

**The Process of Preparing Irish Cello Sonatas (1968-1996) for
Performance**

Annette Cleary (BA, KA, M Mus)

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Supervisor: Dr. Denise Neary

To my father, Vincent Cleary

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Volume I

Table of Contents

Abbreviations	ii
Abstract	iii
Acknowledgements	iv
Introduction	1
Chapter 1: Cello Sonatas by Irish Composers (1968-1996):	
A Performer's Perspective	12
Chapter 2: The Process of Interpretation	62
Chapter 3: Cognitive Aspects of Performance	79
Chapter 4: The Physicality of Performance:	
Mechanics, Movement and Gesture	117
Chapter 5: Emotion: Mood, Character and Expression	145
Conclusion	188
Appendix A	193
Appendix B	199
Appendix C	201
Appendix D	202
Appendix E	203
Bibliography	204

Abbreviations

AIC	Association of Irish Composers
AYIC	Association of Young Irish Composers
BBC	British Broadcasting Corporation
CMC	Contemporary Music Centre
IMRO	Irish Musical Rights Organisation
ISCC	International Society of Contemporary Composers
MAI	Music Association of Ireland
RÉ	Radio Éireann
RÉLO	Radio Éireann Light Orchestra
RIAM	Royal Irish Academy of Music
RTÉ	Radio Telefis Éireann

Abstract

This dissertation focuses on all the sonatas for cello and piano by Irish composers in the second half of the twentieth century. The sonatas, seven in total, were composed between 1968 and 1996 and show little similarity to each other. For the performer, challenges are presented in preparing these works for performance. Apart from the premiere performance only one of these sonatas was subsequently performed and five of the scores are unpublished. There are almost no readily available recordings which could serve as a guide. Therefore the performer needs to rely on a variety of interpretative skills to create a valid realisation of these sonatas.

The interpretative skills required are based on three different approaches: the cognitive, the physical and the intuitive. Solo performers face both technical and musical challenges in the process of preparing a work for public performance. Although a musical interpretation of a particular work may be formed prior to the initial performance, it is only within performance that further knowledge is gained, which then informs subsequent performances. This dissertation discusses the cognitive, the physical and the intuitive aspects of performance preparation within the framework of the cello sonatas, with examples drawn from these works to illustrate performance decisions. A performer's commentary is included and, where possible, collaboration with the composers is integrated in the discussion. This will provide a resource for those who wish to carry out further research or to perform this repertoire.

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Introduction

During the years 1968 to 1996 six Irish composers wrote large-scale works for cello and piano. The concept for this thesis began while researching cello works by Irish composers with a view to performing less-frequently played repertoire. Seven works for cello and piano are examined from a performer's perspective, specifically from the cellist's point of view. Composers represented are Brian Beckett, Angel Climent, Tom Cullivan, John Gibson, Joseph Grocock and Kevin O'Connell. The scores of these works, with one exception¹, are available from the Contemporary Music Centre, Dublin.² The works were all composed in Ireland between 1968 and 1996 and represent an important output in two ways. Firstly, it is a body of interesting and varied repertoire for cello and piano. Secondly, the works are significant within the context of late Irish twentieth-century composition, which is outlined in chapter one.

The works are fairly representative of each composer's individual style, with two of the sonatas being early works³ and another marking the end of a particular stylistic period.⁴ Two of the works include quotations from traditional Irish music.⁵ All of the composers mentioned were pianists and both Gibson and Beckett were the pianists for the premiere performances of their cello sonatas. Although none of the composers were actually string players themselves, all were in a position to consult with cellists, who were either

¹ Brian Beckett, sonata No. 2 for cello and piano is not available in the CMC.

² The Contemporary Music Centre (CMC), 19 Fishamble Street, Temple Bar, Dublin 8, Ireland, <www.cmc.ie>

³ John Gibson, sonatina for cello and piano and Brian Beckett, sonata No. 1 for cello and piano.

⁴ Kevin O'Connell, sonata for cello and piano.

⁵ Tom Cullivan, sonata for cello and piano and Kevin O'Connell, sonata for cello and piano.

family members or colleagues, during the compositional process. Wherever possible all continued to show a keenness to collaborate with performers during subsequent performances of their works and the performer/composer relationship is commented upon throughout the discussion.⁶

Strategies often used by performers during the initial preparation of a work for performance are to compare various editions, or to listen to recordings or performances of the piece. For most of these sonatas no performing editions are available and many of the sonatas exist only as copies of hand-written manuscript.⁷ Apart from the premiere performances, only one of these works was ever performed subsequently by professional musicians prior to 2008 when this research began.⁸ The use of recordings as part of the learning process encourages different viewpoints. According to Mine Doğantan-Dack, ‘there is ample anecdotal evidence that performers do listen to and use recordings professionally, as part of their aesthetic-epistemological quest to create musical meaning in and apply an artistic signature to their performances.’⁹ Peter Hill, on the other hand (while not denying the value of studying recordings), is against the copying of another player’s interpretation stating that ‘it is a lazy shortcut’.¹⁰ Anthony Gritten asserts that listening to recordings is not labour-saving, as the performance still needs to be

⁶ During recent performances of some of these works, composers were attentive to all queries and open to performing suggestions.

⁷ Two of the sonatas are published: Joseph Grocock, sonata for cello and piano (Dublin: Drummartin Music, 1987) and Cullivan, Tom, sonata for cello and piano (Farwestern Publications, 2001)

⁸ A second performance of Kevin O’Connell’s sonata for cello and piano was given by David O’Connell (cello) and Francis King (piano) on 12 March 2000 at the Hugh Lane Municipal Gallery of Modern Art.

⁹ Doğantan-Dack, Mine, ‘Something old, something new, something borrowed, something true: Questions of aesthetics and epistemology in using recordings’, Paper presented at the CHARM Symposium, (Accessed 20 October 2010), <<http://www.charm.rhul.ac.uk/contents/events/symp6.html>>

¹⁰ Hill, Peter, ‘From Score to Sound’, in Rink, John (ed.), *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002), 133.

physically realised. Although recordings may be useful during the early stages of preparation, once a performer is on stage, ‘she now attends to what she is required to do by the work she had been preparing and is now performing’.¹¹ The challenge of live performance ensures that the performer is absorbed in making ‘reflective judgements anew every time she goes on stage’.¹²

Expert performers do not usually try to slavishly copy another player’s interpretation. Imitating another performer is not considered a valued tradition in classical music. Even students often strive to differ from, rather than imitate, their teachers and similarly most teachers wish to encourage their students to develop as individual players. For example, cellist William Pleeth, who was a student of Julius Klengel (1859-1933) said this about him: ‘Klengel never encouraged us to copy, and if you look at the wide range of playing from his many pupils you will see how different they all are’.¹³

Some performers listen to recordings to spark off new creative ideas at various stages of the learning process, while others use recordings to check the correctness or validity of their own rendition. One of the main reasons a string player uses a recording during the study of a sonata (or other work with piano) is to hear the piano part.¹⁴ It is common

¹¹ Gritten, Anthony, ‘Performing after Recording’, in Doğantan-Dack, Mine (ed.), *Recorded Music: Philosophical and Critical Reflections* (London: Middlesex University Press, 2008), 88.

¹² Doğantan-Dack, Mine, ‘Introduction’ in Doğantan-Dack, Mine (ed.), *Recorded Music: Philosophical and Critical Reflections* (London: Middlesex University Press, 2008), xii.

¹³ Campbell, Margaret, *The Great Cellists* (London: Victor Gallancz, Ltd., 1988), 118, quoted in Philip, Robert, *Performing Music in the Age of Recording* (New Haven and London: Yale University Press, 2004), 197. Klengel’s students included not only William Pleeth, but Emanuel Feurermann, Guilhermina Suggia and Gregor Piatigorsky.

¹⁴ Anecdotal evidence supports this use of recordings during the learning process. Some players may be fortunate enough to have a ‘resident’ pianist available throughout the learning period of a new work, but

practice for a cellist to study the cello part individually for most of the preparation time, and often, a sonata is performed with only two or three rehearsals with piano.¹⁵ A detailed knowledge of the piano part, enables the cellist to make suitable musical and technical choices, many of which depend hugely on an awareness of the harmony and texture of the piano part. This is emphasised by Peter Hill when he states that fingering and bowing cannot be devised ‘in a vacuum, without knowing what end they are to serve.’¹⁶ This point is particularly relevant within the context of these Irish sonatas, as recordings, which would be useful to the cellist, are largely unavailable. Only two of the sonatas were recorded for radio broadcasts¹⁷ and these recordings are either lost, inaccessible, or are of little use due to poor recording conditions.¹⁸ Therefore, the cellist needs to rely on other ways of forming suitable interpretative decisions.

During the initial study of these Irish sonatas, it was noted that no detailed research literature appeared to be available on this topic, with the exception of an unpublished MA thesis by Rachael McGinley titled, ‘A Survey of Irish Cello Works from 1939-1997’.¹⁹ McGinley’s thesis includes a brief description of all works documented in CMC for solo cello, cello and piano and cello with another instrument or tape. It does not include the cello sonatas by Kevin O’Connell, Angel Climent and Brian Beckett (Sonata No. 2), and while it is an informative survey, it does not examine cello performance in

most depend on either imagining the sound from reading the score, attempting to play it on the piano if proficient or listening to the work on a recording.

¹⁵ This is not ideal, but due to financial/time constraints, is sometimes necessary.

¹⁶ Hill, Peter, ‘From Score to Sound’, 132.

¹⁷ Brian Beckett’s sonata for cello and piano No. 1 was recorded by RÉ, 9 January 1971, and Kevin O’Connell’s sonata was recorded for BBC Radio 3, 12 September 1996

¹⁸ Appendix E gives details of premiere performances and available recordings.

¹⁹ McGinley, Rachael, ‘A Survey of Irish Cello Works from 1939-1997’ (Unpublished MA thesis, National University of Ireland, Maynooth, 1997).

depth.²⁰ This thesis aims to explore these interesting and largely unknown sonatas for cello within the context of Irish composition in the late twentieth-century and hopes to illuminate practice-based issues relating to interpreting these sonatas for performance.

As a result of research, forthcoming recordings of these sonatas are planned. It is hoped that a radio documentary or series will be recorded which deals with Irish composers and their works for cello.²¹ Since 2008, these sonatas by Irish composers have been gradually introduced into recital programmes.²² All composers of these sonatas have been enthusiastic and helpful in aspiring to have their works for cello and piano brought into the public domain. In many cases, newer and modernised scores have been prepared and made available for recent performances.

This research is practice-based and contributes to this rapidly emerging and thriving area, particularly in the realm of cello performance. Apart from ‘The Alchemy Project: Qualitative Transformations in Chamber Music Performance’,²³ very little research is available on how performers learn on stage. This exciting research project explores the nature of live performance through the practice of a professional piano trio (Marmara Piano Trio: Mine Doğantan-Dack, piano; Pal Banda, cello; Phillippa Mo, violin) which

²⁰ The aim of the survey by Rachael McGinley was to ‘catalogue and evaluate’ all works for cello between 1939 and 1997. McGinley, ‘A Survey of Irish Cello Works’, ii.

²¹ Audio-visual material was not chosen as part of the methodology for this thesis, as preparation for the recording of this extensive body of works is in progress.

²² John Gibson: Sonatina for cello and piano was performed at the Royal Irish Academy of Music in May 2008 by Annette Cleary (cello) and Lance Coburn (piano). Tom Cullivan: Sonata for cello and piano was performed in Virginia, Cavan in 2008 by Annette Cleary (cello) and Padhraic O’Cuinneagain (piano). Joseph Grocock: Sonata for cello and piano was performed at the Royal Irish Academy of Music, October 2009 and St Ann’s Church, Dawson Street, Dublin, November 2009 by Annette Cleary (cello) and Svetlana Rudenko (piano).

²³ ‘The Alchemy Project: Qualitative Transformations in Chamber Music Performance’, (Accessed 20 October 2010), <<http://www.web.mdx.ac.uk/alchemy/summary.html>>

was specifically founded for this research.²⁴ It ‘compares and contrasts the processes that take place in rehearsals/practice sessions with those that unfold during a live performance’.²⁵ This thesis, however, focuses on the learning process during preparation of these works for performance. In discussing the practical aspects of performance preparation of these sonatas for cello by Irish composers, a methodology is exemplified which may be applied to other works for cello or even to works for other instruments.²⁶ During all discussion of the preparation process, it must be remembered that the ultimate goal of practice is to enable the performer to achieve an artistic, secure and enjoyable performance.

An examination of this repertoire from the performer’s perspective raises many intriguing issues and queries regarding performance. The issues centre on decisions that have to be made throughout the study of any work to enable a successful performance to take place. During the process of preparation the player is faced with choices which affect the final interpretation, and many are not notated in the score. Final decisions regarding tempo, dynamic nuance, bowings and articulation are usually left to the performers. With citations from the works being studied, details of practices that are idiomatic to the cello arise, for example, specific fingerings and bowings are indicated and performance suggestions regarding dynamics, timbre, vibrato and articulation are outlined. Many of these performance suggestions are based on the expertise of a professional cellist whose training includes study and masterclasses with renowned

²⁴ Ibid.

