry, in other words, is not just another item of data, "but the idea or form, the intelligible unity or relatedness that organizes data into intelligible wholes."[20]. What the child, then, grasps through insight is the form of the object perceived, "the mystery, the essence, the Idea, imprisoned in matter"[21] as Beckett terms it. In Lonergan's words, to understand is " to see things in a new light, to grasp

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17 Bernard Lonergan, *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education*, p. 171.

18 Bernard Lonergan, *Verbum*, p. 14.

19 For a detailed treatment of Scholastic terms like 'matter' and 'form' see Section 2.4 of this study.

20 Bernard Lonergan, *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 10.

21 Samuel Beckett, *Proust* (London: John Calder, 1965), p. 76.

how they hang together, to come to know why, the reason, the cause."[22]

What is the actual relationship, then, between questions of type (b) and (d)? How do they differ from one another? A question of type (b),"What is a house?", is best answered by transposing it to a question of the fourth type (d), "What is it that makes these sticks and stones and bricks to be a house?". The answer to this involves insight into sensible data which, for Lonergan, is the form or formal cause of that substance, the house.[23] Now, to answer the original question (b) "What is a house?" entails a further insight into form, and is termed the essence; this is the definition, the concept, or 'inner word' of the material object in question. Lonergan states: "Grasping the cause is ... an insight into the sensible data. Grasping the universal is the production of the inner word that expresses that insight."[24] For Aristotle, Aquinas, and Lonergan, what is sought by questions of the type (b) is the concept, or definition, or essence; what is sought by questions of the type (d) is the form, or formal cause.

According to Piaget children under seven or eight years of age have a preoccupation with causality, particularly with final or what he terms "finalistic" causes. Having no concept of chance, or fortuitous occurrences, they tend to see the hand of God, or providence, or adult planning, in everything. Up to the age of seven or eight there is very little reasoning, and there are no genuine "whys of justification", as he terms them. "Curiosity is concentrated always on causes of phenomena (or actions), and not on logical deductions."[25] It has already been suggested in this study that development of reasoning is closely linked to the development of language.[26]

While questions of types (b) and (d) anticipate answers in terms of the common definition or causes, questions of the type (a) and (c) are concerned with the existence or non-existence of X. They find themselves resolved linguistically by "yes", "no", or even "probably", or "I don't know".[27] Answers to questions of type (b) and (d) merely suggest a possibility or a proposition to be further investigated or

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22 Bernard Lonergan, *Insight*, p. 324.

23 See Section 2.4 of this study.

24 Bernard Lonergan, *Verbum*, p. 14.

25 Jean Piaget, *The Language and Thought of the Child*, p.182.

26 See Sections 10.6.3 and 12.3 of this study.

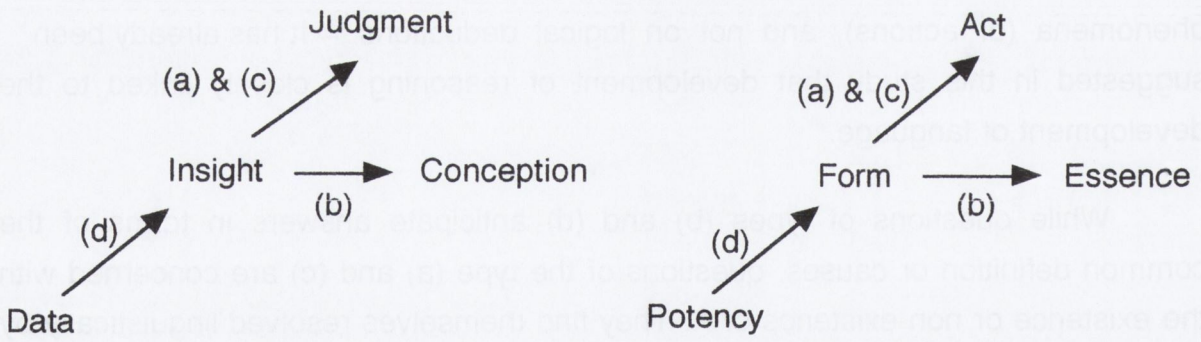
27 William A. Mathews, *Questioning and its Object*, p. 57.

questioned by a return to the given data: "Intelligibility is the ground of possibility"[28]. Lonergan terms questions of type (a) and (c) 'empirical questions' since they are designed to test hypotheses or propositions. Questions of types (a) and (c) inquire into one's proposition or hypothesis and declare themselves satisfied or dissatisfied by a 'yes' or 'no' answer. Thus answers to questions of type (b) and (d), or questions for understanding, can themselves become the objects of questions of type (a) and (c), questions for judgment. Mathews explains:

> The emergence of the reflective or critical component of the questioning activity is effectively the emergence of a further or higher level of organising activity [and consciousness]. It involves a further distinctive orientation of our perceptual activities towards the data or the given of the problem. We reconsider the given, not from the standpoint of ignorance, but rather in the light of one or more possible scientific explanations [or hypotheses]. Reflective or critical wonder orientates not only our perceiving but also our understanding and thinking in the movement towards judgment.[29]

Piaget terms them 'whys of justification' and, for reasons already given, he found that "'Whys of justification' are undifferentiated before the age of 7 or 8."[30]

The following diagram gives a schematic representation and summary of what has been dealt with above regarding the different types of questions. Once again, one must bear in mind that Lonergan views the ontological and cognitional spheres of philosophical investigation as equivalent[31]:



28 Bernard Lonergan, *Verbum*, p. 43.

29 William A. Mathews, *Questioning and its Object*, p. 96.

30 Jean Piaget, *The Language and Thought of the Child*, p.170.

31 See Sections 5.8 and 5.10 of this study. St. Thomas Aquinas says: *"Omnis res est vera et nulla res est falsa"* (Questiones disputatae de veritate, I, 10). Put more briefly, one could say instead: *"Omne ens est verum."* Yet, how can one claim that all that is real is true, unless one equates the ontological with the cognitional. The true is what one grasps by clear understanding and accurate reasoning. The real is what exists prior to any cognitive investigation. The obvious implication is that what puts one in touch with the real, with being, is not sense experience alone, not the empirical, not any intuitive grasp of reality, but sense experience, intelligent understanding, and accurate reasoning - the normal operations of the mind.

The symbols (a), (b), (c), and (d) represent the different types of questions mentioned in the text above. Questions of type (d) give rise to insight into data, disclosing the form or relatedness in the data. Questions of type (b) gives rise to a further abstraction, yielding the conception or essence. Questions of type (a) and (c) are questions for critical reflection or judgment; they further question the conception or hypothesis in order to check its validity, and so they are questions for existence or act.

16.3 *Intentionality and Questioning.*

Lonergan's 'generalised empirical method' is so called because it accepts data of consciousness as valid objects of study, as well as data of sense. As a method "it is a heightening of consciousness that brings to light our conscious and intentional operations and thereby leads to the answers to three questions, What am I doing when I am knowing? Why is doing that knowing? What do I know when I do it?"[32] It also has a heuristic function, a function of conducting, directing, or guiding the process of discovery or learning. As such, it is central to all forms of inquiry, discovery, or learning, whether in the fields of science, literature, or common sense, and whether the explorer is a child trying to make sense of his world, or a mature adult conducting serious systematic research. Central to this method, as has already been argued, is the process of inquiry or questioning, a questioning which is ultimately "prior to language" and which "is rooted in the precognitive stage of *wonder*."[33]

The object of knowledge is being, and being is unrestricted. Being constitutes what Lonergan calls the "transcendental field" of knowing. This transcendental field is unrestricted because, in practice, there is no limit to the number of questions that one can ask. Lonergan explains:

> The transcendental field is defined not by what man knows, not by what he can know, but what he can ask about; and it is only because we can ask more questions than we can answer that we know about the limitations of our knowledge.[34]

There is, however, a limit to the number of answers that one can give. This limit or 'horizon' is determined by one's level of prior learning. Joseph Fitzpatrick in his

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[32] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 25.

[33] Nigel Sanitt, *Science as a Questioning Process* (London: Institute of Physics Publishing, 1996), p. 72.

[34] Bernard Lonergan S.J., *Method in Theology*, p. 24.

article "The Structure of Cognition", which is reproduced in the Lonergan Web Page on the Internet, gives a very useful illustration of this notion of 'horizon' in which he gives the following extract, probably from a children's book:

> When I ___ to ___ shops,
> I always have to t___ my croc ___ with ___.
> He ___ pleased to g___ for a walk.
> He waves his t___ ___ smile___ at every___.
> Not ___y p___ple s___ b___ck.
> They j___ blink and ___re.[35]

Fitzpatrick's point is that a child would use what he knows in order to make sense of this passage. Not only will he use knowledge of crocodiles and of human reactions, but also knowledge of the structure of language, of tenses, of singulars and plurals. Without this range of background knowledge, this 'horizon' in Lonergan's terminology, he would not be able to make sense of the passage. Fitzpatrick concludes that "we do not just get meaning **from** the text but we bring meaning **to** the text."[36]

While there is no limit to the *number* of questions one can ask, one's horizon certainly determines and delimits the *type* of questions one can ask. But one's horizon determines not just the type of question one asks but also one's expectations about the answers to those questions. In this way one can say that the question anticipates the answer, that the question *intends* the answer. Thus Lonergan's notion of intentionality carries with it the implication of anticipation, of a transcendent mind reaching out and encountering reality half way, as it were.

It can be contended that the process of inquiry or questioning not only initiates the process of coming to know, but it also organises each of its levels; it has heuristic value, in other words. The question for each level is different; questions for direct understanding or insight are different from questions for reflection or judgment, which, in turn, are different from questions related to value and decision. While each question can be reduced to one of four types, nevertheless questions are also different for different areas of knowledge in the sense that each area of study employs its own heuristic devices: the "let x be the quantity being sought" of mathematics is one example. In this sense questions for scientific study would be

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35 Joe Fitzpatrick, "The Structure of Cognition", *Lonergan Homepage*, Internet Address: www://ourworld.compuserve.com/homepages/pmrodden/joefitz.htm, p.1.

36 Ibid.

different from those for common sense, everyday situations. The types of questions asked would also depend on one's horizon, or on the level of one's prior knowledge; they are different for children and for adults. But there is only one process of inquiry, only one questioning faculty, common to all situations, to all stages of the learning process, regardless of intelligence, experience, or age group. Thus the same four types of questions are found in different guises, or expressed in different terminology, as the same 'pure desire to know' manifests itself differently under different circumstances.

It was argued above that a question always intends an answer; the questioning process is, of its very nature, intentional. Mathews in his doctoral study, *Questioning and its Object,* claims that "mental activities such as questioning and understanding are unavoidably intentional. When one wonders one wonders about something, some problem situation."[37] When one formulates a question in one's mind one is already reaching out towards the answer. Lonergan himself puts the matter more succinctly in *Method* when he says:

> Inquiry itself ... is something between ignorance and knowledge. It is less than knowledge, else there would be no need to inquire. It is more than sheer ignorance, for it makes ignorance manifest and strives to replace it with knowledge. This intermediary between ignorance and knowing is an intending, and what is intended is an unknown that is to be known.[38]

One might object that in many cases the objects of questioning or inquiry, the so-called intentional objects, are in fact inner concepts and ideas and, as such, are inseparable from the subject, and so not really intentional at all. But the intentional objects of such activities as understanding, far from being inner, indescribable, and private, are in every instance public, in that they are capable of being thought by another and communicated to another. The act of insight itself is private and incommunicable, but the product of the act of insight, the concept or "inner word" is describable or definable, as is the object of the act of insight. Mathews explains:

> It would seem that there is nothing that any individual can think that cannot in principle be thought by any or every other individual. In this sense thought, laws or propositions, although the object of that more enigmatic activity of thinking, are all public. They are not attributes of the individual in the same way as his thinking is.[39]

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37 William A. Mathews, *Questioning and its Object*, p. 41.

38 Bernard Lonergan S.J., *Method in Theology*, p. 22.

39 William A. Mathews, *Questioning and its Object*, p. 86.

Understanding, then, is not totally inner, private and indescribable. It is intimately bound up with, and cannot be separated from, the circumstances of the problem, for example. For Lonergan understanding is always into some concrete datum, problem, or situation and cannot occur without such concrete presentations. He remarks that in order to understand, doctors need to see their patients, and people with a mechanical bent need to take things apart in order to understand how they work.[40] However, the process of thinking, like the intentional link between an operation and its intended object, remains in the private sphere, and is not open to scrutiny.

The objects of questioning are in a full sense intentional objects, and the activity of questioning, or inquiring, or wondering, is an intentional activity, whether formulated in language or not. It can be argued that this intentional correlation between a mental activity and its object cannot be broken. Unless there is some object to question about and understand, one simply cannot question and understand. It is the questioning process, the "What is it?", which links what we perceive with the perceiving process, what we understand with the process of understanding, within the overall activity of coming to know. These links may be termed 'invariant' in that they hold in all instances of mental functioning and are independent of the individual psychological circumstances. Mathews explains: "Those relations are in a sense independent of what might be termed the individual psychology of any individual questioner."[41] In other words, the intentional nature of the mind is deeper and more fundamental than the merely psychological, in the same way that the questioning attitude is prior to language.[42]

The questioning attitude, or spirit of wonder and inquiry, is the source and origin of the mind's intentional nature. But, in Lonergan's theory, the question also initiates and organises into a unitary system its various processor operations of perceiving, understanding, judging and valuing. Thus, questioning is not just one kind of mental activity among many. Rather it seems to be that activity which conducts, organises, or assembles other mental activities in a structured manner in the process of coming to know, or learning. Or, as Walsh describes it in his book *Education and Meaning*, it "tends to shape the contours of our thoughts, to give not

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40 Bernard Lonergan S.J., *Insight*, p. 6.

41 William A. Mathews, *Questioning and its Object*, p. 79.

42 Bernard Lonergan S.J., *Insight*, p. 348.

detailed destinations but some general directions to our enquiries." [43] Lonergan also says that questioning is the 'operator' which marshals the thinking process from experience, through understanding to judgment.[44]

It is useful to examine, by way of example, the common sense world of the child. For Lonergan, common sense is an incomplete accumulation of insights which any common sense person has acquired in the past, and to which he adds a further insight or insights in order to deal with any new situation in hand.[45] Insights, however, are responses to questions. It is questioning that makes the situation an object that is to be understood, rather than a background "street noise". Prior to the occurrence of insight there must emerge that attitude of questioning attentiveness that makes the situation an object to be understood. But the possible questions which one can put to a situation are themselves determined by one's past education, by the common sense situations one has encountered in one's past, by the questions which these have provoked, and by the insights one has accumulated. In other words, the possible questions which one can put to new situations are determined by one's 'horizon'. Thus there is a two-way influence at work: the subject's questioning initiates and organises the process of coming to know, while what the subject already knows, his 'horizon', in its turn, influences the type of questions he asks.

According to Lonergan, situations in which a subject finds himself can be termed 'normal', 'anomalous', or 'enigmatic'. 'Normal' situations are like scientific puzzles; one knows the questions to pose and one knows what comprises an acceptable answer. 'Anomalous' situations provoke one's questioning: "What is happening?"; however, one is unable, as yet, to find satisfactory answers to such questions. Finally, 'enigmatic' situations are beyond the horizon of a subject's questioning and linguistic skills. Until he has enlarged his questioning openness, they remain simply mysterious experiences.[46] This may be one reason why up to the age of seven or eight children cannot frame questions for critical reflection; according to Piaget: " 'Whys of justification' are an undifferentiated class before the

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43 Paddy Walsh, *Education and Meaning: Philosophy in Practice* (New York: Cassell Educational Ltd,1993), p. 3.

44 It was mentioned already that Ryan identified the existence of such an 'operator' in the theory of Lonergan as one of the significant differences between the theories of Husserl and Lonergan. See William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan", *International Philosophical Quarterly*, Vol. 13, (1973), p. 175. See also Section 3.3 of this study.

45 Bernard Lonergan S.J., *Insight: A Study of Human Understanding*, p. 175.

46 William A. Mathews, *Questioning and its Object*, pp. 164 - 165.

age of 7 or 8"[47] One can speculate that the child's horizon is not yet adequate for the framing of such questions.[48] In summary, one can say that as the scientist masters his particular field, his familiarity with what he can count on as relevant evidence for judgment grows as his horizon grows. In the same way the child's ability to make competent judgments depends on her breath of knowledge of the world. One can say with Lillard that as the child grows in experience "he builds up an internal knowledge of the 'known', which now excites expectation and interest in the novel unknown."[49]

16.4 *Questioning and the Socratic Method*

In the Socratic dialogues, questioning is a form of searching. The object or goal of the search is to discover answers to questions like "What is virtue?", "What is love?". The general form of this question is familiar to any child doing algebra; it is "What is x?", where for x can be substituted "temperance", "courage", or "piety," for example. But through questioning he is not merely trying to find a specific unknown, he is also trying to outline or anticipate the structure of the unknown in much the same way as a detective collects a clue here, and a clue there. These clues, in turn, provoke new questions which gives rise to new clues. The questions asked are central in that they guide the future direction of the investigation and organise the whole process of coming to know. To a degree, they anticipate the answer being sought. One can say that they intend the answer as their intentional object. In a sense, one can speak, as Lonergan does, of "the known unknown."

The following excerpt is taken from Plato's *Republic*[50] where the object of Socrates' dialogue with Adeimantus is to discover the answer to the question, "What is education?". The process of coming to a conclusion involves a series of intermediate questions which, though many and varied, nonetheless point towards, anticipate, or intend, the eventual answer.

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47 Jean Piaget, *The Language and Thought of the Child*, p. 171

48 There is a story told of the first appearance of steamboats on the upper Nile. The natives, who had no way of comprehending such a sight, simply turned their backs and ignored them, until they disappeared around the bend in the river. (Alan Moorhead, *The White Nile*)

49 Paula Polk Lillard, *Montessori: A Modern Approach* (New York: Schocken Books, 1972), p. 39.

50 Plato, *The Republic*, Part 3, 377, (Penguin Classics, London, 1955), p. 130.

S. 'So let us tell the tale of the education of our imaginary guardians as if we had all the leisure of the traditional story teller.'

A. 'Let us by all means.'

'What kind of education shall we give them then? We shall find it difficult to improve on the time-honoured distinctions between the physical training we give to the body and the education we give to the mind and character.'

'True.'

'And we shall begin by educating mind and character, shall we not?'

'Of course.'

'In this education you would include stories, would you not?'

'Yes.'

'Those are of two kinds, true stories and fiction. Our education must use both, and start with fiction.'

'I don't know what you mean.'

'But you know that we begin by telling children stories. These are, in general, fiction, though they contain some truth. And we tell children stories before we start them on physical training.'

'That is so.'

'That is what I meant by saying that we must start to educate the mind before training the body.'

'You are right,' he said.

The questions above not only initiate or provoke the thinking process, but direct and orchestrate the whole progress of reasoning and coming to know. Socrates is groping his way towards an answer. Step by step, and question by question, he is leading both himself and Adeimantus towards an intended answer, an answer which is anticipated in the questions themselves. Mathews explains:

> Clearly formulating a question is then a significant element of the problem solving activity. For the question as formulated states, at least partially, the anticipations of the questioning and so becomes

an explicit guide to the problem solving process.[51]

Questioning, then, is intentional in that it anticipates, or intends, the answer as its intended object. But, according to Lonergan, this intentionality of the questioning process is merely a manifestation of a deeper intentionality, that of the 'pure desire to know' which intends being in all its fullness.

16.5 *Questioning in the Thomist Tradition*

Towards the end of *Insight* Lonergan explains something that has a strong bearing on his ideas on education:

> After spending years reaching up to the mind of Aquinas, I came to a two-fold conclusion. ... that reaching had changed me profoundly ... that change was the essential benefit. For not only did it make me capable of grasping what, in the light of my conclusions, the *vetera* really were, but also it opened up challenging vistas on what the *nova* could be.[52]

What Lonergan had learned in his attempts to "reach up to the mind of Aquinas" was not just the theory or conceptual scheme which Aquinas was trying to teach, but the very 'feel' of the way in which the mind of Aquinas worked. He came to realise that Aquinas, while a traditionalist in what he thought, was certainly an innovator in the methods he employed in his teaching of Theology. Lonergan also came to realise that "teaching concepts is not the same as sharing vital knowledge"[53] . This gave him a new way of relating to the world, and all that was in it to be known and learned. Moire Carley explains in her dissertation *Bernard Lonergan S.J.: On Teaching:*

> Because the question guides the intelligibility of the search and exposes the meaning of the text, Lonergan saw that to teach what Thomas said (concepts) without doing what he did (asking questions) was not really teaching the tradition. By focusing on the intellectual vitality of the mind-at-work asking questions, Lonergan shifted the locus of the authority of the theology texts from the reputation of the person who wrote them (in this case Aquinas) to the questions Aquinas was asking, what he really wanted to understand.[54]

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[51] William A. Mathews, *Questioning and its Object*, p. 52.

[52] Bernard Lonergan, *insight*, p. 748. Lonergan is here referring to the motto of Pope Leo XIII: *"Vetera novis augere et perfecere."* - to augment and perfect the old by means of the new.

[53] Moira T. Carley, *Bernard J.F. Lonergan S.J.: On Teaching*, (Harvard University, Ed. D. Thesis, 1989), p. 29.

[54] Moira T. Carley, *Bernard J.F. Lonergan S.J.: On Teaching*, pp. 30,31. Aquinas himself appears to say much the same thing when he asserts: "The purpose of the study of philosophy is not to learn what others have thought, but to learn how the truth of things stands." (Commentary on Aristotle, *De caelo,* I, 22)

In other words, as a teacher himself, Lonergan would do what Aquinas did, and not merely repeat what Aquinas said. In this he was being faithful to his 'intellectualist' view, as opposed to a 'conceptualist' view, of mental functioning. The 'conceptualist' method of teaching, with which one is all too familiar, is to pass on abstract concepts, while failing to recognise the living, 'vital' intelligences both in the one who originally formulated the ideas and also in the ones (the students) who must now grasp these ideas. How these ideas are grasped by the minds of the students will determine the potential, the fertility, of these ideas for further growth; that is, not only growth in the idea, but, more importantly, growth also in the thinking subjects themselves.

Lonergan's 'intellectualist' approach to teaching was to keep these ideas alive by dwelling on 'open' but incomplete insights, rather than on 'closed' concepts. For him, it was the continual searching or questioning attitude that makes for mental development in students, and not just the accumulation of closed, sterile concepts, regardless of the intellectual and moral standing of the author from whom they come. Lonergan explains in *Insight:*

> In so far as any question is followed by an insight, one has only to act, or to talk, or perhaps merely to think on the basis of that insight, for its incompleteness to give rise to still further questions. In so far as the further question is in turn met by the gratifying response of a further insight, once more the same process will reveal another aspect of incompleteness to give rise to still further questions and still further insights.[55]

In practice, Lonergan would encourage those questions that arose spontaneously from the intellectual vitality of his own students, and guide them in the effort necessary to pursue the answers.[56] For him teaching, as he explains, "puts further questions that reveal the need for further insights." [57]

16.6 *The Question in Educational Methodology*

Lonergan's theory throws light on why the traditional question and answer method is such a valuable pedagogic tool. The questioning approach to teaching is effective, not just because it keeps the child 'on the ball', as it were, but because it reflects the method by which the child's mind itself initiates and directs the whole

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55 Bernard J.F. Lonergan, *Insight,* p. 174.

56 Moira T. Carley, *Bernard J.F. Lonergan S.J.: On Teaching* (Harvard Univ., Ed. D. Thesis, 1989), pp. 32 - 33

57 Bernard J.F. Lonergan, *Insight,* p. 174.

process of coming to know. The teacher is merely paralleling or, at times, supplementing, the child's own process of formulating questions for understanding and reflection. At the same time, he or she is providing the necessary specialised knowledge for formulation of concepts. It is also possible, however, that in the absence of a properly differentiated or poorly developed critical faculty in the child, the teachers authoritative affirmation of reality is a necessary condition for the child's mental assent to a truth, according to the 'way of heritage'. In this way, according to Feuerstein, the teacher mediates 'competence'.

The following hypothetical lesson[58] illustrates how the intentional questioning process, aided by the teacher, guides the child's mind towards insight, formulation of insight into concepts, and finally towards critical reflection involving a return to the original data *(resolutio ad principia)*.

Teacher: See these two balls. Would you say they are both the same size?

Student: Yes!

Teacher: Would you say they are the same weight?

Student: (Feels them) No, one is much heavier than the other.

Teacher: What are they made of?

Student: This one feels like lead, the other is definitely of wood.

Teacher: Why is one heavier than the other?

Student: Maybe because it has more matter in it. It's denser.

Teacher: Good. If I drop them both out of the window, which will hit the ground first.

Student: The lead one.

Teacher: You would expect that, wouldn't you? Yet when Galileo dropped similar balls from the leaning tower of Pisa, he found that they both hit the ground at the same time. Can you suggest why?

Student: Air resistance? (Thinks) No, it should slow them both down by

[58] While this lesson follows an actual lesson plan for a group of fifteen year olds, the dialogue here is simplified and idealised.

the same amount since they are both the same size, so the heavier one should still go faster.

Teacher: If I weigh them both, which will weigh the most?

Student: The lead one.

Teacher: Yes. In fact it is nearly ten times heavier. If I weigh them in outer space, which will weigh the most?

Student: Neither, they will both be weightless.

Teacher: How would I know which is the lead one?

Student: The one with the darker colour.

Teacher: And if I paint them both the same and you are wearing heavy gloves so that you can't feel them?

Student: Then you can't tell the difference.

Teacher: Roll both balls on the floor. What do notice?

Student: The lead one goes more slowly and stops more quickly.

Teacher: Why?

Student: Because it has more matter in it. It's more sluggish.

Teacher: Now how would you tell the difference between them in space?

Student: I'd push them both the same amount. The lead one will be more difficult to budge.

Teacher: Yes. We say that the lead ball has more *inertia.* If I call the amount of matter in something its mass, what can I say about the properties of mass.

Student: It causes things to have weight and it causes them to resist movement.

Teacher: Good! We can say that mass has both a gravitational aspect and an inertial aspect. OK?

Student: Right!

Teacher: Now, why did both of Galileo's spheres fall at the same speed?

Student: Is it because if the gravitational pull is ten times stronger, then the inertia is also ten times greater?

Teacher: Correct!

The student progresses from an insight into gravitation, and separate insights into inertia and mass, to a 'higher viewpoint' or a higher insight which combines gravitation, inertia and mass in one act of understanding. This higher viewpoint can be expressed in the definition "gravitation and inertia are simply two properties of one and the same mass". This verbal expression or definition forms part of the overall concept which, in turn, becomes part of the insight which also includes mental pictures or images of falling spheres, remembered experiences of felt weights and reluctance to move and, perhaps, the remembered satisfaction and excitement of a problem resolved. The fact that Einstein in a thought experiment later illustrated that the two properties, gravitation and inertia, are simply one and the same property viewed from different 'inertial frames of reference' indicates that, in theory at least, there is no limit to the cycle of higher viewpoints that can be achieved.

Again, the questioning not only initiates or provokes the thinking process but directs and orchestrates the whole progress of reasoning and coming to know. One can say that questioning brings about a reorganisation of the student's perceiving. Mathews states: "His perceptual orientation changes in relation to the given."[59] He selectively attends to those aspects of the two balls which he judges will be relevant to the intended answers. More importantly, the teacher by his questioning mediates a certain selectivity, helping the child to focus or attend to the data of sense which are relevant.

In *Insight* Lonergan describes what he calls the strategy of learning. He speaks of the child's untutored spirit of inquiry which needs "to learn how to learn ... and to make the discovery that, if we really would master the answers, we somehow have to find them out for ourselves."[60] He describes learning as a spontaneous self-correcting circuit-like process moving from question to insight, to more questions to

59 William A. Mathews, *Questioning and its Object,* p. 73.

60 Bernard Lonergan, *Insight* (London: Longmans, Green and Company, 1957), p. 174.

more insights, and operating within the learner according to the natural dynamism of the cognitional structure.[61] The teacher's role in the process, he says, is to grasp "the strategy of developing intelligence" and then to suggest, or mediate, those images and questions which facilitate the student's achievement of insight. "Teaching is the communication of insight .... and learning .... is the accumulation of insights."[62] He continues:

> The spontaneous process of learning .... is an accumulation of insights in which each successive act complements the accuracy and covers over the deficiency of those that went before. Just as the mathematician advances from images through insights and formulations to symbols that stimulate further insights, just as the scientist advances from data through insights and formulations to experiments that stimulate further insights, so too the spontaneous and self-correcting process of learning is a circuit in which insights reveal their shortcomings by putting forth deeds or words or thoughts and, through that revelation, prompt the further questions that lead to complementary insights.[63]

Through questioning, considered as an organising activity, what we perceive and our perceiving, what we understand and our understanding, are unavoidably united and related within the performance of coming to know something. These relations are intentional and are at the deepest and most fundamental level of cognitional activity, and are, in a sense, independent of what might be termed the individual psychology of any particular person.[64] Thus, individual personality characteristics, levels of intelligence, patterns of abilities, or even age, have no bearing on the intentional relations of the mind. These are inherently private to each individual. However, as Mathews says, "The intentional objects of such activities, far from being inner, indescribable, and private, are in every instance public."[65] Also, the types of questions employed by either the teacher or the student in coming to know will clearly be influenced by psychological variables such as intelligence, pattern of abilities, individual interests and, of course, prior learning or what Lonergan terms the student's 'horizon'.

According to Carley, the teaching strategies that best follow Lonergan's insights into the the dynamics of cognition involve encouraging students to ask the

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61 Moira T. Carley, *Bernard J.F. Lonergan S.J.: On Teaching* (Harvard University, D. Ed. Thesis, 1989), p. 97.

62 Bernard Lonergan, *Insight*, p. 174.

63 Ibid., p. 174.

64 William A. Mathews, *Questioning and its Object*, p. 79.

65 Ibid., p. 41.

questions out of "antecedent desire and effort" and for the teacher or mediator to "honour those questions, first by taking them seriously and then by suggesting further images and further questions, clearing the way to insight."[66] In other words, the teacher must grasp, respect, and take advantage of, and answer first those particular questions which are seen to arise from the students' spontaneous need to know because they are the most likely questions to elicit the necessary images that will lead to insights in the students' minds.

It has already been mentioned that Piaget has much to say of interest on the subject of children's questions in his book, *The Language and Thought of the Child*. However, he confines his speculations to the child's overt questioning and does not seem to grasp the role of the child's internal, often non-verbal, questioning process in initiating and directing his learning or coming to know. He observes, for example, that children frequently ask questions to which they are clearly not expecting an answer: "The question may be merely verbal, and indicate pure astonishment without calling for any answer." [67] Sometimes, he found, they actually answered the question themselves without waiting for a response from the adults present. Rather than drawing the rather obvious conclusion that this represents an overt expression of a private, internal questioning process, he dismisses these questions as "ego-centric" and claims that they are strictly speaking "pseudo-questions." It has been mentioned already[68] that Vygotsky calls this 'inner speech' or 'speech-for-oneself', and he describes it as "a rather late product of the transformation of a speech that earlier had served the goals of communication into individualized verbal thought."[69] Also in regard to such individualised verbal thought, or what Piaget would dismiss as "ego-centric" dialogue, the prominent neurologist, Oliver Sacks, makes the interesting observation that "a man *needs* such a narrative, a continuous inner narrative, to maintain his identity, his self."[70]

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66 Moira T. Carley, *Bernard J.F. Lonergan S.J.: On Teaching*, p. 104.

67 Jean Piaget, *The Language and Thought of the Child*, p.165.

68 Section 14.9 of this study.

69 Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language*, pp. xxxv - xxxvi.

70 Oliver Sacks, *The Man who Mistook his Wife for a Hat* (South Yarmouth: John Curley and Assoc., 1986), p. 183

16.7 *Questioning and 'The Triarchic Model'*

Experience alone is not sufficient to bring about a permanent and positive change in mental outlook. However, an attitude of 'bringing it all together' by thoughtful observation and contemplation can produce insights that convert such experience into a *being* mode of existence and, in consequence, make for mental and personal growth or development. What converts a less productive *having* mode to a more dynamic and effective *being* mode is Lonergan's questioning attitude, or 'spirit of wonder and inquiry'.

Translating what has been said thus far in this chapter into the classroom situation, one can say that the teacher's questioning attitude is the main vehicle which converts the child's natural propensity to *have* and to *do* into a more productive and effective *being* mode of learning. This author's experience in attempting to use the Feuerstein's instruments with Chinese adolescents is a case in point. The children tended to be driven by a desire to complete the exercises as quickly as possible - "I've finished sir!", "Can I have the next one sir?" Productivity and competition, *having* and *doing*, tended to be the main driving forces. Contemplation and reflection on the difficulties and inaccuracies encountered in completing the exercises efficiently were initially met with some frustration and resistance, even though it was here that the real learning, and the development of the *being* mode, was to be found and nurtured.

