

# THE SOCIAL ORGANISATION VIEWED AS A GROWING ORGANISM: WITH NEW HYPOTHESES AS TO ITS NATURE.

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[*Read Friday, 27th March, 1925.*]

I have been prompted to submit this paper by two circumstances connected with this Society—(i.) A recent indication by our President, Professor Oldham, that the Irish Nation constituted a living national organism, and (ii.) an examination by Dr. Leet at a previous meeting (12th December) of the history of function in social groups. These led me to recall the results of some personal research and practical experiment on the subject of the social organism, and I have become desirous of eliciting the views of the Society upon this philosophical concept and upon the following.

The original hypotheses that I wish to propose are briefly—

- (1) A definition of the social organism to include, as organic parts, all forms of property, equally with the human units composing society;
- (2) A statement and classification of social organs in terms of (1);
- (3) A general principle which (I suggest) regulates the development of the social organism;
- (4) A statement and classification of biological methods whereby pre-social forms of organic structures may be improved; and, lastly,
- (5) Applications of such methods to social forms, together with certain special adaptations involved.

The organic structure of society, in its human aspects, is a pretty well established sociological theory, amounting nearly to a law. It is, at the same time, an instance of a very useful theory which is as yet only very narrowly known. Historically, its genesis, in the observed resemblance of the morphological structure of man to the morphological structure of society, may be found in such diverse sources as the early Christian laws of our country, as well as in the writings of Plato, Locke, Hume, Burke and Kant. The theory took definite form, following the

intellectual ferment of the French Revolution, in the work of Comte (1822), and, later, it reached a specially significant development in Herbert Spencer's essay on *The Social Organism* (1860), two years after the publication of Darwin's *Origin of Species*. It appears also in the writings of Bentham, Mill, Schaffle, Wallace, Huxley and Gierke; and, notably, in the teachings of the Historical School of Political Economy. Some practical deductions are shown in two publications that have special interest in this country: (1) *The History of Political Economy* by John Kells Ingram, F.T.C.D. (1888), and (2) *The Elements of Social Science and Political Economy*, translated from the Italian by Father McLoughlin, of Mount Melleray Abbey (1909).<sup>\*</sup> For other recent and up-to-date acceptances of substantially the same theory, with some qualifications, I may refer also to writings of Franklin H. Giddings, Professor of Sociology in the Columbia University, U.S.A. (1896 and 1900),<sup>†</sup> and of L. T. Hobhouse, Professor of Sociology in the University of London (1924).<sup>‡</sup>

Apart from the prevalence of the idea in individual thought illustrated in the foregoing, there are also evidences of related ideas in collective thought. In our own country, recent public utterances have been decidedly marked by the increased and general use of the biological term "function" with its derivatives. Its co-relatives—"organ," "organism" and "organisation"—have also come into greater prominence. In Great Britain, the same feature is noticeable, but not (I think) to the same extent. Collective thought is there still couched in terms of mechanism, rather than organism, as witness the title given to an important Reconstruction Committee, presided over by Lord Haldane, and which was styled "*The Machinery of Government Committee*." It is symptomatic, however, that, on occasions during the war, Mr. Lloyd George described Germany as a paralytic organism, when speaking to a French audience, and as a broken-backed creature, when speaking to a British audience. I have noticed, too, that French official publications refer to committees as organs. In America, the term "organisation" is showing an increasing variety of use, perhaps following the terminology of their Universities, as I observe that Professor Giddings prefers that term to the term

<sup>\*</sup>The *Elements of Social Science and Political Economy*, by the Ven. Arch-priest Lorenzo Dardano. Translated from the Italian by the Rev. William McLoughlin. Dublin: M. H. Gill & Son, Ltd., 1909.

<sup>†</sup>The *Principles of Sociology* (1896) and *Democracy and Empire* (1900), by Franklin Henry Giddings, M.A. New York and London: Macmillan & Co., Ltd., 1896 and 1900.

<sup>‡</sup>*Social Development: Its Nature and Conditions*, by L. T. Hobhouse, D.LITT., LL.D. London: George Allen & Unwin, Ltd., 1924.