²⁵ Ibid.

²⁶ Instruments to which this research may readily be applied include other string instruments (violin, viola and double bass) and, to a lesser extent, piano (as the piano part is discussed within the context of cello performance in some of the cited examples).

cellists such as Eleonore Schoenfeld, Michael Flaksman, Antonio Janigro, Ivan Andrews, André Navarra, Coral Bognuda, László Varga, Lynn Harrell, William Pleeth and Paul Tortelier. Performing experience includes over thirty years working as a soloist, chamber musician, orchestral player, and teacher.²⁷

While preparing these sonatas for performance two questions constantly arise. One question is: how is a particular effect achieved? The other is: where should this apply? The answers to these questions form the basis for further discussion. The first question concerns mainly the technical aspects of playing while the second is an interpretative concern. However, separation of the technical from the musical is an artificial approach and, as evident throughout the following chapters, the inter-relatedness of these two strands is obvious.

In the process of forming an interpretation of each of these works, performance decisions need to be made, tested, and possibly changed or adapted until a coherent realisation is discovered. All of the composers of these sonatas are pianists, organists or harpsichordists, so it is not surprising that details concerning bowings, articulation and choice of string are left almost entirely to the cellist. Decisions regarding phrasing, dynamics and tempo indications are in many cases also left to the performer's discretion. On the large-scale level the performer's judgement is required for presenting the appropriate character and mood for each movement of the sonatas. Pacing needs to be considered carefully to provide structural coherence. Likewise, balance and textural

²⁷ 'Annette Cleary', (Accessed 25 October 2010), <<http://www.annettecleary.com>>

effects rely largely on decisions made by the performers. All of these musical elements depend ultimately on varying energy.

The control or the manipulation of levels of intensity is the source of energy in performance. Decisions regarding mood, tempo, dynamics, timbre and contour need not only to be imagined or thought out but must be physically realised. This is recognised by a performer as technical control which ideally enables musical expression to take place within the stressful context of public performance. During the preparation process the role of the interpreter is to integrate these elements coherently: this involves making musical decisions, based on the knowledge of a composer's style and facilitating technical security in order to ensure that the interpretation can be easily repeated under performance conditions. Thus, certain elements of a performance are automatic, while other aspects such as expressive nuances require flexibility and spontaneity.

The first chapter presents an outline of twentieth-century Irish composition, and an overview of the seven composers, their styles and their works for cello. The discussion in this chapter centres on the queries and observations that arise when a performer picks up a score for the first time. A typical starting point is a glance through the score to see the overall structure (number of movements, etc.) and general style of the composer. Passages containing technical difficulties are usually observed straight away. Usually an initial playing of the piece follows. The beginnings of movements, main themes and obvious new sections are tried out. General tempos are established and striking rhythmic patterns are outlined. Mood and character are often discerned during the first playing of

the piece. Passages which are awkward or unnatural from the technical point of view are attempted and some fingering options may be marked in the cello part straight away. Similarly some essential bowing, particularly idiomatic bowing, may be pencilled in. Sometimes a passage that seemed difficult at first glance may turn out to be quite manageable when tried on the actual instrument. A full or partial play-through of sections usually follows and queries for the composer may be noted. Depending on the technical or musical complexity of the work, the performer usually makes some decisions regarding the time-frame required to learn the work, unless, of course, a performance date has been decided upon, in which case the player needs to organise the study of the work within the allocated time. Included in this overview are the player's thoughts regarding the composer's general style, within the context of the particular work being studied.

The second chapter provides a short overview of interpretation from the performer's point of view. It is discerned that interpretation, for a performer, is mainly a process of decision-making. From the overall structure to the smallest detail of a piece, the player needs to be able to make judgements that will lead to a valid and interesting performance. An essential component of an interpretation is its repeatability and the role of effective practice is observed. This is followed by a description of three practical models that can be used both as background knowledge and as creative solutions to daily difficulties encountered by performers during the regular and often painstaking practice sessions which lead to a successful performance. The first model is based on the premise that interpretation consists of varying energy according to musical context. This was

devised by the violinist Dorothy DeLay to provide a practical framework for players to use during performance preparation. As a strategy for violinists, very little needs to be altered to adapt this process of interpretation for cello. The piece being studied is broken down into technical components which are then incorporated musically with conscious awareness. The musical decisions, in this model, rely principally on either increasing or relaxing energy levels. The second model is based on the mental map performers create of a work in order to learn, memorise and perform it coherently. Performers conceptualise a work within a hierarchically organised structure with performance cues being established during the learning process. These cues are ingrained at specific points during the learning process and serve as invaluable guides for the player to use during performance. The third and final model suggests an ideal structure which encompasses three interrelated aspects which are necessary for forming a valid interpretation of a work. These aspects of musical performance are as follows: the cognitive, the physical and the intuitive. The separation of these three components of expert musical performance is artificial. In reality all of these attributes are imperceptibly linked during both preparation and performance of a work. This model, as interpreted by a solo cellist, provides a useful structure for categorising the different skills required in the process of practice and performance. It provides the cellist with a practice-based methodology for carrying out practical research into these Irish sonatas.

In the following chapters each of these three areas of enquiry provides a framework for the study of selected examples from this sonata repertoire, showing how decisions relating to the interpretative challenges are reached. In some examples, editorial

suggestions are noted. The emphasis is on the discussion of the music from the perspective of the cellist, with comments relevant to performance problems, both technical and musical, encountered in the sonatas. Where necessary, the piano part is also discussed. However, in all of the cited musical examples the piano score is given, even if only the cello part is being examined, as the textural context is an essential component of these duos.

In chapter three, the cognitive aspects of performance are presented within the context of a performer's analysis. A professional player's understanding of how a piece is organised is different from that of a musical theorist and it includes the performer's intuition or wealth of experience as part of this cognitive process. Detailed technical and musical choices in relation to specific examples from the Irish sonata repertoire are discussed. Chapter four focuses on the physicality of cello performance. Problems connected with the mechanics of sound production and technical issues which are specific to the cello are observed. Movement and gesture is discussed from the perspective of the cellist in relation to technical control and musical fluency. Mood, emotion and character are featured in chapter five, with musical expressiveness being found to have natural rules and patterns. The tools of expressiveness as related to string-playing are discussed in detail. Finally, a concluding discussion summarises these aspects of interpretation and mentions briefly the value of post-performance reflection. The interconnectedness of these three aspects of performance cannot be underestimated. The cognitive, the physical and the intuitive inform all stages of performance preparation.

CHAPTER 1

Cello Sonatas by Irish Composers (1968-1996): A Performer's Perspective

General Historical Context

During the early decades of the twentieth century Irish composers were few in number and classical music was considered to belong in the domain of the Anglo-Irish upper class.¹ The situation in 1996 was very different with over one hundred new works by forty composers registered that year in the Contemporary Music Centre.² Established in 1986 with funding from the Arts Council, the CMC is the official resource centre and database for Irish classical music. By 1996 the number of works by Irish composers held in the CMC archives totalled over two thousand compositions which represented the output of eighty composers.³ To trace this dramatic growth in classical music composition in Ireland, it is worth examining and comparing two radio series spanning a thirty-year interval – one was the Radio Éireann (RÉ) 1958 series, ‘Composers at Work’⁴ and the other was broadcast by Radio Telefis Éireann in 1988 under the title

¹ Examples of composers working in the Anglo-Irish tradition include Arnold Bax (1883-1953), Ernest John Moeran (1894-1950), Hamilton Harty (1879-1941), Herbert Hughes (1882-1937), Charles V. Stanford (1852-1924) and Joan Trimble (1915-2000); Klein, Axel, ‘Roots and Directions in Twentieth-Century Irish Art Music’, in Klein, Axel and Cox, Gareth (eds.), *Irish Music in the Twentieth Century, Irish Musical Studies*, Vol VII (Dublin: Four Courts Press, 2002), 168-176.

² The Contemporary Music Centre (CMC) is located at 19 Fishamble Street, Temple Bar, Dublin 8, Ireland.< www.cmc.ie>

³ O’Leary, Jane, ‘Creating an Audience for Contemporary Music’, in Pine, Richard (ed.), *Music in Ireland 1848-1998* (Cork: Mercier Press, 1998), 121.

⁴ The producer of the ‘Composer at Work’ series of radio programmes was Fachtna O’hAnnrachain; quoted in Pine, Richard, *Music and Broadcasting in Ireland* (Dublin: Four Courts Press, 2005), 239.

‘Composers in Conversation’.⁵ Each programme in the series featured most of the composers working at that time in Ireland.

The first series followed a period of controversy regarding the state of composition in Ireland as illustrated by the opposing viewpoints of two prominent musicians: Denis Donoghue, the critic of the *Irish Times*, and Aloys Fleishmann, the Cork-based composer and musician. In 1952 Fleishmann edited a symposium entitled *Music in Ireland*,⁶ a comprehensive survey of music in Ireland in which twenty-nine composers are listed. Two years later, Dennis Donoghue contradicted these figures in his publication ‘The Future of Irish Music’ stating that Ireland had no composers of stature (with the possible exception of Brian Boydell).⁷ He continued by writing that Irish music had ‘no future’ and ‘internationally, contemporary Irish music does not exist’.⁸ The main reason for this bleak outlook, claimed Donoghue, was that ‘many Irish composers have fallen into the trap of folk-music’.⁹ This was in reference to the propensity of composers to incorporate or arrange traditional Irish music within the classical idiom.

⁵ Dermot Rattigan interviewed sixteen composers for the RTÉ Radio 1 series ‘Composers in Conversation’; Pine, *Music and Broadcasting*, 274-276.

⁶ Fleishmann, Aloys (ed.), *Music in Ireland: A symposium* (Cork: Cork University Press, 1952).

⁷ Donoghue, Dennis, ‘The Future of Irish Music’, *Studies* 44 (1955), 113; quoted in Pine, Richard, ‘An Overview’, in Pine, Richard (ed.), *Music in Ireland 1848-1998*, 20.

⁸ Pine, *Music and Broadcasting*, 214-215.

⁹ Pine, ‘An Overview’, 20.

The seventeen composers chosen for the 1958 radio series ‘Composers at Work’ welcomed the opportunity not only to have their new works performed¹⁰ but, more importantly, the chance to contribute a short (three minute) statement describing their personal viewpoints on the compositional process and general problems facing an Irish composer at that time. Interestingly, none of the composers could earn a sufficient income from composition alone – all worked either as music teachers, performers or arrangers. One of the composers, Redmond Friel (1907-1979), spoke on behalf of most of the participants in the following excerpt:

... few of us ... can afford to give 100% of our working day to composition. Time has to be taken off for the earning of one’s living usually by teaching, performing, by church choir work and so on. One result of this is that the expenditure of time and energy on these activities leaves so much less time for composing ...¹¹

A central theme common to all composers participating in this series was the ‘burden of an awareness of national identity’,¹² in other words, the difficulty of ‘nationalism’ in classical music within the Irish context. Nationalism and the use of folk-song was a central concern of classical music in Ireland during the first half of the twentieth century. The use of Irish elements was also a feature of the literary tradition at that time and was encouraged as a source of creativity.¹³ An example of such encouragement of the

¹⁰ Each composer was commissioned by Hans Waldemar Rosen, the choral director of the RÉ singers to write works for this choral group and for piano or small chamber ensemble specifically for these radio programmes.

¹¹ RTÉ Sound archive tape 112MD ‘Redmond Friel’, (1958).

¹² White, Harry, ‘The divided imagination: music in Ireland after O’ Riada’, in Klein, Axel and Cox, Gareth (eds.), *Irish Music in the Twentieth Century*, 11-14.

¹³ Graydon, Philip, ‘Modernism in Ireland and its cultural context in the music of Frederick May, Brian Boydell and Aloys Fleischmann’, in Klein, Axel and Cox, Gareth (eds.), *Irish Music in the Twentieth Century*, 56-57.

importance of nationalism within the arts can be found in the text of Douglas Hyde's¹⁴ inaugural speech at the opening night of the first Irish radio broadcast:¹⁵

I have been asked to open this Broadcasting Station to-night ... our enterprise to-day marks the beginning of a new era ... an era in which our nation will take its place amongst the other nations of the world ... A nation is made from inside itself ... from its language ... by its music, songs, games and customs. So while not forgetting what is best in what other countries have to offer us, we desire to especially emphasise what we have derived from our Gaelic ancestors – from one of the oldest civilisations in Europe ...¹⁶

From the 1930s to 1958, two contrasting strands can be observed in works by Irish composers: those who incorporated Irish traditional elements in their works (or arrangements) and those who deliberately broke away from this style, looking instead to international schools of composition. Frederick May (1911-1985), Brian Boydell (1917-2000) and Aloys Fleischmann (1910-1992) are credited as being the earliest composers to reject the use of traditional Irish music and to focus on developments in contemporary music in Europe.¹⁷

On the other hand, composers who incorporated elements of Irish folk music were well represented in the 'Composers at Work' series, including Eamonn O'Gallchobhair¹⁸

¹⁴ Douglas Hyde (1860-1948) was founder of the Gaelic League and President of Ireland from 1937-1945; Collins, M. E., *History in the Making: Ireland 1868-1966* (Dublin: The Educational Company, 1993), 175-184.