In the same way, travel, school visits, outings, tours, all simply for the sake of experience, are firmly in the *having* mode or approach to education. The notion of travel broadening the mind cannot possibly apply to simply filling the minds of children with ill-digested facts and memories, even if accumulated over considerable distances and time frames. All too often attentive openness to what each new experience has to offer is minimal, if not entirely absent. Instead, tired, bored minds make little effort to make sense of, or even to catalogue properly, the confusing succession of experiences. Absent also are the moments for quiet reflection, the effort to 'bring it all together', to weigh up and seize hold of any perceived value or beauty encountered. Instead, there is the dull gaping at old stones polished by the touching and rubbing of time, the listening to a confusion of doubtful tales, the impulsive collection of countless photographs in which people are endlessly shifted and shuffled from one backdrop to the next. All of this pertains

to the *having* and *doing* modes of human existence. This does not educate the person, but merely reinforces the bad habits of impulsivity and 'episodic thinking'.

Even though human development as a natural unfolding of physiological and psychic potential has been shown to be inherently self-transcendent, nevertheless, in so far as education and learning are concerned, only the *being* mode or attitude is properly self-transcendent. As far as intentionality is concerned, only conscious intellectual activity is properly intentional. This means that *having*, as such, cannot be regarded as intentional. The *being* attitude is inherently intentional. The *doing* mode, however, is much more complex as evidenced by Merleau-Ponty's insistence that human bodily movement is intentional. On the model so far developed in this study, however, intentionality of *doing* could apply only to human activity which is under conscious and intelligent direction, qualifying for Freire's term 'praxis'.

16.8 *Questioning and Mediation in the Work of Feuerstein*

The various parameters of mediated learning experience have already been dealt with in some detail in the previous chapter. The object of this section is to show that what might be termed 'intentional questioning' is also central to the practical methodology of Reuven Feuerstein. A second objective of this section is to revisit each one of the parameters of mediation as it appears in the course of a typical Instrumental Enrichment lesson. Yet a third and important objective is to show how Lonergan's cognitional theories and Feuerstein's practical methodology complement and reinforce one another. The aim, in other words, is to demonstrate in practical detail how Feuerstein's Instrumental Enrichment programme might be used as an agent or vehicle of 'self appropriation of cognitive interiority', and how Lonergan's 'transcendental method' both deepens and widens Feuerstein's view of mental functioning, which functioning is being highlighted and mediated by the teacher with the aim of having it 'appropriated' by the student.

Feuerstein's Instrumental Enrichment programme (FIE) consists of a total of fourteen pen-and-paper instruments which would normally be completed by a child over a two-year course, comprised of two to three hours of tuition per week. The particular instrument selected here is called "The Organisation of Dots." This instrument is normally the first one to be introduced to the child. It demands the use

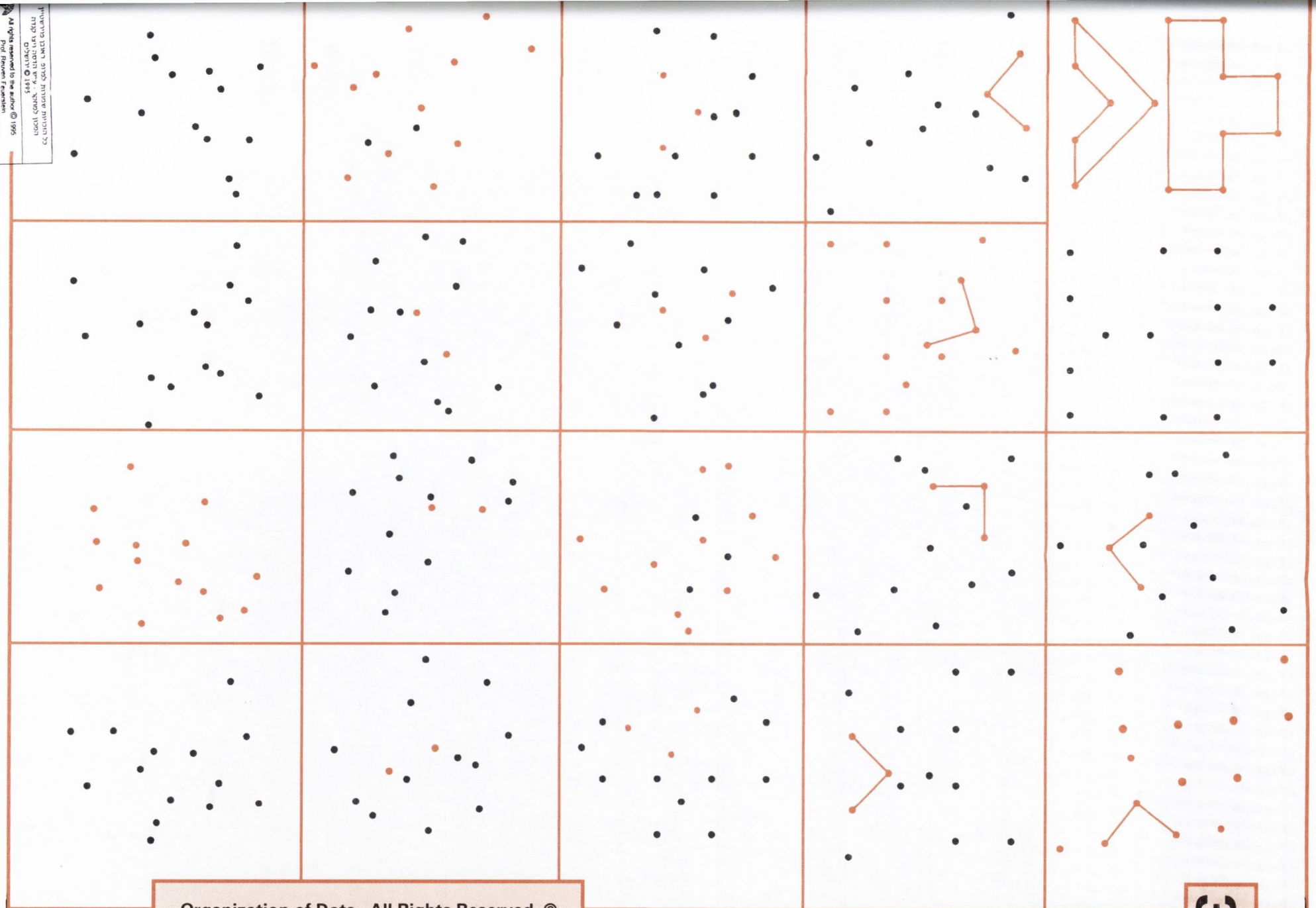
of all of Feuerstein's cognitive functions, as well as of all the various forms of teacher mediation. The Organisation of Dots is made up of seventeen exercises of graded difficulty. The child has to complete these exercise by joining the dots in each square to make shapes identical with those in the model at the top of the page. However, the real learning, the real mediation, depends to a large degree on the discussion prior and subsequent to the child's 'independent work'. The exercise selected for this sample lesson is number 3, which is reproduced in full on the next page.

To complete this task accurately, the student must be precise and accurate in his perception of the model and its attributes, attending carefully to the given data. He must then internalise the given model so that he can transport it as a mental image which can be used as a 'template' by projecting it onto the amorphous field of dots that appears to offer a number of different possibilities for the projection. Effectively what he is looking for is a number of key relationships within the dots that will tell him that he has found the right grouping on which to draw the model. The finding of the correct pattern within the dots is itself an insight into the relation between the dots. Like any insight, this may be conceptualised and later examined, weighed up, or judged for accuracy. Thus, not only does one find in operation the learned cognitive functions of 'precision and accuracy', 'visual transport', 'restraint of impulsivity', and 'conservation and constancy', but one also experiences in operation Lonergan's deeper innate cognitive operations of perception, imagery, insight, conception, judgment, and decision.

Through the intentional process of questioning, the teacher brings the student to an awareness of the importance of the various cognitive functions which the child uses, sometimes well and sometimes deficiently. By mediating the need for 'clear and accurate perception', 'precise and accurate data gathering', and 'systematic exploration', the teacher is in fact making the child aware of the importance of 'being attentive', with the added difference, however, that in this case the child is enabled to grasp in minute practical detail what being attentive actually means, as well as experiencing his own improved performance as he comes to grips with his 'deficient functions'. Likewise, by mediating the importance of 'spontaneous comparative behaviour' and the ability to 'select relevant cues' the teacher is showing the child more clearly than any formal class can do what it means to 'be intelligent'. More importantly, the child's attention can be drawn to the

act of insight as it occurs again and again throughout the class, and he can experience for himself how much more frequently it happens when he has an 'accurate definition of the problem'. In line with Vygotsky's notion of the 'two ways', the teacher takes care to elicit the spontaneous concepts of the child which she then formulates and crystallises for him in more accurate scientific terms. By so doing, she is helping the child conceptualise his insights accurately. Likewise by mediating the 'need for logical evidence', and illustrating for him what it means to use 'strategies for hypothesis testing' and the importance of 'inferential-hypothetical thinking', the teacher is showing experientially what it means to weigh the evidence and make a judgment, as well as displaying what the injunction 'be reasonable' actually means in practice.

If Lonergan's transcendental precepts are to be appropriated in practice, then some vehicle like the following is necessary through which they can be experienced, identified, and appropriated. Lonergan would recommend that one use a book like *Insight* as a tutorial and a vehicle of 'self-appropriation, as well as appropriating one's mental functioning in the ordinary activities of every day. But *Insight* is not accessible to most laymen, let alone to ordinary school children. Besides, most people are too taken up with the ordinary duties of life to give much time or thought to the appropriation of their mental operations, while even the most motivated and mature of school children can achieve little without considerable adult mediation. Of equal importance, however, is the realisation in this study that Lonergan's precepts do not give the whole picture; learned cognitive functions also play a vital part both in the arresting and restricting of mental functioning and, through proper development and correction, in its eventual flowering and flourishing. If Lonergan's precepts are to play a direct role in the educational process, then some vehicle like the following must surely be necessary:



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Rationale & analysis of student interaction	Teacher - student interaction	
	Teacher questions and comments	Anticipated student responses
Mediating control of impulsivity	Please keep your pencils on the table and do not begin to work on this sheet until I tell you.	
Directing attention Comparative behaviour	Let us compare this new page with page 2.	
Breaking the act of comparing into its elements	How is it similar and how is it different?	
Discrimination Finding differences	First, how is it different?	The shapes in the model are completely different. Last time we had squares and triangles.
Discrimination Finding differences	Now, how is it the same?	The task is the same. We have to find the model among the dots.
Recall	What do we do first when we are given a page of Organisation of Dots?	Study the model carefully. Label the model.
Mediation of Intentionality	What are the names of the figures in the model? The problem is that there aren't any names that everyone will understand for this model.	Don't know.
Mediation of Reciprocity	Will we forget about labelling them?	No, we need to label them to be able to talk about them.
Mediation of meaning Mediation of individuation	The label we give the figures should help us remember what the figures look like when we are searching for them among the dots. It's up to you to think of names which will help you in this case.	
Bridging Sharing	Have you ever found it necessary to label something by what it resembled ?	At home we call the thing we mash potatoes with the "smasher."

Rationale & analysis of student interaction	Teacher - student interaction	
	Teacher questions and comments	Anticipated student responses
Labelling by association Identification and description.	There are labels that everybody understands, and there are labels that only you understand. The first kind that everybody understands we call universal labels.	
	Can anyone give me an example of a universal label?	A square or a triangle.
	There are no universal labels for the figures in this model, so we will have to name them ourselves.	
Mediation of Individuation	What will we call these figures? What do they look like to you?	A hat for the top figure; a tent for the bottom figure.
Interiorisation	Now close your eyes and see the hat in your imagination. Now do the same for the tent.	
	Why do I ask you to do that?	So we form a mental image and that makes it easier to find the shape in the dots.
	Good. We can also say that you are interiorising the model by forming a mental image of it.	
Systematic exploration	Now look at the hat closely. Is there anything in it that will help you find it?	There's a square at the top of the hat. You can figure out which side of the square is open by the four dots that are an equal distance from each other. That also shows where the rectangle starts.
	What about the tent?	There's a small triangle for the opening of the tent. There's another larger parallel triangle for the rest of the tent.
Focus. Directing activation.	Is there anything in the opening that shows you the open part of the triangle, the bottom of the tent?	There are four dots along its base.

Rationale & analysis of student interaction	Teacher - student interaction	
	Teacher questions and comments	Anticipated student responses
Use of points of reference	We call these points our "reference points." We can refer to them to locate the orientation of the figure. Please look at the rest of the page.	
Comparison	Is there anything else that is new to us aside from the model figures?	The lines
Organisation of stimuli: helping lines or cues.	These helping lines or guiding lines are cues. Can somebody identify what part of the figure they are?	They look like the tent opening
Comparison: fading or diminishing cues.	Compare the problems in Row 1, Row 4 and Row 5. Describe what's happening. The lines fade away until they disappear. We call this diminishing or fading cues.	First there is only one part of the opening. Then there are no helping lines at all.
Mediation of Transcendence	There's less and less help until there is none and you are on your own. Has that ever happened to you?	When I learned to ride a bike, first I had training wheels; then my big brother ran along beside me to see that I didn't fall; finally I was able to take off alone.
Goal achieving strategies: systematic search	How do you suggest that we work on this page?	Start with the guiding lines and fill in the base of the tent, and then the outside line of the tent.
Attention to relevant cues	What is the position of the dot at the apex of the tent?	Directly over the apex of the door of the tent.
Organisation of stimuli		Then look for the little square that's at the top of the hat. Leave the side open where there are four dots in a row.

Rationale & analysis of student interaction	Teacher - student interaction	
	Teacher questions and comments	Anticipated student responses
	You may now go ahead and do the exercise.	
	Remember the rules?	Don't turn the sheet. This forces us to interiorise the model and turn it in our heads.
		Each dot should be used only once.
		Do the exercises in order
.....	.....	.....
INDEPENDENT WORK:		
.....	.....	.....
	When we started the lesson, we talked of the way to work. You said to use the lines that were part of the tent and look for the tent first. How did you work when you were given no cues?	I had to start with the hat. I looked for the small square at the top of the hat.
	Why did you do that?	Because it is easier that way. I'm familiar with the square; the two sets of parallel lines are easy to find. There are too many places where there are three dots arranged in a triangle and its hard to decide which of them is the tent opening.
Transcendence Sharing Bridging	Can you think of any other instances where you have to change your strategy because it won't work any longer?	In chess. In football and basketball. Taking a detour because a road is closed and you can't get where you want to go in the way you usually take.
Developing inferential, "What if," thinking.	The diminishing cues made it necessary for you to change your strategy. What would have happened if you had insisted on doing it the same way instead of being flexible?	It would have made solving the task more difficult.

Rationale & analysis of student interaction	Teacher - student interaction	
	Teacher questions and comments	Anticipated student responses
Mediation of competence	In using the opening of the tent, you were able to recognise the whole from just one part. Can you think of any time when you were able to recognise the whole from just seeing or hearing a part of it?	
Mediation of transcendence and sharing. Bridging.		I can recognise a song from just a few bars; I can recognise a poem from just a few words; I can tell which of my friends is on the phone by just hearing his voice; I know my father's car from the sound of its engine.
Mediation of meaning. Mediation also of the process conceptualisation & formulation	When we first experience something we need the whole thing in order to recognise it. When we become familiar enough, just a small part of it is enough to help us identify it.	

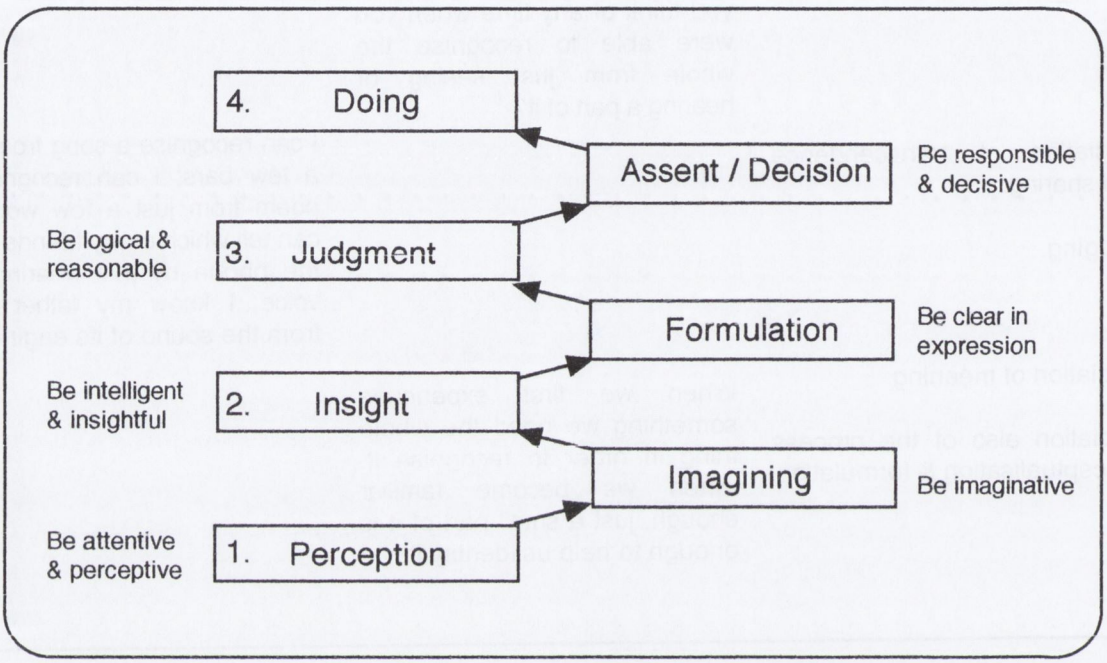
Note

This lesson illustrates quite clearly how, in Feuerstein's system, the questioning process marshals, guides, and co-ordinates the whole process of coming to know or learning. While the teacher is clearly in the role of mediator, nevertheless the particular task on hand also has a mediating role. The process of discovery is very much a joint effort. One could use the term 'cointentional' for the way student and mediator approach the task together.

The teacher is mediating not only the various insights which he hopes to inspire in the child, but he's also busy mediating the focussing behaviour and image formation which are a prerequisite for insight. In the same way, he is mediating conceptualisation by his insistence on getting the child to explain the rationale behind what he is doing. The teacher himself provides the vocabulary and any special concepts necessary as an aid to such conceptualisation.

Not only does Lonergan's model of mental functioning account for the dynamics of the Feuerstein system, but it can act also as an important conceptual framework for the students themselves. While the dialogue above has been paraphrased from the 1988 experimental version of Feuerstein's *Teacher's Guide to the Organisation of Dots*, what follows is the author's own addition to the particular lesson, derived from his own experience in doing Feuerstein's IE programme with a group of Transition Year students in a Dublin school.

Rationale & analysis of student interaction	Teacher - student interaction	
	Teacher questions and comments	Anticipated student responses
Mediation of the use of Lonergan's model of mental functioning	I want you to look at the model of mental functioning that we've used in the last few classes.	



	Where did we use perception in this lesson?	In perceiving the model in the dots.
	What's the difference between perceiving something and just seeing it	We can see the dots but perceive the model in the dots.
		You can see stars but perceive a constellation.
	Right, so perceiving is already reaching out or searching for meaning.	
Imagery	Where did we use mental imagery in this lesson?	When we closed our eyes and interiorised the model.
	What's the difference between a percept and an mental image?	I can move a mental image around in my head but a percept is tied to what I see.
Insight	Can you illustrate an example of insight in this lesson?	When I found where the model actually fitted onto the dots.

Rationale & analysis of student interaction	Teacher - student interaction	
	Teacher questions and comments	Anticipated student responses
Judgment	Can you show me how reasoning and judgment were used in doing this exercise.	When I thought that I had found the square on top of the hat, I then looked for the two dots that might form its base. When I did find it, it was like another insight. I knew I had the hat.
		When I thought I had found the four dots at the base of the tent, it was still only a possibility, a hypothesis, I had to show that the small triangle was also there. This made me sure I had got what I was looking for.
	Good. You were using 'If-then' type reasoning to judge whether your insight was correct.	
Decision	And Decision. Where did you use decision?	When I double checked that I had actually found the hat, I decided to put pencil to paper and actually draw it by connecting the dots. This was also a kind of final judgment because it allowed me to see that what I had in my mind really did fit with the dots, that I had actually got it right.
	Good! So our model works, doesn't it?	Yes.
	We've made another kind of Judgment. This time it's not about dots. Can anyone tell me what this last judgment is about?	We've made a judgment about the model, about the way we think, about the may our minds work.
	Good! We've been thinking about thinking. We've been reflecting on our own thought processes. You might even say that we've been gaining insight into insight.	

16.9 *Chapter Conclusions*

The pure desire to know, man's transcendental trust towards the intelligible, the true and the good, initiates and marshals the whole process of inquiry and coming to know. Once insight into data occurs and is formulated as concept or definition, the desire to understand becomes a desire to understand correctly. Inquiry operates through a questioning attitude which formulates questions first for understanding, and then for critical reflection on what has been understood. It is this process of questioning and inquiry which orientates the person beyond self to the intended object and, through formulation of appropriate questions (verbal and non-verbal), organises and marshals the whole process of coming to know. It is to this latter aspect of questioning that Lonergan applies the term 'operator'.

Lonergan says: "The simple fact that man knows through intelligent inquiry and rational reflection, enable him to determine in advance certain general attributes of the object under investigation."[71] Because of this, Lonergan terms the object of questioning "the known unknown." By this he means that he is able to frame questions which anticipate to some degree the answer being sought and in this way directs the cognitional or learning process. This anticipation is part of the inherent intentionality of the questioning process and of the process of inquiry in general. In *Method* Lonergan says:

> When I ask what, or why, or how, or what for, I do not know the answers, but already I am intending what would be known If I knew the answers. When I ask whether this or that is so, I do not as yet know whether or not either is so, but already I am intending what would be known if I did know the answers.[72]

Thus the process of questioning or inquiry not only initiates the performance of coming to know or learning but actively directs and orchestrates it. Part of this supervisory role involves bringing about a reorganisation of the subject's perceiving. Mathews says: "His perceptual orientation changes in relation to the given."[73] It is precisely this which makes questioning such an important educational instrument, an instrument of mediation or 'mediated learning experience'.

In an attempt to bring Lonergan's theory to life, as it were, several sample lessons have been given throughout this chapter. A sample Instrumental

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71 Bernard Lonergan, *Insight*, p. 634.

72 Bernard Lonergan S.J., *Method in Theology*, p. 34.

73 William A. Mathews, *Questioning and its Object*, p. 73.

Enrichment lesson was given not only to illustrate the role of questioning in Feuerstein's mediated learning experience (MLE) in action but also to illustrate how an understanding of Lonergan's dynamic structure of coming to know complements and expands the usefulness of Feuerstein's own method. Equally important, however, is the potential of Feuerstein's method as an educational instrument for producing what Lonergan terms 'self appropriation of interiority' within the classroom situation.

Chapter 17

The Intersubjective Mode of Human Existence

> But there are powerful days in room 205 at Stuyvesant High School, when discussion of a poem opens the door to a blazing white light and everyone understands the poem and understands the understanding and when the light fades we smile at each other like travellers returned.
>
> Frank McCourt[1]

17.1 *Introduction*

Lonergan has much of interest to say about the topic of intersubjectivity in his various writings. In some cases, as in Chapter 7 of *Insight* and Chapter 3 of *Method in Theology,* the topic is dealt with quite clearly and explicitly; in other cases, as in *Understanding and Being* and his various *Collections,* it is dealt with indirectly and has to be more carefully sifted and collated. This chapter selects particularly those sources which are deemed relevant to the ongoing task of producing a usable philosophy of education. Thus, it is not an exhaustive study of all that Lonergan has to say about the topic.

In order to forge a clear link between the previous parts of this study and the one that follows, the notion of the 'cycle of growth'[2] is returned to, only this time with a double cycle to represent and introduce some basic principles of intersubjectivity. The established notion of intentionality is also reintroduced, but under the broader concept of 'cointentionality'. Neither of these ideas derives directly from Lonergan. The notion of cycle of growth is only implicit in his work, and the term 'cointentional' comes from Freire. However, the method has the virtue of clarity and, by appealing to the imagination, it recommends itself from a pedagogical point of view. Besides, it appears to do no violence to any of Lonergan's theories, while allowing a greater convergence with the theories of Freire and others.

The notion of the 'intentional bond' which is introduced in this chapter is also

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[1] Frank McCourt, *T'is: A Memoir* London: Flamingo, 1999), p. 476.

[2] See Section 8.4 of this study.

novel. Human beings are not purely spiritual or intellectual beings; they are also embodied creatures of habit. Thus the notion of a habitual intentional orientation towards other 'things' seems at least a useful extension of Lonergan's ideas in this area. It has been contended already that Lonergan does not give sufficient weight to the notion of corporality or embodiment in his writings.[3] The same seems to apply to the related area of habit or *habitus.* It may be argued that corporality is the basis of all habit and hence of all human bonds, intentional or otherwise. One can certainly make an assent to 'other' by an act of intellect and will acting as one, but it will be argued below that for this orientation of assent to persist one needs substance, materiality, corporality.

17.2 *The Intersubjective as Co-Intentional*

One of the key aims of this study is to examine the application of Lonergan's cognitive system to the field of education and of human development in general. One contention already argued extensively is that cognitive development is not something that one can achieve alone or unaided. Lonergan himself says:

> The more you talk with one another and throw things out, the more you probe, and the more you express yourself spontaneously, simply, and frankly, not holding back in fear of making mistakes, the more quickly you arrive at the point where you get the thing cleared up.[4]

The situation where one finds two or more persons intending the same intentional object in an intersubjective way is termed 'cointentional' for the purposes of this study. In other words, it is not enough that the persons involved intend the same object, but they must do so in a manner that takes cognisance of the other's intending, and so is influenced in some way by the experience, insights, and judgments of the other. What constitutes this 'intersubjective mode' will be the subject of this chapter.

One indication that a theory or a system of thought has come of age is when one finds it being applied in the hard-headed, results-oriented world of business management and management training. John Little is a management consultant who has written in several business periodicals on the practical application of Lonergan's theories to management training. In one such article he echoes

[3] See Sections 3.4, 6.2, and 7.10 of this work.

[4] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 18.

Lonergan's statement above, and says:

> More often than not, achieving insight is a collaborative affair, whether in science, religion, politics or business. Within a widespread and rapid circulation of information and ideas, the light which turns on for one spreads quickly to others who can then draw on the power and fertility embedded in the original insight.[5]

This observation has important implications for the field of education, and for the development of the educational model which is unfolding in this study. Little goes on to make the common-sense observation that

> where ideas and information are freely exchanged and [where] there is open inquiry, new insights will more easily develop. Equally, where information is not exchanged and where inquiry is suppressed, insights will be crushed or lost.[6]

What Little is in fact describing above is similar to what Paulo Freire terms 'cointentionality' or, more strictly, "cointentional education." In *Pedagogy of the Oppressed* he explains:

> Teachers and students ... , co-intent on reality, are both Subjects, not only in the task of unveiling that reality, and thereby coming to know it critically, but in the task of re-creating that knowledge. As they attain this knowledge of reality through common reflection and action, they discover themselves as its permanent re-creators.[7]

This is also consistent with Dewey's position when he says that education "is not an affair of 'telling' and being told, but an active and constructive process" involving "cooperative or joint activity."[8] It is also consistent with Feuerstein's notion of 'mediated learning experience' dealt with in the last two chapters and summarised in the following diagram. This diagram seeks to illustrate how the teacher and pupil are united, not just by a common field of meaning, not just by the dynamics of their intersubjective natures, but they are also united and mediated by a common task, a task which in turn has an influence on the way they interact with one another.

One can say that mediator and 'mediatee' both intend the same task. The mediatee (the child) has the task mediated to him by the mediator (the parent or teacher) through the process of 'mediated learning experience'. The child's

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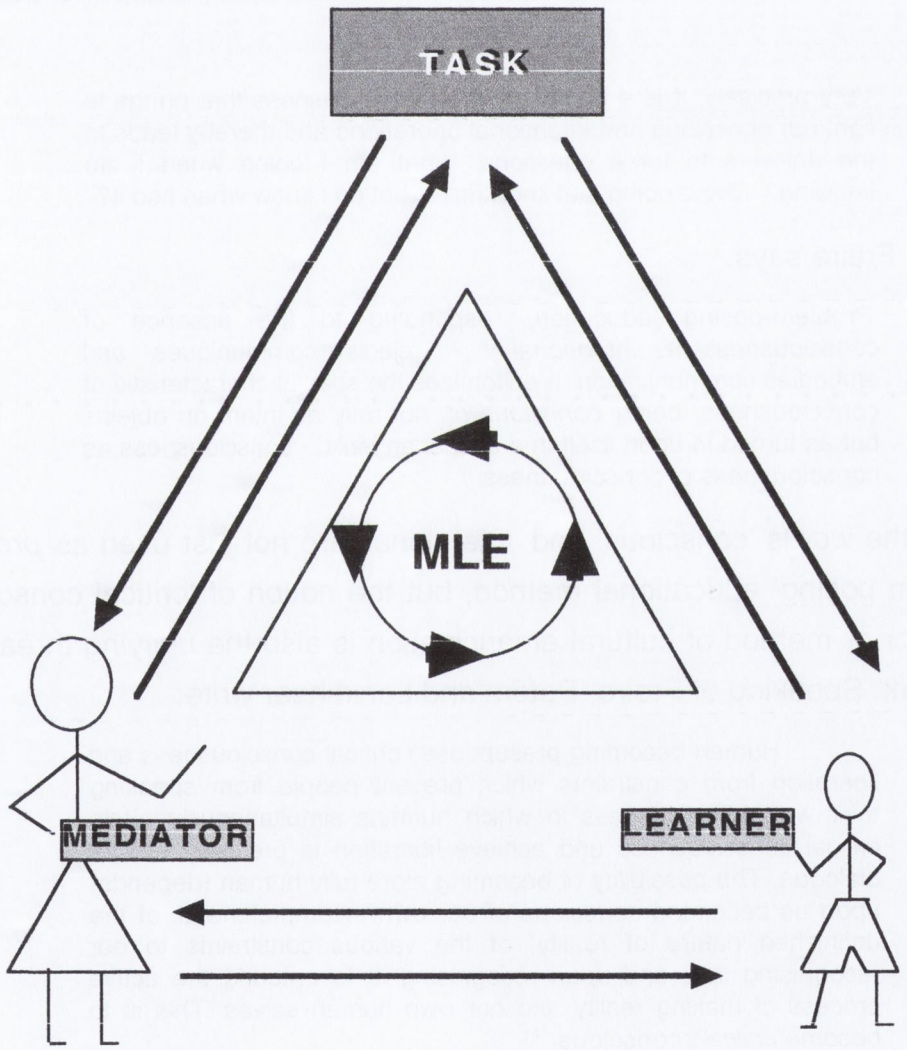
[5] John Little, "Insight, Strategic Thinking and Control", *The Practising Manager* 17:1 (October 1996), p. 22.
[6] Ibid.
[7] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 51. Italics in original.
[8] John Dewey, *Democracy and Education* (New York: Free Press, 1916), p. 38.

perspective on the problem is influenced by the mediator through 'intentionality and reciprocity', 'mediation of meaning', and 'mediation of transcendence'.[9] However, one can also say that the activities of both mediator and learner are mediated by the presenting problem or task itself. This may be termed 'simple mediation'. Then one has the situation of 'mutual mediation' whereby the shared experiences and complementary horizons of both the mediator and mediatee more readily give rise to insights. The dynamic of the situation is not just one of simple and mutual-mediation, however, but since self-development is the aim and, hopefully, the consequence of such interaction, it can be argued that this scheme or scenario also involves 'mutual self-mediation'.



Freire coined the phrase 'co-intentionality' to describe a condition like this in which two or more people intend the same object, or situation, or task. Freire's

[9] See Sections 15.8 and 15.9 of this work.

notions of intentionality and consciousness appear to be similar to those of Lonergan. Quoting Alvaro Viera Pinto with regard to the intentional nature of the educational method, for example, he says:

> The method is, in fact, the external form of consciousness manifest in acts, which takes on the fundamental property of consciousness - its intentionality. The essence of consciousness is being with the world, and this behavior is permanent and unavoidable. Accordingly, consciousness is in essence a way towards something apart from itself, outside itself, which surrounds it and which it apprehends by means of its ideational capacity. Consciousness is thus by definition a method, in the most general sense of the word[10]

His notion of consciousness as "method" is used in a similar sense to Lonergan's 'generalised empirical method' or 'transcendental method', which he describes as follows:

> Very precisely, it is a heightening of consciousness that brings to light our conscious and intentional operations and thereby leads to the answers to three questions, What am I doing when I am knowing? Why is doing that knowing? What do I know when I do it?[11]

Elsewhere, Freire says:

> 'Problem-posing' education, responding to the essence of consciousness - *intentionality* - rejects communiqués and embodies communication. It epitomizes the special characteristic of consciousness: being *conscious of*, not only as intent on objects but as turned in upon itself in a Jasperian 'split' - consciousness as consciousness *of* consciousness.[12]

For Freire the words 'conscious' and 'intentional' are not just used as *properties* of his 'problem posing' educational method, but the notion of 'critical consciousness' as the motor or method of cultural emancipation is also the unifying thread in all of Freire's work. Speaking of Freire, Peters and Lankshear write:

> Human becoming presupposes critical consciousness and liberation from constraints which prevent people from speaking their word. The process in which humans simultaneously attain critical consciousness and achieve liberation is precisely one of dialogue. The possibility of becoming more fully human (depends) upon us becoming conscious of our own incompleteness, of the unfinished nature of reality, of the various constraints to our recognising this, and upon recognising it, to entering the active process of making reality and our own human selves. This is to become *critically* conscious.[13]

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[10] Alvaro Vieira Pinto, in Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 51.