"organism" when speaking of social aggregates. But it is in Germany that collective thought appears to be vocal, particularly in terms of ideas springing from the theory of the social organism. As regards Russia, I have seen some recent articles in the *Manchester Guardian* from Commissars, Engineers, Professors, Bankers and other leaders in that country that appear to indicate a very advanced acquaintance with communal organic structure. Even a leader, remote from science, the Musical Director of the Music Section of the All Russian Academy of Fine Arts, makes use of the emphatic phrase "organism of the country." But in Russia, it is probably the mental currency only of the intellectual *élite*, and perhaps related to their international standing in experimental psychology and similar biological sciences.

The foregoing survey enables me to postulate the theory of the organic structure of society; it would be superfluous for me to go deeply into any statement or argument upon it. It is, however, necessary for a better grasp of the subject to set out some apperceiving group of ideas, and I think that I can do that best by recalling how my own ideas on the subject have developed. I may thus present ideas genetically and, therefore, more effectively.

It first occurred to me when writing a book, published in 1908, that there was a certain analogy between the functioning of the human nerve system and the social governmental system: for example, that nerves conveyed sensations to the brain as representatives convey local sentiment to parliamentary assemblies. Subsequently, I saw other analogies at a time when my official work brought me into a study of human physiology. About 1915, I incidentally became acquainted with zoology and grasped quickly its description of animal forms classified and arranged in groups of ascending complexity and illustrated by such familiar types and species as amoebae, sponges, jelly-fish, earth-worms, insects, shell-fish, lancelets, fishes, amphibians, reptiles, birds and mammals. Generalising from this ascending sequence and realising principles of morphological structure and of development common to all, I saw the possibility of a further ascent, in the same sphere of complexity, to a social organism, planned upon the same all-pervading principles. I envisaged this social organism with reference to the life-history of my own country: namely, what might be said to have "grown" thereon, since human interference began to modify the island's condition—in other words, all property, institutions, and personal groups that this country contained. At this stage I began to look up the literature on the subject, and I soon ascertained that a somewhat similar

hypothesis had been advanced in Herbert Spencer's essay on the Social Organism, published in 1860. I collected by steady stages, subsequently, the further history of the subject which I have already indicated.

The fact that I arrived, independently, at a conclusion confirmed by others, and which I now know to have been a landmark in the exploration of sociology, gives me some confidence in going further and in now stating hypotheses, which (so far as I am aware) are in advance of existing theory. I cannot find that social organism has been, at any time, envisaged as *property plus persons*, which, put briefly, is my definition. Herbert Spencer does seem at times to regard the organism as including, *e.g.*, means of communication; but, at other times, he harks back to the concept of society alone. Where he did push his conception beyond humans, he did it incidentally and without ever suggesting extension to all proprietary forms. Subsequent authorities have diverged from Spencer. They appear to me to be more vague in matters of definition, and, at the same time, more enlightened in matters that pertain specially to the social organism, as, *e.g.*, in regard to laying emphasis on history of cultures, anthropology, psychology and religion. For evidence I refer to above-mentioned writings of Professors Giddings and Hobhouse and to Father McLaughlin's translation.

I submit now that the special practical value of my synthesis is that it enables an enquirer to realise (1) that, for instance, our national organism, for purposes of practical investigation, comprises all our island's property, material and living, and, in addition, all our people; (2) that existing biological knowledge may be brought to bear upon the study of such organisms; and (3) that a community, an industry or any other social form may be advanced, in totality and as a source of life and welfare, by methods of development already known to biological science, by further methods, deducible from these but adapted to meet special sociological requirements, and, perhaps also, by additional biological methods applicable to societary forms only.

The preceding statements constitute a synthesis with some analysis. Sir George Newman, in a recent work on Preventive Medicine, suggests that, in the growth of knowledge, syntheses are followed by analyses, these again by syntheses and so on, alternately. His suggestion relates to knowledge in general, but is here useful in a special sense. I, therefore, will now take the social organism as defined, and I will proceed to state, analyse and classify its component systems and organs. There-

after, their mode of change (integration, differentiation, etc.) may appear more manifest.