¹⁵ The opening broadcast of 2RN took place on 1 January 1926. Music for the occasion included traditional Irish music (Annie Fagan, harp, Maighread Ni Annagain, voice and James Ennis and Liam Andrews, Uilleann pipes); arrangements of Irish Airs performed by classical musicians (Arthur Daley, violin, three Irish Airs; J. C. Doyle, baritone, three Irish songs; Joan Burke, contralto, three Irish songs) and music by Chopin, Palestrina and Wagner; quoted in Pine, Richard, *2RN and the origins of Irish radio* (Dublin: Four Courts Press, 2002), 148-153.

¹⁶ Hyde, Douglas, 'Text of Inaugural Speech', 1 January 1926; quoted in Pine, *2RN*, 187.

¹⁷ Graydon, 'Modernism in Ireland', 57-58.

¹⁸ Eamonn O'Gallchobhair is of particular interest as he composed extensively for cello. Many of his arrangements of Irish folk-songs and slow airs for cello and piano were published in the 1950s. Between 1926 and 1969 the Ceol Cumann orchestra, which was dedicated to chamber and orchestral arrangements

(1910-1982), Proinsias O’Ceallaigh, (1908-1976), T. C. Kelly (1917-1985), Sean O’Riada (1931-1971), Dr J. J. O’Reilly (1905-1983) A. J. Potter (1918- 1980) and Havelock Nelson (1917-1996). For some of these composers, particularly A. J. Potter,¹⁹ arranging traditional dances and melodies was the main source of income as RÉ was in need of such material for its two new orchestras, the Radio Éireann Light Orchestra (RÉLO) and the newly-expanded Symphony Orchestra.²⁰

For others, the use of traditional national elements in their music provided a means of reaching a larger audience. Audience accessibility was mentioned by Havelock Nelson when he said that by incorporating national melodies and dances in his compositions, ‘they gain a larger audience in their new setting’,²¹ while Joseph Grocock (1913-1997) echoed this sentiment in the following extract regarding problems facing a composer:

There are other problems confronting a composer: whether to be in the van of progress and use twelve-note row technique, applauded by a few and misunderstood by the majority of listeners: or to keep to older paths of tonality, more easily understood by the many ...²²

Both Nelson and Grocock chose to use a musical language which was accessible to the majority of concert-goers. A merging of these two strands, the traditional Irish and contemporary European classical music, was described by T. C. Kelly in his use of the

of Irish traditional music, broadcast regularly on Radio Éireann. O’Gallchobhair composed over five hundred chamber works for this ensemble along with a substantial output of similar arrangements of Irish music for both RÉ orchestras. The cellist in Ceol Cumann was Sean Delamere (who also conducted the ensemble) and O’Gallchobhair was resident pianist for many years; Pine, *Music and Broadcasting*, 80-86.

¹⁹ Pine, *Music and Broadcasting*, 216.

²⁰ The enlargement of the Symphony Orchestra and a new Light Orchestra was part of Radio Éireann’s post-war expansion under the Minister for Posts and Telegraphs, Mr. P. J. Little. Not only did he fully support the music section of RÉ, but he envisaged a new National Concert Hall venue on the Rotunda site and a Department of Education with a music section which would develop into a third level Conservatoire; O’Broin, Eimear, ‘Music and Broadcasting’, in Pine, Richard (ed.), *Music in Ireland 1848-1998*, 115.

²¹ RTÉ Sound archive tape 115MD ‘Havelock Nelson’; quoted in Pine, *Music and Broadcasting*, 227.

²² RTÉ Sound archive tape 119MD ‘Joseph Grocock’; quoted in Pine, *Music and Broadcasting*, 228.

term ‘bilingualism’ in the context of his own compositions,²³ while Seoirse Bodley explained that the use of the melodic curve in Irish folk-song could ‘be successfully grafted onto the European tradition’.²⁴

The second major issue of concern to almost all of the composers interviewed was the problem of getting new compositions performed. Succinctly put by A. J. Potter in this statement from his 1958 radio interview, he notes that Radio Éireann was the main commissioning body who was willing to perform works by Irish composers:

As to the job of getting works performed ... with a couple of worthy exceptions, our choral societies and such like regard the approach of a contemporary Irish composer with rather less favour than they would a case of bubonic plague. ... But we always have RÉ. They will commission works, they will pay for them and they will play them.²⁵

The two most senior members of the group of composers interviewed for this series, Frederick May and John F. Larchet (1884-1967), were perhaps the best placed to comment on the overall situation of Irish composition in the late 1950s. May summed up the situation with the observation that ‘we have ... no tradition at all of composition’, but the possibility of ‘an exciting future’ awaits Irish composition as each composer is therefore free to find his own creative voice.²⁶ John F. Larchet, who occupied the chair of composition at both University College Dublin and at the Royal Irish Academy of Music since the early 1920s and was the teacher of almost all composers in Ireland at

²³ RTÉ Sound archive tape 113MD, ‘T. C. Kelly’; quoted in Pine, *Music and Broadcasting*, 231.

²⁴ RTÉ Sound archive tape A530 ‘Seoirse Bodley’; quoted in Pine, *Music and Broadcasting*, 233-234.

²⁵ RTÉ Sound archive tape 106MD ‘A. J. Potter’; quoted in Pine, *Music and Broadcasting*, 238.

²⁶ RTÉ Sound archive tape 118MD ‘Frederick May’; quoted in Pine, *Music and Broadcasting*, 224-225.

that time, seemed hopeful that, given the right conditions, Irish composition could flourish.²⁷

A comparison of the 1958 interviews with the 1988 radio series ‘Composers in Conversation’ in which sixteen composers were featured reveals some important changes during the thirty-year interval.²⁸ Only four of the interviewees from the 1958 series were included in the new series – Bodley, Boydell, Fleischmann and Victory; ten had died and Grocock, Deale and Nelson were omitted because they were members of Aosdána and thus considered to have a different professional status than other composers.²⁹ The principal difference was that the question of nationalism in Irish music was no longer the main subject of debate. Instead, the focus was on the influence and integration of techniques and styles from abroad. A brief overview of the list of composers represented in the 1988 series reveals a broad geographical spectrum which may account for the diversity of styles represented in these composers’ works: Jane O’Leary was born and educated in America; Gerard Victory studied in Darmstadt; Seoirse Bodley studied in Stuttgart; Gerald Barry studied in Vienna and Cologne; John Buckley studied in Cardiff; Frank Corcoran studied in Berlin and now is professor of composition in Hamburg; Raymond Deane studied in Darmstadt, Berlin and Basel;

²⁷ Klein, Axel, ‘Irish Composers and Foreign Education: A Study of Influences’, in Devine, Patrick F. and White, Harry (eds.), *The Maynooth International Musicological Conference 1995, Irish Musical Studies*, Vol. IV (Dublin: Four Courts Press, 1995), 273.

²⁸ The composers interviewed were Brian Boydell, Aloys Fleischmann, Gerard Victory, Seoirse Bodley, Gerald Barry, Walter Beckett, John Buckley, Frank Corcoran, Raymond Deane, Jerome de Bromhead, Roger Doyle, John Kinsella, Philip Martin, Jane O’Leary, Eric Sweeny and James Wilson. Pine, *Music and Broadcasting*, 274-275.

²⁹ Aosdána, a government supported body, was created in 1981 to acknowledge the importance of the creative artist in various disciplines within Irish society. In 1995 Aosdána represented one hundred and fifty artists, composers and writers, fifteen of whom were composers. Each member receives an annual stipend drawn from Arts Council funds; O’Leary, Jane, ‘Contemporary Music in Ireland: Developments in the Past Twenty Years’, in Devine, Patrick F. and White, Harry (eds.), *The Maynooth International Musicological Conference 1995*, 286.

Jerome de Bromhead studied in Siena and Eric Sweeney studied in Rome.³⁰ Other notable composers who also studied abroad but were not featured in this series included Eibhlis Farrell who studied in Bristol, and John Gibson, who studied in Munich and Moscow and is the composer of the sonatina for cello and piano which is discussed later. Of the six composers whose works are studied in this thesis, two were born outside the Republic of Ireland; Angel Climent is Spanish and Kevin O'Connell is from Northern Ireland.³¹

During the 1960s and 1970s composers tended to study abroad: at this time, performance opportunities in Ireland for newly-composed works were limited, as were the opportunities to hear live contemporary music.³² Training in contemporary compositional techniques at most Irish universities was not extensive with the exception of the arrival of A. J. Potter in 1951 and James Wilson and Joseph Grocock in the early 1970s at the Royal Irish Academy of Music. Both John Gibson and Brian Beckett were fellow composition students at the Royal Irish Academy of Music at this time and along with Derek Ball, Raymond Deane and Gerald Barry were founders of the Association of Young Irish Composers (AYIC) in 1970. This later developed into the Association of Irish Composers (AIC) which is a member of the International Society for Contemporary Composers (ISCC).

³⁰ Klein, 'Irish Composers', 271-276.

³¹ Other notable Northern Irish composers working in the late twentieth century include Elaine Agnew, Michael Alcorn, Stephen Gardiner and Philip Hammond.

³² Klein, 'Irish Composers', 276-277.

In contrast to the earlier comments of 1958 regarding commissions and performance, many of the younger composers were in a position to earn a full-time living from composition alone. The reasons were due to a huge increase in funding and performance opportunities during the 1970s and 1980s which benefited composers working in this era. Beginning in 1969, when the government introduced tax exemptions on earnings by creative artists, conditions slowly improved for composers working in Ireland. The following year saw the inauguration of the Dublin Festival of Contemporary Music administered jointly by the Music Association of Ireland³³ and RTE. This was important not only as a platform for Irish composers to have new works performed – Brian Beckett had his first cello sonata performed at this 1970 festival – but, even more importantly it provided an opportunity for hearing the music of prominent international composers. Olivier Messiaen, Elliot Carter and Karlheinz Stockhausen all came to Dublin as part of this festival which lasted until 1984 when it ran into insurmountable financial difficulties. Jane O’Leary established Concorde in 1975, an ensemble specialising in contemporary music, both Irish and international.³⁴ The Contemporary Music Centre (CMC) was established in 1986 and includes an archive and a catalogue of Irish works. Previously, it was only possible to obtain information regarding a work or scores through direct contact with the composer. This resource is deemed essential as ‘there have never been commercial publishers of serious new music in Ireland’.³⁵ Irish composers are also represented by the Irish Musical Rights Organisation (IMRO). The

³³ The Music Association of Ireland (MAI) was founded in 1948 by Aloys Fleischmann, Frederick May, Brian Boydell and Michael McMullin as a body of musicians and music teachers who wanted more of an input into the policies and decisions RTE were making in regard to their music department; Pine, *Music and Broadcasting*, 126.

³⁴ O’Leary, ‘Contemporary Music’, 291.

³⁵ O’Leary, ‘Creating an Audience’, 126.

Arts Council of Ireland is probably the most important source of funding for composers since its foundation in 1951. Often, in partnership with other bodies such as IMRO and RTÉ, commissioning schemes have led to the composition and performance of new works. The performance of contemporary Irish pieces is actively promoted by Music Network,³⁶ a professional body that manages national tours of soloists and chamber musicians. All musicians, irrespective of nationality, who tour under the aegis of Music Network are obliged to incorporate a work by an Irish composer in every performance. In some cases a work needs to be commissioned for a specific instrumental combination if no suitable work already exists.

Many of the cello sonatas composed during the period 1968-1996 were a direct result of this increased support for Irish classical contemporary music. For example, the composition of the cello sonata by Kevin O'Connell was funded by a Northern Ireland Arts Council commission and Brian Beckett's second cello sonata was commissioned by the Dublin Arts Festival. Beckett's first cello sonata was submitted to the Young Composers concert at the 1971 Dublin Festival of Twentieth Century Music where it was recorded for broadcast by Radio Éireann. John Gibson's sonatina for cello was composed under the guidance of A. J. Potter (as were both of Beckett's cello sonatas) and performed at one of the Young Composers Concerts series organised by Potter at the Royal Irish Academy of Music during the early 1970s.

³⁶ Music Network is an organisation originally initiated in the 1950s by MAI; it manages tours of solo and chamber music.