[11] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 25.

[12] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 60.

[13] Michael Peters and Colin Lankshear, *"Education and Hermeneutics"* in McLaren and Lankshear (Eds.), Politics of Liberation - Paths from Freire (London: Routledge, 1994), pp. 179 - 180.

17.3 *The Nature of Co-Intentionality*

As implied above, co-intentionality is involved when two or more people intend the same intentional object, or problem, or task, in a cooperative and intersubjective manner. This is also what is meant in this study by the term 'synergy'. Maritain sees cooperation as one of the "fundamental dispositions" to be fostered by an educational system, while education itself, in turn, depends for its effectiveness on this "sense of coöperation, which is as natural in us ... as the tendency to social and political life."[14] According to Little, most of the situations one encounters in the world of work are cointentional. However, according to Freire, classroom dynamics frequently fall far short of the truly co-intentional, even within many so-called 'child centred' systems. He explains:

> Liberating education consists in acts of cognition, not transferrals of information. It is a learning situation in which the cognizable object (far from being the end of the cognitive act) intermediates the cognitive actors - teacher on the one hand and students on the other. Accordingly, the practice of problem-posing education entails at the outset that the teacher-student contradiction be resolved. Dialogical relations - indispensable to the capacity of cognitive actors to cooperate in perceiving the same cognizable object - are otherwise impossible.[15]

In his book *Psychological Tools* Kozulin makes the commonsense observation that "it is group activity and the establishment of personal relationships that has the highest priority for adolescents." As a consequence, "the teacher has a hard time keeping students' attention, because in the classroom (there is) a 'parallel activity' focused on nonacademic problems of an interpersonal nature." From the perspective of Vygotskian theory, he suggests "turning this 'obstacle' into a motor of learning" by organising class work "according to the principle of collectively distributed problem solving." He continues: "Thus the students' desire to engage in interpersonal contact becomes fully realized, but it is employed as a means for achieving the goals of learning."[16]

Feuerstein's 'mediated learning experience', Freire's 'problem-posing' education, and Eric Mazur's[17] 'peer instruction' can all be classed as what might be

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[14] Jacques Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1975), p. 38.

[15] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), pp. 60 - 61

[16] Alex Kozulin, *Psychological Tools* (Cambridge MASS: Harvard University Press, 1998), pp. 56 - 57.

[17] Eric Mazur is professor of physics in Harvard and is author of several books on 'peer instruction', which is a dynamic, cooperative type of learning which he incorporates into his physics lectures. See Eric Mazur, *Peer Instruction* (New Jersey: Prentice Hall, 1997)

termed 'cointentional educational systems'. The role of the teacher changes in such a situation. Instead of appearing in the role of an authoritarian figure, 'the master', "the teacher becomes a senior member of the 'scientific group'." This not only leads to a more relaxed teacher-student relationship, but also serves as an important model for the students of group cooperation and distribution of functions in problem solving. Kozulin explains:

> According to Vygotsky, many relations that first appear in a real group activity are later internalized by the students as relations between his or her inner intellectual processes. Thus the role of a teacher as an expert and adviser working within the group becomes internalized by the child as his own internal function of reference and control.[18]

It will be argued below[19] that this form of co-intentional activity leads to the formation of a special bond between the participants which this study terms 'synergy' and which Karol Wojtyla terms "the bond of a common good."[20]

17.4 *The Dynamics of Co-Intentionality from a Lonergan Perspective*

From a consideration of the works of Freire and others, this section will attempt to clarify and formulate the nature of cointentional education using Lonergan's cognitive theory as a guide. To do so, it is helpful to return to the model of the 'wheel of growth' adapted from Little. This time, however, one must consider two persons, A and B, and hence two wheels, or cycles, to be considered separately as well as in interaction with one another.[21] If such education is to be truly co-intentional, then Freire insists:

> Authentic education is not carried out on by "A" *for* "B" or by "A" *about* "B", but rather "A" *with* "B", mediated by the world - a world which impresses and challenges both parties, giving rise to views or opinions about it.[22]

It is important to remember that Freire sees the learning, or coming to know, as being mediated by the task at hand. In this view, neither party is the intentional object of the other; neither party is the passive recipient of the knowledge of the other; both are partners in the search for knowledge. One must certainly be

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[18] Alex Kozulin, *Psychological Tools* (Cambridge MASS: Harvard University Press, 1998), p. 57.
[19] See Section 17.9.3, below.
[20] Karol Wojtyla, *Love and Responsibility,* H.T. Willits (Trans.), (London: Collins, 1981), pp. 28 - 29.
[21] The notion of 'cycle of growth' is dealt with in Section 8.4 of this study.
[22] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 74. Sic.

conscious of the other, but not at the critical reflective level at which the common goal itself is intended. One's trust or caring for another might even surface at the first level of consciousness, that of attending, but most often it lies at a 'pre-conscious' level, manifesting itself only as an underlying attitude of 'community of feeling' or 'fellow feeling' towards the other.[23] Feuerstein's notion of mediation, however, significantly broadens this view. One person can act as mediator and the other as mediated; one can be speaker and the other listener; one can be the teacher and the other the taught. Indeed, it is an essential part of the educational model of this study that the prime mediator is the significant 'other' in the child's world, and not just the task at hand. This is natural even when the persons involved are peers and the consequent relation is a 'symmetrical' one. But A and B must both be open to a periodic reversal of roles if the intersubjective exercise is to be truly co-intentional, and if 'reciprocity'[24] is to hold sway, and if its educational value in the situation is to be fully exploited.

In this model, A and B can be mother and child; in which case it is clearly the mother who is the prime mediator, and the relationship is 'asymmetrical'. However, their interaction is also mediated by the situation in which they find themselves, their topic of conversation, or the child's question to be answered. Or, A and B can be teacher and student in one-to-one interaction. In this case the dynamics of the situation are influenced by the teacher's consciousness of his role as educator, as mediator, as well as by the nature of the problem to be solved or clarified. A and B can also be peers, classmates; in which case they take it in turn to be mediator as they cooperate in solving a particular problem or in understanding a particular concept.

Driven by inquiry, or by the pure desire to know, both persons A and B attend to the same available data with varying degrees of efficiency. The experiences and perceptions of A and B are quite different since each has a different background knowledge, a different 'horizon'. The experience of each is non-communicable as such, yet each is part of the experience of the other; each is capable of influencing the attention of the other, by pointing to, or otherwise highlighting, certain data (figure) at the expense of other data (ground). One person is thus capable of immediately shaping and influencing the experience of the other to some degree,

[23] For an in-depth discussion of 'community of feeling' or 'fellow feeling' see Section 17.5 below.
[24] See Section 15.8.1 of this study.

and so is mediately capable also of shaping his images and his insights. Thus, in this sense, in Feuerstein's sense of mediation, one person acts as mediator for the other. The other centre of mediation, the other bridge between the two individuals is the intended object itself, their common task. Freire summarises:

> Only dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue, there is no communication, and without communication, there can be no true education. Education which is able to resolve the contradiction between teacher and student takes place in a situation in which both address their act of cognition to the object by which they are mediated.[25]

All the various modes of expression employed by a person - whether discursive language, gesture, facial expression, written communication, or drawings - all happen at the level of conception and are thus a product of the experience, memory, perceptions, and insights of that person. Where the persons are known to one another, then the motivating factors of mutual care and trust, together with an existing shared fund of knowledge have a bearing on the type and extent of the communication employed at the level of conception. Where persons are unknown to one another, where trust is lacking, or where language skills are poor, then potential for misunderstandings abound. The acts of judgment of each person are again private and essentially incommunicable, but the product of such acts can be communicated. For example, mutual assent as to the clear formulation of a hypothesis, and judgment as to its acceptability or otherwise, is easily communicated where language skills are adequate. Yet here again misunderstandings can easily occur. [26]

17.5 *Intersubjective Feelings According to Lonergan*

The above description of the interaction between two people is primarily cognitive and so has been termed 'cointentional'. What Lonergan means by 'intersubjective', however, has more to do with an affective and emotional environment, atmosphere, or milieu than with intellect. Lonergan, as said elsewhere,[27] manages to integrate well the two spheres of the cognitive and the

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[25] Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), pp. 73 - 74.

[26] The author, for example, has encountered the Japanese custom of responding with an enthusiastic "Hai!" every few minutes in the course of a conversation. *Hai* means yes. But in general conversation it denotes an assent to the person addressed rather than the topic, or business deal, under discussion; nor is it any guarantee that one is even being understood; hence, it is a source of much confusion to the uninitiated Western visitor.

[27] See Section 13.2 of this study.

affective. It is best, then, to approach this aspect of Lonergan's theory from the standpoint of his notion of 'meaning'. As already noted, Lonergan considers that the world is always mediated by meaning and sometimes even constituted by that meaning. Such meaning, he claims, "is embodied or carried in human intersubjectivity, in art, in symbols, in language, and in the lives and deeds of persons."[28] Art, symbols, language, and deeds are all intersubjectively mediated, they all move through the medium of intersubjectivity. The nature or qualities of this medium are manifest in feelings which Lonergan categorises as: "community of feeling, fellow-feeling, psychic contagion and emotional identification."[29]

By 'community of feeling' Lonergan means the situation where two or more people respond in parallel fashion to the same object, as for example, when every child in a class each responds in the same way to a teacher's joke, or to a sad story. Another example would be A's and B's assent to the same truth, or good, in the above model. Since both are intending the same object, the situation may be termed cointentional. Since both respond in a similar way emotionally to the perceived good in the intended object, the situation may be said to involve an intersubjectivity of feelings of the type 'community of feeling.'

In what Lonergan terms 'fellow feeling', on the other hand, first one person responds to an object, and then a second person responds to the manifest feeling of the first. The friend recognises the object of the first person's emotional reaction, but his own response is elicited, at least initially, not in any perceived good or value in the object itself but in the perceived good which is his friend's emotional reaction. The intentional response may be the same, but the initial motive is different. This would be close to what Edith Stein describes as 'empathy' in the following illustration:

> My friend comes to me beaming for joy and tells me he has passed his examination. I comprehend his joy empathically; transferring myself into it, I comprehend the joyfulness of the event and am now primordially joyful over it myself.[30]

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[28] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 57.

[29] Ibid.

[30] Edith Stein, *On the Problem of Empathy*, trans. Waltrout Stein, *The Collected Works of Edith Stein*, Vol 3, (Washington: ICS Publications, 1989), p.13. Stein was a noted phenomenologist. She was also a Carmelite nun, and is a canonised saint of the Catholic Church. She began her philosophical career as assistant to Edmund Husserl, and completed her Doctoral dissertation under his supervision. It was hoped that Stein's work would play a much larger part in this section of the study. However, the approaches adopted by Lonergan and Stein proved to be too different, and so this line of enquiry was abandoned.

Both community of feeling and fellow feeling involve what Lonergan would term intentional responses to values, responses that presuppose the apprehension of objects that arouse feeling. As such, they are both cognitive and affective. They are inseparable from cognition because, as Tyrrell says,

> It is on the level of intentional feeling responses to values that realities known through experiencing, understanding, and judging are apprehended as realities with value, that is, as values. ... Indeed, it is valid to affirm of every authentic feeling response that through it we discern, recognise, and apprehend a dimension of reality previously unknown to the knowledge of experiencing, understanding, and judging.[31]

While emotionality adds a new and more fully human dimension to cognition, nevertheless it is cognition which provides direction and control to emotionality. It is because of this element of cognitive control that 'community of feeling' and 'fellow feeling' are conscious and intentional responses. More fully, they are both what Freire would term 'cointentional'.

In contrast, Lonergan proposes that 'psychic contagion' and 'emotional identification' "have a vital rather than an intentional basis."[32] Psychic contagion is a matter of sharing another's emotion without adverting to the object of that emotion. Simply sharing an emotion does not necessarily involve the intellect and, hence, may not be intentional in itself. An example might be where a child simply enjoys a joke because the rest of the class is enjoying it, even if he did not really understand the joke. This is the rationale behind so called 'piped laughter' in radio and TV comedy shows. The commonly used word 'sympathy' might be appropriate in this context. It may also apply to the situation in which one child's pain or tears are enough to cause emotional distress in the other children in the class, or when a peaceful demonstration with its accompanying 'community of feeling' and 'fellow feeling' becomes a street riot which is out of control. Thus, psychic contagion or 'sympathy' is largely unconscious, or preconscious, and does not necessarily require an object of any kind, but just the emotional influence of another subject or subjects.

'Emotional identification' also belongs to the unconscious mind. And even though it is not accompanied by cognition in a controlling or directing capacity, and so is not intentional, it does, nonetheless, have an object which is another person or

[31] Bernard J. Tyrrell S.J. , "Feelings as Apprehensive-Intentional Responses to Values", *Lonergan Workshop, 7* (1988), pp. 354, 355.
[32] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 58.

human subject. In fact, Lonergan's notion of emotional identification seems quite close to the psychoanalytic notion of 'identification'. He notes that emotional identification is characteristic of a situation in which "either personal differentiation is as yet undeveloped or else there is a retreat from personal differentiation to vital unity." As an example of the former (undeveloped personal differentiation) he cites "the earnestness of a little girl's play with her doll; she identifies herself with her mother and at the same time projects herself into the doll."[33] An example of the latter (retreat to vital unity) would be the identification of a student with his favourite football hero in action so that he effectively 'loses himself' in the emotional enthusiasm of the moment. In emotional identification, the subject identifies himself emotionally with the other to the extent that psychically he becomes 'other' by 'incorporating' the other's attitudes, mannerisms, and values. He tends to see the world through the eyes and actions of the other, as it were. Thus, both 'psychic contagion' and 'emotional identification' operate unconsciously, or preconsciously, outside the realm of cognitive control, and so cannot, strictly speaking, be regarded as intentional.

Thus, in summary, one can say that the character and qualities of the medium which facilitates the interaction between persons in the intersubjective environment are manifest in "community of feeling, fellow-feeling, psychic contagion and emotional identification."[34] All these are either pure feelings, or feelings directed by cognition. All tend to act spontaneously, as is the nature of feelings. Feeling, after all, spreads without reflection; "one adverts to it not before it occurs but as it is occurring."[35] They are all also carriers, or mediators, of meaning. Such intersubjective meaning indicates feelings first, rather than thoughts. A smile, a frown, a shout of joy, a twinkle in the eye, all convey meaning; but it is a meaning which reveals not so much what one knows, as what one feels, and what one is.

Human life generally involves claims to truth, truth that is opposed to falsity. Normally, such claims have to be verified cognitively, through the act of judgment. Such claims, in other words, have to be judged, verified, and assented to cognitively, if one is to reach the true and the real. For this reason, purely intersubjective meaning cannot make the kinds of truth claims that linguistic meaning does. Purely intersubjective meaning, which reveals something about

[33] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 58.
[34] Ibid., p. 57.
[35] Ibid.

oneself, one's own inner feelings, rather than something about the external world, can only be a *part* of a truth, a part of the full meaning of the real. Intersubjectivity, then, as the term is used here, is limited in practical life in what it can convey from person to person. As a concept, it is also limited in its explanatory capacity. This is why it has been linked above with Freire's non-Lonerganian concept of cointentionality.

It is also clear that real intersubjective experiences may involve more than one of Lonergan's intersubjective modes in any given situation. The term 'affection', for example, may refer not simply to Pieper's notion of love as an assent to the being of another, but may it also carry with it connotations of 'fellow feeling' or empathy. One might also suggest that one of the educational values of team sports, for example, is that they allow young people to experience and express all four modes of intersubjectivity outlined above, thus preparing them for their practical expression in later social life. A typical football match, for example, with its delight in shared physical effort, is a prime example of 'community of feeling'. The joy experienced when one's team-mate scores a goal could not be stronger if one had done it oneself, and is an example of 'fellow feeling', or empathy, in action. Meanwhile, one is carried along on an emotional high of 'psychic contagion', while the fact of 'emotional identification' is everywhere evident in the chants, gestures and mannerisms copied directly from the great and the famous of the football world.

17.6 *Intersubjectivity and Authenticity*

In his article "Cognitional Structure", Lonergan speaks of "the collective subject referred to by 'we', 'us', 'ourselves', 'ours'."[36] He goes on to explain that the necessary condition of the possibility of this collective subject is human communication. He also insists that true human communication involves not so much saying what one knows as in revealing what one is. It is of the nature of intersubjective meaning that it reveals, not what one knows, but what one is:

> To say what one knows presupposes the labor of coming to know. But to show what one is, it is enough to be it; showing will follow; every movement, every word, every deed, reveals what the subject is.[37]

[36] Bernard Lonergan, "Cognitional Structure", in F.E. Crowe & R.M. Doran (Eds.), *Collected Works of Bernard Lonergan, Vol. 4* (Toronto: University of Toronto Press, 1988), p. 219.
[37] Ibid., p. 220.

Just as human knowing or cognition raises the problem of truth, so human communication and intersubjective meaning (the condition of the collective subject) raises the problem of 'authenticity', the 'truth factor' in self-revelation. The main concern of human authenticity is not what one knows, or how one interprets one's knowing, but what one ultimately *is*. And what one is, is revealed in what one *does*. In other words, the question of authenticity moves beyond, or transcends, objective knowing to considerations of personal living. And "it is in this personal context that the questions arise as to whether one is doing what is necessary to be an authentic and good human being." [38] This does not imply that objective knowing is not still of vital importance for authentic living. On the contrary, Lonergan insists that

> without objective knowing there is no authentic living; for one knows objectively just in so far as one is neither unperceptive, nor stupid, nor silly; and one does not live authentically inasmuch as one is unperceptive or stupid or silly.[39]

Nor can a human community itself exclude objective knowing without becoming an inauthentic community; friendships cannot last where unperceptiveness, stupidity, and silliness predominate, and a community without friendship, Lonergan would say, is a manipulative community.[40]

One can say that there are two poles to the intersubjective mode of human existence. There is the subject himself, known to himself through reflective experience, insight, and judgment, to affirmation of himself as knower. Then there is the existence of other selves, other subjects to whom he responds. He experiences their subject-like activity (including their ability to respond and communicate with him); he gains insight into that same activity, which intimates to him that this is indeed another subject; he then makes a judgment as to the validity of his conclusions, followed by an affirmation of existence, an affirmation of being. He may also (one might say 'should' also) respond to the inherent value or good observed in the other with an assent of being, with an "Its good that you exist," and the accompanying emotion which is an intentional response to a value or a good.

Lonergan's position, as already argued, is that one knows something, one has an increment of knowledge, only when one reaches the virtually

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[38] Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", *Method: Journal of Lonergan Studies*, Vol. 4, No. 1 (March 1986), p. 42.

[39] Bernard Lonergan, "Cognitional Structure", in F.E. Crowe & R.M. Doran (Eds.), *Collected Works of Bernard Lonergan, Vol. 4* (Toronto: University of Toronto Press, 1988), p. 220.

[40] Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", p. 42.

unconditioned.[41] Such is the way one assents to a truth in the objective world; such also is the way one affirms oneself as an intelligent and rational subject; such also is the way one makes an affirmation about another subject. The evidences in the two cases of affirmation (self and other) would differ in certain respects; the self is affirmed by means of the data of consciousness, while the other is affirmed by means of the data of sense. But, as Kidder says, the ultimate judgment regarding the other would not thereby be less certain than the judgment regarding oneself.

In coming to know an object in one's environment, one addresses questions to oneself. In coming to know a subject in one's environment, one addresses one's questions to him personally. One test, as it were, that one has indeed encountered another subjectivity is that he also is an asker of, and a responder to, questions. A human being is a seeker after truth: "One may define the human being ... as *the one who seeks the truth*."[42] Once that is established, the personal question "What?" is confirmed - "It is a human being"; one then progresses to the question "Who?". The story is told of a prisoner alone in a dark dungeon who hears a scratching sound on the other side of a wall. Unsure as to whether the sound he hears is of human origin or the product of some rodent, he scratches three times. Back comes an identical three scratches. He scratches five times, this time to a pattern. To his delight, the same pattern is repeated back to him. He has found another human being. He has found him with a pattern of behaviour, the recognition and duplication of a form. Nevertheless, without the communication, without the question, one might say, he could never have judged, never have been sure.

One does not simply look at another human being, one interacts with him. One interacts with him largely as one interacts with oneself, within one's own psyche; one asks questions and seeks for meaning and understanding, and makes judgments about the answers. The other, of course, does the same. To affirm with certainty the other's performance of the whole broad range of conscious operations is to affirm that the dynamism among the operations is at work in his activity. One cannot see through the eyes of one's friend. Nor can one think his private thoughts. They belong to his world of privacy. So one must learn the content of his gaze and the significance of his meditative expression by asking "What do you see?" and "What do you think?" This assumes that a dynamism is present whereby the other's

[41] For a discussion of Lonergan's notion of the 'virtually unconditioned' see Sections 5.3.1, 5.3.3, 7.2, 9.3, 12.1

[42] Pope John Paul II, *Fides et Ratio* (London: Catholic Truth Society, 1998), p.45. Italics in original.

intelligent-sounding speech communicates intelligent acts like seeing, tasting, inquiring, understanding, and judging. That such an affirmation can be made with relative certainty is proven by the absurdity of the alternative. To doubt the dynamism in another would be to doubt the dynamism in oneself, would be to doubt one's own experience, understanding, and judgment, and would be to doubt that when all the conditions are fulfilled one has indeed reached the virtually unconditioned, one has indeed reached 'the heart of the real', a human person.

But thankfully, there is yet another way besides the purely cognitive. There is another mode whereby human beings reveal themselves to one another. That is the mode of affective intersubjectivity already outlined above. These four phenomena (community of feeling, fellow-feeling, psychic contagion, emotional identification) that constitute the nature or qualities of the medium of intersubjectivity are characterised by being both spontaneous and affective: Feeling spreads without reflection; "one adverts to it not before it occurs but as it is occurring."[43] In addition, the source of these spontaneous, non-deliberate, feelings runs deep: "Its 'we' is prior to the 'we' that results from the mutual love of 'I' and 'Thou'; its 'we' precedes the distinction of subjects and survives its oblivion." [44] Intersubjectivity has its own kind of meaning. Intersubjective meaning arises spontaneously and indicates feeling rather than thoughts. A smile, to take Lonergan's example, does this. Intersubjective meaning does not regard objects; "rather it reveals or even betrays the subject, and the revelation is immediate."[45] Body language in general, tones of voice, even silences, "all the ways in which our feelings are revealed or betrayed by ourselves or are depicted by actors on the stage ... point to the existence of a special carrier or embodiment of meaning, namely, human intersubjectivity."[46]

17.7 *Intersubjectivity in Lonergan and Husserl*

Because Husserl has already an established reputation in the area of intersubjectivity, it seems prudent to follow the pattern or model already begun in Part I of this study and compare Lonergan's theories with those of Husserl. Luckily, once again, there already exists an excellent study which compares the two philosophers' notions of intersubjectivity in some detail, a study on which this

[43] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 57.
[44] Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", p. 32.
[45] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 60.
[46] Ibid., p. 61

section will lean heavily.[47]

Lonergan describes himself as a 'critical realist'[48]. He regards his philosophy as a critical philosophy. It derives its critical orientation from his "decision to analyze metaphysical, social, historical, and theological convictions and disputes in light of their cognitional-theoretical assumptions."[49] Kidder goes on to say that by virtue of this same decision, Lonergan's philosophy can be described as a transcendental philosophy. It is transcendental in that it identifies the whole range and the whole pattern of invariant operations that form both the basis for human experience and the basis for all theoretical interpretations of human experience, including, he would say, all other philosophies. In *Method in Theology* Lonergan identifies these operations as

> seeing, hearing, touching, smelling, tasting, inquiring, imagining, understanding, conceiving, formulating, reflecting, marshalling and weighing the evidence, judging, deliberating, evaluating, deciding, speaking, writing.[50]

As has already been mentioned, to analyse these operations in their patterning and their concrete conditions is to perform what Lonergan describes as 'intentionality analysis'[51] . To transcend or to go beyond such analysis in an effort to appropriate the patterns of one's own living and thinking is to undertake 'self-appropriation of interiority', which is the central task to which Lonergan's writings chiefly direct his readers:

> The point is not to provide the reader with a stream of words that he can repeat to others or with a set of terms or relations from which he can proceed to form inferences and prove conclusions.... the point is to discover, to identify, to become familiar with the activities of one's own intelligence.[52]

But such 'self appropriation of interiority' has an essentially private or subjective character. There are certain aspects of the exercise, in other words, that cannot be shared. Consider sense perception, for example; how is one even to begin to describe for another the flavour of an orange, or the smell of a rose, or the sound of falling snow?

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[47] Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", p. 29.

[48] For a complete exposition of what is meant by 'critical realism' see Bernard Lonergan, "Cognitional Structure", in F.E. Crowe & R.M. Doran (Eds.), *Collected Works of Bernard Lonergan, Vol. 4* (Toronto: University of Toronto Press, 1988), pp. 214 -219. See also 'critical realism' in the glossary of this study. See also Section 18.1.1

[49] Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", p. 29.

[50] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 6.

[51] See Section 9.1 above.

[52] Bernard Lonergan S.J., *Insight*, p. xix.

This latter consideration necessitates asking some very basic questions before weighing up or judging the suitability of Lonergan's theories as forming the basis of a theory of intersubjectivity:

1) How does a cognitional theory that makes transcendental use of private acts of intelligence explain the public aspects of human life? And, further, can such a theory achieve such an explanation in a way that strengthens rather than weakens the overall cognitional theory?

2) Given the accusations of solipsism[53] directed at Husserl's theories of intersubjectivity, how can a cognitional theory like Lonergan's, that pivots on the private acts of one's own intelligence, even begin to account for the existence of minds other than one's own?

3) What is the nature of the community of subjects whose cognitional operations are being sought by the given cognitional theory? In other words, is the ontological ground of community to be found in individuals or in the relations that exist between those individuals?

Paul Kidder of Boston College posed these three questions in his paper "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity." Based on a similar exposition of Lonergan's work to that already given in the previous section of this investigation, Kidder very ably argued that 1) Lonergan's cognitional theory does indeed incorporate the public aspects of human life in a way that strengthens his overall theory, 2) that to raise a solipsistic objection to Lonergan's position is to misunderstand that position, and 3) that Lonergan finds ontological priority in neither the individual nor the community, but rather "makes an ontological commitment to their dynamic interrelationship."

On the other hand, it will be argued below that Husserl's position is more problematic than that of Lonergan. His theories, including his 'epoché', or method of doubt, have already been introduced in comparing the notions of intentionality in Lonergan and Husserl.[54] It has already been contended that, while there are many points of similarity between the theories of the two philosophers, there are also fundamental differences.

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[53] The term signifies isolation from the external world. The Macmillan Encyclopaedia of Philosophy explains: "The term 'solipsism' (Latin *solus*, alone, plus *ipse*, self) would generally suggest any doctrine that attaches prime importance to the self."

[54] See Section 3.3.4 of this study.

For a start, differences in the way that Husserl and Lonergan approach cognitional theory make for differences in the ways that they conceive the problem of intersubjectivity. It was argued already that Husserl views perception and judgment as being functionally related in much the same way as Lonergan's notions of experience, understanding and judgment are functionally related. However, according to Ryan, the question for Husserl is "how does the cognitional process get from perception to judgment?"[55] It has been shown that Lonergan uses the 'operator'[56] of questioning to account for the progress of cognition from one level to the next. Without such an operator there would be no knowing process. He sees the questioning process as a manifestation of the inherent intentionality of the mind. Ryan says:

> The essential questioning, or intending of being, is the permanent grounding and the originating power that sets in motion the whole cognitional process.[57]

However, according to Ryan, "Husserl does not have an explicitly recognised operator ... to promote cognition from sensation to categorical activity."[58] The only comparable concept in the theory of Husserl is 'interest' *(Interesse)*. To Husserl, interest is an element in the very structure of intentionality and "*not just a psychologically describable advertance*"[59]. It is far from clear that one can regard questioning and 'interest' as equivalent concepts. It is clear, however, from the two papers by Ryan quoted above that, once one has managed to break through the differences of terminology, the underlying similarities between the theories of cognition and intentionality of Lonergan and Husserl are quite significant and if either of them is lacking in anything, then it must be this absence of a definite operator in the theory of Husserl. Paul Kidder in his own paper quotes Ryan's works and supports his conclusions.

Husserl's writings also bear witness to the same spontaneous and immediate kind of intersubjectivity operative in human life as is identified by Lonergan. Husserl, for example, says:

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55 William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan" , *International Philosophical Quarterly*, 13 (1973), p. 178.

56 For an exposition of what Lonergan means by the term 'operator' see the glossary at the end of this study.

57 William F.J. Ryan, "Intentionality in Edmund Husserl and Bernard Lonergan," p. 182

58 Ibid., p. 175.

59 ibid., p. 180. italics in original work.

> That which is given to us, as human subject, one with the human body, in immediate experiential apprehension, is the human person, who has his spiritual individuality, his intellectual and practical abilities and skills, his character, his sensibility.[60]

In Book II of his *Ideas* he describes what he calls the 'personalistic attitude' wherein human subjects have an immediate apprehension of the presence of one another:

> The unity of body and spirit is a two-fold one, and, correlatively, a two-fold apprehension (the personalistic and naturalistic) is included in the unitary apperception of the human.[61]

This 'attitude' is a kind of intuition, and when one is in this personalistic attitude, everything about the other person is received as an immediate revelation of a distinct personality or spirit. What constitutes such an intuition is far from clear from Husserl's description.

Husserl also draws special attention to the intersubjective origins of the motivations and purposes of human action. One's activities are being constantly motivated by the promptings of others , and one's actions, in turn, seek to prompt them:

> Just as ... mere physical things "motivate", i.e. stimulate the subject of experience as appearing things, as experienced actuality, and are the "occasion" of his behavior ..., so do human beings exercise on one another, in a similar general sense, "immediate" personal effects that can be intuited. They have "motivating power" for each other. But they do not have effects in the mere way of things of physical experience, in the mere form of stimuli ... . But there is still *another* form in which persons influence persons: In their spiritual activity they *direct* themselves towards *one another* ... , they perform acts with the intention of being understood by the other and of determining the other, in his understanding grasp of these acts (insofar as they are externalised in this intention), to certain personal modes of behavior.[62]

It is significant that Husserl attempts to deal with the notion of motivation without any theory of the emotions or affectivity comparable to Lonergan's.

But, according to Husserl himself, neither his intersubjectivity of motivation, nor the intersubjectivity of the 'personalistic attitude' provides an adequate foundation for what should be a rigourous and comprehensive philosophy, a

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[60] Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, Second Book, trans. Rojcewich & Schuwer, *Collected Works*, Vol. III (Dordrecht: Kluwer Academic Publishers, 1989), p. 147.

[61] Ibid., p. 259.

[62] Ibid., p. 202, Italics in original.

philosophy that would give an adequate account of the whole range of one's involvements with plants, animals, peoples, tools, social and cultural institutions - all of the mundane engagements that Husserl terms the "life-world". Instead, the "rigourous and comprehensive philosophy" sought by Husserl is based on his 'method of doubt', or his 'epoché'.

According to Paul Kidder, there is an inherent contradiction at this point in Husserl's work. Such "a rigourous and comprehensive philosophy" would need to cover the whole range of elements in the 'life world' and all the ways the life world is normally interpreted. It was already suggested that Husserl was forced to posit the existence of a 'personalistic attitude' to account for the special immediate experience human beings have of other selves. But, according to Husserl himself, the whole structure of his phenomenology was built up on the basis of a deep exploration of, and opposition to, the 'natural attitude'.[63] Kidder says:

> Husserl's foundational philosophical ideas ... are developed, not through a deeper exploration of the personalistic attitude, but through an opposition to the natural attitude. The transcendental philosophy occasioned by this opposition requires a theory of intersubjectivity that differs from the personalism of Ideas II.[64]

By prescinding from, or leaving out of one's consideration, the objectivity of objects as presumed by the 'natural attitude', the phenomenological epoché prescinds also from all of those features whereby a subject can be experienced as an entity in the world. It prescinds from aspects such as spatial extension, natural behaviours, personality, and personal relationships. All of these qualities, some of them clearly intersubjective, are of course retrievable through phenomenological analysis. In this analysis, phenomenology uncovers the process whereby one constitutes a spatial, temporal, intersubjective world to which one may add oneself as a member. But when the epoché first takes place, all of the empirical and intersubjective qualities that make the subject a "human person" are considered mere phenomena displayed before the single ego that performs the epoché. The ego, the "I", that performs the epoché, then, is not in the world, but is rather the extramundane transcendental ground for the world, "the transcendental ego," in other words. Since only the ego that performs the epoché persists through the epoché as something more than mere phenomenon, that ego is the unique and

[63] 'Natural attitude' is a term used by Husserl to denote the natural, everyday, commonsense view of the world.
[64] Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", *Method: Journal of Lonergan Studies*, Vol. 4, No. 1 (March 1986), p. 33.

ultimate source for all meaning; everything worldly has an essential dependence upon it. And because the ordinary intersubjective life of human beings is something worldly, "a unique sort of philosophical solitude," says Husserl, characterises the transcendental ego:

> I am not an ego, who still has his you, his we, his total community of cosubjects in natural validity. All of mankind, and the whole distinction and ordering of personal pronouns has become a phenomenon with my epoché; and so has the privilege of I-the-man among other men.[65]

With these assertions there emerges a conflict between the transcendental starting point of phenomenology and the reality of intersubjectivity. The goal of phenomenology is to explain how the subjectively grounded constitution of the world can also be true. However, part of what it means to be 'true' is to be 'there for everyone', always and ever to persist in the same manner no matter who does the interrogating, or when or where. But a problem arises here: the phrase "there for everyone" is hardly consistent with the fact that by "everyone" is meant all of those human persons who, we have decided, are mere phenomena displayed before a unique transcendental ego. Thus, the personalist treatment of intersubjectivity in Husserl's *Ideas II* is of no assistance here. The only solution to the problem would be that all foreign egos should be transcendental egos as well, giving rise to a multiplicity of transcendental egos.