Hitherto, the primary divisions of social systems appear to have been the political and the economic, in correspondence, respectively, with the external and internal structures of the individual organism. From both, however, I abstract and form a third primary classification, viz., the financial. It arises out of both the political and the economic and is in further correspondence with the nerve force of the individual organism. The political and the economic have also been denoted as the regulative and the operative; and, for present purposes, I term the three primary divisions, as described and subject to certain other inclusions as will appear, the regulative, the economic, and the financial. The regulative system includes the following social organs, viz., communicational, representative, interpretative, administrative, defensive, recreational, curative, educational, research, artistic, and religious. (I might mention that I have been guided here and elsewhere by reference to particulars of occupations in the Irish Census.) If a study of this classification is made in conjunction with the results of recent research work on the psychology of behaviour, for an exposition of which I refer to a publication (1919) by J. B. Watson, Professor of Psychology in the John Hopkin's University, U.S.A.,\* such study will suggest analogies, if not homologies, with systems of organs in the individual organism arising from primitive ectodermic and endodermic layers. The communicational organs show such correspondence with the dendrites and axones of the afferent and efferent neurones, including those of the kinaesthetic, or striped muscular, and organic, or smooth muscular, sense organs. The representative, interpretative and administrative organs of government and of vocational and other groups show correspondence with certain of the afferent, efferent, and sympathetic neurones: the defensive show analogy to skeletal and supporting structures, particularly in mode of development: the recreational and curative show resemblances, in regard to function, to those ductless glands which have been recently the subject of special research. Finally, it might be said that educational, research, artistic and religious organs have their counterparts in certain of the central and cortical structures.

I may observe here that the above illustrate a special method of statement and classification that I employ, viz., a genetic analytic method. In this, both statement and classifica-

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\*Psychology from the Standpoint of a Behaviourist, by John B. Watson. Philadelphia and London: J. B. Lippincott Company.

tion proceed from primary to secondary, from simple to complex and, equally, in sequence of genetic relationship. The biological sciences, notably botany and zoology, have already established the value of this method. It offers a useful principle by which phenomena may be recalled and arranged for reflection. Its explanation at this stage may simplify what is to follow.

The second primary division of social organs, viz., the economic, includes the extractive, distributive, and elaborative systems which are broadly analogous to, if not homologous with, the alimentary, including the respiratory, the circulatory and the duct-gland systems, respectively. These economic systems subdivide as follows: extractive into organs engaged in agriculture, fishing, mining, power, heat and light production; distributive into transport and marketing organs (road, rail, water, air, retail and wholesale); and elaborative into organs concerned with milling, brewing and distilling, miscellaneous food and drink preparation, textiles, implements and machinery, structural work, domestic and sanitary work.

The third and remaining system, the financial, arises out of both the preceding and facilitates their functioning. Finance is common to both the regulative and economic systems, as nerve force is, likewise, to the external and internal individual organisation. They are, in both cases, systems of forces operating through systems of organs and co-operating in the functioning of the organic whole. It is clear that the regulative, no less than the economic, includes the financial. This does not appear to have been, hitherto, well recognised, owing, perhaps to some extent, to the supposed separateness of their co-relatives, the cerebro-spinal and autonomic systems. These, however, have now been demonstrated to be an organic unity. I, therefore, submit this new division, viz., the financial, and I differentiate it as between private and general corporate finance, Governmental finance, banking, money-market and insurance.

Having stated a definition of the social organism and having analysed its systems and classified them genetically, I submit, as a synthesis and hypothesis, that the development of that organism can be effected, and can only be effected, by improving the efficiency and economy of the systems without counterbalancing injury to the efficiency and economy of the whole.

But the query will arise what are the sociological methods or factors by which that development and improvement can be effected. In other words, how does the principle of development and improvement divide and sub-divide into classifications of methods or factors readily recognisable as suitable for practical application.