The diversity of styles shown by composers in Ireland and the lack of any single ‘school’ or tradition in composition is demonstrated in the seven sonatas composed for cello during the second half of the late twentieth century.³⁷ Earlier examples of sonatas for cello by Irish composers are few in number: Michele Esposito composed numerous works for cello including a sonata dedicated to cellist Henry Bast in the early years of the twentieth century;³⁸ Havelock Nelson composed a sonata for cello and piano in 1942;³⁹ and Brian Boydell composed a sonata dedicated to cellist Betty Sullivan in 1945.⁴⁰ However, for the following two decades no major works for cello and piano were composed in Ireland.⁴¹ Each of the seven sonatas composed between 1968 and 1996 illustrates a diverse range of compositional techniques with different stylistic periods represented within the individual composer’s output – the sonata by O’Connell was composed at the end of a particular compositional style while Gibson’s sonatina, composed at the age of sixteen, demonstrates his early style. The sonatas by Cullivan and O’Connell incorporate traditional Irish melodies into the slow movements. The diversity of compositional techniques and styles found in these cello sonatas encourages the performer to incorporate a wide range of technical and musical approaches while

³⁷ Details of other works for cello composed in Ireland during this period are listed in appendix B.

³⁸ Michele Esposito (1855-1929) lived in Naples and Paris before moving to Dublin to take up a post in piano and composition at the RIAM from 1882 until 1928. He founded and directed the Dublin Orchestral Society (1898-1914) and initiated the chamber music series at the Royal Dublin Society in 1886. Works for cello include *Sonata for Piano and Cello*, Op. 43 (Leipzig: Breitkopf & Hartel, 1899), *Serenata*, Op. 69, (London: J. & W. Chester, n.d.) and *Two Irish Melodies* (London: Schott, n.d.). Larchet, John F., ‘Intermezzo: Michele Esposito’, in Pine, Richard and Acton, Charles (eds.), *To Talent Alone: The Royal Irish Academy of Music 1848-1998* (Dublin: Gill & Macmillan, 1998), 433.

³⁹ A copy of the manuscript of the Sonata in G minor, Op. 19 for cello and piano, dated 8 April 1942, was sent to cellist Annette Cleary by the Nelson family; personal communication, 1995.

⁴⁰ Betty Sullivan was a teaching colleague of Boydell’s at the RIAM in 1945, which was the year his cello sonata was composed. The premiere performance of Boydell’s sonata for cello and piano took place on 19 September 1945 at the National College of Art, Dublin with performers Betty Sullivan (cello) and Charles Lynch (piano).

⁴¹ A. J. Potter composed a cello concerto in 1968; Pine, *Music and Broadcasting*, 247.

studying these works in preparation for performance. Before focusing on performance details, it is important to establish an overall perspective of each of these sonatas.

Introduction to the Cello Sonatas

An overview is presented of each of the seven cello and piano sonatas by John Gibson, Brian Beckett, Joseph Groocock, Tom Cullivan, Kevin O'Connell and Angel Climent.⁴² The emphasis is on a discussion of the music from the performer's perspective with a commentary which informs performance. Problems encountered, both musical and technical, are highlighted and selected examples are discussed in further detail in later chapters. This overview of the seven sonatas is not intended to provide an in-depth or formal analysis of the music – instead the focus is on providing a performer's commentary which covers the concerns outlined regarding the player's initial contact with a 'new' work.⁴³ Observations cover topics such as general structure and form, musical characteristics and mood, technical challenges and idiomatic passages. The overall aim is to present a starting point for the cellist which can be pursued in further detail. Included in the discussion is a performing history of the piece,⁴⁴ information regarding the inspiration for the work and other background information relating to the creation of the work. Influences on the composer's style are also noted. Information pertaining to the availability of editions and recordings are given. In some cases, various versions of the sonata emerged both during the compositional process and later in the context of subsequent performances. Where more than one version exists, the most

⁴² Biographical details of each of these composers are outlined in appendix A. The names of the composers are listed according to the date of the composition of the sonatas.

⁴³ A new work in this context refers to a work which is in the process of being added to the performer's repertoire, not a 'newly-composed' work.

⁴⁴ Details of performances and recordings of these sonatas are outlined in appendix E.

recent one is usually the recommended one for use by the composer. However, some details of earlier versions are described when of interest. In a few instances, passages from earlier versions may be more idiomatic for either instrument and in these cases both versions are discussed. The sonatas are outlined in chronological order of composition. A detailed biography of each composer is included in appendix A⁴⁵ while other works for cello composed during this period are listed in appendix B.⁴⁶

John Gibson: Sonatina for Violoncello and Piano (1968)

The sonatina for cello and piano is a concise work, composed in 1968 at the age of seventeen.⁴⁷ It was premiered the same year⁴⁸ at the Royal Irish Academy of Music by Aisling Drury-Byrne (cello) and John Gibson (piano) as part of the Young Composer's Concert Series organised by A. J. Potter to promote the performance of new works.⁴⁹ The sonatina was also performed in the *Feis Ceoil*⁵⁰ Contemporary Irish Music Competition by cellist Padraig Cusack.⁵¹ In 2008 a performance of this work took place at the Royal Irish Academy of Music.⁵² Gibson's initial five years of composition (1967-

⁴⁵ The composers, biographies are listed in chronological order of date of composition of sonatas for cello and piano in appendix A.

⁴⁶ A list of Irish works for cello (solo, with piano or another instrument, and with orchestra) from 1968 onwards is to be found in appendix B.

⁴⁷ The piano part was revised in the 1980s.

⁴⁸ The exact date of this performance is not known.

⁴⁹ John Gibson, personal communication, 22 April 2009.

⁵⁰ Ireland's premier competitive music festival, *Feis Ceoil*, was founded in 1896 by Dr Annie Patterson. Based in Dublin, it is an annual event that provides an important platform for young Irish musicians. 'Feis Ceoil', (Accessed 13 September 2009), <<http://www.feisceoil.ie>>

⁵¹ Padraig Cusack recollects the date of his performance of this work as 1980 and notes that a second performance took place in 1981 as part of the RTÉ Young Musician of the Future String Finals competition; personal communication, 19 March 2010.

⁵² The performers were Annette Cleary (cello) and Lance Coburn (piano), 10 May 2008.

1972) included works for violin, a string quartet and a piano quartet.⁵³ His only other cello composition is 'Five Irish Airs' written in 1994 and revised in 2004. The sonatina for cello and piano is composed in three short movements, Allegretto, Allegretto and Andante Religioso, and has a performance time of nine minutes.

The cello sonatina is partially based on ideas used in earlier piano works: Nocturne and Sonatina. The concept of composing using a limited number of ideas gives rise to the concise and sparse texture of the work. This is particularly evident in the first movement, which is primarily based on the intervals of the minor second and its inversion, the major seventh, creating an apparent atonal harmonic character.⁵⁴ The opening phrase demonstrates semitonal dissonances between the cello's repeated B falling to B-flat, which then is heard with the piano tremolo on B-natural (Example 1.1):

Ex. 1.1

Gibson - Sonatina: I, bars 1 - 4

Allegretto (♩ = 100)
sempre cantabile

dolce

ped. * *sempre pedale*

⁵³ Gibson has included the cello in the following ensemble works: *Ikon* (2006), *Sliabh Luachra* (1996), String Quartet No. 2 (1973), Music for Seven Instrumentalists (1973), Piano Quartet No. 1 (1972), String Quartet No. 1 (1969) and Piano Trio No. 1 (1969).

⁵⁴ John Gibson, personal communication, 22 April 2009.

The interval of the major seventh is heard in the cello line in bars 12 to 14 and this G to F-sharp is echoed in the piano part in bars 35 to 36. Two bars later, the intervals of the minor second are sounded simultaneously (piano and cello) and both the minor second and the major seventh intervals are played in succession, using the pitches C descending to B, followed by B descending to B-flat (cello) and B-flat moving to B-natural (piano). The most intense phrase of the movement is reached in bar 41 with the use of the cello's high register in playing the major seventh, B ascending to B-flat (Example 1.2):

Ex. 1.2

Gibson - Sonatina: I, bars 38 - 41



A transparent texture is achieved by the use of only one voice in the piano part and careful choice of register. This ensures that the cello is never overpowered by the piano.⁵⁵ The cellist is therefore free to focus on a greater variety of dynamic range without fear that the more delicate colours will not project. Good use is made of combining the sonorous range of the A-string with the piano's low register (Example 1.3):

⁵⁵ Ibid.

Ex. 1.3

Gibson - Sonatina: I, bars 18 - 21



The second movement opens with an energetic ‘dialogue of a fiery rhythmical idea between the cello and piano’.⁵⁶ In contrast to the outer two movements of the work, dynamics are generally loud, with use of double stops to create a folk-dance effect. Rhythm plays an essential role in portraying the lively moods; *con fuoco* and *con brio* are indicated, and the opening phrase features the use of off-beat piano chords combined with a syncopated cello line (Example 1.4):

⁵⁶ McGinley, Rachael, ‘A Survey of Irish Cello Works from 1939-1997’, (Unpublished MA thesis, National University of Ireland, Maynooth, 1997), 34.

Ex. 1.4
Gibson - Sonatina: II, bars 1 - 7

Allegretto (♩ = 112)

The musical score for Ex. 1.4 is in 2/4 time, marked Allegretto (♩ = 112). It consists of two systems. The first system shows bars 1 through 5. The cello solo (bass clef) begins with a half note G4, followed by eighth notes A4, B4, and C5. The piano accompaniment (grand staff) features chords marked *sf* in the right hand and rests in the left hand. The second system shows bars 6 and 7. The cello solo continues with a half note D5. The piano accompaniment features triplets marked 3 in both hands.

A *cantabile* cello solo marks the return of calmness in the opening of the third movement. This is indicated as Andante Religioso and the long singing cello part with rests as breath marks is reminiscent of ancient liturgical chant (Example 1.5):⁵⁷

Ex. 1.5
Gibson - Sonatina: III, bars 1 - 8

Andante religioso

The musical score for Ex. 1.5 is in 4/4 time, marked Andante religioso. It consists of two systems. The first system shows bars 1 through 8. The cello solo (bass clef) begins with a half note G2, followed by half notes A2, B2, and C3. The piano accompaniment (grand staff) features rests in both hands. The cello solo is marked *mf sempre espressivo* and the piano part is marked *sempre pedale*.

⁵⁷ John Gibson, personal communication, 22 April 2009.

In bar 26, the piano enters sotto voce with pedal, repeating the opening theme with a bell-like colour. The theme is transformed throughout the middle section, between bars 28 and 54, into a ‘stormy’ and more intense phrase before the cello returns to the opening calm atmosphere which builds to a final dissonant chord. Throughout the sonatina the middle register of the cello is the most widely used tonal register. In fact, the C-string register is never used in this work, which is very unusual.⁵⁸ Technically the work is accessible, thus making it a suitable pedagogic work.⁵⁹ The main challenge for the cellist lies in controlling a wide range of tonal colours while focusing on ensemble aspects of the work. The cello part contains phrase marks rather than actual slurs,⁶⁰ so the performer needs to ascertain changes of bow according to phrase contour, harmonic emphases and dynamic intention.

Brian Beckett: Sonata for Cello and Piano, No. 1 (1970)

Over a four-year period Brian Beckett composed numerous works for cello and piano. Starting with the first sonata for cello and piano in 1970, Beckett went on to compose *Fantasia* (1972), *Caddy* (1974)⁶¹ and the second cello sonata in 1973.⁶² Beckett’s first cello sonata is an attractive and engaging work in four movements: Adagio-Allegro, Adagio, Scherzo-Allegro Moderato and Presto. In its classical design, emotional effect and lyricism it is similar in many ways to early Schumann, although the harmonic language shows an emerging unique style with ‘superimposed fourths’ and ‘frequent

⁵⁸ McGinley, ‘Survey of Irish Cello Works’, 36.

⁵⁹ This work is recommended to students presenting programmes for Junior Certificate and Leaving Certificate examinations.

⁶⁰ John Gibson, personal communication, 22 April 2009.

⁶¹ Both *Fantasia* and *Caddy* are short works for cello and piano.

⁶² CMC refers to Beckett’s Cello Sonata without a compositional date.

chromatic expansion'.⁶³ Having won the composition award for Chamber Music at the 1970 *Feis Ceoil*, Beckett embarked on composing for cello inspired by its range and expressive power. Beckett describes the events connected with the composition of Sonata No. 1 as follows:

The Sonata was composed with a view to being submitted for selection for the Young Composers concert in the 1971 Dublin Festival of 20th Century Music where it received its first public performance played by Aisling Drury-Byrne and myself. The slow movement was recorded by Telefis Éireann (as it was then) and broadcast as part of a preview of the Festival.⁶⁴

A. J. Potter gave guidance while the work was being composed and, during rehearsals, advice on the cello part was given by Aisling Drury-Byrne.⁶⁵

The first movement opens with an eight-bar Adagio introduction where the cello plays a 'modal' or whole-tone melody in D, with a tonic pedal and 'ambivalent harmonies in the piano part'.⁶⁶ The Allegro starts in bar 9 and the movement is in sonata form with an interlude based on the initial Adagio (Example 1.6):

⁶³ Brian Beckett, personal communication, May 2009.