In summary, Paul Kidder states:

> Some of Husserl's best interpreters have expressed strong reservations regarding Husserl's working-out of transcendental intersubjectivity and the role of transcendental intersubjectivity in phenomenology generally. Many critics have expressed suspicion regarding the possibility of performing all of the phenomenological reductions and still being able to constitute the other as a truly alien transcendental ego.[66]

The general conclusion is that it is at least doubtful that Husserl's phenomenology is up to the task of explaining the phenomenon of intersubjectivity, just as it did not appear to be up to the task of explaining the human mind's graduation or progression from experience to judgment. Thus, of the two approaches to intersubjectivity dealt with in this section, Husserl's presents underlying contradictions and offers little in the way of a comprehensive theory which might be

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[65] Edmund Husserl, *The Crisis of European Science and Transcendental Phenomenology*, David Carr (trans.) (Evanston: Northwestern University Press, 1970), p. 184.

[66] Paul Kidder, "Lonergan and the Husserlian Problem of Transcendental Intersubjectivity", p. 39.

of use in the field of education. Lonergan's, on the other hand, appears to be the clearer, simpler, and more comprehensive, offering, at the same time, the possibility of a merger or marriage with the pedagogical theories of Feuerstein, Freire, and many others.

17.8 *Intersubjectivity from a Developmental Viewpoint*

17.8.1 *Affect and Intellect in Piaget*

Although Piaget is best known for his theories of cognitive development, many of his writings contain references to the significance of social influences. For example, in *The Psychology of Intelligence* he says that "the human being is immersed right from birth in a social environment which affects him as much as his physical environment."[67] Also, when discussing the structures that organise mental activity, he identifies "motor or intellectual" structures on the one hand and "affective" structures on the other. Intellectual and affective structures, in turn, are organised along the same main dimensions as this study: the "intrapersonal" on the one hand and the "social or interpersonal" on the other.[68]

Piaget describes affectivity and intellectual functions as "two indissociable aspects of every action"[69] and sees them both as being influenced from earliest childhood by socialisation. According to Piaget, there is never a purely intellectual act that is unaffected by emotion, and, similarly, there is never a purely affective act totally devoid of comprehension.[70] However, while clearly identifying the importance of the affective, particularly with regard to socialisation, and, in turn, the interdependence of social and intellectual development, he fails to propose a theory of how the affective and the intellectual are integrated in the execution of human decision making and activity, as Lonergan has done with his notion of feeling as an 'intentional response to a value'. On the other hand, Piaget's concern with egocentrism, with the growth in children's ability to play cooperatively with one another, and with the moral development of the child all clearly reflect his awareness of the importance of social and intersubjective factors in a child's development.

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[67] Jean Piaget, *The Psychology of Intelligence* (New York: Harcourt Brace, 1950) p. 156.
[68] Jean Piaget, *Six Psychological Studies* (New York: Random House, 1967), p. 5.
[69] Ibid., p. 33.
[70] Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy". In L.S. Segal & Brainerd (Eds.) *Alternatives to Piaget* (New York: Academic Press, 1978) p. 29.

In discussing the interdependence of social and intellectual development, Piaget differentiates three separate but interrelated processes that are closely synchronised with one another. He says that "all three begin very early, ... remain uncompleted at the close of childhood, and survive throughout the intellectual development of the adult."[71] These three processes distinguished by Piaget are as follows:

1) The first is primarily social. It reflects the transition from an 'egocentric' view, in which the young child is unaware of the existence of anyone else's perspective, to 'reciprocity', in which the same value is attributed to another person's point of view as one's own. This same 'reciprocity', as already mentioned, is also regarded by Feuerstein as one of the key elements in Mediated Learning Experience (MLE).

2) The second process is primarily intellectual and describes the transition from 'absolutism', or the acceptance of each perception as a separate and independent entity (Feuerstein terms this the 'episodic grasp of reality'), to 'relativism', where all concepts and objects are thought of in relation to one another.

3) The third process stems from an interaction between intellectual and social factors. It involves the gradual change from 'subjectivity', with the expectation that everything comes from or is somehow related to the 'self', to 'objectivity', where the individual is able to distinguish between what originates from within and what is part of external reality as observed by everybody.[72]

17.8.2 *Piaget and Intersubjectivity*

If Piaget's ideas concerning reciprocity, relativism, and objectivity, as introduced above, are applied to a model based strictly on social interaction, then human beings must be considered to have the capacity for being aware of other people's perspectives, for relating these perspectives to their own and other

[71] Jean Piaget, *The Child's Conception of Physical Causality* (London: Kegan Paul, 1930) p. 252.
[72] Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy", p. 30.

individual's life experiences, and for understanding these varying perspectives within the framework of external reality. These are clearly cognitive situations. They are also conscious and intentional. However, Piaget mentions nothing about the emotionality which might accompany them, except to insist that affectivity, like the cognitive, depends for its development on socialisation and cultural transmission. He says:

> It has long been thought that the affective characteristics of adolescence, beginning between the ages of twelve and fifteen, are to be explained primarily by innate and quasi instinctual mechanisms. This is assumed by psychoanalysts who base their interpretation of these stages of development on the hypothesis of a "new version of the Oedipus Complex." In reality, the role of social factors (in the twofold sense of socialization and cultural transmission) is far more important and is favoured more than was suspected by the intellectual transformations we have been discussing.[73]

It can be argued that Piaget takes a mainly cognitive view of intersubjectivity since he does not attempt to describe, differentiate, or define intersubjective feelings. One does not find in his work anything that might be equivalent to Lonergan's 'community of feeling', 'fellow feeling', 'psychic contagion' or 'identification'. Neither does Piaget appear to have any theory of how the affective and the cognitive might interact and work together.

Helen Borke, however, developing Piaget's line of thought, assigns the term 'role taking' to the most advanced stage of social interaction and attempts to show that its appearance in the child determines the development of 'empathy'.[74] Empathy for her is "the ability to understand the thoughts and feelings of others" and she maintains that its existence "helps to explain the emergence in human relationships of such positive interpersonal responses as sympathy, altruism, and love." By implication, empathy for her does involve affective as well as cognitive dimensions. By role-taking she means the facility which children develop to play pretend-type games, like pretending to be the mother feeding and rocking the baby, or pretending to be the father going out to work.

Since the assumption was that the development of role-taking entailed the ability to put oneself mentally in another's shoes, thus mentally seeing something from another's perspective, then the natural egocentricity of the child should be a

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[73] Jean Piaget and Barbel Inhelder, *The Psychology of the Child* (New York: Basic Books, 1969), p. 149.

[74] Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy". In L.S. Segal & Brainerd (Eds.) *Alternatives to Piaget* (New York: Academic Press, 1978)

hindrance to the emergence of this ability and hence to the emergence of empathy. Piaget and Inhelder tested this hypothesis in the now famous mountain experiment. A doll was placed at different positions around a cardboard model representing three mountains. The children displayed their role-taking ability by selecting one picture from a group of pictures which showed the mountain display as the doll would see it. The results of this experiment appeared to confirm Piaget's contention that the child below the age of 7 or 8 reduces all social and physical influences " to his point of view and therefore distorts them without realizing it, simply because he cannot yet distinguish his point of view from that of others."[75]

More recent research, however, seems to indicate that the young child's problem relates more to the nature of the task than to his cognitive development. Elliot and Dayton, for example, maintain:

> Egocentric errors are more a function of task complexity and experience with ambiguous perceptual tasks than an inability to take another's viewpoint.[76]

As a result of her own research and that of many others, including that of Eliot and Dayton cited above, Borke concluded that "rather than being egocentric, children as young as 3 years of age show an ability to take another person's perspective."[77] Indeed, she goes on to cite examples of empathic behaviour in children as young as 15 months and concludes:

> Although the children's actions ... are imitative of adult behavior, it would be difficult to account for their motivations without hypothesizing some awareness of the other person's feeling and some capacity for role-taking.[78]

Piaget himself had already identified the emergence of object permanence in the child during the second half of the first year. He also recognised that at this time an equally significant advance occurs in the interpersonal sphere:

> From the affective point of view, it is no doubt only at the stage at which the notion of an object is formed that there is a projection of affectivity onto people conceived as similar centres of independent action.[79]

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[75] Jean Piaget, *The Psychology of Intelligence* (New York: Harcourt Brace, 1950) p. 160.

[76] Elliot, j., & Dayton, C.M., "Egocentric Error and the Construction of Egocentrism", *Journal of Genetic Psychology*, No. 128 (1976), pp. 275 - 289 quoted in Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy", p. 35.

[77] Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy", p. 35.

[78] Ibid., pp. 38 - 39.

[79] Jean Piaget, *The Psychology of Intelligence* (New York: Harcourt Brace, 1950) p. 158.

Between 18 and 24 months, in other words, the child acquires the intellectual capacity mentally to represent the other. This ability to visualise the other results in increased awareness of the separate individualities of the self and others. The appearance of role-taking and empathic behaviour which Borke now places between 18 months and two years "can be attributed to the integration of the child's capacity for emotional responsiveness with the newly acquired capacity for mental representation."[80] This latter assertion appears to tie in very well with Piaget's own position just quoted.

According to Piaget, children between 7 and 12 years of age learn to relate experiences over time and to think in terms of general concepts and principles. This advance in intellectual capability makes possible equally significant changes in the child's capacity for role-taking and empathic awareness. A number of investigators cited by Borke have reported a significant increase in the accuracy of the child's perception of other people's feelings, thoughts, and motives between the ages of 7 and 12. Piaget observed that the child during this stage develops the capacity "both to dissociate his point of view from that of others and to co-ordinate these different points of view."[81] This is the beginning of 'reciprocity', which strengthens the autonomy of the individual and at the same time enhances the individual's ability to relate to the group.

With the transition to formal operational thinking during adolescence, the individual for the first time is intellectually capable of the reciprocity, relativism, and objectivity which Piaget maintains represents the most advanced stage of social development. Growth in these processes continues throughout adulthood, but, as suggested above, "their earliest manifestations can be seen in the very young child, provided one uses appropriate methods to identify them."[82]

In the light of Piaget's thinking, as well as of more modern developments of Piagetian thought, the following table attempts to summarise the growth in empathetic understanding as a function of the parallel growth in the cognitive functioning of the child.

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[80] Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy", p. 39.

[81] Jean Piaget, *Six Psychological Studies* (New York: Random House, 1967), p. 39.

[82] Helen Borke, "Piaget's View of Social Interaction and the Theoretical Construct of Empathy". In L.S. Segal & Brainerd (Eds.) *Alternatives to Piaget* (New York: Academic Press, 1978) p. 40.

Stage	Age	Description
1. Sensorimotor Period	(0 - 2 years)	First emergence of perspective role-taking behaviour and empathy.
2. Preoperational Period	(2 - 7 years)	Child's ability to grasp the perspective of the other develops but is still confined to immediate, simple situations that fall within the realm of his life experiences.
3. Period of Concrete Operations	(7 - 11 years)	The child displays an increase in the accuracy of perception of the feelings, thoughts and motives of others. Learns to dissociate his point of view from that of others and to co-ordinate different points of view. Beginning of 'reciprocity'.
4. Period of Formal Operations	(11 - 15 years)	The young person is capable of reciprocity, relativism, and objectivity, and is thus capable of the most advanced stage of social development.

17.8.3 *Erikson and Intersubjectivity*

Erikson's stages of psychosexual development have already been introduced in Chapter Eight to illustrate the fact that Erikson's theories of child development, like those of Piaget, are inherently transcendent. Here his stages are dealt with in more detail, both as an illustration of how the intersubjective mode in the child develops over time, and as a comparison with the more cognitively biased stages of Piaget:

Stage		Psychosocial Crisis	Psychosocial Strength
I	Infancy	Trust vs Mistrust	Trust or Faith
II	Early	Autonomy vs	Will Power

	Childhood	Shame or Doubt	
III	Play Age	Initiative vs Guilt	Sense of Purpose
IV	School Age	Industry vs Inferiority	Competence
V	Adolescence	Identity vs Identity Diffusion	Fidelity, Loyalty

Erikson uses the term "Life Cycle" to describe his view of human development. This is partly due to the tendency of the individual life to "round itself out" as a coherent experience. But he also tries to express with it the equally important tendency "to form a link in the chain of generations from which it receives and to which it contributes."[83] This latter aspect appears to correlate well with Feuerstein's notions of 'cultural transmission', failure of which may lead to what he terms 'cultural deprivation.'

I *Infancy*

During what Freud termed the 'oral period' of psychosexual development, Erikson stresses the fundamental struggle between basic trust and mistrust. The resolution of the first psychosocial crisis is performed primarily by maternal care. The new-born infant's more or less coordinated readiness to incorporate by mouth and through the senses meets the mother's and society's more or less coordinated readiness to feed him and to stimulate his awareness:

> The mother must represent to the child an almost somatic conviction that she (his first "world") is trustworthy enough to satisfy and to regulate his needs.[84]

But the infant's trusting demeanour also inspires care in adults and makes them wish to give care; it awakens in them a strength which they, in turn, are ready and needful to have confirmed in the experience of care. Erikson claims that this "is the ontogenic basis of hope, that first and basic strength which gives man a sense of

[83] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX (The Macmillan Company, 1968), p. 286.
[84] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX, p. 288.

instinctive certainty in his social ecology."[85] This is also the basis of Bowlby's notion of secure attachment. In the language of this study one can say that the care of the adult elicits trust in the child, while the child's trusting demeanour in turn elicits a caring attitude in the adult.[86]

Unavoidable pain and delay of satisfaction, however, and the inexorable weaning make this stage also prototypical for a sense of abandonment and senseless rage. This is the first of the human estrangements against which hope must maintain itself throughout life. Erikson tends to use the word 'hope' as both synonymous with, and arising from, basic trust:

> Hope, then, is the first psychosocial strength. It is the enduring belief in the attainability of primal wishes in spite of anarchic urges and rages of dependency.[87]

However, the term 'hope' also means to have an aspiration or a dream. At this age, hope and belief are undifferentiated.[88] Josef Pieper claims that belief is always belief in someone before it becomes belief in something. It implies a basic trust in the person who is the communicator or mediator:

> Belief still means: to accept something unconditionally as real and true on the testimony of someone else who understands the matter out of his own knowledge.[89]

From this basic primal trust, one may say, comes not just the future ability to trust others but also the ability to accept on trust what they convey to us. One might say that belief is a type of knowing which is primarily mediated from above downwards. Nevertheless, what the act of belief truly aims at is still reality, as already mentioned, not a message or a report; Aquinas says: "it does not stop at something that is said but at something that is."[90]

Erikson has some very revealing things to say about the role of motherhood in the development of the infant's mind. Apart from the content of what he has to say, the following extract appears to confirm the essentially transcendent nature of Erikson's viewpoint:

> Biological motherhood needs at least three links with social experience - the mother's past experience of being mothered, a

[85] Ibid.

[86] Care and trust have already been dealt with from a philosophical viewpoint in Chapter 14 of this study.

[87] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX, p. 288.

[88] See Section 14.5.9 of this study.

[89] Josef Pieper, *Faith Hope Love* (San Francisco: Ignatius Press, 1997), p. 55

[90] Thomas Aquinas, *Summa Theologica*, Part II of Section II, quaestio 1, articulus 2.

> method of care in trustworthy surroundings, and some convincing image of providence. The infant's hope, in turn, is one cornerstone of the adult's faith, which throughout history has sought an institutional safeguard in organised religion. However, where religious institutions fail to give ritual actuality to the formulas they may become irrelevant to psychosocial strength.[91]

II *Early Childhood*

This level coincides with what Freud termed the 'anal stage of libido development'. Early childhood sets the stage for psychosocial autonomy by rapid gains in muscular maturation, locomotion, verbalisation, and discrimination. Muscular maturation sets the stage for an ambivalent set of social modalities, holding on and letting go. Holding on can be a destructive retaining or restraining, or a pattern of care (as in "to have and to hold"). To let go, too, can turn into an inimicable letting loose, or a relaxed 'letting pass' or 'letting be'. Erikson explains:

> This stage ... becomes decisive for the ratio of good will and wilfulness. A sense of self-control without loss of self esteem is the ontogenetic source of confidence in free will; a sense of overcontrol and loss of self-control can give rise to a lasting propensity for doubt and shame. The matter is complicated by the different needs and capacities of siblings of different ages - and by their rivalry.[92]

According to Erikson shame is the experience of estrangement that results from being exposed and being looked at disapprovingly, of wishing to "bury one's face". The term 'loss of face' is even used in Chinese culture to describe just this experience. This can be such a potent force for acculturation in Chinese society that it can sometimes lead to suicide even among the very young. While shame is related to consciousness of being exposed, doubt has much to do with consciousness of having a front and a back and of the vulnerability of being seen and influenced from behind. "It is the estrangement of being unsure of one's will and of those who would dominate it."

From this stage or level there emerges the propensity for compulsive over-compliance or impulsive defiance. If denied a gradual increase in autonomy of choice the individual may become obsessed by repetitiveness and develop an overly cruel conscience. Erikson explains:

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[91] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX , p. 288.
[92] Ibid.

> Early self doubt and doubt of others may later find their most malignant expression in compulsion neuroses or in paranoiac apprehension of hidden critics and secret persecutors threatening from behind.[93]

Of interest at this point is the finding of certain notable clinicians that the self-doubt resulting from learning disabilities like dyslexia, for example, may also manifest itself in obsessive compulsive behaviour.[94]

Will power for Erikson is the unbroken determination to exercise free choice as well as self-restraint in spite of the unavoidable experience of shame and doubt. Erikson says: "Good will is rooted in the judiciousness of parents guided by their respect for the spirit of the law."

III *Play Age*

Able to move independently and vigourously, the child, now in his third or fourth year, begins to comprehend his expected role in the adult world and to play out worlds worth imitating. He develops a sense of initiative. He associates with age mates and with older children as he watches and enters into games in the nursery or on the street corner. His learning is now intrusive; it leads him into ever new facts and activities, and he becomes acutely aware of differences between the sexes. This corresponds to Freud's 'phallic stage' of psychosexual development. In the boy, the sexual orientation is dominated by the phallic-intrusive initiative; in the girl, by inclusive modes of attractiveness and "motherliness".

Conscience divides the child within himself by establishing an inner voice of self-observation, self-guidance, and self-punishment, what Freud terms the 'superego'. The threatening estrangement at this stage, then, is a sense of guilt over goals contemplated and acts done, initiated, or merely fantasised. Initiative includes competition with those of superior equipment. Erikson, like Freud, believes that in a final contest for a favoured position with the mother 'Oedipal' feelings are aroused in the boy, and that there appears to be an intensified fear of finding the genitals harmed as punishment for the fantasies attached to their excitability.

Infantile guilt leads to the conflict between unbounded initiative and

[93] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX, p. 288.

[94] Dr. Harold Levinson, *The Discovery of Cerebellar-Vestibular Syndromes and Therapies* (New York: Stonebridge Publishing Ltd., 2000)

repression or inhibition. In adult pathology this residual conflict is expressed in hysterical denial, general inhibition, and sexual impotence, or in overcompensatory exhibitionism and acting out.

Erikson also holds that the "play age relies on some form of basic family, which also teaches the child by patient example where play ends and irreversible purpose begins."[95] Only thus are guilt feelings integrated into a strong (but not severe) conscience. He says:

> The "oedipal" stage thus results not only in a moral sense restricting the horizon of the permissible, but it also directs the way to the possible and the tangible, which attract infantile dreams to the goals of technology and culture. Social institutions, in turn, offer an ethos of action, in the form of ideal adults fascinating enough to replace the heroes of the picture book and fairy tale.[96]

Purpose, then, may be defined as the courage to envisage and pursue valued and tangible goals guided by conscience but not paralysed by guilt and by the fear of punishment.

This view of conscience, while different from that of Lonergan, does not contradict it in any way but, on the contrary, would appear to complement it. Lonergan approaches conscience mainly from a cognitional standpoint, but realises the importance of emotion as the 'intentional response to a good'; Erikson, however, appears to take a largely emotional or affective stance, but without denying the complementary role of the cognitive.

IV *School Age*

This age and stage of development coincides with what Freud describes as the 'latency period', a time during which genital maturation is postponed. Erikson says that at this stage:

> The child develops a sense of industriousness, i.e., he begins to comprehend the tool world of his culture, and he can become an eager and absorbed member of that productive situation called "school", which gradually supersedes the whims of play. In all cultures, at this stage, children receive systematic instruction of some kind and learn eagerly from older children.[97]

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[95] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX, p. 289.
[96] Ibid.
[97] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX, p. 289.

Walter E. Conn, in his paper "Moral Development as Self-Transcendence" comments:

> It seems to be no accident, but the wisdom of life's ground plan, that the psychosexual period of latency and the psychosocial period stage of industry and competence coincide. It is no accident either that Erikson's school age of industry and competence is complemented in Piaget's analysis by one of the most decisive breakthroughs in the entire course of cognitive development - the emergence and logical grouping of concrete operations.[98]

He goes on to point out that this is just one example of how intimately related and interdependent are the young person's developments in one area to that in others, and that cognitional, affective, and moral development are only facets of a total development of the concrete person. He also maintains that "the psychosocial virtues which Erikson emphasizes in childhood are not only to some degree self-transcending in themselves but are all foundational elements in the springboard that makes possible the various adult forms of personal self-transcendence - not only basic trust and hope, but autonomy, will, initiative, purpose, industry, and competence."[99]

The danger at this "School Age" lies in the possible development of a sense of inadequacy. If the child despairs of his skill or his status among his peers, he may be discouraged from further learning. Erikson explains:

> Where he finds ... that the color of his skin or the background of his parents rather than his wish and his will to learn will decide his worth as an apprentice, the human propensity for feeling unworthy (inferior) may be fatefully aggravated as a determinant of character development.[100]

Erikson also points out a second danger. If the overly conforming child accepts work as the only criterion of worthwhileness, sacrificing too readily his imagination and playfulness, he may become ready to submit to what Marx termed a 'craft-idiocy', i.e., "become a slave of his technology and of its established role typology."[101]

Competence, the outcome of this stage, is defined by Erikson as "the free exercise (unimpaired by an infantile sense of inferiority) of dexterity and intelligence in the completion of serious tasks. It is the basis for cooperative participation (or

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[98] Walter E. Conn, "Moral Development as Self Transcendence", *Horizons* Vol 4 (1977), p 195.
[99] Ibid.
[100] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX, p. 289.
[101] Ibid.

'synergy') in some segment of the culture."[102]

V *Adolescence*

For Erikson, the key to development during adolescence is the issue of identity. Indeed, the dominant thrust of Erikson's writings focuses on identity as the central question in the entire course of personal development. Psychosocial identity, as Erikson understands it, is "at once subjective and objective, individual and social." It includes a subjective sense of continuity as an active, alive individual. At the same time, the social side of identity development "presupposes a community of people whose traditional values become significant to the growing person even as his growth assumes relevance for them."[103] An inner ego synthesis of the individual, then, is complemented by genuine role integration in his group.

What Erikson calls an identity crisis is constituted by the fact that in this stage of adolescence "persistent (but sometimes mutually contradictory) infantile identifications are brought in line with urgent (and yet often tentative) new self-definitions and yet irreversible (and yet often unclear) role choices."[104] Erikson insists that the "integration of an identity is more than the sum of childhood identifications."[105] and it is the newness and originality of this "more than" that seem to constitute the critical self-transcending nature of identity.

To the degree that one is able to resolve this crisis of identity, there is generated the characteristic strength or virtue of adolescence - fidelity, the "ability to sustain loyalties freely pledged in spite of the inevitable contradictions of value systems." Closely connected to and supported by this virtue of fidelity is what Erikson calls the fundamental ideological orientation of adolescence. He suggests that "if the child learns to be moral, by which [he means] primarily to internalize the prohibitions of those significant to him, his moral conflicts continue in adolescence, but come under the primacy of ideological thinking. By ideology, in turn, [he means] a *system of commanding ideas* held together more (but not exclusively) by totalistic logic and utopian conviction than by cognitive understanding or pragmatic experience."[106]

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[102] Ibid., pp. 289 - 290.
[103] Ibid., p. 61.
[104] Ibid.
[105] Erik Erikson, "Life Cycle" in *International Encyclopaedia of the Social Sciences*, Vol. IX, p. 290.
[106] Erik Erikson, "Reflections on the Dissent of Contemporary Youth" , *Daedalus 99* (Winter 1970), p. 164.

The close connection between Erikson's understanding of the adolescent's moral or ideological horizon and Piaget's explanation of the emergence of formal thought during adolescence seems clear. The egocentrism of formal thought gives way to a consistent pattern of genuine understanding and realistic judgment, acting from 'below upwards', only when the logic of formal operations is properly complemented by concrete experience in the social world, acting from 'above downwards'. In the same way, the experimentation of the ideological orientation that Erikson sees as succeeding the moral learning of childhood is itself subject to the realistic demands and lessons of social experience. Thus, Erikson points out that

> this ideological orientation as well as the moral one are in turn absorbed, but never quite replaced, by that ethical orientation which makes the difference between adulthood and adolescence - 'ethical' meaning a universal sense of values assented to with insight and foresight in anticipation of immediate responsibilities not least of which is a transmission of these values to the next generation.[107]

17.9 *The Notion of the Intentional Bond*

17.9.1 *Society and Community*

In relation to schools and schooling, one frequently hears the words 'society', 'community', and 'association' used rather vaguely and indiscriminately. Matters are not helped by the fact that these same terms are sometimes spoken of as representing collections of individuals, and sometimes as if they were themselves individuals with interests, aims, strengths, and weaknesses of their own. At times, this can even be brought to an absurd degree of abstraction that causes a whole new level of vagueness and confusion, as in: "Society is to blame." or "The local community must take more responsibility." or "That school has a very good name." One cannot but agree with Finnis, when he says:

> Little progress can be made by talking about social life, social responsibilities, social rules, etc., until what it is to be involved in community is quite particularly and concretely understood.[108]

It is as an attempt to bring some clarity into this most central and important of areas that this study employs the notion of the 'intentional bond'. It will be argued below

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[107] Ibid.

[108] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1996), p. 135.

that this notion is not only consistent with Lonergan's cognitive scheme, but it also allows one to bring the more clinical and experimental work of people like John Bowlby within its ambit.

17.9.2 *Intentional Bonds*

The human person relates to many different persons, things, and situations each day, but when these relations recur regularly, or are accompanied by strong affect, they become habits of relating. In this way psychic or intentional bonds are forged with various objects and situations in a person's life. Such bonds form an intimate part of the horizon of the individual; so intimate, in fact, that these bonds may be said to constitute a significant part of who and what that individual *is*. There is a sense in which one can say: "We are what we repeatedly do. Excellence ... is not an act, but a habit."[109]

Since they relate a person to something in his environment, such relations, and the bonds they forge, are inherently intentional. The level of consciousness and volition accompanying such acts of relating may decrease with time and usage, as the bond takes hold and the relation becomes more unconscious or 'second nature' to the person. Such bonds, one may say, are a 'natural' part of a person's system of needs, a 'particular good' for the individual. As such, the forging of personal relations, and the bonds that ensue from them, are a good or a value, and potentially enhance the *being* mode of human existence. John Finnis explains that

> the basic forms of good are opportunities of *being*; the more fully a man participates in them the more he is what he can be. And for this state of being fully what one can be, Aristotle appropriated the word *physis*, which is translated into Latin as *natura*. [110]

So Aquinas and Lonergan would say that these habitual relations or bonds are not just a good for individual man, but are an integral part of human nature in general.

Such bonds not only enhance the *being* mode of existence in a general sense, but they are also the means by which a person can 'Be-In' the world, according to Heidegger's notion of *'dasein':*

> Dasein 'Being-in' relates to dwelling in the world, which is very different from merely being present-at-hand in the world. Dwelling

[109] Aristotle, quoted from Stephen R. Covey, *The 7 Habits of Highly Effective People* (London: Simon & Schuster, 1999), p. 46.

[110] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 103

> in the world means 'Being alongside' the world, absorbed with it and concerned about the world and its beings.[111]

A man's memories and relationships are, strictly speaking, not so much something he *has* as something he *is*. They may belong to the *having* mode of human existence but only to the extent that they belonged first to the *being* mode. A memory of an event or relationship which at some point in the history of the individual was really 'lived' on a cognitive and emotional plane is stronger, more permanent, more a part of his *being* mode than those memories or relationships that had no such cognitive and emotional investment.

Memories and relationships are not simply internal states; they are states which relate the individual to an external reality, they are intentional. However, they are not merely transitory intentional relations, as are many of the daily experiences one has, but they are historical, semi-permanent relations, part of the 'horizon' of the subject. These relations are an integral part of an individual as he moves from place to place, and from day to day. They are part of what he is, part of his being. They constitute a network, a system, a matrix, of intentional bonds. Thus, as the individual person flies by airline across the Atlantic, or explores the depths of farthest Borneo in a dugout canoe, he carries with him the accumulated insights of his culture, the values of his religious persuasion, the ties of family and friends, all not just as inner mental states, but as intentional mental states that relate him in all directions to things, to people, to institutions, to places, and to various times past and, through imagination, to times future.

17.9.3 *Intersubjective Bonds*

An intentional bond, then, is a cognitive, conscious, affectional, and habitual relation of one person with another, or of one person with a 'thing'. It is based on an assent to the being of the other which says, or implies that "it's good that you exist." Such an assent to the being of another as a good on Lonergan's fourth level naturally leads to an attitude of responsibility and action towards that other. In this regard, Martin Buber was able to define love as the taking of responsibility for another. Such an attitude of responsibility or 'prudence' naturally carries with it attitudes of justice, of fortitude (or courage), and of temperance (or moderation). Thus an intentional intersubjective bond naturally implies loyalty and, within

[111] Haim Gordon, *The Heidegger-Buber Controversy* (London: Greenwood Press, 2001), p 8

marriage, exclusivity and courage.

As has already been argued above[112], knowing a person involves the same intellect and reason, the same process of experience, understanding, and judgement as is involved in coming to know any other 'thing' in one's environment. It can be argued that this knowing together with the accompanying affective apprehension in the form of Lonergan's four modes of intersubjectivity are all that is necessary to account for interpersonal relations. There is no need for any special apprehension of personhood which goes beyond the merely cognitive and affective, as Husserl would imply. To grasp the being of another one reaches the 'virtually unconditioned' whereby one can affirm that one has indeed found another self, another 'I'. The resulting affirmation is special; the relation is most definitely an 'I-Thou', which is different cognitively and affectively from 'I-It'. The self, the 'I', remains the same; it is simply the relation which is different. Thus, in the opinion of this author, Buber is quite mistaken when he claims that "the *I* of man is ... twofold. For the *I* of the primary word *I - Thou* is a different *I* from that of the primary word *I - It*."[113]

Invisible psychic and intentional bonds, then, exist between people, "knitting them into groups, communities, or pairs, destroying their atomicity, making them interdependent parts, rather than independent wholes, joined together rather than solitary."[114] Driven by the value of 'sociability' and by the basic need for human warmth and emotional security, as well as the higher values of 'religion' and 'practical reasonableness', people form families, organisations, groups, schools, or simply friendships. At the core of all such groupings are intentional intersubjective bonds which are the lifeblood of any human collective. John Donne poetically describes the invisible but precious bonds, which link carer to cared-for, or lover to beloved, in an attachment relationship, as slender threads of gold:

> Our two souls therefore, which are one,
> Though I must go, endure not yet
> A breach, but an expansion,
> Like gold to airy thinness beat.[115]

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[112] See Section 17.6.

[113] Martin Buber, *I and Thou* (Edinburgh: T. & T. Clark, 1987), p. 15.

[114] Brenda Almond, "Human Bonds", in Brenda Almond and Donald Hill (Eds.), *Applied Philosophy: Morals and Metaphysics in Contemporary Debate* (London: Routledge, 1991), p. 59.