In this, pre-social biology again gives valuable assistance. For if we take the sequence of zoological forms in order of ascent we find the following factors of advance, viz., in amoeba, sensitivity, activity, defence, nutrition, capitalisation, differentiation, standardisation and integration; in hydra, general localisation; in unsegmented worms, bi-lateral localisation; in segmented worms, segmented localisation; in insects, anterior localisation of nerve structure, standardisation of jointed appendages and centralisation and dorsalisation of brain structure; in shell fish, special ectodermic defence; in primitive vertebrates, endodermic support or defence, by means of a notochord, and special respiration by gill-slits; in fishes, substitution of organs, mesodermic support or defence by a backbone which replaces the notochord, ventral centralisation of circulatory system, increased extension of growths from dorsal brain to participate in sensory and motor function and, further, dorsalisation of nerves in spinal cord; in amphibians, special respiration by lungs; in birds, special locomotor organs; and in mammals, special forms of nurture and, ultimately, organic verticalisation.

Now all these methods, or their homologues, may be found equally ascertainable and illustrated in social organic structures—sensitivity in a council of tribal chiefs or in the intelligence system of a Germanic army; activity, in the pursuit of their respective decisions; defence, in the organisation of their “braves” or battalions; nutrition, in a subsidy to an industrial unit by a paternal government or corporate trust; capitalisation, in the processes of the finance system; differentiation, in the branching of a banking corporation; standardisation, in concentrations of manufacturing effort on special products; integration, in imperial or federated forms of government adapted, respectively, to genetic or congregate groups; general localisation, in the government or armed force of a primitive tribe; bi-lateral localisation, in the universal participation in government of Right and Left; segmented localisation, in tribal systems performing like groups of functions; anterior localisation, in collection of controlling activities in capital centres; standardisation, in the regulation of industrial or other personnel or plant with reference to standard outputs or costs; centralisation, in increasing powers of central authorities; dorsalisation, in establishment of federal constitutions; ecto-, endo-, and meso-dermic defence, and substitution of organs, in the evolution of tribal, revolutionary and regular armies, respectively; gill-slit respiration, in the early stages of power development by water or steam; ventral centralisation, in the unification of a transport system; dorsalisation of nerves in

spinal cord, in extension of federal governmental power over constituent states, as in the United States of America; special respiration by lungs, in development of super-power systems; special locomotor organs, in external transport development; special forms of nurture in systems of tariffs or subsidies that aid nascent industries; and verticalisation, in increasing unions of local with central governments as well as in federations of industrial organisations engaged in processes ranging from sources of raw material, such as iron and steel, to highly elaborated and finished products, such as ocean liners.

It will be observed, on reflection, that the foregoing factors have manifested their effects on social affairs in a variety of other ways, by their operation as unaided methods of nature. Hippocrates long ago observed that in the healing art the physician should ascertain and aid nature. I now suggest, as a matter parallel, that the foregoing may be usefully regarded as ascertained methods or factors in aiding nature in the development of social organic forms. And I further suggest that in a process of research they may be systematically applied by their consideration, individually and in the foregoing sequence, in connection with any special system of organs desired to be improved, comprising the organs in our previous classification specially concerned with the function in view, together with other organs in the classification auxiliary or ancillary thereto. Thus, in regard to the improvement of a national curative system, it will be observed that, in addition to special curative organs, we have to consider also representative, administrative, educational, research, transport, marketing, finance and perhaps further organs ancillary or auxiliary to the curative system. To discover ways of improvement we consider the possibilities of the factors as stated—for instance, of increased sensitivity, by some re-arrangement of representative managements; of increased activity, by a larger utilisation of available personnel or hospital accommodation; of increased defence by improved preventive measures; of increased nutrition, by governmental or public aid; of increased capitalisation, by erecting new hospitals; of increased differentiation, by a tendency towards specialist facilities or by a better allocation of functions; of increased standardisation in regard to qualifications of personnel; and so on until each method is tested, as above and otherwise as may seem practicable, in conjunction with the several organs or groups of organs concerned.

I had special opportunity of observing and proving the practical value of these methods; as, during the exceptional developmental period of the European War, I occupied a private secretarial position closely in touch with the inner work-



ings of the Government. I had, at the same time, charge of the organisation of new measures, in particular two relating to rather complex systems of agencies dealing with disease and invalidity. Their cost to the Central Government was about £23,000 per annum and their total operating cost perhaps £40,000 per annum. I have had also a recent experience in initiating and organising a new system of Local Government statistics for the purpose of measuring each year the organisation, functions and finance of Local Government. This involved a comprehensive survey and classification of all Local Government organs and functions. In these and other capacities, some essentially different, as, for instance, the secretaryship to the Irish Civil Service Home Rule Committee, I have had what I might term an applied-science experience of the subject.