⁶⁴ Ibid.

⁶⁵ A live recording of this performance, dated 9 January 1971, is available for reference in the CMC Sound Archives.

⁶⁶ Brian Beckett, personal communication, May 2009.

Ex. 1.6
Beckett - Sonata No. 1: I, bars 9 - 12



An *accelerando* (unmarked) leads to the development section which expands on earlier material, in particular, featuring the dotted-crotchet and three quavers rhythmic motif. This is further developed using chromatic and shifting tonalities. At bar 135 the recapitulation occurs with a *piu mosso* dramatic coda.

The second movement is a lament in A-minor based on ternary form. The opening four bars are characteristic of the use of contrasting texture between the melodic cello line in the upper register over a chordal accompaniment in the piano part (Example 1.7):

Ex. 1.7
Beckett - Sonata No. 1: II, bars 1 - 4



‘Restless melodic lines over long pedal notes in the piano part’ characterise the intense middle section of this movement which reaches a three-bar cadenza played by the cello

leading to a return of the opening lament theme.⁶⁷ However, the use of a *forte* dynamic unlike the quieter version at the start of the movement, gives a very different character. The restlessness continues with a further dynamic increase to *fortissimo* from bar 100 to the end of the movement.

The third movement is also in ternary form: a short scherzo, a contrasting trio and a return of the scherzo with a short coda. Ideas from the first movement are referred to in the scherzo, particularly motifs from the Adagio and the first theme, ‘while the piano provides sequential harmonic patterns’.⁶⁸ From bar 9, the playful character of the scherzo is emphasised by alternating *legato* and *staccato* bars played in turn by both the cello and the piano (Example 1.8):

Ex. 1.8

Beckett - Sonata No. 1: III, bars 9 - 13

In the trio Beckett a cross rhythm may be heard during the opening eighteen bars which are played by solo piano. While the left hand plays a continuous crotchet and minim pattern, the melodic pattern of the right hand quaver passage places a natural emphasis

⁶⁷ Ibid.

⁶⁸ Ibid.

on the fourth quaver of each bar. The cello enters in bar 59 in a definite 3/4 pattern, thus creating an uncertain and restless mood (Example 1.9):

Ex. 1.9

Beckett - Sonata No. 1: III, bars 59 - 63



The *Da Capo* of the scherzo section is followed by a ten-bar coda where the G-minor tonality is reiterated with tonic and dominant chords only interrupted by the unexpected E-flat minor in bars 5, 7 and 9.⁶⁹ The final movement⁷⁰ is in Rondo form and is described by the composer as a '*moto perpetuo* ... interspersed with more lyrical contrasting ideas.'⁷¹ The opening energetic theme, featuring a descending arpeggio preceded by an *acciaccatura* and chromatic scale motifs, is heard first in the piano accompanied by low-register double-stops in the cello (Example 1.10):

⁶⁹ McGinley, 'Survey of Irish works', 12.

⁷⁰ Bar 24 is missing from the cello part but can be transferred from the piano score until a more up-to-date version of the work is published.

⁷¹ Brian Beckett, personal communication, May 2009.

Ex. 1.10

Beckett - Sonata No. 1: IV, bars 1 - 4

Presto



At bar 122, new material is introduced at the 9/8 section marked *meno mosso*, which links to a solo cello cadenza in bar 131. According to Beckett, this was never notated, apart from the final three pause notes, so the cadenza is left ‘entirely to the performer’s discretion’.⁷² The movement concludes dramatically with a return of the main theme.

The composer makes the following performance suggestion: in considering texture, the work tends towards the romantic so melodic contour in each instrument needs to be brought out with emphasis alternating between the cello line and the piano part; the pianist needs to be aware of balance and often need only use a full ‘orchestral’ sound at cadential points; and the cellist can observe that ‘descending scales in long notes are always structurally significant’.⁷³ Some notes in chords that are too great a stretch can be omitted by the pianist. The performers can interpret the dynamic markings freely to bring contrast and energy to the work. This sonata was well received at the premiere performance and ‘was much praised for its beauty, lyricism and accessibility’.⁷⁴

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Ibid.

Brian Beckett: Sonata for Cello and Piano, No. 2 (1973)

Following on the success of his earlier compositions,⁷⁵ Beckett was commissioned in 1973 to write a cello sonata for the Dublin Arts Festival. This sonata was composed with cellist Aisling Drury-Byrne in mind and, drawing on her expertise, the possibilities of the instrument are used to full effect in this work. The only surviving parts are the actual manuscripts used by the performers, Aisling Drury-Byrne (cello) and Brian Beckett (piano), and until 2008 this manuscript remained solely in the composer's possession.⁷⁶ This work is in three movements: *Molto Agitato*, *Andante Mesto* and *Scherzo/Romance*. A feeling of restlessness is created in the first movement with a syncopated cello line accompanied by *tremolo* figures in the piano (Example 1.11):

Ex. 1.11

Beckett - Sonata No. 2: I, bars 1 - 4

Molto agitato

The musical score for Example 1.11 shows the first four bars of the first movement, *Molto agitato*, of Beckett's Sonata No. 2. The key signature has one flat (B-flat) and the time signature is 2/2. The cello part (treble clef) begins with a whole rest in the first bar, then enters in the second bar with a syncopated melody: a half note B-flat, a quarter note A, a half note G, a quarter note F, a half note E, and a quarter note D. The piano part (bass clef) features a tremolo in the right hand, marked *trem. brillante*, and a strong bass line in the left hand, marked *f*. The piano part consists of a series of chords and single notes, including a prominent B-flat in the first bar and a series of chords in the subsequent bars.

Throughout the movement, which is extensive in length and ideas, the restless mood is further developed by the use of unstable harmonies and clearly-marked tempo fluctuations. The cello part uses a very wide register, incorporating almost four octaves,

⁷⁵ Early works included the first cello sonata and the first piano sonata. The piano sonata was performed in 1972 at the Dublin Festival of Twentieth Century Music. Brian Beckett, personal communication, May 2009.

⁷⁶ In 2008 Annette Cleary was given a copy of the Sonata for Cello and Piano, No. 2 by the composer. To date, CMC does not have a copy of this work.

string-crossing passagework and double-stops in the treble register. From bar 152 to 164 *pizzicato* against the pianist's *tremolo* contrasts with earlier sustained motifs; for example, from bars 133 to 152 the cello plays syncopated *forte* thematic material reminiscent of the opening passage of the movement.

The opening theme of the Andante Mesto is based on falling semitone motifs in the cello part accompanied by an arpeggiated chordal piano part (Example 1.12):

Ex. 1.12
Beckett - Sonata No. 2: II, bars 1 - 4

Andante mesto
con sord

The piano part develops this harp-like harmonic accompaniment into continuous quaver broken-arpeggio passages, while the cello continues to expand on the falling semitone pattern using a wide register. In bars 50 to 55 the cello begins the phrase on E and ends on D-flat, thus spanning three octaves. The mood of the Andante is similar to a lament and the movement comes to a close with soft sustained chords and three bars of *pizzicato* in an A-minor tonality.

The finale is rhapsodic in style and structure and consists of a Scherzo in 3/4 followed by a contrasting Romance section in 4/4. This moderato section opens with the cello

playing a warm *cantabile* melody in the middle register and a transparent piano accompanying texture (Example 1.13):

Ex. 1.13

Beckett - Sonata No. 2: III, bars 41 - 47

Romance

The musical score for Example 1.13 shows a cello and piano arrangement. The cello part, in the upper staff, is marked *mf cantabile* and plays a warm, flowing melody in the middle register. The piano part, in the lower staff, is marked *(pp) mf* and provides a transparent, arpeggiated texture. The key signature has one flat (B-flat) and the time signature is 4/4. The score consists of seven measures.

In bar 93 the Scherzo, which is marked *presto* and *martellato* in the piano part, returns exactly as in the first section, leading in bar 132 to a solo piano *valse-tempo* for four bars. A seventeen-bar coda follows incorporating a cadenza passage for both instruments, a short reprise of the first movement opening passage and an energetic *prestissimo*, which concludes the movement dramatically.

Beckett's second sonata is an advanced work both musically and technically for both performers. Much of the work is rhapsodic with frequent tempo changes within movements and thematic material featuring throughout the work. The cello part is virtuosic and use of such a wide register range is striking. The range of dynamics is also broad often requiring sudden changes from *piano* to *forte*. Such a variety of tempo, dynamic range and character encourages a dramatic and individual interpretation of this work.

Joseph Grocock: Sonata for Cello and Piano (1985)

Joseph Grocock composed five works for cello and piano, of which only the sonata is published.⁷⁷ This work is concise, with a performance time of twelve minutes. Between 1983 and 1985 Grocock composed one work each year for cello and piano. The sonata dates from 1985. In 1994 the remaining two works for cello were written. The sonata was written for the composer's wife, Dorene Grocock, who describes the background to the work as follows: '[The cello sonata] was written for me when I had been playing for five years and wanted something romantic but not too hard – not ready for Brahms! The piano part is much more difficult than the cello part for this reason.'⁷⁸

The work was premiered by Niall O'Loughlin (cello) and Pdraig O'Cuinneagain (piano) in 1989 at St Ann's Church, Dawson Street, Dublin.⁷⁹ Although most of Grocock's works were influenced by J. S. Bach's compositional style, he composed the cello sonata in the style of Brahms.⁸⁰ It is noteworthy that, one year prior to the composition of the cello sonata, Grocock wrote a romantic work in the style of Brahms for the Prelude Brass Ensemble.⁸¹ The cello sonata has three movements and is constructed using classical forms and romantic harmony throughout. The first movement, Moderato, is in A-minor and uses classical sonata form structure. As the movement is concise, just 148 bars in length, it is advisable to perform it with the exposition repeated as indicated by the composer. The Brahms-like harmony can be seen

⁷⁷ Grocock, Joseph, *Sonata for Cello and Piano* (Dublin: Drummartin Music, 1987).

⁷⁸ Dorene Grocock, personal communication, 25 September 2009.

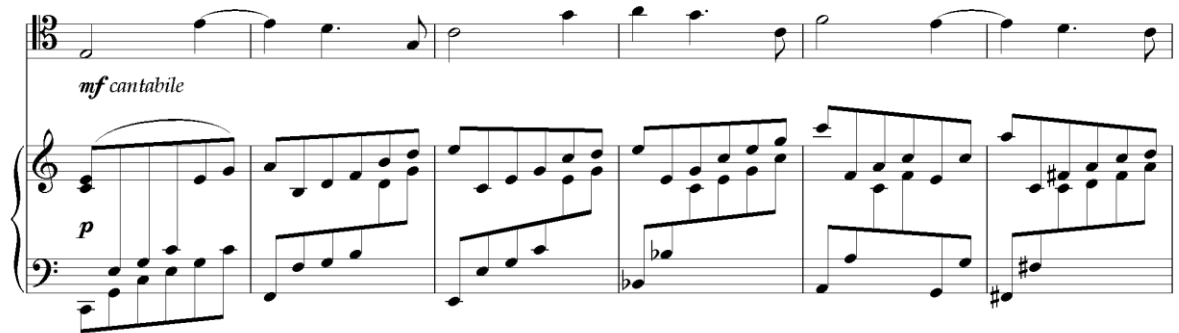
⁷⁹ Padhraic O'Cuinneagain, personal communication, 11 September 2009.

⁸⁰ According to student Fergus Johnston, a favourite dictum of Grocock was Oscar Wilde's quote taken from his play, 'An Ideal Husband': 'Nothing is so dangerous as being too modern; one is apt to grow old-fashioned quite suddenly'. Holland, Vyvyan, *The Complete Works of Oscar Wilde* (New York: Harper Collins Publishers Inc., 1989).