[115] John Donne, "A Valediction: Forbidden Mourning."

However, these intersubjective bonds are not all "gold to airy thinness beat;" this "webbing that knits our lives together" is not "woven of one sort of thread." On the contrary, according to Almond[116] , human bonds may of three kinds:

i) biological and natural
ii) legal and artificial
iii) social and voluntary

Among the first type of bond may be included what are generally termed 'blood relationships': relationships like those of parent and child, or brother and sister. The second type of bond could be represented by a standard business or employment contract. The third type of bond may be best represented by friendships of all kinds, including short-term sexual relationships, or by membership of a voluntary group serving some common purpose.

Similar to Almond's model but of much more use to the needs of this study, however, is the following scheme or system of bonding which is based on the more subtle, perceptive, and comprehensive work of John Finnis. Finnis' system also has the added virtue of being more consistent with Lonergan's cognitive scheme than that of Almond. Finnis recognises five different types of human bonds:

A. *The Physical and Biological Bond*

This first level of human bonding, while it can be understood empirically and scientifically, is nonetheless biological in the sense that it is not caused or brought about directly by human social intervention. One aspect of this are those elements of human behaviour which derive from the genetic unity of the race. A family, in particular, "has a special physical unity of close genetic interrelationship, sexual intercourse between parents, the feeding of the unborn infant children from their mother's body"[117] as well as their close physical handling and feeding by their mothers as neonates after birth, and the inherited similarities of physique and temperament.

This bond is clearly also affectional and emotional in nature. Of Lonergan's intersubjective feelings 'emotional identification' would be the most prominent on

[116] Brenda Almond, "Human Bonds", p. 60.
[117] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 103

the child's part within this level of bonding. However, as mentioned already, recent research on infants[118] seems to point to the existence of what is generally termed 'empathy', and which Lonergan categorises as 'fellow feeling', between mother and child as early as two months after birth. Combining this with the fact that the child's is predominantly a 'need love', one finds that this bond is a very close approximation to what Bowlby terms 'attachment':

> The young child's hunger for his mother's love and presence is as great as his hunger for food. ... Attachment Theory provides a language in which the phenomenology of attachment experiences is given full legitimacy. Attachment is a 'primary motivational system' with its own workings and interface with other motivational systems.[119]

The complementary emotion on the part of the mother in this form of bonding is 'care', which this study defines as love with an attendant sense of responsibility. This level of relation between mother and child and the form of bonding or attachment which results from it is clearly intentional, even at the earliest days after birth when the child attends more to the mother's voice than to any other sound and seeks out the human face before all other visual stimuli. However, the bond becomes more and more 'allocentric', or other-centred, as the child becomes more aware of the distinction between 'me' and 'not-me'.

B. *The Cultural and Social Bond*

In *Method in Theology*, Lonergan states:

> There is a still further dimension to being human, and there we emerge as persons, meet one another in common concern for values, seek to abolish the organisation of human living on the basis of competing egoisms and replace it by an organisation on the basis of man's perceptiveness and intelligence, his reasonableness, and his responsible exercise of freedom.[120]

In agreement, Finnis states that part of one's "unity in human community then is a unity of intelligence in its capacities, its workings, and its product, knowledge."[121] There is a sharing of meanings and insights which gives one a sense of belonging, of being 'at home' with a particular group or community. On a social or

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[118] See Daniel Stern, *The Interpersonal World of the Infant* (New York: Basic Books, 1985), and Colwyn Trevarthen, "The Self Born in Intersubjectivity: The Psychology of an Infant Communicating", In Ulric Neisser (ed.) *The Perceived Self* (Cambridge: Cambridge University Press, 1993)

[119] John Bowlby, *Attachment and Loss*, Vol. 2 (London: Hogarth Press, 1973), p.

[120] Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 10.

[121] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 137.

intersubjective level, in other words, this "unity of human community" may be viewed as analogous to the unity wrought by the human intellect on an individual personal and intrasubjective level.

The unity of shared values and meanings can be said to constitute a 'culture'. Lonergan understands culture empirically, rather than normatively. The empirical notion of culture "is the set of meanings and values that inform a way of life."[122] For Feuerstein, on the other hand, culture is a *process* by which knowledge, values, meanings and beliefs are transmitted from one generation to the next. Thus the difference is one of Lonergan's 'content' against Feuerstein's 'process'. The important point, however, is that the sharing of meanings and values is central to culture for both writers, with the added implication that this sharing constitutes a bond or relation between its members.

However, intellect alone is not sufficient to constitute a cultural and social bond. The real 'cement' of a relationship is emotionality. While there are many types and levels of human affect, that emotion which transcends space is what Lonergan describes as an 'intentional response to a value', that assent to the perceived good of another which says (according to Pieper) "it is good that you exist." One can argue that the family has a special unity or bond in this order of relationship in as much as its members think and learn together, acquiring in the process a common fund of experience, shared memories and insights, common attitudes and beliefs. However, the network of threads which constitutes a family is above all a matrix of intentional cognitive/emotional bonds, a unitary system of perceived goods and values, which transcends space and even time, and constitutes a significant part of the 'horizon' of the individual human psyche of its members.

C. *The Bond of Common Activity or 'Synergy'.*

Most human *work* is intersubjective in nature. This study has used the term 'synergy' to express this dimension. Synergy is often defined as 'joint work towards a common end'. However, it involves more than what Freire calls "cointentionality" and more than what Finnis means by "unity of common action"; it is not just cognitive and active, but also clearly involves some or all of Lonergan's intersubjective feelings - community of feeling, fellow feeling, psychic contagion, and emotional identification. Further, synergy implies a mutual help and

[122] Bernard Lonergan S.J., *Method in Theology,* p. xi.

cooperation best exemplified by Lonergan's term 'mutual self mediation'. As in self-mediation, synergy also implies that the whole is greater than the sum of its parts. Covey expresses this very well when he says:

> You begin with the belief that parties involved will gain more insight, and that the excitement of that mutual learning and insight will create a momentum toward more and more insights, learnings, and growth.[123]

This is consistent with what Finnis is describing when he says that

> each of its members (especially the one(s) directing and shaping the common life) is devoted to finding his or her own self-fulfilment (at least in part) in helping the other members fulfil themselves, by caring for them and helping them to grow in freedom and responsibility and other basic aspects of human flourishing.[124]

Thus one can say that synergy, like *work*, adds value to something in the environment and something within the subjects participating in the joint venture. It operates through a process of mutual self-mediation which implies a mutual service between the participants who relate with one another on both cognitive and affective levels.

Working towards a common end establishes a special bond between participants, be they children or adults. Karol Wojtyla terms this "the bond of a *common good* and of a common aim." This bond, in turn, may be interiorised to become the focal point around which mutual love may develop. Wojtyla explains:

> This special bond does not mean merely that we both seek a common good, it also unites the persons involved internally, and so constitutes the essential core round which any love must grow. In any case, love between two people is quite unthinkable without some common good to bind them together. This good is the end which both these persons choose. When two different people consciously choose a common aim this puts them on a footing of equality, and precludes the possibility that one of them might be subordinated to the other. Both - (although there may be more than two people tied to a common end) - are as it were in the same measure and to the same extent subordinated to that good which constitutes their common end.[125]

Synergy, or "the bond of a common good," is a vital concept in understanding, for example, the work of children in a Montessori classroom, or what actually happens in Mazur's 'peer - instruction' sessions, or in Freire's 'problem-

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[123] Stephen R. Covey, *The 7 Habits of Highly Effective People* (London: Simon & Schuster, 1999), p. 264.
[124] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 138.
[125] Karol Wojtyla, *Love and Responsibility,* H.T. Willits (Trans.), (London: Collins, 1981), pp. 28 - 29.

based learning', or in Vygotsky's notion of group activity,[126] or in Feuerstein's 'mediated learning experience'. The following observation from Covey would be relevant in all five contexts:

> As a teacher, I have come to believe that many truly great classes teeter on the very edge of chaos. Synergy tests whether teacher and students are really open to the principle of the whole being greater than the sum of its parts.
>
> There are times when neither the teacher nor the student knows for sure what's going to happen. In the beginning, there's a safe environment that enables people to be really open and to learn and to listen to each other's ideas. Then comes brainstorming, where the spirit of evaluation is subordinated to the spirit of creativity, imagining, and intellectual networking. Then an absolutely unusual phenomenon begins to take place. The entire class is transformed with the excitement of a new thrust, a new idea, a new direction that's hard to define, yet it's almost palpable to the people involved.[127]

This third type of human bond which cements communities and cultures together can also be said to be a bond of common *doing*. This is the intentional bond between people working together for a common goal. Finnis says that it is this "sharing of aim rather than multiplicity of interaction .. (which) .. is constitutive of human groups, communities, societies." Such groups of individuals are intent not just on *doing* for the sake of *doing*, but are actively co-operating in the process of adding value both to themselves and to their environment. This 'synergy' arises from a situation of 'cointentionality' on a common goal. This involves two or more intellects reacting to the same data, perceiving them differently and enriching one another with their different perceptions. It involves weaving with their words different but complementary mental pictures, and so ordering and reordering the data until the inherent intelligibility in the data is grasped to the satisfaction of all. Each, then, contributes to the formulation of the insight, taking turns to find the right words or phrase, or an apt metaphor. Each, then, must judge for himself whether this conception is indeed consistent with the various elements of the original problem. In the process, however, he must leave himself open to persuasion by the reasoning and argumentation of the other.

This scenario of Lonergan's experience, understanding, and judgment being forwarded, advanced, and progressed, as it passes from one person to another, as if they were in reality one intellect, one mind, acting with greater capacity, speed,

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[126] See Section 14.3, above.

[127] Stephen R. Covey, *The 7 Habits of Highly Effective People* (London: Simon & Schuster, 1999), p. 265.

and precision, applies not just to the world of academia, but to the board room of a commercial business, to school kids frantically completing their homework on the bus, to family members discussing the family holiday around the dinner table, or equally well, to the school football team intent on winning a match. And all the time, there is that most essential medium or atmosphere which makes it all work, Lonergan's intersubjective patterns of emotionality - community of feeling, fellow-feeling, psychic contagion, and emotional identification. In this situation of cooperative *work*, then, one finds all the conditions necessary for a form of intersubjective bonding: the cognitive efforts of the individuals involved in some common purpose, and the emotional milieu so essential for all cooperative human activity.

The life of the individual family is full of such instances of cooperative work - cooking, housework, helping with homework, washing up. Indeed, one can argue that it is in the family that children first learn the importance of cooperation and mutual service and true 'synergy' first makes its appearance.

D. *The Legal or Contractual Bond.*

Consider the example of two pupils, X and Y who approach their mathematics teacher, Miss Z, for help with a particular problem in mathematics. X and Y have a common objective which can be realised only by co-operating: agreeing a suitable time and place, abstaining from incessant interruptions of each other. Their arrangement may be said to be of type C above, even if their bond is based on a mutual feeling of responsibility rather than one of affection. The relationships between X and Z, and Y and Z, however, may be purely contractual. The teacher is paid to do a job and may have no other feeling for her students other than the feeling of contractual responsibility. The pupils, in turn, are bound by a certain contractual responsibility to cooperate with the teacher.

Such contractual relationships are an important aspect of human life in society and are to be found throughout human history, frequently involving the signing of a formal agreement, the swearing of an oath, or even the making of a sacrificial offering. These acts are frequently given extra force and formality by being declared before witnesses. Thus, in most cultures marriage would be regarded as a contractual bond, at least in part. Almond contends that such bonds

are not 'natural' since they are artificially created by people in society. She says:

> The quintessential network of bonding is the family; and at the heart of *that* system, the nuclear family, lies a central relationship between two people which, unlike all other family relationships, is *not* based on a biological or blood-tie. - it is not natural but created, whether by the will of the two people themselves, or, in some cases, by external agencies or circumstantial constraints.[128]

Almond is implying that only the biological is natural. Finnis, however, would be more in line with Aquinas when he defines 'the natural' as anything which is a good for man. In a passage already quoted, he says:

> The basic forms of good are opportunities of *being*; the more fully a man participates in them the more he is what he can be. And for this state of being fully what one can be, Aristotle appropriated the word *physis*, which is translated into Latin as *natura*. So Aquinas will say that these requirements are requirements not only of reason, and of goodness, but also ... of (human) nature.[129]

Under this wider view, the marriage bond would certainly qualify as natural. Besides, one can argue that the sexual relations between father and mother create an emotional and physical bond which may be deeper and stronger than those of purely biological family ties alone.

E. *The Nuptial Bond*

Neither Finnis nor Almond deal directly with the marriage bond as a separate category. Yet, while one can certainly make the case that the nuptial or marriage bond is simply a combination of all of the others mentioned above, it does have unique characteristics of its own and so is being dealt here as a special case.

Man, according to Pieper, is in *status viatoris*. This is an instance of what Aquinas means when he says that all being is in a state of becoming. It follows that there is an inherent 'incompleteness' in man at any stage in his life. Christopher West explains:

> Everyone knows the experience of "incompleteness." It drives us to seek communion with others. Not only do we want to be with others; we want to *know* another person and have our persons *known* by another person.[130]

West uses this idea to point towards and clarify the nature of 'nuptiality':

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[128] Brenda Almond, "Human Bonds", in Brenda Almond and Donald Hill (Eds.), *Applied Philosophy: Morals and Metaphysics in Contemporary Debate* (London: Routledge, 1991), p. 60.

[129] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), p. 103

[130] Christopher West, *Theology of the Body Explained* (Herefordshire: Gracewing, 2003), p. 74

> Man is not fully human - his creation is not complete - until he emerges in his "double unity" as male and female. Double unity speaks of a "two-in-oneness," which is man's completeness.[131]

It has been argued already that one does not just *have* a body but one can say with Marcel that, in a sense, one *is* a body. When what one *shares* with another is one's body, then one can say that this mutual possession takes on an element of the sharing of *being* ; nuptiality is not just a sharing of what one *has* but also of what one *is*. Because it is in the *having* mode, the body is something that can be shared. Because it is also an aspect of the *being* mode, the sharing of the body is, in a sense, the sharing of one's very being, "an overcoming the frontier of solitude,"[132] an overcoming the limitations of what Lonergan means to be a "unity-identity-whole."

Following Marcel's logic, one can suggest that the more the body is viewed as mere property, as something in the *having* mode, as something to be used, the more insecure must be one's attitude towards it, the more one feels, at least potentially, divorced from it. This is an inevitable product of both philosophical extremes of Cartesian dualism, on the one hand, and what might be termed 'animalism' on the other. But "man can be neither reduced to the material world nor divorced from it." [133] The only solution is that suggested by John Paul II in his *Theology of the Body*[134]*:* the suggestion that what is needed is a more integrated view of intellect, will, emotion, and corporality, where the body is given its true position of importance in the life of the human person.

Again, one cannot say that the human person simply *has* a body, as this implies that it is somehow disposable or separable from the person. Nor can one say that the person *is* a body. One can, however, say that corporality or embodiment is a characteristic of the human person, just as intellect, will, and potential for consciousness are characteristics of the person. The body is unique in that it hovers or is median between what is *had* and what *is*. Cain says that "corporality is on the frontier between being and having."[135] In so far as it is *had*, one can say that it is the medium whereby the person manifests himself. One can say that the person is mediated to the world by the body, and that the world in turn is mediated to the

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[131] Ibid.

[132] Ibid., p. 77.

[133] Ibid., p. 22.

[134] John Paul II, *The Theology of the Body* (Boston: Pauline Books and Media, 1997)

[135] Seymour Cain, *Gabriel Marcel* (London: Bowes & Bowes, 1963), p. 62

person by the same body.

Likewise, one nuptial partner is mediated to another by the body. But it is at the border between *being* and *having* that these two lives meet. It is because this border is itself imprecise and ambiguous, not precisely in the *being* mode and not precisely in the *having* mode, that two separate beings can almost merge, "almost" in the same sense in which *being* and *having* in this case are "almost" inseparable, and yet "almost" separable. It is in this sense that Marcel can say:

> When I say a being is granted to me as a presence or as a being (it comes to the same, for he is not a being for me unless he is a presence), this means that I am unable to treat him as if he were merely placed in front of me; between him and me there arises a relationship which, in a sense, surpasses my awareness of him; he is not only before me, he is also within me - or, rather, these categories are transcended, they have no longer any meaning.[136]

Yet Marcel neglects the fact that the person is not just relational but also substantial, a being-for-itself, with a discrete intrasubjectivity. He also neglects the fact that one of the factors which facilitates such a "transcendence" of the notions of "before me" and "within me" is affectivity or emotion, by which I am able to make an assent to her as a person and experience 'fellow feeling' or empathy for her as well as 'psychic contagion' or sympathy, and 'emotional identification'. Linked to all of these is the intellectual capacity to place oneself mentally 'in another's shoes', to transcend self with its egocentric perceptions and see things from another's angle and to experience things as 'one feels' that the other experiences them.

17.9.4 *John Bowlby's Attachment Theory*

It has been argued already that the *having* mode is inherently insecure. This applies also to one's attachments, in the degree to which these attachments are in the *having* mode. Bowlby's theories have already been referred to at various points throughout this study. The theme of 'attachment theory' has been described by Bowlby as "the making and breaking of affectional bonds." Jeremy Holmes explains Bowlby's attachment theory more fully as follows:

> *'Attachment'* is an overall term which refers to the state and quality of an individual's attachments. These can be divided into secure and insecure attachment. Like many psychodynamic terms, 'attachment' carries both experiential and theoretical overtones. To feel attached is to feel safe and secure. By contrast, an insecurely

[136] Gabriel Marcel, Manya Harari trans., "On the Ontological Mystery", *The Philosophy of Existence* (London: Harlill Press, 1949), p. 24.

> attached person may have a mixture of feelings towards their attachment figure: intense love and dependency, fear of rejection, irritability and vigilance.[137]

One cannot help but have attachments, positive or negative, secure or insecure. One can best describe Bowlby's notion of attachment as a central, primary habitual relationship or bond with another significant person in one's life, which is so primal or basic that it generalises into an all pervading attitude or habit of reaction to the world at large, colouring one's reactions to people and to events in one's life. Holmes continues:

> Attachment and attachment behaviour is based on an *attachment behavioural system*, a blueprint or model of the world in which the self and significant others and their interrelationship are represented and which encodes the particular pattern of attachment shown by an individual. The ambivalently attached person we have described might have a working model of others as desirable but unreachable, and of themselves as unworthy of support and love, and/or of an unreliable and rejecting attachment figure with a protesting, attacking self.[138]

This "attachment behavioural system" of Bowlby is more than just the network of one's intentional bonds. It is rather the foundation upon which this network is laid down and which, therefore, colours and influences the very nature and style of one's relationship to the world at large. This has an important bearing on one's adult life and has an even more profound educational influence on the child. One can argue that an understanding of the dynamics of such bonding and of attachment theory in general is of immense educational significance:

> All of these studies strongly support the view that children deprived of maternal care, especially if raised in institutions from under the age of seven, may be seriously affected in their physical, intellectual, emotional and social development.[139]

It has been mentioned already that Freudian psychoanalysis offered two different accounts of the infant-mother bond: drive theory and object-relations theory. Both of these were, in Bowlby's eyes, seriously flawed. The first, 'classical' drive-theory account came from Freud's early attempts at formulation. Here the bond which links mother to infant is said to be 'libido', a type of psychical energy. According to this view, the new-born infant lives in a solipsistic world of 'primary narcissism' and experiences a build-up of tension whenever there is the need to

[137] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 67.
[138] Ibid., p. 68.
[139] Ibid., p. 39.

feed, to suck the breast. The mother provides the vehicle for the discharge of this libido. If she, or her breast, is absent, tension arises due to undischarged libido which is felt by the infant as anxiety. The baby learns to love the mother because she feeds him, and so reduces the inner tension which is felt as anxiety. Bowlby dismisses this as "the cupboard love" theory of relationships.

In *Inhibitions, Symptoms, and Anxiety*, Freud in 1926 changed his theory from one of 'dammed-up' libido to the theory of 'signal-anxiety'. Here anxiety is felt whenever there is actual or threatened separation from someone who is loved and longed for. The basis for this love, however, still remained the satisfaction of physiological needs. Freud explains:

> The reason why the infant in arms wants to perceive the presence of its mother is only because it already knows by experience that she satisfies all of its needs without delay. The situation, then, which it regards as a 'danger' and against which it wants to be safeguarded is that of non-satisfaction, of a growing tension due to need, against which it is helpless.[140]

According to Bowlby, Freud failed to take the all-important step of seeing attachment between the infant and mother as a psychological bond in its own right, not solely as an instinct derived from feeding or from what he termed 'infantile sexuality'.[141] Bowlby explains:

> The young child's hunger for his mother's love and presence is as great as his hunger for food. ... Attachment Theory provides a language in which the phenomenology of attachment experiences is given full legitimacy. Attachment is a 'primary motivational system' with its own workings and interface with other motivational systems.[142]

Furthermore, Holmes explains that:

> Secure attachment provides an external ring of psychological protection which maintains the child's metabolism in a stable state, similar to the internal physiological homeostatic mechanisms of blood pressure and temperature control.[143]

Thus, Bowlby manages to combine the notion of homeostasis with the inherent transcendent nature of the human organism. While he never uses the term 'intentionality' it is clear that for him the intersubjective bond is in itself transcendent, reaching out to objects in the child's environment:

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[140] Sigmund Freud, *Inhibitions, Symptoms, and Anxiety* (London: London: Hogarth, 1926), p.
[141] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 63.
[142] John Bowlby, *Attachment and Loss*, Vol. 2 (London: Hogarth Press, 1973), p.
[143] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 66.

> Attachment is mediated by looking, hearing and holding: the sight of my loved one lifts my soul, the sound of her approach awakes pleasant anticipation. To be held and to feel her skin against mine makes me feel warm, safe and comforted, with perhaps a tingling anticipation of shared pleasure. But the consummation of attachment is not primarily orgasmic - rather, it is, via the achievement of proximity, a relaxed state in which one can begin to 'get on with things', pursue one's projects, to *explore*.[144]

As a scientific body of learning, 'attachment theory' has two great advantages over more traditional Freudian psychoanalysis. First, it rests on direct observation of parent-child interaction, rather than on retrospective reconstructions of what may or may not have gone in a person's past. Secondly, it starts from the observation of normal development, which can then be used as a better yardstick against which to understand psychopathology, rather than building a theory of normal development from inferences made in a consulting room.[145] In a statement which would strike a sympathetic cord with Feuerstein, Bowlby says:

> The human psyche, like human bones, is strongly inclined towards self-healing. The psychotherapist's job, like that of the orthopaedic surgeon's, is to provide the conditions in which self-healing can best take place.[146]

The core state of a person's horizon is a condensed view of the history of his primary relationships and the strength or weakness of the bonds they formed. If this history is available to him in the form of a personal narrative, then he is likely to gain a greater insight into problems and objectify them and, hence, accept them. Thus Bowlby's, like all forms of psychoanalysis, is based on the Delphic injunction: "Know thyself". Bowlby would say that the aim of making the unconscious conscious can be reformulated as "knowing and owning one's story." Knowing one's story in Bowlbian psychoanalysis means revisiting one's past, reliving it with the aid of the therapist, gaining insight into it, formulating that insight, judging whether that formulation really does fit the facts, and finally, by 'assenting' to the goodness and value of that same knowledge, gaining "a sense of ownership" by appropriating it into one's cognitive and emotional scheme. Holmes summarises:

> Narrative turns experience into a story which is temporal, is coherent and has meaning. It objectifies experience so that the sufferer becomes detached from it, by turning raw feeling into symbols. It

[144] Ibid., p. 67.

[145] Ibid., p. 104.

[146] John Bowlby, A Secure Base: Clinical applications of Attachment Theory (London: Routledge, 1988), quoted in Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 149.

> creates out of fragmentary experience an unbroken line or thread linking the present with the past and future. Narrative gives a person a sense of ownership of their past and their life.[147]

17.9.5 *The Family*

Bowlby would agree with Almond when she says that the "quintessential network of bonding is the family." Indeed, one can make the case, as Bowlby does, that all of the intersubjective bonds described above are found first and foremost in the family, and only later, by extension, in society. For example, Almond makes the interesting observation:

> It is, for example, a feature of religions and political movements that they attempt to secure the intimate effectiveness of family bonds to weld together 'in one' ... their disparate members. Hence, the use of terms like 'father', 'brother', 'sister', 'son', 'daughter', as ways of addressing fellow members of church or party.[148]

The family is also generally thought of as being more 'natural' (in the sense used by Finnis), more humanly intimate, and even representing a more basic, and hence prior, human need. Rousseau, for example, says that "the most ancient of all societies and the only natural one, is that of the family."[149] This sentiment of Rousseau's that the family is the most natural society may be found echoed again in a contemporary text-book of family therapy: "Family therapy can be defined as the psychotherapeutic treatment of a natural social system, the family."[150]

At the core of each family is a marriage, or its equivalent. Such a coming together of two people may include all or some of the intersubjective bonds treated above. Bowlby saw marriage, or its equivalent, as the adult manifestation of attachment "whose companionship provides a secure base allowing for work and exploration, and a protective shell at times of need."[151] Unlike Freud for whom mutual love and affection was simply 'aim-inhibited', or 'sublimated', sexuality, Bowlby saw bodily pleasure not as an aim in itself but as a "signpost to the object,"

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[147] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 150. sic

[148] Brenda Almond, "Human Bonds", in Brenda Almond and Donald Hill (Eds.), *Applied Philosophy: Morals and Metaphysics in Contemporary Debate* (London: Routledge, 1991), p. 60.

[149] Jean-Jaques Rousseau, "On the Social Contract," in D. A. Cress (Ed.), *The Basic Political Writings of Jean-Jaques Rousseau* (Indianapolis: Hackett Publishing Company, 1987), p. 142.

[150] S. Walroad-Skinner, *Family Therapy: The Treatment of Natural Systems* (London: Routledge & Kegan Paul, 1976), p. 1.

[151] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 81.

a means towards the greater end of cementing the relationship and procreating children. Just as the mother-infant relationship cannot, in Bowlby's eyes, be understood as primarily based on feeding and on purely physical and biological bonding, so adult pair-bonding cannot be explained adequately by sexuality alone. "'In sickness and in health' is a reminder that the psychological purpose of marriage is to provide a secure base and an attachment system which can be awakened in times of need."[152] Bowlby insists:

> All of us, from the cradle to the grave, are happiest when life is organised as a series of excursions, long or short, from the secure base provided by our attachment figures.[153]

Returning to the theories of Lonergan, through the writings of Crowe, one can say that the 'way of heritage', as the name implies, has its origins in the family and thus "begins in the affectivity of the infant"[154] and "rests on trust and belief."[155] And what is the source of this belief and trust and of the love which has been shown to underpin both? Crowe answers:

> It comes from the parents, beginning in their total commitment to one another and extending to their children, to include them all in one strong circle, to make of the home a single unit, knit together by manifold bonds, bonds of common interests and concerns, surely, but still more bonds of an affection that finds its object rather in the family as a whole rather than in individual members. This love of parents the children learn to reciprocate; *cor ad cor loquitur* in mutual exchange; and prior to all exchange of messages, words and deeds of love, there is the gift of love itself.[156]

Such a family teaches, or rather 'mediates', many things to the child. The mediation may not be structured, formal, or, at times, even conscious. Yet through the family the child is taught many things from practical skills, including how to behave in society, to deeper lessons of values, meanings, and attitudes that become part of the young personality and guide his conduct for years, maybe throughout life. Crowe explains that

> the lessons may be only implicit, the guidance may be only that of a remembered scene or event, rather than of a precept, but the influence is nonetheless real.[157]

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[152] Ibid., p. 82.

[153] John Bowlby, *A Secure Base: Clinical Applications of Attachment Theory* (London: Routledge,1988), p.

[154] Frederick E. Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985),p. 17

[155] Bernard Lonergan, "Theology and Praxis" in Frederick E. Crowe (Ed.), *A Third Collection: Papers by Bernard J.F. Lonergan, S.J.* (New York: Paulist Press, 1985), p. 197.

[156] Frederick Crowe, *Old Things and New: A Strategy for Education* (Atlanta, GEO: Scholars Press, 1985), p. 18

[157] Ibid., p. 19

Such mediation by the family or significant others within the child's milieu is vital to the proper cognitive development of the child. This is treated in some detail in the part of this study dealing with Feuerstein's 'mediated learning experience'.[158] Suffice it to say that where children are lacking such mediation, proper cognitive growth is impaired. Feuerstein terms this 'cultural deprivation'; Bowlby prefers to use the term 'maternal deprivation.' In both cases what is produced is a child with a propensity to *have* rather than to *be*. Fromm explains:

> While the having persons rely on what they *have*, the being persons rely on the fact that they *are*, that they are alive and that something new will be born if only they have the courage to let go and respond. They come fully alive in the conversation, because they do not stifle themselves by anxious concern with what they have. Their own aliveness is infectious and often helps the other person to transcend his or her egocentricity. Thus the conversation ceases to be an exchange of commodities (information, knowledge, status) and becomes a dialogue in which it does not matter any more who is right. The duellists begin to dance together, and they part not with triumph or sorrow - which are equally sterile - but with joy."[159]

17.10 *Chapter Conclusions*

This last chapter has attempted to do something which Lonergan in his writings left unfinished, that is deal with the notion of intersubjectivity directly and explicitly as a topic in its own right. At the same time it has sought to summarise and bring to a conclusion many of the ideas introduced in earlier chapters. Thus, for example, Lonergan's dynamic mental operations are here reconsidered, but from an intersubjective viewpoint, a viewpoint in which the intentional object is another human subject. The notion of intentionality also makes a reappearance, this time as 'co-intentionality', a concept borrowed from Freire. And, since Lonergan considers intersubjectivity and intersubjective meaning primarily from an affective viewpoint, the whole realm of the human emotions has also been revisited, but again from an intersubjective stance.

Once more the theories of Edmund Husserl are returned to, and once more the conclusion is drawn that for all the importance he attaches to intersubjectivity in his various writings, Husserl's theories are not quite adequate for explaining man's

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[158] See Sections 12.8 to 12.10.

[159] Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.42.

perception and understanding of other selves. Lonergan's theories, on the other hand, unencumbered by the phenomenological method, do seem to offer a more satisfactory basis for a philosophical theory of intersubjectivity. The chapter has also tried to show that, by adding the notion of the 'intentional bond', Lonergan's theories on affectivity can be integrated with, and supplemented by, the extensive clinical findings of John Bowlby, in much the same way as Feuerstein's clinical findings extended and supplemented Lonergan's more intrasubjective cognitive theories and his theory of mediation. The notions of the intersubjective bond, when added to Bowlby's attachment theory with its notion of 'maternal deprivation', lead naturally to a consideration of that most natural of all human societies, the family.

Finally, since education and development are closely interlinked, Piaget and Erikson were returned to in order to give a developmental perspective to the notion of intersubjectivity. The close link between the theories of Piaget and Lonergan has been argued in earlier chapters. This chapter, while displaying the similarities between the intersubjective theories of Piaget and Erikson, has also attempted to identify and define a correlation between the theories of Erikson and those of Lonergan.

Part V

Conclusions

Chapter 18

Conclusions: An Answer to the Challenge

> "And this I believe: that the free, exploring mind of the individual human is the most valuable thing in the world."[1]
>
> John Steinbeck

18.1 *Introduction*

18.1.1 *A Review of the Aims of the Study*

The general conclusion of any study necessarily involves an attempt to 'bring it all together'. In this case the general conclusion will attempt to show that the study has established, realised, or fulfilled, the two aims which were set down in the Introduction:

1) To examine the relevance of Lonergan's theories as a foundation for a comprehensive philosophy and theoretical model of the educational process;

2) To explore the possibility of a practical pedagogical method based on such a model or philosophy, and particularly on the 'self-appropriation of cognitive interiority' which is an integral part of it;

Apart from Lonergan's method of 'self-appropriation of interiority', the other method of 'proof' adopted by this study has been described as 'the method of converging theories'.[2] This is the preferred method of Jean Piaget,[3] and such a method necessarily entails a synthesis, a 'grand scheme', a bringing together and collating of the theories of many different philosophers, psychologists, and educationalists. By demonstrating the 'convergence' or compatibility of Lonergan's

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[1] John Steinbeck, *East of Eden* (London: Penguin Books, 2000), p. 134.

[2] See Section 1.8.2

[3] Jean Piaget. Closing remarks, in D.R. Green et al (Eds.) *Measurement and Piaget* (London: McGraw-Hill, 1971) p. 213.

insights with these theories, the study attempts to establish the validity of these same insights, bearing in mind that, strictly speaking, "proof is a concept that should be restricted to closed systems, such as mathematics."[4]

The construction of such a 'grand scheme', whether in educational philosophy or any other area of human knowledge, is rather like the construction of a gigantic jigsaw puzzle. The pieces lie scattered all over the table in apparent confusion. Yet here and there lie assembled fragments of the whole, some big, some small, like growing islands of colour and form in a sea of chaos and uncertainty. Such islands display tantalising glimpses of what the whole picture might look like if only some connection, some bridge, some relation, could be found between them. One rejoices to find an apparent edge piece with link nodes pointing conveniently inwards; here at last is a potential outline, a frame, a limit within which the whole picture might be contained. Alas, all too soon one finds to one's dismay that, after all, a lone link piece faces stubbornly outward into the apparent void beyond.