I will now illustrate the methods enumerated by reference to the development of the special curative system with which I was first concerned. It might be said to have had its beginning in an increased sensitivity, on the part of the public, arising specially from information obtained through medical inspection of army recruits. This occasioned a gradual awakening of various parties to a recognition of the need for special measures. Activity and, to a certain extent, defence made their appearance in the efforts of a voluntary propagandist organisation; nutrition, in special allocations of public finance; capitalisation, in certain hospital improvements; differentiation, in development of special hospital and university laboratory departments; standardisation in certain standard pathological tests; and integration, in the co-operation of hospital, university laboratory, Local Government, and other authorities—as many as eight corporate agencies were, on occasions, combined in single local systems. The arrangements showed also general localisation in Ulster, centralisation in Leinster and substitution of organs, in the revolutionary period, owing to the rupture of relations between local and central authorities. Verticalisation of organs proceeded throughout, in the increasing union of Local and Central Governments. It became specially manifest in a final arrangement whereby the Irish system was brought into relation with the Medical Research Committee in Great Britain and through that organ with the best available medical opinion.

Up to this point I have only considered the social organism with reference to biological methods deduced from the biology of pre-social forms. But the biology of the social organism must include not only, generally, the biology of pre-social forms, but, specially that of the social forms themselves.

To be more accurate, pre-social biological hypotheses, in their social application, must be adapted to the special circumstances and attributes of the social organic form under consideration. They must take into account the history of the form, a history which sub-divides into (1) the relevant history of its environment, and (2) the history of its culture, including, as the case may be, that of its anthropology, politics, economics, psychology, and religion. This appears to me to be a statement of the necessary addition to Spencer's theories that subsequent sociologists have aimed at. Generally, it will be found that required adaptations of hypotheses are already illustrated in pre-social forms. It may, for instance, be found true of all forms that the possibilities of activity and differentiation vary with the vigour of the cultural stage arrived at; of defence, with environmental and internal conditions; of capitalisation, with degree of development; of standardisation, with comparative fixity of type; of integration, as of communities, with genetic relationship; of localisation, with special localising tendencies; of centralisation, with special centralising tendencies; of substitution of organs, with preceding or accompanying metamorphosis; of special nurture and verticalisation with advanced cultural progress; and of all these, in exceptional metamorphic form, with abnormal preceding, or accompanying, environmental change.

There will be, over and above the foregoing, special hypotheses applicable only to social forms and arising from their unique characteristics. Thus, in regard to certain other agencies of whose reorganisation I had charge, I have noticed entirely different forms of differentiation in Dublin and Belfast. In Dublin, the agencies were differentiated in accordance with religion and sex and sub-differentiated in accordance with the classes dealt with. In Belfast the differentiation was chiefly in accordance with classes dealt with. I would understand special cultural, including religious, differences as between Dublin and Belfast to be responsible for these features. They, therefore, appear to me to be explainable only on special social hypotheses.

The foregoing considerations open up a vista of further possible conclusions. But I have reached a certain definite point at which I may conclude. If I may present a somewhat incomplete summary, it is this: that the social organism may be developed in its regulative, economic and financial systems by improvements in sensitivity, activity, defence, nutrition, capitalisation, differentiation, standardisation and integration, as well as by other biological methods which may appear to be, to a large extent if not entirely, more complex forms of these eight that I have stated.

I would, however, submit that the use of biological methods should be dictated by need only, or, at most, conservative experiment; and I would suggest that research workers' conclusions should be tested by their submission to representative organs, constituted with attention to a special suitability for the consideration of the matter under investigation. It is somewhat on this principle that I submit my paper to the Society. I submit, too, my belief that Social Science may have its inventions equally with Mechanical Science. I realise, from experience, that its methods may increase output, reduce expense, and improve life. Generally, in regard to this final aspect of the subject, I lean to an opinion that the Science may be evolved to secure, in social affairs, fifty per cent. improvements in efficiency and equivalent advances in economy.