⁸¹ 'Joseph Grocock Mus D', *BBC h2g2*, (Accessed 24 June 2008), <<http://www.bbc.co.uk/dna/h2g2>>

in the use of arpeggiated accompanying figures in the piano with a *cantabile* line in the cello using hemiola rhythmic motifs (Example 1. 14):

Ex. 1.14
Grocock - Sonata: I, bars 31 - 36



This rhythmic grouping of three minims within two bars is the motif upon which the development section is based (bars 47 to 84), during which the elements of the first theme are extended by harmonic modulations. A short coda based on the opening two bars of the work brings the movement to a calm close (Example 1.15):⁸²

Ex. 1.15
Grocock - Sonata: I, bars 142 - 148



In the second movement, Adagio, the cello part is similar to an operatic aria, with the piano supplying a steady quaver pulse accompaniment throughout. This quaver

⁸² The bowing indications in this example are suggested by Annette Cleary. The use of three consecutive up-bows for the final three bars creates an appropriate wispy timbre. An alternative suggestion is to play the two final notes *pizzicato*.

movement, if played with gravity and at a steady *adagio*, perhaps even slower than the marked metronome speed (quaver = 96), gives this movement its sombre and expressive character.⁸³ The cello's sustained vocal line covers a broad dynamic range with some unexpected harmonic sequences implying a varied use of tonal-colours (Example 1.16):

Ex. 1.16
Grocock - Sonata: II, bars 41 - 47

The musical score for Example 1.16 consists of three systems of staves. The first system shows the cello part (bass clef) and the piano part (treble and bass clefs) for bars 41-47. The cello part has dynamics *p*, *f*, and *pp*. The piano part has dynamics *pp* and *f*. The second system shows the cello part (bass clef) and the piano part (treble and bass clefs) for bars 48-54. The cello part has dynamics *p* and *f*. The piano part has dynamics *pp* and *f*. The third system shows the cello part (bass clef) and the piano part (treble and bass clefs) for bars 55-61. The cello part has dynamics *p* and *f*. The piano part has dynamics *pp* and *f*.

Cross-rhythm occurs between the two instruments, for example, in bars 51 to 52 the cello plays in 3/4 time while the piano remains in 6/8 and two bars later the cello plays duplet quavers against the triple quaver pulse in the piano part.

The final movement, marked *Allegro*, begins with a jocular and witty theme in the key of A-minor (Example 1.17):

⁸³ Padhraic O'Cuinneagain, personal communication, 11 September 2009. In 1989 the pianist Padhraic O'Cuinneagain worked with the composer, Joseph Grocock, in preparation for the premiere performance of the cello sonata. See chapter 3, n. 50.

Ex. 1.17
Grocock - Sonata: III, bars 7 - 10



This movement is also in sonata form, but with the character of a Rondo. The restless first theme gives way in bar 27 to a singing *legato* contrasting theme which recurs many times during the movement, particularly in the development section from bars 58 to 117. Imitation and baroque compositional textures are found throughout this movement, for example, the second theme which is first used in bar 27 to 42 is imitative with the piano entering two beats after the cello. The texture is akin to a ground bass line in the lower left hand notes of the piano line with the three upper notes being a harmonic realisation⁸⁴ (Example 1.18):⁸⁵

⁸⁴ Due to notational differences, this texture is more obvious when the theme reoccurs in bars 139 to 154; here the left hand plays the bass line alone and the other voices are written and played by the right hand in the treble clef.

⁸⁵ The bowing indications in this example are suggested by Annette Cleary. These bowings were chosen to facilitate the use of down-bows on the first beat of bar 7, the fourth beat of bar 9 and the first beat of bar 11. It is common practice in string playing to arrange bowing so that main beats coincide with down-bows.

Ex. 1.18

Grocock - Sonata: III, bars 27 - 31



A coda starting in bar 183 uses both main themes and ends with an *accelerando*.⁸⁶ This sonata is technically readily playable without any difficulties. Much of the cello part uses the lower register of the cello (with the exception of the middle Adagio movement) from the low open C to A in the first harmonic register, which makes the first and third movements playable using only the neck positions. Articulation in this lower register of the cello can often be problematic and it could be recommended that certain passages benefit from being transposed up an octave: in the first movement bars 51 to the first note of bar 53; in the second movement a harmonic D on the final chord in bar 59; in the third movement bars 1 to 2, bars 112 to 114 and bars 139 to 154.⁸⁷ Musically, this sonata challenges the player to use a wide variety of tone colours and control of tempo is essential when performing this work.

⁸⁶ The use of short double-stopped chords for the final cadence is suggested to match the articulation and register of the piano and to enable the *accelerando* to continue to the last note.

⁸⁷ Certain passages of the cello sonatas by Chopin and Mendelssohn are routinely transposed up an octave by performers for articulation and sound projection.

Tom Cullivan: Sonata for Cello and Piano (1993, rev. 2001)

Apart from the cello sonata, which was composed in 1993, Tom Cullivan has written sonatas for violin and viola.⁸⁸ The principal influences on Cullivan's style are the forms and tonality of nineteenth- and early twentieth-century composer/pianists combined with traces of traditional Irish music. The cello sonata was premiered on 24 November 1994 in O'Connell Hall, Dublin, by David James (cello) and Padraig O'Cunneagain (piano). It was performed again on 19 November 2008 in Virginia, Co. Cavan, in a programme dedicated to the composer's works for piano, voice and cello.⁸⁹ This sonata was dedicated to the memory of a childhood friend of the composer, Monsignor Cyril Mulligan, a gifted pianist who died tragically in 1992 while Parish Priest of Killinkere, Co. Cavan.⁹⁰ In 2001, the sonata was revised.⁹¹ It is a work in three movements with a duration of twenty-two minutes and is composed in a 'neo-romantic style, with large scale melodic lines and elaborate accompaniments'.⁹²

The first movement, Allegro, is in sonata form. The opening theme, in F-minor, is lyrical with descending chords in the bass line and moving quaver arpeggios in the piano part (Example 1.19):⁹³

⁸⁸ 'Tom Cullivan', (Accessed 18 May 2009), <<http://www.tomcullivan.eu>>

⁸⁹ The performers were Annette Cleary (cello) and Padhraic O'Cunneagain (piano).

⁹⁰ Tom Cullivan, personal communication, April 2009.

⁹¹ Tom Cullivan, *Sonata for Cello and Piano* (Farwestern Publications, 2001). The revised work was sent to Annette Cleary on 20 August 2001 with an attached note stating that the composer would appreciate any suggestions regarding bowmarks, dynamic indications, corrections or improvements. The revised edition is included in Volume II of this thesis.

⁹² McGinley, 'Survey of Irish Cello Works', 24.

⁹³ Dynamic markings are not indicated in the score (with the exception of two corresponding passages in the first movement and two similar passages in the third movement), but were added by Annette Cleary (cello) and Padhraic O'Cunneagain (piano) in collaboration with the composer, Tom Cullivan.

Ex. 1.19

Cullivan - Sonata: I, bars 1 - 5

Allegro

The musical score for Example 1.19, bars 1-5 of Cullivan's Sonata: I, is presented in 3/4 time with a key signature of two flats (B-flat major). The tempo is marked **Allegro**. The score consists of three staves: a single bass staff for the melody and a grand staff (treble and bass) for the piano accompaniment. The melody begins with a two-quaver anacrusis, marked *p*. The piano part features a repeated semiquaver pattern in the treble staff, marked *p cresc.*, and a sustained pedal note in the bass staff, marked *dim.*.

This main theme with a two-quaver anacrusis is developed throughout the movement with a contrasting character in the *agitato* repeated semiquaver sections in bars 52 to 63 and later in bars 243 to 253. A sudden change occurs in bar 138 with a change of key, a change of time signature to 2/4 and a *ritardando* leading to a *grave* section. In the revised version⁹⁴ this new theme was altered significantly in the cello accompanying figures. Originally the cello played double-stops which, due to the sustained pedal note and ‘awkward stretches’, were ‘unidiomatic’.⁹⁵ In the revised version, the melody remained in the piano part but the double-stops were changed to three-string arpeggios which can be played effectively using a variety of bowing styles (Example 1.20 A and B):

⁹⁴ The revised version is included in Volume II of this thesis.

⁹⁵ McGinley, ‘Survey of Irish Cello Works’, 26.

Ex. 1.20 A

Cullivan - Sonata: I, bars 138 - 142

Ex. 1.20 B

Cullivan - Sonata: I, bars 139 - 140

A suggestion for performing this passage is shown in example 1.20 B,⁹⁶ where the chords are three-stringed arpeggios in a triplet rhythm and bowed as four quavers in each bar. The dynamic for the cellist can be *pianissimo* so the piano melody is well projected. From bar 171 the cello takes over the theme in the sonorous middle register of the instrument while the piano plays the arpeggio accompanying figure.

The second movement *Andante rubato*, which is in ternary form, uses in the middle section the traditional Irish melody, *Limerick's Lamentation* by the composer Myles

⁹⁶ The performing suggestion and bowing is recommended by Annette Cleary.

O'Reilly of Killinkere, Co. Cavan, who was born about 1635.⁹⁷ Coincidentally, Kevin O'Connell, in the second movement of his cello sonata, uses part of this ancient melody in the opening theme of the second movement of his cello sonata. In Tom Cullivan's version, the theme is presented in full, with colourful modulations and interesting register changes in the middle section of the second movement, between bars 407 (*maestoso*) and 471 (*Andante rubato come prima*). The first section is an originally-composed slow air which is repeated after the middle section (*Limerick's Lamentation*) to bring the movement to a close, thus establishing the ABA structure. After a four-bar introduction, the cello enters with an original slow air in the key of A-flat major. In the manner of a traditional singer, phrase endings are all marked with pauses giving an improvised character to the movement (Example 1.21):

⁹⁷ Myles O'Reilly, an eminent harper, was born about 1635 in Killincarra (Killinkere), Co. Cavan. He was referred to by the Belfast harpers' assembly in 1792 as the composer of the original air *Lochaber* or *Limerick's Lamentation*. This air, referred to as *The Irish Tune*, was published in 1676 in Thomas Duffel's *New Poems, Songs, Prologues and Epilogues, etc.*, a copy of which is in the British Museum. According to Donal O'Sullivan's biography of the harper Turlough O'Carolan, although *Limerick's Lamentation* was generally attributed to Myles O'Reilly, he believes it to be based on an earlier tune of Highland origin. O'Sullivan, Donal, *Carolan: The Life and Times of an Irish Harper* (Lincolnshire, England: Celtic Music Louth, 1958, rev. edn.1991).

Ex. 1.21

Cullivan - Sonata: II, bars 383 - 387

The musical score for Ex. 1.21 is in G major (one sharp) and 3/4 time. It consists of two systems of staves. The first system shows a piano introduction with a semiquaver/dotted quaver figure in the right hand and a bass line in the left hand. The second system continues the piano introduction with similar figures and a final cadence marked with a 'V'.

The semiquaver/dotted quaver figure is another feature of traditional song and in keeping with the *rubato* indication at the start of this movement needs to be treated as a free ornament in order to maintain an expressive character (Example 1.22):

Ex. 1.22

Cullivan - Sonata: II, bars 439 - 443

The musical score for Ex. 1.22 is in G major (one sharp) and 3/4 time. It consists of two systems of staves. The first system shows a piano introduction with a semiquaver/dotted quaver figure in the right hand and a bass line in the left hand. The second system continues the piano introduction with similar figures and a final cadence marked with a 'V'.

Throughout the middle section, from bar 407 to 471, the traditional song (*Limerick's Lamentation*) is developed using ornamentation, modulation and change of register in

the cello line. For the final rendition of the initial slow air, from bar 471 to the end of the movement, it could be suggested that the first four quavers of bar 497 are omitted in the cello part, as they are a repetition of the previous bar and are also doubled in the piano. This would allow ample time for the cellist to put on a mute, which was found to be an effective tone colour for the last section of this movement.⁹⁸

The final Presto movement provides an energetic and joyful ending to the cello sonata and is characteristic of the finales of most of Cullivan's chamber music: 'a slow air (either original or quotation) is placed between two outer sections comprising a dance tune (jig/reel/polka etc.), usually original'.⁹⁹ In this movement 'an original double jig flanks the slow Duigenan air' (Example 1.23):¹⁰⁰

Ex. 1.23

Cullivan - Sonata: III, bars 514 - 517

Presto

Suggested bowing for the opening phrase is two bows to a bar with definite articulation on each quaver.¹⁰¹ Ascending scale passages alternating between cello and piano form a countermelody to the principal theme, for example, from bars 554 to 565. A contrasting

⁹⁸ Con sordino was used in the most recent performance of this sonata (2008) from bar 499 to the end of the second movement by Annette Cleary.

⁹⁹ Tom Cullivan, personal communication, 14 June 2010.

¹⁰⁰ Ibid.

¹⁰¹ As the slur mark over the four bars of the opening phrase of the final movement is pianistic, the suggested bowing is recommended to portray the lively dance-like character of this movement.

middle section, originally marked *Moderato Eroica*, in B major has been replaced in the revised *Andante* and is in the key of D major. In correspondence, Cullivan described the revision of the third movement as follows:

I have replaced the slow or ‘B’ section of the last movement with a treatment of *The Fretful Child* by the eighteenth-century composer and harpist Jerome Duigenan. It is the only air attributable to this composer and it is a particularly fine one. My arrangement is based on the version contained in the Stanford-Petrie collection and although it has been disparaged by that other distinguished collector, P. J. Joyce, I regard it as the best of all the versions extant.¹⁰²

At bar 687 the first theme is reintroduced, this time with some changes to key and register, until bar 767, where a ten-bar coda brings the movement to a dramatic close.