The problem lies in the fact that the emerging picture is not a pre-given one; it does not involve a one-to-one relation with reality. What is emerging is more a metaphor of the real, one's own personal view. It is coloured and textured by reality, but it is nonetheless straightened and formed and filtered by the limitations of one's own horizon. The picture is not an empiricist one, nor is it a neo-Thomist 'naive realist' rendering of reality. Neither is it a subjectivist or idealist projection of inner form. It is rather a 'critical realist' synthesis which steers a golden mean between extreme realism on the one hand and Kantian or Hegelian idealism on the other. This study has been an attempt at such a critical realist synthesis. Whether this synthesis may be deemed brave or foolhardy, a success or a failure, is for others to judge. One thing, however, is quite clear: it is coloured as much by the interests and biases of its author as it is by so called 'objective' observation and logical reasoning. Piaget, like Lonergan, grasped this very well; Gruber, for instance, says of Piaget:

> Very early in the course of his investigations, Piaget recognised that the child's cognitive growth does not occur as a passive reflection or copy of external events impinging on his sensory system, but through his own activity, constantly structuring and restructuring his own schemata, i.e., actively structuring the world he cognizes.

[4] David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art* (London: Thames and Hudson Ltd., 2002), p. 48.

> Thus, when Piaget speaks of the early phase of childhood mentality as the "sensory-motor period" he is not simply describing the brute fact that the child is born with both sensory and motor equipment. Piaget's use of the term "sensory-motor" reflects his rejection of the *empiricist* or copy theory of knowledge and captures his belief that knowledge arises in the organism's activity, not in the passive experience of a scissile sensorium.[5]

Piaget, like Lonergan, appears to hold to the critical realist mean. In *Insight and illusions in Philosophy,* for example, he says that there is "no such thing as a pure fact, ... It always involves an interpretation."[6]

18.1.2 *General Overview of the Work*

The study was divided into five main Parts. Part I, consisting of four chapters and dealing with general philosophical and psychological considerations, sought to place Lonergan's theories in context, as it were, and to lay the foundation on which the study as a whole was to be built. The first chapter acted as an introduction, and considered the relationships between education, science and philosophy. It was also designed to expand and clarify the overall aims of the work. It concluded that If education were ever to emerge as a science in its own right, its theories would need to be consistent with the findings of the various related sciences - psychology, sociology, and neurology, for example. But because the object of education is the human person and his development, then philosophy must have a guiding role in the emergence of such theories, since, it is argued, only philosophy can take the broader view and do justice to the human person in all his depth and complexity.

The second chapter gave an introduction to Lonergan and his general philosophical theories. It sought to give a glimpse of Lonergan 'at home', as it were, by dealing with his origins and background, and with how he related to those of his own 'family' in the Thomist tradition. At the same time, it aimed to give an overview of the original Thomistic notion of intentionality, which has played such a central part in this study. The chapter concluded that, while Lonergan certainly sought to be faithful to Aquinas' original method, his aim was to go beyond Aquinas and to adapt and update classical or Thomist philosophy in order to take into consideration the enormous developments that have taken place in science over the past seven centuries. This he undertook in response to the aspiration of Leo XIII, "*vetera novis*

[5] Howard E. Gruber, "Courage and Cognitive Growth in Children and Scientists", Schwebel and Raph (Eds.), *Piaget in the Classroom* (Routledge & Keegan Paul, 1974), p. 75.

[6] Jean Piaget, *Insights and Illusions of Philosophy,* (Routledge & Kegan Paul, London, 1972), p. 32.

augere et perficere", to develop and perfect the old by means of the new.

The aim of the third chapter was inevitably more difficult. It involved placing Lonergan 'in context', as it were, among the non-Scholastic contemporary philosophers of his own time. This was necessary, to some degree, because modern philosophy has appropriated the Scholastic notion of intentionality to its own ends. The task is a difficult one because philosophy today is a much more disparate discipline than at any stage in its history.[7] The chapter examined not only those philosophers like Brentano and Husserl who were influenced to some degree by Scholasticism, at least in regard to their concepts of intentionality, but also others like Gabriel Marcel and John Dewey who were subject to no such influence but whose common ground with Lonergan was used to elaborate and extend his thinking. More importantly, because of the areas of common ground identified between these theories and those of Lonergan, and because of the ease with which Lonergan's system appears capable of subsuming or 'sublating' these theories to itself, the chapter lends some credence to Lonergan's claim to have produced 'a philosophy of philosophies', a secure base from which different philosophies can be compared and contrasted with one another, "a philosophy that is capable of performing an integrating function with regard to knowledge in general."[8]

The fourth chapter, dealing with Lonergan's place in modern psychological thought, introduced the reader to some other major thinkers in the field of education - Jean Piaget, Lev Vygotsky, and Reuven Feuerstein. These latter are important in that their theories have allowed a clarification and expansion of Lonergan's own thinking. Their theories, in other words, permitted a further development and expansion of the theoretical scheme or model arising from this work and, as a consequence of this, their theories are referred to repeatedly throughout the study. This chapter not only illustrated the degree to which Lonergan leaned on the work of Piaget for considerations of what might be termed the 'genetic development' of the human person, but also suggested that the theoretical stance adopted by Lonergan appeared to be more consistent with the theories of Vygotsky than those of Piaget. This chapter also introduced Feuerstein's notion of 'mediated learning experience' which was to form the basis, in later chapters, for a practical pedagogy

[7] See Edmund Husserl, *Cartesian Meditations,* (Kluwer Academic Publishers, Dordrecht, 1995), pp. 4 & 5, and Bernard Lonergan S.J., *Method in Theology*, (Darton, Longman & Todd, London, 1972), pp. 20 - 21.

[8] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 102.

incorporating Lonergan's cognitional theories.

Part II of the study, consisting of Chapters Five to Seven, dealt with "The Intrasubjective Nature of Man", man in his interiority, man as person and subject. Chapter Five, for example, gave an overview of Lonergan's basic cognitive philosophy, which formed the foundational 'model' for all that was to follow in subsequent chapters. In this chapter an attempt was made to follow the same route as Lonergan's own thinking, from his dynamic structure of coming to know, through an account of his 'pure desire to know' and intentionality, to a consideration of his 'notion of being' and his definition of being as the object of the pure desire to know, and ending with his notion of objectivity as "authentic subjectivity." The classic statement of this programme is given in Lonergan's well known dictum with which *Insight* begins and ends:

> Thoroughly understand what it is to understand, and not only will you understand the broad lines of all there is to be understood but also you will posses a fixed base, an invariant pattern, opening upon all further developments of understanding.[9]

Since one of the primary objects of this study is to widen and expand the scope of Lonergan's philosophy so that it more readily forms the basis for a philosophy of education, several new non-Lonergan terms were introduced and defined in Chapter Six, dealing with the "The Primary Modes of Human Existence." This chapter adopted an essentially existentialist approach and introduced the terms *'being'*, *'having'*, and *'doing'* , for example, which derive from the theoretical work of Marcel and Fromm, and which constitute Rand's 'triarchic model' of human existence. This model, with the addition of the author's own notion of *'work'* as a human activity which adds value both to the human person himself and to his world, laid down an expanded model which was later used to develop further the basic theoretical framework of Lonergan.

However, since education deals essentially with the development of individual human persons, rather than of disembodied minds, as an indiscriminate use of the words 'cognitive' or 'cognitional' might sometimes seem to imply, Chapter Seven examined what Lonergan meant by the term 'person' and how this related to his various other philosophical concepts such as 'subject' and 'thing'. This chapter, in other words, provided an opportunity to describe, explain, and define many more

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[9] Ibid., p. xxviii.

of the philosophical terms which are used extensively throughout this work. For example, it introduced for the first time the notion that the human person is not only transcendent by nature, but that this transcendence leads naturally to considerations of intersubjectivity. This chapter also sought to show that notions of transcendence and intersubjectivity are a natural consequence of the very notion of 'being' itself, as it is employed in this study. While this is consistent with the work of Aquinas and, by extension, with that of Lonergan, it was argued that Lonergan did not adequately develop this aspect of the notion of being. Because of this, the works of W. Norris Clarke, a fellow Jesuit and Thomist, were turned to and referred to extensively by way of support. Chapter Seven also sought to redress Lonergan's 'intellectualist bias' by a detailed treatment and analysis of the notion of corporality and its implications for a theory of education.

Having sought to establish the premiss that man has an intrasubjective nature in Part II, Part III of the work then sought to show that man also has a transcendent nature. For example, the first chapter of this section, Chapter Eight, attempts to show that man by his very nature is self-transcendent, and that this view is as apparent from his biological and psychological development as it is from the inherent intentionality of his mind. This chapter also introduces the notions of a 'cycle' and 'spiral' of growth, as reflected not only in organic development, but as also applicable to cognitive development, thus forming a type of underlying model, or rule, or law of nature. The theories of Piaget, Erikson, and Feuerstein, introduced in Part II, are appealed to in support of this hypothesis. Chapter Nine then follows with a more detailed exposition of Lonergan's notions of consciousness and of what he terms 'self-appropriation' of interiority', both of which, it is argued, are inherent and essential aspects of man's transcendent nature. This chapter also introduces Lonergan's notion of emotion or feeling as the 'intentional response' to a perceived good or value, a notion which is used extensively throughout the later parts of the study. One of the most central conclusions of this and later chapters is that what Lonergan is attempting to achieve in *Insight* through what might be termed 'guided self-appropriation of interiority' is very similar to what Feuerstein is attempting to achieve through his Mediated Learning Experience (MLE) and his Instrumental Enrichment (IE) programme.

Chapters Ten, Eleven, Twelve, and Thirteen are an attempt to examine Lonergan's 'transcendental precepts' in such detail as to constitute a type of 'self-

appropriation of interiority' in themselves. To approach this investigation from a purely theoretical viewpoint would, as an exercise, enhance only the *'having'* mode of both the author and the reader. Like Lonergan in *Insight*, one of the aims of this study is also to aid 'self appropriation' and hence to achieve an enhancement of what is termed the *'being'* mode of living. Chapters Ten to Thirteen, in particular, set this process in train. Concepts and ideas already introduced in the first chapters are repeated, expanded, and clarified in these later ones. There is a clear logic to such repetition, both from a pedagogical viewpoint and also from the point of view of the organisation of this work: as one seeks for ever higher viewpoints on Lonergan's philosophy, one necessarily subsumes or 'sublates' all of the previous insights into the newer and higher structure of knowledge. One of the important achievements of this subsection is also the way in which a marriage of the theories of Susanne Langer with those of Lonergan, an alliance of considerable benefit to both, succeeds in throwing light on the role of music and of the arts in general in education.

Having sought to establish the premiss that man has an intrasubjective nature in Part II, and that an essential part of that intrasubjective nature is its inherent transcendent quality in Part III, Part IV seeks to show that man's intersubjective nature is a natural consequence of both. Part IV, in other words, deals with man from an intersubjective and cultural perspective. Chapter Fourteen, for example, brings together Lonergan's 'two ways of human development' and integrates them with the notion of 'cultural deprivation' as expounded by Feuerstein. This chapter also deals at length with the notions of love, care, belief and trust as the main motivators of intersubjective relations. The work of Josef Pieper augments, complements, and expands the work of Lonergan throughout this section. Chapter Fifteen then offers a model for human intersubjectivity based on Lonergan's notion of mediation, while Feuerstein's 'mediated learning experience' (MLE) extends this model into the educational arena. Thus, once again, Lonergan's theories are further expanded and 'sublated' into what Lonergan would describe as a 'higher viewpoint'. This synthesis is further reinforced, concretised, and made relevant to the field of practical pedagogy by a consideration in Chapter Sixteen of the role of questioning in mediation. This chapter also attempts to illustrate how Lonergan's 'self-appropriation of interiority' might be 'taught' to a group of children or young adults with the aid of Feuerstein's theories of Mediated Learning and with the

materials, or 'instruments', of his Instrumental Enrichment Programme.

Further educational expansion is achieved through a more detailed theoretical treatment of Lonergan's theories of intersubjectivity in Chapter Seventeen. This chapter also attempts a comparison between the theories of intersubjectivity of Lonergan and and those of Husserl. While this inevitably involves a somewhat heightened level of abstraction, the exercise was deemed necessary because Husserl is widely regarded as the major philosophical authority on the notion of intersubjectivity. The chapter concludes that Lonergan's theories provide a more useful foundation from which to consider intersubjectivity than do the theories of Husserl, in which certain inherent contradictions were identified. The study then returns to earth, as it were, with the more concrete examination of the developmental aspects of intersubjectivity, and of the role of the family in education. The assimilation of the theories of John Bowlby into the overall scheme or model was attempted through the introduction of this author's own notion of the 'intentional bond'.

Part V now constitutes the conclusion of this work. It is first of all an attempt to bring together the findings of the study and to integrate them with a consideration of the educational needs of a rapidly changing world. An attempt is made to show that what is sorely needed and sadly lacking in this challenging era is what this study defines as education for *being*. Then, an attempt is made to show that a possible answer might lie in integrating what Lonergan terms 'self-appropriation of cognitive interiority' into the practice of education. It has been argued already that, far from being overly abstract and esoteric, a concrete practical methodology is already available for the realisation of this end. This is constituted by Feuerstein's Mediated Learning Experience (MLE) and his Instrumental Enrichment programme.

This final chapter, in other words, while offering a review of the study and its findings, also attempts to lay bare the challenges facing educators in the new millennium, and attempts to show that the solution to the problem lies essentially in Lonergan's scheme. As investigated in this study, however, it is clear that Lonergan's theories alone will not provide an adequate pedagogy. It is argued that they require in addition the further theoretical elaboration provided by Marcel, Langer, and others and, more importantly, that they require a practical theory and methodology like that proposed in Feuerstein's theory of Mediated Learning

Experience and his related Instrumental Enrichment programme. If it manages to establish all of this with sufficient conviction, then it will have accomplished at least the first two of the threefold aims put forward at the start of this chapter. Since it may be argued that there is no such thing as 'proof' outside of a closed quasi-mathematical system, success or otherwise must be gauged through the dual lenses of convergence of theories and 'self-appropriation of interiority'. 'Convergence', it must be remembered, consists in illustrating how Lonergan's theories are consistent with, or dovetail and 'interface' with, the theories of a wide variety of thinkers some of which, like the theories of Piaget, Vygotsky, and Feuerstein, are based on solid empirical research findings.

18.2 *Education for a Changing World*

Chapter One of this study began with a quotation from Seymour Papert bemoaning the fact that, unlike pedagogy or teaching, no art or science of *learning* existed. It is fitting that this concluding chapter should return to Papert's work to consider why it is particularly urgent at the start of the third millennium to redress this serious imbalance. Papert explains:

> It is often said that we are entering the information age. This coming period could equally be called the age of learning: The sheer quantity of learning taking place in the world is already many times greater than the past.

Piaget himself puts this more succinctly when he states:

> The current state of knowledge is a moment in history, changing just as rapidly as the state of knowledge in the past has ever changed and, in many instances, more rapidly.[10]

Papert continues:

> Not very long ago, and in many parts of the world even today, young people would learn skills they could use in their work throughout life. Today, in industrial countries, most people are doing jobs that did not exist when they were born. The most important skill determining a person's life pattern has already become the ability to learn new skills, to take in new concepts, to assess new situations, to deal with the unexpected. This will be increasingly true in the future. The competitive ability is the ability to learn.[11]

Papert appears to be suggesting that the ability to relearn, the capacity to be retaught, with its attendant mental flexibility, or what Feuerstein terms 'cognitive

[10] Jean Piaget, *Genetic Epistemology* (New York: University of Columbia Press, 1970), p. 2.

[11] Seymour Papert, *The Children's Machine - Rethinking School in the Age of the Computer* (London: Harvester Wheatsheaf, 1993), p. vii

modifiability', is the most urgent need today. For Piaget, as for Lonergan, knowledge is a process of continual change, a process of construction and reorganisation, a process of becoming. "Knowledge," Piaget says, "is currently coming to be considered more and more as a process rather than as a state."[12]

More starkly, the Harvard Business School professor, Joseph Schumpter, has described the modern world, the world for which children are being educated and prepared, as a world of "creative destruction". Friedman explains what he means:

> Innovation replaces tradition. The present - or perhaps the future - replaces the past. Nothing matters so much as what will come next, and what will come next can only arrive if what is here now gets overturned. While this makes the system a terrific place for innovation, it makes it a difficult place to live, since most people prefer some measure of security about the future to a life lived in almost constant uncertainty. ... We are not forced to re-create our relationships with those closest to us on a regular basis. And yet that is precisely what ... is necessary to prosper [today] [13]

He continues:

> If the defining anxiety of the Cold War was fear of annihilation from an enemy you know all too well in a world struggle that was fixed and stable, the defining anxiety in globalization is fear of rapid change from an enemy you can't see, touch or feel - a sense that your job, community or workplace can be changed at any moment by anonymous economic and technological forces that are anything but stable.[14]

Thus, while the modern world is witnessing a period of unprecedented innovation, it is also suffering the inevitable effects of the upheaval and insecurity which accompanies such rapid change. John Bowlby argues that such insecurity has an inevitable effect on the education and development of the next generation:

> The insecurity or otherwise of its citizens will affect the general cultural and economic conditions of society, and thus the cycle is complete as these factors have their impact on child care in the next generation.[15]

In other words, in today's world emerging global forces continue to have an impact on all economies, rich and poor alike, and, through economics, on all

[12] Jean Piaget, *Psychology and Epistemology* (London: The Penguin Press, 1970), p. 2
[13] Thomas L. Friedman, *The Lexus and the Olive Tree* (New York: Random House, 2000), pp. 11 - 12.
[14] Ibid., p.12.
[15] Jeremy Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), p. 204.

sectors of society. Survival in this world of 'globalisation' demands continual restructuring, amalgamation, 'downsizing', and adjustment of public and private sectors of the economy. This process of "creative destruction"[16] is, in turn, having an enormous influence on the lives of countless individuals the world over, and consequently on social and educational attitudes. Crowe echoes this when he says:

> This is a time of great and rapid change, and many bastions of tradition are falling, and the rest are subject to criticism. But that only makes it the more urgent *to get down to bedrock and find the constants that really are constant in human development.*[17]

He also sees the role of the educator as assuming a "greater importance ... at the point of radical transition than in gradual day-to-day growth."[18] Papert, however, insists that economic factors and working conditions are not the only things contributing to this crisis of education:

> The rate of change in the workplace is not the only factor giving increased importance to the ability to learn. The global scale of the consequences of human actions makes it ever more urgent for us to understand what we are doing. The destruction of the upper atmosphere, the AIDS crisis, the population explosion, the breakdown in American cities and Russian villages, the plight of the African continent, and all the other issues that make daily headlines are more than desperately urgent problems. They are examples of much worse to come if human beings cannot bring themselves, on a hitherto unprecedented scale, to *learn new ways of thinking.*[19]

Again, the emphasis is on mental flexibility, cognitive modifiability, and "new ways of thinking."

In her book, *Does Education Matter,* Alison Wolf, Professor of Education at the University of London's Institute of Education, argues persuasively that expanding education thoughtlessly without returning to the drawing board, as it were, is counterproductive and appears from statistics to weaken the link between education and economic growth. She concedes that while education can certainly be viewed as a multi-billion pound industry, far too much is decided by wishful thinking and received wisdom. She concludes, for example, that the rapid expansion of education in Britain has simply not produced the desired economic

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[16] The perpetual capitalist cycle of destroying the old and less efficient product or service and of replacing it with new, more efficient ones. The term was coined by Joseph Schumpeter, Austrian Minister for Finance and Harvard Business School professor in his book, *Capitalism, Socialism and Democracy .*

[17] Frederick E. Crowe, *Old Things and New* (Atlanta, Georgia: Scholars Press, 1985), p. 64. Italics are this author's own.

[18] Ibid., p. 99.

[19] Seymour Papert, *The Children's Machine - Rethinking School in the Age of the Computer* (London: Harvester Wheatsheaf, 1993), p. viii. Italics are this author's own.

growth. However, another even more serious conclusion of her book is that the preoccupation with economic growth - the preoccupation with the *having* mode, to use the language of this study - actually has the effect of narrowing and distorting society's idea of what education should be. She concludes by saying:

> Our recent forebears, living in significantly poorer times, were occupied with the cultural, moral and intellectual purposes of education. We impoverish ourselves by neglecting these.[20]

This study is, in effect, such an attempt to return to the 'drawing board' or, as Crowe expresses it above, "to get down to bedrock and find the constants that really are constant in human development," and at the same time to re-examine critically the basic assumptions on which modern education is based. One can argue that the piecemeal or incremental approach to educational improvement, which has characterised so many recent so called 'advances', is no longer good enough in a scientific era in which space probes can be landed on distant planets with pinpoint accuracy. A much more systematic, structured, and scientific approach to education is demanded. In the opinion of this author, too many children are being let down by the present system; worse, they are often let down even when the discoveries and expertise to understand and help them have been available for decades. What is needed first and foremost is a comprehensive theory of education, an attempt to 'bring it all together' in order to provide a coherent picture of the child and his development. The modern world is desperately in need of such a system. Montessori recognised this as far back as the beginning of the last century, saying that

> humanity can hope for a solution of its problems, the most urgent of which are those of peace and unity, only by turning its attention and energies to the discovery of the child and the development of the great potentialities of the human personality in the course of its construction.[21]

It can be argued that the answer to the present world-wide crisis in education is not merely to increase the child's exposure to the new technology, nor even to revamp the school curriculum once more so that education is made to reflect more clearly the skills and knowledge base necessary to live in this "brave new world" as many, including the OECD, would have us believe. To suggest this is to miss the

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[20] Alison Wolf, *Does Education Matter? Myths About Education and Economic Growth* (London: Penguin Books: 2002), p. 254.

[21] Maria Montessori, *The Discovery of the Child* (Wheaton, ILL: Theosophical Press, 1964), p. XIV.

main point completely. In Lonergan's words, one can say that

> the point is not to provide (the student) with a stream of words that he can repeat to others or with a set of terms or relations from which he can proceed to form inferences and prove conclusions.... the point is to discover, to identify, to become familiar with the activities of one's own intelligence.[22]

The point, in other words, is to elicit an understanding of understanding, to raise the level of consciousness to the degree that the student grasps the essence of his own intellect in operation and, in Eidle's words, "to nurture its flowering in ways appropriate to its natural unfolding"[23] This is not merely what classical educationalists termed 'intellectual development' the object of which Newman proposed was "clarity of mind and accuracy of expression." It is a central conclusion of this study that the emphasis in education for a new world must be on education for flexibility of mind and a heightened level of consciousness. This is what Feuerstein terms 'cognitive modifiability' and it is realised through his Mediated Learning Experience, and through Lonergan's 'self appropriation of interiority'.

In support of this contention Naickamparambil states that "the fundamental alienation of the human person is not economic alienation, but the alienation from the transcendental imperatives imprinted in his/her nature." And again: "A conscious grasp of the transcendental method and its objectification can render the pursuit of knowledge effective and fruitful."[24] Eidle supports this view when he says: "If humanity is to make genuine progress in furthering its development, individual self-appropriation of interiority will provide a giant step forward in the process."[25]

To express this in more practical terms, the solution to the educational demands of the modern world is not simply to try to get children to learn more at an earlier age, but rather to find ways of teaching which enhance their capacity to reflect on themselves and on their world, and in this way to increase their cognitive capacity, to make them effectively more intelligent. As will be shown, this does not mean adding to what they have by nature, but rather understanding that nature and then giving it a chance to come to fruition or, in the words of Eidle already quoted above, "to nurture its flowering in ways appropriate to its natural unfolding."[26]

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[22] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longman, 1964), p. xix.

[23] William Eidle, *The Self-Appropriation of Interiority* (Peter Lang Publishing, New York, 1990), p. xv.

[24] Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 262.

[25] William Eidle, *The Self-Appropriation of Interiority* (Peter Lang Publishing, New York, 1990), p. 204.

[26] William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing,1990), p. xv.

Pope John Paul II also bemoaned the fact that

> the segmentation of knowledge, with its splintered approach to truth and consequent fragmentation of meaning, keeps people today from coming to an interior unity.[27]

This proposed new education is not just a method, but it also entails a new outlook on the learning and teaching process itself. It demands a new attitude and a more disciplined methodology on the part of educators, and by extension a new approach to the formation and training of teachers. Lonergan warns that

> the very advance of knowledge brings a power over nature and over men too vast and terrifying to be entrusted to the good intentions of unconsciously biased minds.[28]

Thus, the contemporary educator must become a facilitator, a guide, an organiser, a mediator, but no longer a "master". Maria Montessori long ago explained the difference:

> The task set before themselves by masters has generally been to mould soft material and fill empty vessels, but we must set ourselves to see the marvels hidden in the child and help him to unfold them.[29]

And again she says:

> The secret of education is to recognise and observe the divine in man; that is to know, love and serve the divine in man. To help and co-operate from the position of the creature not of the Creator. We have to further the divine work but not substitute ourselves for it, otherwise we become seducers of nature. [30]

Thus, whole chapters of this study have considered Lonergan's and Feuerstein's notions of 'mediation' and have attempted to form a synthesis of the theories of intersubjectivity of Lonergan, Husserl, and Piaget.[31] The rather startling experimental observation made by Feuerstein which demonstrated that the cognitive changes produced by his 'mediated learning experience' and Instrumental Enrichment programme not only persisted with time but was shown to be "cumulative," and to actually increase well beyond the point or time of intervention, gives new meaning to the term 'flexibility of mind'.[32] Reuven Feuerstein has proven time and again that the human mind is infinitely modifiable, even in the

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[27] John Paul II, Encyclical Letter *Fides et Ratio*, Ch. VI, Par 85, p. 28.

[28] Bernard Lonergan S.J., *Insight: A Study of Human Understanding* (London: Longmans, 1964), p. xiv.

[29] Maria Montessori, *The Child, Society and the World* (Oxford: Clio Press, 1989), p. 99.

[30] Ibid.

[31] See particularly Chapters Fifteen, Sixteen, and Seventeen of this study.

[32] Feuerstein, Rand, Hoffman and Miller, *Instrumental Enrichment: An Intervention Program for Cognitive Modifiability* (Baltimore, Maryland: University Park Press, 1980), p. 371.

so called 'retarded'. In his book *Don't Accept me as I Am* he poses two direct questions for educators which reach to the core of educational philosophy: "Do you really think that people can change?" and "Do you think that you can help them change?" If the answer is "yes" to both questions, why is this truth not carried to its logical conclusions? If the answer is "no," then what's the point of education?

Another major problem of the modern world stems not from lack of intelligence, not from lack of I.Q., nor even from lack of so called E.Q., but from a lack of respect for rationality and responsibility. Men who are capable of reasoning well when it comes to solving everyday problems or attaining short-term goals, like landing a robot on Mars, seem utterly incapable of applying the same norms to the larger problems of life and the attainment of goals that are more central to human needs. Albert Schweitzer, in his Nobel Prize acceptance speech, said:

> Man has become a superman. ... But the superman with the superhuman power has not risen to the level of superhuman reason. To the degree to which his power grows he becomes more and more a poor man.[33]

And Fromm, while highlighting the central importance of freedom, "freedom to create and to construct, to wonder and to venture," nevertheless insists that

> such freedom requires that the individual be active and responsible, not a slave or a well-fed cog in a machine. ... It is not enough that men are not slaves; if social conditions further the existence of automatons, the result will not be love of life, but love of death.[34]

Perhaps this problem also stems from a poorly developed capacity on the part of educators to distinguish appropriate priorities, like the priority of *being* over *having*. In the language of this study, education for *being* demands an in-depth understanding of the nature of the child and his world. It has been argued in this study that the ultimate education, the most central aspect of human development, is that which enhances the *being* mode of human existence. This, in Lonergan's terms, is 'self-appropriation of interiority', giving children an insight into, an understanding of, a grasp of, and, hence, a control over their own mental functioning. Feuerstein terms this 'metacognition', and such 'insight into insight' is precisely what Feuerstein's method of Instrumental Enrichment attempts to produce. This is also the point of Freire's 'problem-based' learning and also that of Eric Mazur's very successful system of 'peer instruction' introduced into the teaching of

[33] Albert Schweitzer, quoted from Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p. 11.

[34] Eric Fromm, *The Heart of Man* (New York: Routledge & Kegan Paul, 1965), pp. 52 - 53.

the sciences at Harvard.[35] Thus one finds a variety of different methods and approaches all leading towards one and the same aim, that of a more natural, a more organic, a more effective development of the human mind.

Education as a form of indoctrination, or development 'from above downwards', is all too widely practised, yet by itself it is as impoverished and inadequate a preparation for life as an ideology would be as a system of morality, or as a fundamentalist creed would be for a proper religious development. To use Lonergan's terminology, the former in each case rises only to an accumulation of insights, the latter reaches to rational reflection and mature decision. It is of ideologies that Dewey complains when he says:

> For in spite of itself any movement that thinks and acts in terms of an 'ism becomes so involved in reaction against other 'isms that it is unwittingly controlled by them.[36]

while Hugo Meynell would add:

> Education is largely a matter of getting the pupil to fulfil certain capacities. .... To educate a man is to encourage his latent capacities to follow the precepts; to indoctrinate him is to render him, in relation to the matter in which he is being indoctrinated, unable to do so.[37]

18.3 *Education for Freedom*

If to *be*, to *have*, and to *do* are primary modes of human existence, it follows that they are also central to human nature. It follows that the freedom to *be*, to *have*, and to *do* are basic human needs, and hence give rise to basic human values, according to the argument employed in Chapter Thirteen. Eric Fromm, as already quoted, speaks of "freedom to create and to construct, to wonder and to venture," and says that

> such freedom requires that the individual be active and responsible, not a slave or a well-fed cog in a machine. ... It is not enough that men are not slaves; if social conditions further the existence of

[35] Eric Mazur, *Peer Instruction* (New Jersey: Prentice Hall, 1997). Mazur developed Peer Instruction as an interactive approach to teaching physics at Harvard. It emphasises understanding or insight over what he terms "the tyranny of technique." His approach actively involves the students in the teaching process. He bases his lectures on what he terms 'ConcepTests' which cannot be completed without genuine understanding. He encourages his students to discuss and help one another with the solution of the problems. Thus his may also be said to be a system of 'mutual self-mediation'.

[36] John Dewey, *Experience and Education* (New York: Collier Macmillan Publishers, 1938), p.6.

[37] Hugo A. Meynell, "On the Aims of Education", *Proceedings of the Philosophy of Education Society of Great Britain*, Vol. X, (July 1976), p. 86.

> automatons, the result will not be love of life, but love of death.[38]

The link between freedom and responsibility implied in the above quotation is also central to Lonergan's notion of freedom. Like responsibility, he sees freedom as part of the human authenticity which becomes realisable only at the fourth level of cognitive functioning. In *Method* he says:

> The fourth level, which presupposes, complements, and sublates the other three, is the level of freedom and responsibility, or moral self-transcendence and in that sense of existence, of self direction and self-control.[39]

The notion of freedom to *do* as the royal road to growth in freedom of intellect and the development of personal responsibility is also central to progressive education as expounded by educators like Dewey, Montessori, Pestalozzi, Froebel and Freire. Like Maritain, Lonergan sees much that is good in the theories of these educators, including their expounded change of perspective to a consideration of the subject in a more child-centred system, as well as their ideals of democracy and freedom in education. He traces their common root to "the Greek vision insofar as it has been refracted by the Renaissance and then by enlightenment cultural concerns and developments." [40] Yet, Lonergan is quite critical of the way such so-called 'progressive' systems of education are implemented, as well as the prevalence of what he terms "a determined, state-controlled secularism" which often accompanies them. He continues:

> Secularist philosophy, of course, led spontaneously to a secularist education. If the basis of human life is human reason and human freedom and nothing else, if we are to have in 'Western man' a fundamental affirmation of human dignity as the basis of the whole of human life and society, then education simply has to be secularist.[41]

What all of this has so far neglected to address is the fact that most contemporary views on 'progressive' education see the child's *doing* as central to his development. However, this ignores the fact that *doing* comes as the culmination of experience, understanding, conception, judgment, and decision. Besides, it is not *doing* as such but *work*, as the concept is used in this study, which is so central to a child's development. And it is not external *work* only but an

[38] Eric Fromm, *The Heart of Man* (New York: Harper & Row, 1964), pp. 52-53.
[39] Bernard Lonergan S.J., *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 121.
[40] Frank P. Braio, "Towards the re-Horizoning of Subjects: Re-Structuring Classical-Modern Educational Perspectives, *Method: Journal of Lonergan Studies*, Vol. 13 (1995), p. 105.
[41] Bernard Lonergan S.J., *Collected Works of Bernard Lonergan, Vol. 10 - Topics in Education*, pp. 12,13.

external work which is geared and designed to produce an inner added value to the child himself as a person which is so central to his development.[42] Such is the *work*, such is the inner added value that is achieved, for example, in Feuerstein's 'mediated learning experience'. The freedom achieved in the latter case is the capacity for 'cognitive modifiability'.