The revised version of the sonata is more idiomatic for the cello and includes some textural changes to the piano part which help greatly in projection of the cello part. Based on a recent performance of the revised version,¹⁰³ some performance recommendations are as follows: in the first movement, from bar 31 to 43, a *crescendo* is played with a *forte* on bar 44; the pause in bar 51 is moved back to the previous crotchet and the last quaver of bar 51 is omitted to allow for a definite start in the *agitato*; at bar 138 the cello line is transferred to the piano part, as in the original version; from bar 327 to 335 the cello doubles the first note of each bar in the left-hand piano part, but as a *pizzicato* crotchet an octave lower. In the second movement suggestions are as follows: in bar 388 the right-hand piano part is played on the beat; in bar 391 the ornament is omitted from the piano part; in bar 395 the first two notes in the cello part are A and B-flat; in bar 407 and 497 the first four notes in the cello part are

¹⁰² Tom Cullivan, personal communication, 20 August 2001.

¹⁰³ This sonata was performed by Annette Cleary (cello) and Padhraic O’Cuinnegain (piano) on 19 November 2008 in Virginia, Co. Cavan.

omitted; from bar 423 to 436 the cello plays an octave higher; in bar 448 and 449 the cello is *tacet* until the final up-beat quavers of bar 449 and also in bar 452 the cello is *tacet* until the up-beat of bar 453. In the final two bars of the third movement chords are played in the cello part.

Generally, in this sonata, the phrase marks in the cello part are pianistic and are not slurs referring to bowings; for example, bars 52 to 63 are *tremolo* semiquavers and can only be played with separate bows, so the slur indicates phrasing. These phrase marks can be interpreted with a variety of workable bowings and the possible choices made are based on register, dynamic level, string-crossings and articulation. No dynamics are indicated in the score, so it is the task of the performers to work out appropriate dynamic schemes for each movement.¹⁰⁴ This sonata is accessible not only to the performers but to audiences who may be familiar with some of these traditional airs or interested in the composer's use of elements of Irish culture within the context of classical music.

Kevin O'Connell: Sonata for Cello and Piano (1993-1995)

Cello has been used extensively in many of Kevin O'Connell's works. Apart from string quartets and a string trio, the cello has been combined with flute and clarinet in chamber works.¹⁰⁵ Two short works for solo cello, both titled *Epithalamium* were composed for weddings and the sonata for cello and piano was written between 1993 and 1995.¹⁰⁶

¹⁰⁴ This is the composer's request. Tom Cullivan, personal communication, 2002.

¹⁰⁵ *Tenebrae* (1992), for clarinet, violin and cello was commissioned and performed by Sequenza. *Contratempo* (1999), for flute and cello, was premiered at the Hugh Lane Gallery of Modern Art, Dublin, by Elaine McPherson (flute) and David O'Connell (cello).

¹⁰⁶ See appendix B.

The work was commissioned by cellist Raphael Wallfisch and funded by the Northern Ireland Arts Council. On 12 September 1996 it was premiered by Raphael Wallfisch and John York (piano) at the Guildhall, Derry, and recorded by BBC Radio 3 with an enthusiastic audience reaction.¹⁰⁷ A further performance of the sonata took place on 12 March 2000 at the Hugh Lane Municipal Gallery of Modern Art, Dublin, by David O’Connell (cello) and Francis King (piano).¹⁰⁸ From his experience performing the cello repertoire with his brother, cellist David O’Connell, the composer was familiar with ‘the sound and capabilities of the instrument’.¹⁰⁹ He was in a position to try out parts of the sonata with David during its two-year compositional process.¹¹⁰ According to O’Connell, the cello sonata was not experimental but stands alone with no other work anticipating or following it in a similar style. The work is really a duo, with both instruments equally expressive and powerful. With a performance time of twenty-seven minutes, the piece is substantial and in large-scale sonata form. O’Connell describes this work as being ‘dramatic, and maybe in some places melodramatic’.¹¹¹

The first movement is in traditional sonata form but sounds rhapsodic and improvised in many parts. Pauses and breath markings separate sections which generally begin with a tempo change. The main sections occur at the following places: bar 12 (a cadenza-like passage), bar 16 (Adagio), bar 19 (Moderato) and bar 46 (Tempo 2; *molto energico*). The opening theme material is used throughout both the first and the third movements and shows dramatic use of register in both instruments (Example 1.24):

¹⁰⁷ A copy of this BBC recorded live performance is available at the CMC Sound Archive.

¹⁰⁸ CMC Sound Archive holds a recording of this live performance but it is unavailable to the public.

¹⁰⁹ Kevin O’Connell, personal communication, April 2009.

¹¹⁰ Ibid.

¹¹¹ Ibid.

Ex. 1.24

O'Connell - Sonata: I, bars 1 - 5

Broad and sustained (♩ = c. 96)

The musical score is written for piano and consists of two systems. The first system covers bars 1 to 5. The piano part has a forte (f) dynamic. The melody is broad and sustained. The piano accompaniment features a drone-like effect in the bass line. The second system continues the melody and accompaniment, with a 'cantabile' marking at the end.

The Lento second movement is a complete contrast to the outer two movements and is based on a traditional Irish melody *Lament for Limerick*.¹¹² This is the same Irish song used by Tom Cullivan in the second movement of his cello sonata but the material is treated very differently. While Cullivan presents the melody in its entirety with a traditional harmonic accompaniment, incorporating newly-composed interludes and embellishments throughout, O'Connell uses only a part of the melody (corresponding to the segment starting in bar 407 in Cullivan's version) and blends it with original material. The texture of the piano at the opening uses intervals of a fourth and consecutive fifths in the bass line. This 'drone-like' effect creates a wonderful atmospheric colour reminiscent of uilleann pipes. The melody is presented initially on

¹¹² Many traditional Irish songs have different titles in different parts of the country. In this thesis, the titles mentioned by the composers themselves, who are from different parts of Ireland, are the ones used: Tom Cullivan (Cavan) uses the title *Limerick's Lamentation* and Kevin O'Connell (Northern Ireland) uses the title *Lament for Limerick*.

the cello, using the powerful middle range of the A-string within a *forte* dynamic (Example 1.25):

Ex. 1.25
O'Connell - Sonata: II, bars 1 - 6

Lento (♩ = c. 52)

A contrasting *con moto* middle section begins in bar 28 after a nine-bar bridge passage in the piano. This section is marked *poco scherzando* and although light in mood is virtuosic from a technical perspective: the material is complex, using both chromatic fragments in a high register, interspersed with large intervals of a ninth and tenth which require the use of string crossings and left-hand stretches. The rapid changes of left-hand extensions and contractions within legato bowing patterns are technically challenging. From bar 35, new motifs emerge with the use of a broad double-stopped passage in a *forte* dynamic range. This passage contains the marking ‘with abandon’, suggesting an interpretation which might make use of down-bow retakes in order to create a character with driving energy. In bar 45, the cello plays a delicate and quasi-improvised passage marked *tranquillo*. This passage sets the stage for a return of the original opening material which, with some embellishment including virtuosic double-stops and ornaments covering a wide register, brings the movement to a close.

The third movement, marked *energico*, does not follow a formal structural pattern but uses thematic material from the first movement within the context of a loud dynamic range and accented driving rhythmic motifs (Example 1.26):

Ex. 1.26

O'Connell - Sonata: III, bars 1 - 3

Energico (♩ = 108)

The musical score for Example 1.26, O'Connell - Sonata: III, bars 1 - 3, is presented in three systems. The first system shows the piano introduction with a forte (f) dynamic. The second system shows the piano introduction with a forte (f) dynamic. The third system shows the piano introduction with a forte (f) dynamic.

Between bars 66 and 74 a dramatic *grandioso* section uses trills almost continuously in a high treble register within a loud dynamic range. This echoes the trill section heard previously at the close of the first movement. From bar 112 a *stringendo* section in repeated *tremolo* figures drives the movement to an exciting and dramatic conclusion.

This sonata is highly virtuosic for both instruments with a structure that is unified by the development of motifs throughout the entire work. The first and third movements are dramatic and energetic, while the second movement provides a contrasting character in

its use of *cantabile* in the cello part. The work features rhythmic motifs which at times unify both instruments but often provides a contrasting texture between the cello and the piano. A wide range of register and dynamics in both parts allows the performers scope to use a variety of tonal colours with imagination.

Angel Climent: Sonata for cello and piano (1996)

Between 1995 and 2000 Angel Climent composed extensively for cello: a short piece titled *Gitana* was written in 1995; the sonata for cello and piano was composed the following year; the suite for solo cello was composed in 1997 and the concerto in A minor in 2000. Both the suite and the sonata are three-movement works with a performance time of twenty and thirty-five minutes respectively.

The sonata for cello was dedicated to Climent's daughter, Clara, who was studying cello at the Cork School of Music. It was first performed at the Crawford Art Gallery, Cork, on 29 June 1997 by Gerard Kelly (cello) and Jan Cap (piano). Angel's music 'has a Spanish flavour, more classical than contemporary, but with a twentieth-century idiom'.¹¹³ In a review, his music is described as 'melodic, romantic ... imaginative and accessible ... qualities [which are] seldom found together in art music written since the end of World War II [and] are at the heart of all Climent's music.'¹¹⁴

¹¹³ Healy, Isabel, 'It's a family affair', *The Examiner*, 14 April 1998.

¹¹⁴ Townsend, Declan, 'Review: Climent Cello Concerto', *The Examiner*, 25 June 2003.

The first movement is the most dramatic of the three and according to the composer most of the ideas were initially improvised at the piano, taped and gradually shaped into a complete movement. It begins with an Andantino theme in E-minor (Example 1.27):

Ex. 1.27
Climent - Sonata: I, bars 1 - 4

Andantino ($\text{♩} = 85$)

This theme modulates through various tonalities to the key of F sharp. After a repeat of this first section, a calm section follows from bar 60: this is a ‘majestic theme based on the Gregorian chant from the *Tantum Ergo*’ in 3/4 time and is played by the cello at bar 78 (Example 1. 28):¹¹⁵

Ex. 1.28
Climent - Sonata: I, bars 78 - 85

mf cantabile

¹¹⁵ Climent, Angel, personal communication, 20 April 2009.

At bar 121 an Allegro section starts which *crescendos* up to the piano *glissando* (on the black keys) in bar 135. This is followed by a return to the first theme and a ‘succession of chromatic chords from the piano in an ascending form looking to the heavens’ brings the movement to a close in the key of F-major.¹¹⁶ Most of the contrasting sections in this movement are given definite separation by the use of pauses: it is important that the performers decide exactly how to link each section in order to create a unified interpretation.

The second movement begins *segue* and is a *cantabile* duet between the piano and the cello where the upper register of the piano line and the cello line form a melody in thirds (Example 1.29):

Ex. 1.29

Climet - Sonata: II, bars 1 - 5

Adagio

The musical score for Example 1.29 shows the first five bars of the second movement of Climet's Sonata II. The tempo is marked 'Adagio' and the piano part is marked 'mp'. The score is written for piano and cello. The piano part has a melody in the upper register, and the cello part has a melody in the lower register, forming a duet in thirds. The key signature has two flats (B-flat major), and the time signature is 4/4.

In bar 28 the piano takes over the main melody while the cello plays *con sordino* and from bar 43 the tension builds reaching a climax at bar 61 where the piano plays a ‘thunderous C’.¹¹⁷ With the return of 6/8 time in bar 73, a calm mood returns and the end

¹¹⁶ Ibid.

¹¹⁷ Ibid.

of the movement is reached ‘in a play of enharmonically constructed melodies between the two instruments’.¹¹⁸

The third movement could be titled ‘Zortzico’ which is a Spanish dance in an energetic 5/8 time (Example 1.30):

Ex. 1.30

Climent - Sonata: III, bars 1 - 5

Presto

The musical score for Example 1.30 is in 5/8 time and marked 'Presto' and 'f' (forte). It features a piano and a violin. The piano part has a complex, rhythmic accompaniment with many beamed eighth and sixteenth notes. The violin part has a melodic line with many slurs and accents. The key signature has one flat (B-flat).