It is of the nature of a child's *work* that its product returns to influence him. Even Karl Marx recognises this when he says: "An animal's product belongs immediately to its physical body, whilst man freely confronts his product."[43] The ultimate education, the most central aspect of human development is that which enhances the *being* mode of human existence. This, in Lonergan's terms, is 'self-appropriation of interiority' - giving children an insight, an understanding, a grasp, and, hence, a control over their own mental functioning. To do so entails raising the child's level of consciousness. To achieve this in practice requires a practical methodology like Feuerstein's 'Mediated Learning Experience'.

18.4 *The Teacher as Reflective Practitioner*

Of parallel importance to the development of the child is the raising of the teacher's level of consciousness so that he, in turn, may become aware of the dynamics of mental functioning, not just in an abstract and intellectual sense, but concretely, experientially, 'propriately', in his own life and the lives of the children in his care. He must then convey, in and through his day-to-day teaching, the operation of these dynamic functions to his children, using, perhaps, Feuerstein's method of Mediated Learning Experience as a guide. To do this requires a comprehensive theory or philosophy of education, which transcends mere considerations of curriculum and practical pedagogy and plumbs the depths of the human person and his understanding, in order to identify what is immediate and central to his nature and, by exposing this, clarifying the most effective route to his development.

One of the characteristics of educational practice in the modern era is the increased pressure on teachers and schools in general for even greater levels of

[42] This author's notion of *work* as any authentically human *doing* which adds value to one's world and/or oneself is from John Locke and is dealt with in some detail in Section 6.6 of this study.
[43] Karl Marx, *Economic and Philosophical Manuscripts* (New York: 1964), p. 113.

productivity and efficiency. In his book *The Reflective Practitioner* Donald Schön[44] says:

> Teachers are faced with pressures for increased efficiency in the context of contracting budgets, demands that they rigourously "teach the basics," exhortations to encourage creativity, build citizenship, help students to examine their values.[45]

The central idea in Schön's book is that there is a gap between theory and practice in most professions such that many professionals are at a loss to explain professional competence in terms of any satisfactory theoretical model. The best professionals, he maintains, know more than they can put into words. To meet the challenges of their work, they rely less on formulas learned in graduate school than on a kind of improvised, *ad hok* learning derived from practice. He says, for example, that professionals generally

> are disturbed because they have no satisfactory way of describing or accounting for the artful competence which practitioners sometimes reveal in what they do. They find it unsettling to be unable to make sense of these processes in terms of the model of professional knowledge which they have largely taken for granted.[46]

And again, he says: "We are bound to an epistemology of practice which leaves us at a loss to explain, or even to describe, the competences to which we now give overriding importance."[47] He claims that the dominant theory of professional practice is the myth that professional practice (or *doing)* consists of a process of problem solving which is more or less scientific in its orientation and discipline. He says, for example:

> According to the model of Technical Rationality - the view of professional knowledge which has most powerfully shaped both our thinking about the professions and the institutional relations of research, education, and practice - professional activity consists in instrumental problem solving made rigourous by the application of scientific theory and technique.[48]

He contrasts this with what he terms "Reflection-in-Action." This is nothing other than the capacity to self-reflect as one goes about one's everyday work, a type of

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[44] Donald A. Schön is Ford Professor of Urban Studies and Education at the Massachusetts Institute of technology. He is also a social scientist and an industrial consultant. In *The Reflective Practitioner* he examines five professions - engineering, architecture, management, psychotherapy, and town planning - to show how professionals in these areas really go about solving problems. Despite the fact that he barely mentions education, in the opinion of this author his findings are very relevant to a Lonergan based philosophy of education.

[45] Donald A. Schön, *The Reflective Practitioner* (Aldershot, Hants: Ashgate Publishing Limited, 1995), p. 17.

[46] Ibid., p. 19.

[47] Ibid., p. 20.

[48] Donald A. Schön, *The Reflective Practitioner* (Aldershot, Hants: Ashgate Publishing Limited, 1995), p. 21.

'self-appropriation' applied to one's professional activity.

Schön explains that the everyday work of the professional depends on what he terms "knowing in action."[49] By this, using Lonergan's terminology, he appears to mean practical insights into new problems and situations arising from his previously accumulated insights to do with his particular profession. These insights, however, have never been clearly formulated or conceptualised in terms of a wider all-embracing theory and so have not been subjected to the proper weighing up of evidence and judgment needed to translate such insights into true knowledge. He insists:

> Often we cannot say what it is we know. When we try to describe it we find ourselves at a loss, or we produce descriptions which are obviously inappropriate. Our knowing is ordinarily tacit, implicit in our patterns of action and in our feel for the stuff with which we are dealing.[50]

As was said, Schön calls this "knowing in action." Clearly Lonergan would agree with Schön that a person "cannot separate thinking from doing, ratiocinating his way to a decision which he must later convert to an action."[51] Schön goes on to say that "our knowing is *in* our action." Lonergan also says that what he terms "active meaning" can "come with judgments of value, decisions, and actions."[52]

What Schön appears to be describing above, as already said, are in fact poorly formulated insights:

> Every competent practitioner can recognise phenomena - families of symptoms associated with a particular disease, peculiarities of a certain kind of building site, irregularities of certain kinds of materials or structures - for which he cannot give a reasonably accurate or complete description.[53]

The inevitable result is the inability to make clear judgments, or the making of judgments based on 'intuition' or 'gut feeling' rather than on careful scientific analysis founded on coherent theory. He continues:

> In his day-to-day practice he makes innumerable judgments of quality for which he cannot state adequate criteria, and he displays skills for which he cannot state the rules and procedures.[54]

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[49] Ibid., p. 49.

[50] Ibid.

[51] Ibid., p. 68.

[52] Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 74. Is appears doubtful from the context that Schön is implying that knowledge is what knowledge does. This would suggest that mind is derived from behaviour, which is what pragmatists like Dewey hold.

[53] Ibid., p. 49.

[54] Donald A. Schön, *The Reflective Practitioner* (Aldershot, Hants: Ashgate Publishing Limited, 1995), pp. 49 - 50.

Elsewhere in the same book Schön adds that such professionals "cannot say what they know how to do, cannot justify its quality or rigour."[55]

Reflection-in-action, on the other hand, involves the capacity to reflect on what one is doing, as one is doing it. In this way one is gaining insights not only into the problem at hand, but also into one's own reactions, into one's efficiency or otherwise in dealing with a particular problem, and into finding better and more effective ways of handling similar problems in the future. More importantly, reflection in action demands that one clearly formulate one's insights in terms of some overarching model or theory. The whole procedure must be guided by the questioning attitude of 'the pure desire to know', asking oneself, for example:

> What features do I notice when I recognise this thing? What are the criteria by which I make this judgment? What procedures am I enacting when I perform this skill? How am I framing the problem that I am trying to solve?[56]

The danger in all professions, including education, is that as practice becomes more repetitive and routine, and as 'knowing-in-practice' becomes more tacit, unformulated, and spontaneous, the professional may miss many opportunities to reflect on what he is doing. He may be drawn into patterns of error of which he is unaware and which he therefore cannot correct. "And if he learns, as often happens, to be selectively inattentive to phenomena that do not fit the categories of his knowing-in-action, then he may suffer from boredom or 'burn-out' and afflict his clients (students) with the consequences of his narrowness and rigidity."[57] He adds:

> Many practitioners, locked in a view of themselves as technical experts, find nothing in the world of practice to occasion reflection. They have become too skilful at techniques of selective inattention, junk categories, and situational control, techniques which they use to preserve the constancy of their knowledge-in-practice. For them, uncertainty is a threat; its admission is a sign of weakness.[58]

For the educator, 'reflection-in-action' involves being ever attentive to what is happening in the class in front of him, and to his own personal ongoing reactions to the class. He must be aware of the demands of the material being taught, possibly

[55] Ibid., p. 69.
[56] Ibid., p. 50.
[57] Ibid., p. 61.
[58] Donald A. Schön, *The Reflective Practitioner* (Aldershot, Hants: Ashgate Publishing Limited, 1995), p. 69.

in terms of Feuerstein's 'cognitive map' - the level of abstraction required, the modality involved, the complexity of the particular task, and the likely deficient cognitive functions to look out for. He must not only teach in such a way as to induce insights in the young minds on front of him, but he must also seek insights into the dynamic of the class situation itself, of which he is a central and vital part. He must arrange the teaching material in a way that appeals to the child's imagination and in this way lead him to insight. He must get his students not only to formulate clearly what they have understood but also to explain how they arrived at their conclusions, thus inducing insight into insight. This in turn becomes part of his own horizon, informing his own reactions and approach to the class in future sessions. He must be continually judging his own performance as well as that of his students, and be ever formulating ways in which his functioning and execution can become more effective. Above all, he must be ready to assent with enthusiasm to, and to act upon, those aspects of the overall situation which he perceives to be good, thus mediating competence both to his students and to himself.

From Lonergan's perspective, then, one can say that the driving force or motivating power for 'reflection-in-action' is the 'pure desire to know' and that the necessary means are the ordinary intentional cognitive and volitional operations of experience, understanding, judgment, and decision. Schön appears to agree with this when he says:

> The practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomena before him, and on the prior understandings which have been implicit in his behavior. He carries out an experiment which serves to generate both a new understanding of the phenomena and a change in the situation.[59]

For an educator, in other words, reflection-in-action demands a knowledge of Lonergan's dynamic operations of coming to know and observing, understanding, and acknowledging them both in his students and in himself. One may also say that it demands an easy familiarity with Feuerstein's deficient cognitive functions and with his 'cognitive map'. It demands a willingness to self-reflect on an ongoing basis and to correct anything which one sees to be defective both in oneself and in one's students. It demands that one embrace the good and the true wherever they are to be found, and that one encourage one's students to do the same. Lonergan explains:

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[59] Ibid., p. 68.

> When you are teaching a class, for example, you can see from the looks on the students' faces who is getting it and who is finding it rather dull. If it is clicking, if it means something to them, then there is not merely presence, empirical consciousness, but also *intelligent consciousness, intellectual consciousness*. They are catching on, they are understanding, or they are trying to understand; they are very puzzled or tense - intellectual consciousness. On this level, you are present to yourself as trying to understand, as saying 'I've got it!' and as conceiving and expressing. But beyond this second level, there is a third level on which you are present to yourself, *rational consciousness*. When you do understand, you think, 'After all, is that just another bright idea, or have I really got it properly?' On the level of rational consciousness, the level of reflection, the question is, Is it true or false? And when your judgments move on to action, you have, fourth, *rational self-consciousness*. Then your rational reflection is about yourself. It is conscience in the ordinary sense - 'Am I doing right or wrong?' - where rational reflection is concerned with your own action.[60]

Thus, it can be argued that Lonergan's cognitive system forms a good basis for a pedagogy of 'reflection-in-action.' There is no set of automatic prescriptions to be applied to the actual teaching situation. In a sense, the teacher must himself become the prescription through his grasp of the functioning of his own cognitive scheme, through the self-appropriation of his own interiority. He will become effective, not just through the application of some enormous body of professional knowledge, but more importantly through a philosophy that has been appropriated to the degree that it becomes part of 'reflection-in-action.'

It follows from what has been said that, if the educator is ever to develop such a capacity for 'reflection-in-action', then a comprehensive theory, a usable model, an insightful philosophy of education must be achieved. In the opinion of this author, a real problem of education is that what theories and models there are tend to be piecemeal and fragmentary, while more general philosophies of education tend to be either in the form of received wisdom or to be based on limited or simplistic views of human nature. It is argued in this study that the advantage of Lonergan's system is that it is comprehensive enough to include all aspects of human development under its ambit and that, where it is deficient or lacking in anything, it is capable of making up or compensating by interfacing or dovetailing with, or being complemented by, the works of many other philosophers and psychologists.

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[60] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 16.

18.5 *The Challenges of Prospective Education*

It has been argued in this study that traditional education tends largely to be education for *having*. In other words, it tends to highlight human development 'from above downwards' and emphasise 'the way of heritage' at the expense of 'the way of achievement'. In his book, *Psychological Tools,* Kozulin describes this as "retrospective" education:

> Traditional education responded to society's goal of transmitting an unambiguous cultural tradition from generation to generation, and in this respect was for the most part retrospective. The model of the world and cultural traditions were givens, and the task of a student was to absorb this tradition and the intellectual tools associated with it. Students were thus taught to deal with problems that reproduced the cultural patterns of the past.[61]

Under the demands of a changing world, and "the dynamic conditions of modernity," a more "prospective" form of education is required. Kozulin explains:

> Prospective education implies that students should be capable of approaching problems that do not yet exist. To gain this ability, students should be oriented toward productive rather than reproductive knowledge. Thus the body of knowledge should appear not in the form of results and solutions but as a creative process. ... The focus of learning thus shifts from delivering information to the student to building the student's learning potential.[62]

One can argue that essay writing has tended to fulfil this creative function in traditional education. However, the purpose here is to more clearly understand the dynamics of prospective education in terms of the model developed in this study. One can say that prospective education is education in which 'the way of achievement' is in balance with 'the way of heritage'; it is a system, in other words, in which the 'spontaneous concepts' of the child are in harmony with the taught 'scientific concepts' he picks up in the classroom:

> In working its slow way upwards, an everyday concept clears the path for a scientific concept in its downward development. It creates a series of structures necessary for the evolution of a concept's more primitive, elementary aspects, which gives it body and vitality. Scientific concepts, in turn, supply structures for the upward development of the child's spontaneous concepts towards consciousness and deliberate use.[63]

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[61] Alex Kozulin, *Psychological Tools* (Cambridge, MASS: Harvard University Press, 1998), p. 154.
[62] Ibid.
[63] Lev Vygotsky, *Thought and Language* (Cambridge, MASS: MIT Press, 1986), p. 194.

This involves "building the student's learning potential." This, in turn, demands a 'mediated learning' approach by which the child gains insight into his own cognitive functions. It involves, a 'self-appropriation of cognitive interiority', to use Lonergan's terminology, or a raising of the child's awareness to a 'metacognitive' level, to use the preferred terminology of Feuerstein.

18.6 *Education, Self-Realisation, and Happiness*

18.6.1 *The Need for and the Right to Self-Realisation*

In a sense, what this study has been attempting to do is to explore in a systematic way the nature of the child so that a clearer, more systematic, more philosophical, more scientific, view of his development might result. The assumption is that with an understanding of the nature of human development should come a deeper, more consistent, more authentic insight into the educational process itself.

That the child has a certain cognitive, emotional, psychic, organic nature is clear. That because of this nature the child has certain basic needs is equally clear. The fulfilment of these needs is necessary if the child is to grow and develop and realise the full potential of his nature. So, corresponding to his basic needs the child has basic values and rights. Who gives him these rights? The answer is, nobody; he has these rights by virtue of his nature. And since it is his nature to grow, develop and learn, it follows that one of the most basic of these rights is the right to self-fulfilment and self-realisation. For self-fulfilment and self-realisation both Pieper and Aquinas use the word 'happiness'. Pieper explains:

> A single word, "happiness", comprehends such a variety of meanings: the immortal richness of divine life and man's part in it, as well as the petty satisfaction of a fleeting desire. ... It happens whenever a thirsty man drinks, whenever a questioner receives a flash of illumination, whenever lovers are together, whenever a task is brought to successful conclusion and a plan bears fruit.[64]

The quest for happiness is then natural, a consequence of man's nature. This is what Aquinas means when, in his *Summa Theologica,* he says: "Man desires happiness naturally and by necessity."[65] And again, in the same place, he insists: "To desire to be happy is not a matter of free choice."[66] And Josef Pieper

[64] Josef Pieper, *Happiness and Contemplation* (South Bend, Indiana: St. Augustine's Press, 1998), p. 16.
[65] Thomas Aquinas, *Summa Theologica*, I, 94, 1.
[66] Ibid., I, 19, 10.

says: "Man, as a reasoning being, desires his own happiness just as the falling stone 'seeks' the depths, as the flower turns to the light and the beast hunts its prey."[67] If this desire for happiness is a natural human drive or need, then it follows that it must also have a corresponding good or value.[68] If, as has been implied, the drive to self-realisation is the most basic of human drives, then it must be regarded as the highest of human values.

But in what does human happiness consist? Surely it must be more than the satisfaction of one's needs; it must involve more than just the *having* mode of existence, in other words. Otherwise, "once the means of living have been obtained, in what will this new-secure life consist?"[69] Aquinas says: "To seek happiness is nothing but to seek the satiation of the will."[70] And Pieper explains:

> Thus, the entire energy of human nature is considered a hunger which demands satiation, a thirst that requires quenching. And the quenching of this thirst is happiness.
>
> This metaphor ... immediately conveys the idea that happiness is being dealt with in a twofold sense. The thirsting man looks toward the glass filled with wine; the hungry man reaches toward the loaf of bread. That is gratification. But we can also say that neither the bread nor the wine is the gratification, but the eating and the drinking of them. Both manners of expression are meaningful and validated by linguistic usage.[71]

Happiness, then, might best be described as involving a combination of the drive to realise one's potentialities and the actual realisation or satisfaction of these same potentialities. In the early language of this study, one might say that happiness involves both transcendence and homeostasis; it involves the active reaching out and transcendent search for what is good, no less than the eventual relaxation in the achievement of one's yearned-for goal. This notion appears to be supported by Aquinas when he says: "The goal is spoken of in a dual sense; it can mean the thing we seek to attain, and it can mean its attainment."[72]

If one takes the very human example of the mother being made present to the child, for example, then the child's reaching out to the mother may be regarded as both a physical and a psychological response. As psychological, the response is both conscious and intentional. It is intentional not just in a cognitive sense but also

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[67] Josef Pieper, *Happiness and Contemplation,* p. 21.
[68] See Sections 13.4 to 13.8 of this study.
[69] Josef Pieper, *Happiness and Contemplation,* p. 91.
[70] Thomas Aquinas, *Summa Theologica*, I, II, 5, 8.
[71] Josef Pieper, *Happiness and Contemplation,* p. 32.
[72] Thomas Aquinas, *Summa Theologica*, I, II, 2, 7.

in an emotional sense; it is an intentional response to a perceived good, which is the mother. The mother's presence conjures up all the associated images of physical warmth, emotional security, as well as fulfilled nutritional needs. With her smile comes all the happiness associated with the fulfilment of these basic needs. The resultant feelings of happiness reinforce the already existing psychological and intentional bond between the mother and child, a bond that will persist even in the mother's absence. The bond will manifest itself in the drive, the need, the urge to re-establish the mother's presence by crying, by imagery, by memory. The intentional psychological state accompanying the satisfaction of this need may be termed 'happiness'. Such happiness is always limited, however, in that no mother can fully satisfy a child's capacity for attention seeking; nor indeed, according to some psychologists, should it be fully satisfied. The important point is that, while the happiness of the child is clearly both a psychological and emotional state, yet equally clearly it is based first and foremost on cognition.

18.6.2 *Happiness and Cognition*

Aquinas says: "*Ultima hominis felicitas [est] in contemplatione veritatis*,"[73] meaning that the ultimate happiness or satisfaction for man lies in the contemplation or reflection on the real and the true. Which leads Pieper to ask: "how can the most intense craving of our nature be entirely satisfied by an act of the intellect.?"[74] Pieper proceeds to answer his own question:

> What is implicit in this sentence? This is implicit: the fulfilment of existence takes place in the manner in which we become aware of reality; the whole energy of our being is ultimately directed toward attainment of insight. The perfectly happy person, the one whose thirst has been finally quenched, who has attained beatitude - this person is one who sees. The happiness, the quenching, the perfection consists in this seeing.[75]

This appears to support the contention that man's self-realisation lies primarily in the realm of the cognitional. However, Pieper's use of the word "see" and "seeing" for "know" and "knowing" may betray a certain underlying 'naive realism', confusing knowing with a type of seeing, or having a good look at what is already out there to be seen. This assessment appears to be confirmed when he says:

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[73] Thomas Aquinas, *Summa Contra Gentes*, 3, 37.

[74] Josef Pieper, *Happiness and Contemplation* (South Bend, Indiana: St. Augustine's Press, 1998), p. 19.

[75] Josef Pieper, *Happiness and Contemplation* (South Bend, Indiana: St. Augustine's Press, 1998), p. 58.

> Man, physical, historical, 'earthly' man, has a basic craving to see; strictly speaking, he craves nothing else; his make-up is such that he lives most purely as a see-er: in contemplation.[76]

The case may be better put by Aristotle when he says: "All men by nature desire to know," and what is implicit in Aquinas' statement above is better expressed as follows: the fulfilment of man's existence is to be found in the activity of his intellect as he strives to know everything there is to know. The perfectly happy man is the one whose 'pure desire to know' has been fulfilled in the embrace of the 'idea of being'. Or, as Augustine puts it: "What else does being happy mean, if not this: knowingly to possess something eternal."[77] Bartholimé de Medina, commenting on this section of Aquinas' *Summa Theologica,* states: "The happy life does not mean loving what we possess, but possessing what we love."[78] Possession of the beloved, St. Thomas holds, takes place in the act of cognition. Hence the child's delight, joy, and sense of security, not just at the presence of the mother, but also in the anticipation of her coming, and even in the memory of their encounter. Marcel Proust, for example, speaking of his own childhood relationship with his mother, savours

> the calm and serenity she had brought me a moment before, when she had bent her loving face down over my bed, and held it out to me like a host for an act of peace-giving communion in which my lips might imbibe her real presence and with it the power to sleep.[79]

Yet for all its human warmth and emotionality, this also is at core an intellectual encounter. Later in the same book, Proust says:

> Even the simple act which we describe as "seeing someone we know" is to some extent an intellectual process. We pack the physical outline of the person we see with all the notions we have already formed about him, and in the total picture of him which we compose in our minds those notions have certainly the principal place. In the end they come to fill out so completely the curve of his cheeks, to follow so exactly the line of his nose, they blend so harmoniously in the sound of his voice as if it were no more than a transparent envelope, that each time we see the face or hear the voice it is these notions that we recognise and to which we listen.[80]

Human happiness, self-realisation, as already mentioned above, lies as much in the process of self-transcendence as in the achievement of a state of

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[76] Ibid., p. 59.

[77] Augustine, *Eighty Three Questions*, 33, 1,

[78] Baratholomé de Medina on Aquinas I, II, 3, 2, quoted in Josef Pieper, *Happiness and Contemplation,* p. 63.

[79] Marcel Proust, *In Search of Lost Time, Vol. 1 - Swann's Way* (London: Vintage, 2002), p. 13.

[80] Marcel Proust, *In Search of Lost Time, Vol. 1 - Swann's Way* (London: Vintage, 2002), p. 20.

homeostasis. Pieper says:

> In short, human life means stirring, putting shoulder to the wheel, accomplishing something, labouring, making, working, acting. And in all these things man's happiness also lies; it makes him happy to live in this way.[81]

Hence, Feuerstein's insistence on the 'active-modificational' approach to education as opposed to what he terms the 'passive-acceptant' approach. To make a child happy, in other words, it is not enough merely to remove from him the various causes of unhappiness. Hertzberg long ago pointed out that the things that make a man happy are very different from the things which cause him to be unhappy:

> The two aspects of man are essentially independent; furthermore, each aspect has a system of needs that operate in opposing directions. Meeting the needs of one facet of man has little effect on the needs of the other facet. When we think of man, we must ask two questions. First, how happy is he?. Then a distinctly separate question: How unhappy is he?[82]

Frankl says that "a human being is not one in pursuit of happiness but rather in search of a reason to become happy."[83] And the true source of this happiness lies as much in self-transcendence as in homeostasis. He goes on to say:

> Being human always points, and is directed, to something, or someone, other than oneself - be it a meaning to fulfil or another human being to encounter. The more one forgets himself - by giving himself to a cause to serve or another person to love - the more human he is and the more he actualizes himself. What is called self-actualization is not an attainable aim at all, for the simple reason that the more one would strive for it, the more he would miss it. In other words, **self-actualization is possible only as a side effect of self-transcendence**.[84]

But such self-transcendence, Lonergan would say, lies in being attentive, being intelligent, being reasonable, and being responsible. In other words, self-transcendence lies primarily in the sphere of the cognitional: "The essence of happiness consists in an act of the intellect."[85] Also, according to Lonergan, self-actualisation lies in 'self-appropriation of interiority'. This places Lonergan's 'self-appropriation of interiority', not just in the realm of self-realisation, but squarely in the sphere of man's greatest happiness. However, it is clear from what Pieper says that the 'self-appropriation' he would envisage is not just a "cognitive" one, but also a self appropriation of volitional and emotional interiority, of a type which Pieper,

[81] Josef Pieper, *Happiness and Contemplation* (South Bend, Indiana: St. Augustine's Press, 1998), p. 90.
[82] Frederick Hertzberg, *Work and the Nature of Man* (London: Staples Press, 1968), pp. 168 - 169.
[83] Viktor Frankl, *Man's Search for Meaning* (New York: Washington Square Press, 1984), p. 162.
[84] Ibid., p. 133. (Bold print represents the author's own emphasis.)
[85] St. Thomas Aquinas, *Summa Theologica*, I, II, 3,4.

like Langer, would see as emanating primarily from an encounter with the arts:

> Out of this kind of contemplation of the created world arise in never-ending wealth all true poetry and all real art, for it is the nature of poetry and art to be paean and praise heard above all the wails of lamentation. No one who is not capable of such contemplation can grasp poetry in a poetic fashion, that is to say, in the only meaningful fashion. The indispensability, the vital function of the arts in man's life, consists above all in this: that through them contemplation of the created world is kept active and alive.[86]

18.6.3 *Happiness and the Triarchic Model*

Self transcendence and self-realisation, then, lie primarily in the realm of the cognitional. Man's happiness springs from and resides in his cognitional nature. Certainly there is corporality, and with it there is *having*. But man's happiness cannot lie in *having* alone, because having by its very nature is uncertain and insecure.[87] There is also the *doing* mode; but authentic human doing is something that follows from a process of experience, understanding, judgment, and decision. Man's happiness lies in the *being* mode of his existence, and the *being* mode of existence is of the cognitional and volitional. Certainly there is also the affective, the emotional. But the affective and emotional are of the *being* mode only when they are directed by the cognitive, that is, when emotion is an intentional response to something which is perceived as a good or a value.[88] The *having* mode, the *doing* mode, the *affective* mode, of human existence are all subservient to, and secondary to, the *being* mode, and the *being* mode is of the cognitional, aided and reinforced by the *having*, *doing*, and *affective* modes. Then there is the Intersubjective mode of human existence. But, as has already been argued, there is an intersubjective nature only because there was first an intrasubjective one, and the intrasubjective nature of man hinges primarily on the cognitional and the volitional.

It follows that the most central aspect of a child's development, and hence the most central aspect of education, is an authentic cognitive development. And authentic cognitive development, it has been argued, hinges on self-appropriation of interiority. And the most effective means of attaining self-appropriation of interiority, it has also been argued, is that supplied by Feuerstein's Mediated

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[86] Josef Pieper, *Happiness and Contemplation* (South Bend, Indiana: St. Augustine's Press, 1998), p. 85. Clearly much more can be said in relation to cognition, contemplation, and the arts, but the study has already explored this in quite some detail in Section 11.11.

[87] See Section 3.4.5 of this study.

[88] See Section 9.4 of this study.

Learning Experience.

18.6.4 *Happiness and Joy*

What, then, can be said of that other, related experience, joy? Fromm describes the present culture of *having* in the following terms:

> People are confused and unsure, they seek answers to guide them to joy, tranquility, self-knowledge, salvation - but they also demand that it be easy to learn, that it require little or no effort, that results be quickly obtained.[89]

But, in common experience, neither happiness nor joy are easily come by. Spinoza, for example, connects joy with self-transcendence when he says: "Joy is man's passage from a lesser to a greater perfection. Sorrow is man's passage from a greater to a less perfection."[90] But joy, as the term is used in common parlance, is less frequent, less permanent, of shorter duration, and more gratuitous than happiness. One commonly associates joy with childhood, although childhood is just as frequently a time of disappointments and tears. But there does appear to be something inherently innocent and child-like about joy. This may be because there is a close relationship between wonder and joy. Aquinas, for example says: *"Omnia admirablia sunt dilectablia,"*[91] or, the sources of joy and wonder are the same. If this is valid, then one can find one's source of joy also in Lonergan's 'pure desire to know' or what he also terms the 'spirit of wonder and inquiry'. But it cannot be in the 'pure desire' alone that one finds joy, since even the greatest rogues are also so endowed, but rather in the fulfilment of the 'desire'.

One can say that one is happy in the striving, but one is joyful in the realisation or fulfilment of the striving. Pieper says:

> Joyousness necessarily implies an "about something"; we cannot rejoice in the absolute; there is no joy for joy's sake. This something, this reason, is our possessing or receiving a thing we desire. "Possession of the good is the cause of rejoicing." This having and partaking of the good is primary; joy is secondary. [92]

And in the *Summa Theologica* Aquinas expresses these same ideas in the following manner:

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[89] Erich Fromm, *The Art of Being* (London: Constable, 1993), pp. 13 - 14.

[90] Spinoza, *Ethics*, 3, defs. 2,3, quoted from Eric Fromm, *To Have or to Be* (London: Sphere Books Ltd., 1979), p.120.

[91] Thomas Aquinas, *Summa Theologiae*, I - II, Q. 32, a. 8, quoted in Josef Pieper, *Leisure, the Basis of Culture* (South Bend, Indiana: St. Augustine's Press, 1998), p. 107.

[92] Josef Pieper, *Happiness and Contemplation* (South Bend, Indiana: St. Augustine's Press, 1998), p. 45.

> Therefore a person rejoices because he possesses a good appropriate to him - whether in reality, in hope, or at least in memory. The appropriate good, however, if it is perfect, is precisely the man's happiness ... . Thus it is evident that not even the joy which follows the possession of the perfect good is the essence of happiness itself.[93]

Thus, with Bartholimé de Medina, in the passage already quoted, one can say that joy lies not in "loving what we possess, but possessing what we love."

18.6.5 *Childhood and Suffering*

Like Hertzberg, Frankl would classify freedom from suffering as a mere "negative happiness."[94] Yet, children do suffer: "Suffering is an ineradicable part of human life, even as fate and death."[95] Children's sufferings may sometimes appear minor compared with adult suffering - bruised knees, name-calling, but, they cannot be dismissed as minor or irrelevant. Frankl explains:

> To draw an analogy: a man's suffering is similar to the behavior of a gas. If a certain quantity of gas is pumped into an empty chamber, it will fill the chamber completely and evenly, no matter how big the chamber. Thus suffering completely fills the human soul and conscious mind, no matter whether the suffering is great or little. Therefore the "size" of human suffering is absolutely relative.[96]

When the cause of a child's suffering is remorseless, lingering, chronic, like that arising from a learning disability or marital break-up, for example, then there is a real danger of permanent damage to the child's psyche. The solution proposed by most therapists is again a cognitive one, that of helping the child give meaning to the suffering he is experiencing through insight into his suffering, clearly formulating the insight for himself, and by assenting to his formulation or 'story' as valid, helping him 'own his own story'[97] and thus objectify it. In this way, he gains some sense of control. Frankl explains that

> everything can be taken from a man but one thing: the last of the human freedoms - to chose one's attitude in any given set of circumstances, to chose one's own way.[98]

Hence, not only does happiness depend on the proper cognitive development of

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[93] St. Thomas Aquinas, *Summa Theologica*, I, II, 2, 6,

[94] Viktor Frankl, *Man's Search for Meaning* (New York: Washington Square Press, 1984), p. 67.

[95] Ibid., p. 88.

[96] Ibid., p. 64.

[97] This notion of owning one's own story is from the therapeutic theory and method of John Bowlby.

[98] Viktor Frankl, *Man's Search for Meaning* (New York: Washington Square Press, 1984), p. 86.

the child, on his self-transcendence, and on his self-appropriation, it also depends on the removal of the causes of his unhappiness and on the proper functioning of his cognitional abilities. Thus, one might say that the ability to self-appropriate one's interiority is linked to one's capacity to be fruitful, effective, self-transcendent, and even happy.

18.7 *General Conclusions*

It can be argued that Lonergan alone among modern philosophers appears to have set the foundation for a "philosophy of philosophies,"[99] "a philosophy that is capable of performing an integrating function with regard to knowledge in general,"[100] and so is capable for forming the basis for a philosophy of education. He claims that his self-appropriation of interiority in particular "cuts to the root of philosophical differences and incomprehensions."[101] And again in *Understanding and Being* he says: "It is possible, I believe and suggest, to classify the differences of philosophies in terms of the measure of self-appropriation."[102]

That Lonergan's theories appear so consistent with those of modern neo-Thomists like Pieper and Maritain should come as no surprise. That his work is capable of complementing, and being complemented by, the works of philosophers like Marcel, Dewey, and Langer, on the other hand, would appear to support Lonergan's contention that he has in fact produced such a "philosophy of philosophies." Certainly, as was outlined in Section 3.3, Husserl attempted to do the same, and he even claimed that he had succeeded in producing such a unifying philosophy. But this study has argued that in two central areas at least, intentionality and intersubjectivity, Husserl's theories have been found wanting, while those of Lonergan appear to be more satisfactory and more comprehensive in explication.[103]

Yet it has also been argued[104] that Lonergan's scheme by itself does not translate into an effective pedagogy, but that certain learned cognitive functions are also necessary for the efficient exercise and employment of one's mental

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[99] Bernard Lonergan, *Insight* (London: Longmans, 1957), p. 691.

[100] Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 5* (Toronto: University of Toronto Press, 1995), p. 102.

[101] Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 95.

[102] Bernard Lonergan, *Understanding and Being*, p. 220.

[103] See Section 3.3.4 for a comparison of Lonergan's and Husserl's notions of intentionality, and Section 17.7 for a similar comparison of the two explications of intersubjectivity.

[104] See particularly Chapters 10, 11, 12, and 13 of this study.

operations of experience, understanding, judgment and decision. This does not contradict Lonergan's hypotheses in any way, rather it is quite consistent with his notions of the two ways of human development. Feuerstein's deficient cognitive functions are corrected by mediation from above-downward or 'way of heritage', while Lonergan's own mental operations constitute a natural spontaneous development from below-upwards, the 'way of achievement'. This study has also argued that, while Lonergan's self-appropriation of interiority is necessary for development of the *being* mode of living and for one's full self-realisation and happiness, yet for its proper implementation within the school situation a practical methodology such as Feuerstein's Instrumental Enrichment programme, which recognises and utilises this notion of the 'two ways', is also necessary.

The answer to those who are seeking a new education for a new era is simply a reaffirmation of an age old insight, mental development through self-understanding. However, this study has tried to throw fresh light on this intuition and clarify it, express it, and conceptualise it in more thoughtful, more scientific, more philosophical terms. By so doing, one can begin to discern more clearly how part relates to part, and so begin to see how best to judge the validity of the overall model. One hopes that what was an insight, perhaps only vaguely grasped, has been conceptualised and formulated so that one can now begin to see what its truth conditions are, and how its validity may be tested and judged. The model to be tested and judged is what this study has termed education for *being*. It is what Lonergan has been reaching towards with his 'self-appropriation of interiority'. It is also the conclusion and method of Feuerstein with his Mediated Learning Experience. It is also hinted at by John Bowlby with his 'understanding of understanding'. It is at the core of Marcel's philosophy of the superiority of being over having. And the method for achieving this is again Feuerstein's Mediated Learning Experience. And the core of this method is as old as Socrates and Plato, the method of questioning.[105] It is this same method, it is argued, that underlies all of human thinking.

Lonergan's transcendental method forms an excellent basis for a philosophy of education. As a basis for a practical and usable pedagogical model, however, it has clear limitations. The first limitation is that, like Aquinas before him, he has tended to neglect corporality, at least in the full existentialist sense adopted by

[105] See Chapter 16 of this study.

philosophers like Marcel, Merleau-Ponty, and Wojtyla. It was argued in Chapter Seven that Lonergan tends to equate the notion of personhood, for example, with the exercise of mental or rational capacity. This rather narrow conception of 'person' can be shown to be inadequate, and not in keeping with the ontological reality of an individual human entity. Kevin Doran maintains that "this inadequacy is due, at least in part, to the failure to take account of the body as an aspect of the nature of finite persons."[106]

Secondly, and closely linked to the first, is Lonergan's lack of sufficient attention to the notion of *habitus* or habit. Lonergan's model may not be idealist in nature but, as becomes a philosophical model, it is certainly idealistic. It is idealistic in the sense that it has a tendency to portray things in a visionary or utopian light. His cognitive philosophy ignores the very obvious fact that it is not enough for a child simply to have an intact mind given him by nature, nor is it enough for him to grasp this ideal mind in its dynamic operations, but that an essential part of the operation of this mind, and a necessary part of his understanding of it, are the set of *learned,* and frequently deficient, cognitive functions identified by Feuerstein. An essential part of 'self-appropriation' of cognitive interiority, in other words, must involve not just the grasp of Lonergan's dynamic cognitive operations in practice, but also an understanding of, and compensating for, these deficient cognitive functions. Lonergan's system alone would, no doubt, be quite sufficient in an ideal world of disembodied spirits but in the real corporeal world dominated by habit it is not by itself sufficient for an effective pedagogy.

Finally, while Lonergan gives more space to a consideration of the emotions than most other philosophers, and while he has managed quite successfully to integrate the emotions with the cognitional, there has been no attempt by Lonergan in any of his works to provide a phenomenology of emotionality on a par with his detailed analysis of the cognitional. It has been argued in this study that the theories of Susanne Langer are capable of complementing greatly Lonergan's own thinking, adding a kind of self-appropriation of emotional interiority to Lonergan's notion of self-appropriation of cognitive interiority. But both Langer and Lonergan have failed to address directly the complex and difficult notion of the unconscious mind. This is an area of research which would have to be addressed before one can lay claim to a full and balanced theory of the human mind, capable of throwing light on all

[106] Kevin Doran, *What is a Person* ? (Lewiston, NY: The Edwin Mellen Press, 1989), p. 61.

aspects of human growth and development. More importantly, it is an area which will have to be explored before the self-appropriation of interiority may be said to plumb the full depths of the human person.

Part VI

Appendices

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TEXTS

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Glossary of Terms

A posteriori knowledge

A posteriori knowledge is knowledge "which is based upon experience and observation."

J. Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper and Row, 1968), p. 44.

A priori knowledge

A priori knowledge is knowledge which is self-evident. "Principles which, when once understood, are recognized to be true and do not require proof through observation, experience, or experiment.

J. Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper and Row, 1968), p. 44.

Absolute Objectivity:

"You have to be familiar with your own experience and intelligence and reasonableness. But that familiarity is just the experiential side. When you know yourself through the judgment, you know yourself as objectified. If the subject is not objectified, the subject qua subject is not known in the absolute realm. It is the subject qua objectified, qua affirmed, that is known in the absolute realm."

Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 8* (Toronto: University of Toronto Press, 1995), p. 173.

Abstraction, Level of

"The level of abstraction defines the distance between the given mental act and the object or event upon which it operates. Thus, a mental act may involve operations on the objects themselves, such as sorting, or it may involve relationships between purely hypothetical propositions without reference to real or imagined objects or events."

Reuven Feuerstein, Yaakov Rand, Mildred B. Hoffman, *The Dynamic Assessment of Retarded Performers* (Baltimore, MA: University Park Press, 1979), p. 124.

Active-Modificational Approach to Education

"The active-modificational (AM) approach, in contrast to the passive-acceptant (PA) one reveals itself as an unwillingness on the part of the parent, caregiver, teacher, employer to accept the person's impairment - be it physical, mental, educational, or behavioral - as it is."

Feuerstein, Rand & Rynders, *Don't Accept Me as I Am* (NewYork: Plenum Press, 1988), p. 13.

"These two views do not refer to the quantitative aspects of educational intervention. Instead, they address its qualitative aspects, that is, its nature, goals, and direction toward which interventional energies and resources are directed."

Feuerstein, Rand & Rynders, *Don't Accept Me as I Am* (NewYork: Plenum Press, 1988), p. 14.

Aesthetics

Aesthetics deals with the "nature of the values which are found in the feeling aspects of experience. The conscious search for the principles governing the creation and appreciation of beautiful things."

J. Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper and Row, 1968), p. 46.

Complexity of Mental Act

"The level of complexity of a mental act may be understood as the quantity and quality of units of information it contains. The quality of the information is a function of its degree of novelty. The more familiar the units, even if they are multiple, the less complex the act; the less familiar, the more complex the mental act is."

Reuven Feuerstein, Yaakov Rand, Mildred B. Hoffman, *The Dynamic Assessment of Retarded Performers* (Baltimore, MA: University Park Press, 1979), p. 124.

Consciousness

"Consciousness is the presence of oneself to oneself as subject and is a concomitant of all experience of which we have direct awareness."

William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 16.

Critical Realism

Lonergan adheres to the middle ground between the extremes of Kantian idealism on one side and what he terms the 'naive realism' of Aquinas on the other. By what he terms 'critical realism' he manages to integrate the positive insights of both. He holds that an authentic subjectivism is the only way to get to the heart of the real and, by doing so, achieve authentic objectivity. He would agree with Kant that the world in which we live and move and have our being is a world of our own construction, a world mediated by meaning. However, this world of meaning is constructed by a process of experience, understanding and judgment, and what is achieved by this process is not a completely subjective, idealist, or ideosyncratic world, but a concrete grasp of objective being. In fact, only by such a process can true objectivity be achieved. With the realists he would hold that the primary object of knowledge is the independent physical world. But to truly know this world requires much more that merely empirical knowledge, more than simply having a good look at what is there, one must also gain insights into it and, having done so, test these insights through critical reflection and judgment. Only thus is knowledge of the independent, objective world achieved.

Culture

Lonergan understands culture empirically, rather than normatively. The empirical notion of culture "is the set of meanings and values that inform a way of life." (*Method in Theology*, p. xi). For Feuerstein, on the other hand, culture is a *process* by which knowledge, values, meanings and beliefs are transmitted from one generation to the next. Thus the difference is one of Lonergan's 'content' against Feuerstein's 'process'.

Data of Consciousness

"The data of consciousness are the intentional sensory and mental operations themselves in the act of being intentional. Awareness of the subject as subject is awareness of oneself as the operator of intentional operations fulfilling their intentional function."

William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 21.

Data of Sense

"Sense data are objects made present to us through our sensory and mental operations."

William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 20.

Deduction:

"Reasoning from a general principle to particulars included within the scope of that principle."

James Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper & Row, 1968), p. 44.

Dialectic:

"A method of reasoning in which the conflict or contrast of ideas is utilized as a means of detecting the truth. In Hegel's formulation of it there are three stages: *thesis, antithesis*, and *synthesis*."

James Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper & Row, 1968), p. 44.

Episodic Grasp of Reality

An episodic grasp of reality' is the perception of reality as consisting of separate, isolated, and unrelated entities. (Feuerstein)

Essence:

" ... *essence can be defined as that which makes a thing to be what it is.* All things have the act of being (*esse*), by virtue of which we call them beings (*entia*). It is evident however, that each thing has its own essence, by virtue of which it has a name different from that of other things. It is by their respective *essences* that a man is a man, wine is wine, and water is water, and not any other thing that exists in the material universe."

Thomas Alvira, Luis Clavell, Tomas Melendo, *Metaphysics* (Manila: Sinag-Tala Publishers, 1991), p. 19. Italics in original.

Note: There is rather an inaccurate use of hyphenation in the English translation of the original book. No attempt has been made to correct this in quotations.

Excluded Middle, Principle of

" ... principle of excluded middle: either it is or it is not, there is nothing in between."

Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 8* (Toronto: University of Toronto Press, 1995), p. 116.

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Functionalism:

Functionalism represents an attempt to understand "the means-end linkages in human behaviour and how they are perfected in the course of growth."

Jerome Bruner, *Patterns of Growth* (Oxford: Clarendon Press, 1974), p. 6

Functionalism

Functionalism is the view that mental states are defined by their causes and effects. It was developed by Armstrong and Putnam as an improved, or developed, form of behaviourism. It holds that what makes an inner state mental is not some intrinsic property of the state, but rather its relations to sensory stimulation (input), to other inner states, and to behaviour (output). Thus, it emphasises what the mind *does* and what it produces, rather than what the mind *is*. Functionalists would have little time for Lonergan's notion of the inherent intentionality of the mind, for example, or his 'pure desire to know', or his 'notion of being'. This does not mean that functionalism does not have an important part to play in explicating the workings of the human mind. Thus Feuerstein's stages of input, elaboration, and output are a servicebale, if simplistic, way of considering mental operations, as are his learned cognitive functions.

Functionalism, like behaviourism, also suggests that similar states may be shared by physically dissimilar systems. Piaget's dual functions of assimilation and accommodation, for example, may be found operative in very simple biological organisms as well as in the human mind itself. An attempt is also made in Chapter Eight to show that mental growth follows the same 'spiral of growth' model as that found in biological organisms.

Although functionalism does not automatically rule out the existence of immaterial souls, its motivation in the works of Dewey, Piaget and others has been to provide a purely materialistic account of the human mind.

Generalised Empirical Method

"Very precisely, it is a heightening of consciousness that brings to light our conscious and intentional operations and thereby leads to the answers to three questions, What am I doing when I am knowing? Why is doing that knowing? What do I know when I do it?"
Bernard Lonergan S.J., *Method in Theology* (Darton, Longman & Todd, London, 1972), p. 25.

Heuristic Structure

Heuristic structure orients the knower toward the known unknown. Unlike a map which guides one to a known destination, a heuristic structure leads one to what is unknown. In Lonergan's terms, it leads one to the known unknown. We know it is unknown. We know we want to understand. We do not have a direct route to understanding. We have the heuristic structure. The heuristic structure is what enables us to work out a strategy that will give us insight into what is unknown.

Heuristic structure is simply naming the unknown that we anticipate knowing when we finally understand. Another way of saying this is that a heuristic is a guiding question that leads us to insights. What was implicit becomes explicit. What was unknown becomes known. This transformation within the subject, within the knower, is brought about by the heuristic structure.

The link between the question and understanding is the heuristic structure. Heuristic structure is intricately linked to the anticipation of the understanding one spontaneously experiences when one inquires. Thus, moving intelligently from question to insight is what Lonergan means by heuristic. The moving or development follows a road that is not designated. It is a road that gives one signs but not directions.

Heuristic structures carry no content. The criteria of heuristic structures are satisfied when the form they anticipate is filled. Understanding fills that form. Heuristic structure is detached from the actual content of that understanding. It

Immediacy or Immediate

"The term 'world of immediacy' is given to things directly experienced as sensory data or as data of consciousness prior to any perceptible intrusion from insight or concept, reflection or judgment, deliberation or choice."
William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 16.

Induction:

"Reasoning from particulars to a general conclusion"
James Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper & Row, 1968), p. 44.

Wojtyla explains that "induction consists in grasping mentally the unity of meaning from among the multiplicity and complexity of phenomena." Thus, it leads "to that simplicity in the experience of man which we find in it in spite of all its complexity."
Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 14.

Intelligence

"We define intelligence as the capacity of an individual to use *previously acquired experiences* to adjust to new situations."
Reuven Feuerstein, Yaakov Rand, Mildred B. Hoffman, *The Dynamic Assessment of Retarded Performers* (Baltimore, MA: University Park Press, 1979), p. 76.

"Intelligence, in our conceptual view and in our methodology of assessment, is the 'propensity' of the individual to undergo changes in the direction of higher levels of adaptability."
Reuven Feuerstein, Yaacov Rand, Carl Haywood, *L.P.A.D. Learning Propensity Assessment Device - Manual* (Jerusalem: International Centre for the Enhancement of Learning Potential, 1995), Section 1.1.

Feuerstein has adopted the concept 'propensity' in place of 'potential' or even 'capacity' because it encapsulates better his dynamic notion of intelligence and the 'propensity' of the individual to undergo change.

Intelligibility:

The term 'intelligibility' as used by Lonergan refers to an intrinsic characteristic of being whereby being can come to be known through intelligent insight and rational reflection. In fact Lonergan defines being itself as that which one grasps at the end of the process of experience, understanding, and judgment. By experience one comes to know potency; by insight one grasps form; by conception one expresses essence; and by judgment one apprehends act. Thus all being is inherently intelligible in its potency, its essence, its form, and its act.
See Bernard Lonergan, *Insight - A Study in Human Understanding* (London: Longmans, Geen, and Co., 1957), pp. 499 - 500

Intentionality

"By intentionality is meant the dynamic thrust of the patterened cognitive operations of generalized empirical method as they reach out to know reality."
William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 8.

"It is that aspect of cognitive operations which reaches out to grasp reality and make it present to the subject as a psychological event."
William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 14.

Interiority

Doran, a student of Lonergan's identifies interiority as consisting of "psyche and primarily intentionality."
Robert Doran quoted in William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 8.

Isomorphism:

"If you put bricks and stones and wood together in a certain way, you get a house. But a house is not bricks or wood or stone. It is the order imposed upon bricks and wood and stone. That order is a sequence of relations, and in a housing project in which the company builds the same type of house, the same plan all along the street, you have an isomorphism in the structures. There are different materials all along; you do not use the same wood in two houses; you use different pieces of wood. But the structure is the same. And that idea of similarity of relational structure is what is meant by isomorphism."

Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, in Philip McShane (ed) *Collected Works of Bernard Lonergan, Vol. 18* (Toronto, University of Toronto Press, 2001), p. 31.

Learning

"Learning is a *change* in human disposition or capability which is not simply ascribed to the process of growth."

R.M. Gagné, *The Conditions of Growth* (New York: Holt, Rinehart, and Winston, 1970), p. 3.

Learning by Direct Exposure

"In learning by direct exposure, the developing human organism is modified through immediate and direct contact with sources of environmental stimulation. The learning process is conceived of as resulting from direct chance encounters with, and the spontaneous manipulations of, objects and experiences of events, resulting in continuous modification of existent schemata through the "accommodation' and 'assimilation' processes described by Piaget."

Reuven Feuerstein, Yaakov Rand, Mildred B. Hoffman, *The Dynamic Assessment of Retarded Performers* (Baltimore, MA: University Park Press, 1979), pp. 70 - 71.

Liberal arts

"'Liberal arts', therefore, are ways of human action which have their justification in themselves; 'servile arts' are ways of human action that have a purpose outside of themselves, a purpose, to be more exact, which consists in a useful effect that can be realized through *praxis*. the 'liberality' or 'freedom' of the liberal arts consists in their not being disposable for purposes, that they do not need to be legitimated by a social function, by being 'work'."

Josef Pieper, *Leisure, the Basis of Culture* (South Bend, Indiana: St. Augustine's Press, 1998), p. 22.

Meaning:

In general terms, a meaning may be said to be the relation between a signifier and what it signifies. A signifier might be a word, a gesture, a pictogram, a mental image; what is signified may be a mental concept of some kind. Thus, for example, a meaning could be the relation of the mental image of a thing to its concept. The meaning of a word, for example, could be the relation of the acoustic image of the word, with its attendant connections to memory, to the concept which that word conjures up.

Mediated by meaning.

"In contrast to the world of immediacy, the world mediated by meaning is the world revealed in asking questions and getting answers. It is determined not only by experience but also by understanding and, commonly, by judgment as well. It is the world in which we objectify experience through the intellectual operations of understanding and judgment."

William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), pp. 16 - 17.

Mediated Learning Experience

"By mediated learning experience (MLE) we refer to the way in which stimuli emitted by the environment are transformed by a "mediating" agent, usually a parent, sibling, or other caregiver. This mediating agent, guided by his intentions, culture, and emotional investment, selects and organises the world of stimuli for the child. The mediator selects stimuli that are most appropriate and then frames, filters, and schedules them; he determines the appearance or disappearance of certain stimuli and ignores others. Through this process of mediation the cognitive structure of the child is affected."

Feuerstein, Rand, Hoffman and Miller, *Instrumental Enrichment: An Intervention Program for Gognitive Modifiability* (Baltimore, Maryland: University Park Press, 1980), p. 16.

"Mediated learning experience, on the other hand, is defined as the interactional processes between the developing human organism and an experienced, intentional adult who, by interposing himself between the child and external sources of stimulation, 'mediates' the world to the child by framing, selecting, focusing, and feeding back environmental experiences in such a way as to produce in him appropriate leartning sets and habits. The action of the adult and his activity in restricting the stimulational field and interpreting it to the infant or child constitute the major difference between mediated learning and non-mediated, direct exposure learning."

Reuven Feuerstein, Yaakov Rand, Mildred B. Hoffman, *The Dynamic Assessment of Retarded Performers* (Baltimore, MA: University Park Press, 1979), p. 71.

Mental Operation

"A mental act may be analyzed according to the operations that are required for its accomplishment. An operation may be understood as a strategy or a set of rules, in terms of which information derived from internal and external sources is organized, transformed, manipulated, and acted upon. In defining the nature of the operation it is important to identify the prerequisites necessary for its generation and application. Operations may be relatively simple or complex. Classification, seriation, logical multiplication, or analogical, syllogistic, or inferential thinking are obviously more complex than recognition or comparison."
Reuven Feuerstein, Yaakov Rand, Mildred B. Hoffman, *The Dynamic Assessment of Retarded Performers* (Baltimore, MA: University Park Press, 1979), p. 124.

Metacognition

The term "metacognition", as used by Feuerstein, appears to correspond to the raised level of awareness or consciousness involved in attending to and understanding one's own mental operations in action. This, in turn, appears to parallel what Lonergan means by inducing "insight into insight". In other words, what Feuerstein is describing in very detailed and practical terms is nothing other than the mediation to the child of the process of self-reflection, or the 'self appropriation' of his cognitive interiority. Feuerstein explains:

"The metacognitive components form an important part of the mediational interaction, taking the form of induced self-reflection, insight and articulation of the total field into its components. This orientation, once internalised, becomes the steering power towards more efficient learning and, in turn, leads to higher levels of modifiability."
Feuerstein, Klein and Tannenbaum, *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House Ltd., 1994), p. 20.

Method

The term for Lonergan does not mean a technique. Most fundamentally it refers to the innate dynamic operations of human consciousness, its 'method.'

"A method is a normative pattern of recurrent and related operations yielding cumulative and progressive results. There is a method, then, where there are distinct operations, where each operation is related to the others, where the set of relations forms a pattern, where the pattern is described at the right way of doing the job, where the operations in accord with the pattern may be repeated indefinitely, and where the fruits of such repetition are, not repetitious, but cumulative and progressive."
Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. 4.

Model

"By a model is not meant a description of reality or a hypothesis about reality. It is simply an intelligible, interlocking set of terms and relations that it may be well to have about when it comes to describing reality or to forming hypotheses. As the proverb, so the model is something worth keeping in mind when one confronts a situation or tackles a job."
Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1999), p. xii.

Modifiability

"Modifiability is ... a meaningful, substancial, and durable departure from a trend of development that has been predicted on the basis of the individual's traditionally measured level of performance. Only in rare cases do persons with retarded performance produce and maintain substantial modifiability on their own iniative. Such modifiability usually requires intensive and systematic intervention."

Feuerstein, Rand & Rynders, *Don't Accept Me as I Am* (NewYork: Plenum Press, 1988), p. 7.

Neural Plasticity

"Neural plasticity is an intrinsic, beneficial characteristic of the nervous system which gives us both the ability to learn and the ability to adapt in response to damage - to relearn. From shortly after conception and throughout a lifetime, the nervous system is a dynamically changing, self-organizing system. It follows no single master-plan and is never static. We develop our neural wiring in direct response to our lifetime experiences. Ability and increased potential grow hand in hand. As we grow, as we move, as we learn, the cells of our nervous systems connect in highly complex patterns of neural pathways. These patterns are organized and reorganized throughout life, allowing us greater ability to receive outside stimuli and perform the myriad jobs of a human life."

Carla Hannaford, "Neural Networks - Superhighways to Development," *Smart Moves* (Arlington, Virginia: Great Ocean Publishers, 1995), p. 17.

Non-Contradiction, Principle of

"Again, rational consciousness, besides imposing the alternative which leads to the law of excluded middle, also - and this definitively - posits, means, the principle of non-contradiction. You cannot make both the judgment, It is, and the judgment, It is not; it is either/or, not both; you cannot say yes and no with regard to exactly the same object - that is, not under the limitations of the excluded middle."

Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 8* (Toronto: University of Toronto Press, 1995), p. 116.

Normative Objectivity:

"Again, inquiry, the demand for intelligibility, the demand for the unconditioned, are norms immanent within this cognitional process itself. Insofar as one is meeting those requirements, one is objective. Insofar as one's desires or fears or any other factor in one's makeup are interfering with the execution of this process according to its own immanent norms, one's judgments will be merely subjective."

Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 8* (Toronto: University of Toronto Press, 1995), p. 174.

Object:

"By an object we mean what you know through a set of true judgements. If you have just one, then you have one object; if you have a series and no one is any of the others, you have a set of distinct objects. That is the principal notion of the object, defined through your true judgment in which you know, It is. 'It is' stands for the fulfilment of the virtually unconditioned."

Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 8* (Toronto: University of Toronto Press, 1995), p. 171.

Objectivity:

" ... there is no problem of a bridge. If you can reach the judgment, you are there. ...Through true propositions you can arrive at an objective world. That is the principal notion of objectivity."

Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 8* (Toronto: University of Toronto Press, 1995), p. 172.

Operator

For Lonergan, the 'operator' of man's cognitional development "is his detached, disinterested, unrestricted desire to know." (*Insight*, p. 636) In Lonergan's philosophy, then, a mental 'operator' may be described as a type of precognitive driving force, or motive power. As such, it is more fundamental and more basic than the cognitional and volitional operations of the mind: experience, understanding, judgment, and assent. In fact, it influences or 'operates' over the whole range of cognitive levels and mental operations, and its object is being in all its fullness; "the detached and disinterested desire to know is unrestricted." (*Insight*, p. 546) Lonergan's 'pure desire to know', also termed the 'spirit of wonder and inquiry' or 'Eros of the mind', which manifests itself as an innate questioning attitude, is then such an operator. It may be said to be the motive power which guides, marshalls, and propels the cognitional process from one level of mental operation to the next. It is also that which "deeply and powerfully holds our sensitive integrations open to transforming change." (*Insight*, p. 546)

Phenomenology

"The goal of phenomenology is to clarify and thereby to find the ultimate basis of all knowledge. To reach this goal it considers nothing that is in any way "doubtful", nothing that can be eliminated. In the first place, it does not use any results of science whatsoever. This is self evident, for a science which proposes ultimately to clarify all scientific knowledge, must not, in turn, be based on a science already extant, but must be grounded in itself."

Edith Stein, *On the Problem of Empathy* (Washington: ICS Publications, 1989), p 3.

Praxis:

"**Praxis** (From Greek *prasso*, 'doing', 'acting'), in Aristotle, the sphere of thought and action that comprises the ethical and political life of man, contrasted with the theoretical designs of logic and epistemology (*theoria*)."
Robert Audi (Ed.), *The Cambridge Dictionary of Philosophy* (Cambridge: Cambridge University Press, 1995), p. 638.

"**Praxis**: the action and reflection of men and women upon their world in order to transform it."
Paulo Freire, *The Pedagogy of the Oppressed* (London: Penguin Books, 1996), p. 60.

Praxis has also been variously termed "The exercise of a theory", and the doing of something intelligently.

"**Praxis**: that practical understanding which is necessary and sufficient for a man to live and act consciously."
Karol Wojtyla, *The Acting Person* (Dordrecht, Holland: D. Reidel Publishing Company, 1979), p. 16.

Wojtyla, approaching the subject from the point of view of the acting person, explains that the person-action relation is first and foremost a subjective experience. "Induction, however, makes of it a porblem for and a subject of reflection." Thus, again, praxis is seen as action with reflection, or reflective action.

Proprioception & Proprioceptors

"Proprioception is the senstation from muscles, tendons and the vestibular system that enables the brain to determine movement and the position of the body and its parts in space."
Carla Hannaford, "Neural Networks - Superhighways to Development," *Smart Moves* (Arlington, Virginia: Great Ocean Publishers, 1995), p. 39.

"Proprioceptors are sense organs that relay information about muscle position or tension or activity of joints and equilibrium. The proprioceptors are located throughout muscles, tendons, joints and mechanisms of the inner ear."
Carla Hannaford, "Neural Networks - Superhighways to Development," *Smart Moves* (Arlington, Virginia: Great Ocean Publishers, 1995), p. 19.

Psyche

"By psyche is meant the realm of image/symbol formation that produces the familar ongoing flow of our conscious imaginings."
William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 8.

Pure Desire to Know

"All human beings have an innate desire to be aware of objects and to understand and affirm their reality. It is this desire that gives conscious operations their intentional quality."
William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 20.

Self-Appropriation of Cognitive Interiority

"In essence, self-appropriation involves a self-discovery and a self-transcendence. One discovers one's true self, one consciously possesses one's dynamic self to the exetent that such conscious self-possession transforms one's very life and effects a self-transcendence."

Thomas Naickamparambil, *Through Self-Discovery to Self-Transcendence* (Rome: Editrice Pontifica Universita Gregoriana, 1997), p. 45.

Self-appropriation of interiority:

"The self-appropriation of interiority means that we have discovered the elements of symbol-forming psyche and intentionality/generalized empirical method within ourselves; that we have realized their importance for human development and learning; and that we have decided to be attentive to them and commit ourselves to fulfilling the dominant role that is theirs in the knowing, valuing and deciding processes by which we direct and regulate our living."

William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), pp. 8 - 9.

Self-appropriation of interiority:

"Consciousness, my presence to myself as subject, enables all objects including myself to be present to me as objects and is the prior condition for my capacity to reflect on them as objects. To become aware of my presence to myself as subject in the operations of conscious knowing is to self-appropriate."

William Eidle, *The Self-Appropriation of Interiority* (New York: Peter Lang Publishing, 1990), p. 20.

Structural Cognitive Modifiability (SCM)

"Structural Cognitive Modifiability (SCM) describes the unique propensity of human beings to change or modify the structure of their cognitive functioning to adapt to changing demands of life situations. This is not only a reflection of the person's response to external stimuli, and changes in internal conditions, but also a product of the individual's active involvement in the process of learning and changing.

"SCM is distinguished from biological or maturational changes, and from fragmentary or transient changes that may occur as a result of direct exposure to stimuli that are random and incidental. Change can be described as structural when (1) change in a part affects the whole to which the changed part belongs; (2) when the process of change is transformed in its rhythm, amplitude and direction; and (3) when the change is self-perpetuating, reflecting its autonomous, self-regulatory nature. Structural cognitive modifiability occurs when the changes are characterized by permanence, pervasiveness, and are generalizable."

Reuven Feuerstein, Yaacov Rand, Carl Haywood, *L.P.A.D. Learning Propensity Assessment Device - Manual* (Jerusalem: International Centre for the Enhancement of Learning Potential, 1995), Section 1.1.

Subject:

"Any object that is a knower is a subject, and so we have a definition of 'subject': ... a unity-identity-whole that senses, perceives, imagines, inquires, understands, conceives, reflects, grasps the virtually unconditioned, judges."
Bernard Lonergan, *Understanding and Being*, in Elizabeth A. Morelli and Mark D. Morelli (Eds.), *Collected Works of Bernard Lonergan, Vol. 8* (Toronto: University of Toronto Press, 1995), p. 171.

Sublation

Sublation is a translation of the Hegelian term *"aufheben"* or *"aufgehoben"*, meaning variously "to get rid of," or "to preserve," or "to raise up."
M.J. Unwood, *Hegel* (London: Routledge & Kegan Paul, 1983), p. 548, note 43.

Lonergan defines it as follows: "What sublates goes beyond what is sublated, introduces something new and distinct, puts everything on a new basis, yet so far from interfering with the sublated or destroying it, on the contrary needs it, includes it, preserves all its proper features and properties, and carries them forward to a fuller realization within a richer context."
Bernard Lonergan S.J., *Method in Theology* (London: Darton, Longman & Todd, 1972), p. 241.

Vygotsky uses the same term in the sense of "superseded" to designate "the transformation of natural functions into cultural ones."
Alex Kozulin, "Vygotsky in Context" in Lev Vygotsky, *Thought and Language* (Cambridge, MASS: MIT Press, 1986), p. xxv.

Syllogism:

"A form in which to cast deductive reasoning. It is comprised of three propositions: the major premise, the minor premise, and the conclusion."
James Donald Butler, *Four Philosophies and Their Practice in Education and Religion* (New York: Harper & Row, 1968), p. 44.

Synergy:

Synergy is often defined as 'joint work towards a common end'. However, it involves more than what Freire calls 'co-intentionality; it is not just cognitive but clearly involves also some or all of Lonergan's intersubjective feelings: community of feeling, fellow feeling, psychic contagon, and emotional identification. Further, synergy implies a mutual help and cooperation best exemplified by Lonergan's term 'mutual self mediation'.

Thus one can say that synergy, like Work, adds value to something in the environment and/or something within the subjects participating in the joint venture. It operates through a process of mutual self-mediation which implies a mutual service between the participants who relate with one another on both cognitive and affective levels.

Using

"*To use means to employ some object of action as a means to an end* - the specific end which the subject has in view. The end is always that with a view to which we are acting. The end also implies the existence of means (our name for those objects upon which our action is focused with a view to an end which we intend to attain) so that in the nature of things the means is subordinated to the end, and at the same time *subordinated to some extent to the agent*. ... the means serves both the end and the subject."

Karol Wojtyla, *Love and Responsibility,* H.T. Willits (Trans.), (London: Collins, 1981), p. 25.

Zone of Proximal Development

Vygotsky defined the 'zone of proximal development' (ZPD) as "the distance between the [child's] actual developmental level as determined by independent problem solving and the [higher] level of potential development as determined through probleming solving under adult guidance or in collaboration with more capable peers."

Lev Vygotsky, *Mind in Society* (Cambridge, MASS: Harvard University Press, 1978), p. 86

Feuerstein's Cognitive Functions Classified According to Lonergan's Dynamic Operations.