This lively Basque dance with its complex rhythms was used as inspiration by both Spanish and non-Spanish composers such as Joaquin Turina, Manuel de Falla and Isaac Albéniz. It brings the sonata to an exciting conclusion. In Climent’s own words: ‘I also

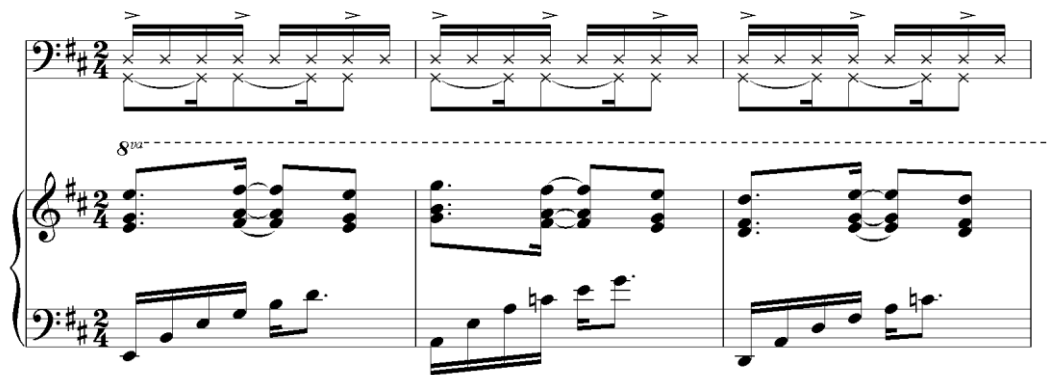
¹¹⁸ Ibid.

wanted to have a go at this ‘energetic’ ... type of piece, but I decided to give it another twist, that is, compose a Zortzico with a ‘blend’ of Basque and Andalucian music’.¹¹⁹

An unusual effect is called for in the section from bar 74 to 93 – the cellist is asked to drum intricate rhythmic patterns on the wood of the instrument (Example 1.31):

Ex. 1.31

Climont - Sonata: III, bars 80 - 82



Two versions of this sonata exist: one dates from 1996 and was probably used for the first performance. The newer version is easier to read but has some differences, mainly in the cello part, which are listed as follows: in the first movement from bar 146 legato phrase marks are added for six bars, in bar 157 *molto legato* is added to the harmonics and phrasing is added and from bar 169 to the end of the movement a *diminuendo* is notated. The second movement has one major change: from bars 24 to 27 continuous semiquaver broken octaves have been notated rather than the earlier melodic quaver line with the use of *tremolo* and *sul ponticello* effects.¹²⁰ The earlier version is more idiomatic for the cello and is written out for reference (see appendix C). In bar 69 a second pause mark is placed over the last two beats of the bar. The third movement has

¹¹⁹ Ibid.

¹²⁰ Continuous broken octaves in this context might be considered slightly awkward to perform.

one notable change where the time signature at the start has been changed from 5/4 time to 5/8. The tempo is unchanged: the earlier version gives a metronome speed of quaver = 180 but the 5/8 enables a smoother transition to the 6/8 passages which start in bar 20. In bar 45 to 60 *legato* slurs are added to the arpeggio figures.¹²¹

Two elements are influential in Climent's work: 'one is the religious aspect and the other [is] the Spanish idiom.'¹²² In performing this sonata the performers need at times to envisage the qualities of an organ, while in other places the romance of folk or gipsy music is evoked.

Conclusion

A general outline of the historical context in which these works were composed provides valuable insight to this repertoire for performers. It clarifies the uniqueness of each composer's style within the history of twentieth-century Irish composition. With a diversity of styles represented in the seven sonatas, the performer is faced with interpretative challenges during the preparation process. Key aspects drawn upon during this preparation process are the cognitive, the physical and the intuitive. Although separated for purposes of discussion, in reality these concepts are inter-related in both practice and performance. An essential part of the interpretative process is decision-making – examples drawn from each of the sonatas illustrate specific problems encountered, both technical and musical. Useful background information regarding the compositional process, which includes the composers' own comments on the works, is

¹²¹ The original detached version may be more suitable in maintaining the rhythmic drive.

¹²² Climent, Angel, personal communication, 20 April 2009.

also included in the discussion of each sonata. Details of past performances, recordings and available editions are listed. Where relevant, comparisons between different versions of a sonata are outlined and performing suggestions are given. Many of the recommendations made form the basis of future discussion in the following chapters.

CHAPTER 2

The Process of Interpretation

Introduction

In order for a performance to take place, within the realm of Western classical music and its traditions, it is generally recognised that the performer has worked on an ‘interpretation’ which will be presented during performance. What exactly an interpretation is and how it is achieved, from the performer’s point of view, will be the focus of this chapter. In part I, broad definitions of musical interpretation will be examined along with an overview of the importance of effective practice. Three models of the processes used by performers to arrive at an interpretation of a musical work are highlighted in part II. From these concepts, a working model is adopted, which provides both a practical basis and a conceptual method for performers to use while preparing for performance. Although each performance is unique, the tradition of Western classical music implies the repetition of a work along with its ‘interpretation’.

I. Definitions of Interpretation

Interpretation is defined in the *Oxford English Dictionary* as ‘the rendering of a musical composition, according to one’s conception of the author’s idea’.¹ This definition includes both the composer’s and the performer’s conception of the music, which may or may not be similar. Interpretation is defined in *The Oxford Companion to Music* as ‘the process by which a performer translates a work from notation into artistically valid

¹ ‘Interpretation’, *OED Online* (Accessed 19 June 2010), <<http://www.oed.com>>; quoted in Davies, Stephen and Sadie, Stanley, ‘Interpretation’, *Grove Music Online* L. Macy (ed.), (Accessed 19 November 2008), <<http://www.grovemusic.com>>

sound.² As the performer translates the ‘set of instructions’ which are contained in the score into a coherent sound, the personality and judgement of the performer are incorporated into the interpretation.³ No single interpretation of a work may be considered to be ‘correct’, and the same work, presented by different musicians, may result in a variety of valid interpretations.

From the performer’s viewpoint a broader definition of interpretation includes the concept of vision. A musical work is revealed in performance as a vision, which ideally contains both the composer’s and the performer’s perspective of a particular piece. These perspectives usually, but may not always, coincide. The interpretation of a work in performance is not a description but a disclosure in sound alone. This is one of the principal difficulties involved in verbal discussion of comparing performances. According to Davies and Sadie:

An interpretation is distinct from the performance in which it is embodied. Whereas a given performance is a unique event that might be reproduced (as by a recording) but cannot be re-enacted, an interpretation results from a series of decisions that can be repeated on different occasions which embody the same or a very similar interpretation.⁴

It is possible for most works to be performed with a variety of interpretations, each equally valid. Once the composer’s instructions are followed and understood ‘according to the performing conventions of the composer’s time and provenance’,⁵ it is then the

² White, Bryan, ‘Interpretation’, *The Oxford Companion to Music* (Accessed 19 November 2008), <<http://www.oxfordmusiconline.com>>

³ ‘Interpretation’, *The Oxford Dictionary of Music* (Accessed 19 November 2008), <<http://www.oxfordmusiconline.com>>

⁴ Davies and Sadie, ‘Interpretation’, *Grove Music Online*.

⁵ Ibid.

performer's responsibility to provide the originality of expression which is manifest in a valid and unique interpretation.

The possibility of different realisations of a particular work poses a challenge for the performer, who must develop a personal and natural-sounding interpretation for a specific performance of a work. The performer's choices and the process involved in making musical decisions are the essence of interpretation. The musician's decision-making process may include choices on the detailed level regarding dynamics, tempo and phrasing. Large-scale judgements concern the shaping of the overall structure and the pacing of musical climaxes. Both the broad interpretative outline of a work and the small-scale details are approached in different ways and at different times during performance preparation.

There are three aspects to be considered by a performer in working out an effective interpretation: the cognitive, the physical and the intuitive.⁶ Most professional musicians have well-developed skills, whether conscious or not, in each of these areas, all of which are of equal importance in arriving at a successful and meaningful performance.

According to Mine Doğantan-Dack:

A performer needs to know not only how to achieve continuity/discontinuity, contrast, different levels of intensity, gestural shapes with a particular instrument, but also know when along the music a change in any of these parameters would yield aesthetically satisfying results.⁷

⁶ Doğantan-Dack, Mine, 'Practice and Theory: Ways of Knowing Music', *Systems Research in the Arts*, Vol. 8, 7-12. Proceedings of the 8th Conference on Systems Research in the Arts, Baden-Baden, Germany. Ontario: International Institute for Advanced Studies, 2007.

⁷ Ibid., 10.

In other words, musicians must know not only how to achieve a particular effect on their instrument but also when to apply it. These two conditions form a valuable backdrop to discussion in the following section which includes useful models and methods applicable to the practice process. Combining both of these abilities is the goal of effective practice.

Practice

The pianist Frederic Kalkbrenner in his 1831 treatise on piano playing commented that ‘very few persons obtain from their practice all the benefit they hope for, because, in general, they practice badly’.⁸ Musicians constantly strive to use practice time usefully and to increase the effectiveness of the many inevitable hours of time required to prepare works for performance. Even when technique is assured most musicians require a minimum regular amount of time just to maintain these technical skills. With new repertoire, a significant amount of extra time is necessary to formulate an interpretation. So the quality of practice is vital for an effective musical result.⁹ These difficulties are not exclusive to the modern performer. Writing in 1753, C. P. E. Bach commented that with ‘intelligent practice it is easy to achieve that which can never be attained through excessive straining of the muscles’.¹⁰ Intelligent practice or ‘deliberate practice’¹¹

⁸ Kalkbrenner, Frederic, *Learning the Pianoforte*, trans. Sabilla Novello (London: J. Alfred Novello, 1866), 19.

⁹ Reid, Stefan, ‘Preparing for Performance’, in Rink, John (ed.), *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002), 104-106.

¹⁰ Bach, Carl Philipp Emanuel, *Essay on the True Art of Playing Keyboard Instruments* [*Versuch über die wahre Art das Clavier zu spielen*] trans. and ed. Mitchell, William (London: Eulenburg, [1753, 1762] 1949), 101; quoted in Reid, Stefan, ‘Preparing for Performance’, in Rink, *Musical Performance*, 104.

¹¹ Krampe, Ralf Th. and Ericsson, K. Anders, ‘Deliberate Practice and Elite Musical Performance’, in Rink, John (ed.), *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), 86-87.

suggests the use of a systematic approach towards practice.¹² Three practice models which contain elements used by all professional musicians during both practice and live performance, although usually in an individual way, are examined in detail. For many performers the practice systems used vary according to the specific instrument or type of work being prepared. For example, the problems faced by a string player are not precisely the same as that of a pianist and a contemporary work is approached differently from a work of the baroque era. Where possible each of the ensuing three models is adapted to cello performance.

II. Three Interpretative Models

The first system described is specifically designed for string players and concerns the practical problems faced by performers in their day-to-day practice. It focuses largely on the technical aspects of interpretation and answers the question regarding how to achieve a particular effect. The second model is based on the use of a hierarchy of performance cues which are incorporated by the musician into the study of each work and help the performer monitor both artistic detail and the overall broad structure of the piece. This model is crucial in answering the question of where to apply a particular effect. The third model is concerned with the balance between the cognitive, the physical and the intuitive while emphasising the post-performance learning of a work.

¹² Ibid., 86-87. Krampe and Ericsson define deliberate practice as a structured activity with the goal of improving a specific aspect of performance. Weaknesses are noted and tasks are devised to overcome them. Elite performers aim to make the best possible use of practice time available in spite of three major constraints: lack of adequate resources (time and money), insufficient intensity during practice and lack of motivation.

The first model described was one devised by the violinist Dorothy DeLay as a tool to help students to develop their own interpretative voice.¹³ It is largely a practical model, which focuses on the ‘procedural route of problem solving and decision-making that led to that interpretation’.¹⁴ An organising process, based on the concept of energy, was developed to help string players in this decision-making that is the essence of creating individual yet musically valid interpretations. Energy can be defined as force, power, strength or activity. When transferred to music, words such as intensity and strength are the basis of the ‘energy list’,¹⁵ which describes a system for creating performance structure. It applies both to technical and expressive realisation. Musical energy, according to DeLay, is divided into two separate processes: ‘breaking things down into parts (structural analysis) and measuring those parts (quantitative analysis)’.¹⁶ The skill of breaking musical structures and difficulties in technical execution down into smaller more manageable problems is advocated by violinist Robert Gerle in his advice to ‘separate the problems and solve them one by one’.¹⁷ The measurement of sound depends on three interrelated categories: sound (instrument based), rhythm and pacing, and intonation. Each of these categories is further subdivided into areas which can be measured quantitatively into either more or less energy, depending on musical context.

¹³ Dorothy DeLay (1917-2002) was a renowned violin teacher at the Julliard School of Music from 1948 and from 1970 teacher at Aspen Music School. Her students include Itzhak Perlman, Nigel Kennedy, Midori, Gil Shaham and Cho-Liang Lin. Recipient of many awards, DeLay received the US National Medal of Arts in 1994 at the White House and Emperor Akihito awarded her the Order of the Sacred Treasure for contributions to Japan’s musical culture. See appendix D for details of the Energy List. ‘Dorothy DeLay’, (Accessed 29 April 2009), <<http://www.mvdaily.com/news/item.cgi?id=102891>>

¹⁴ Gholson, Sylvia, ‘Dorothy DeLay’s Energy List: A Process Model for Musical Interpretation’, *American String Teacher* (February 1999), 42-45.

¹⁵ See appendix D.

¹⁶ Gholson, ‘DeLay’s Energy List’, 43.

¹⁷ Gerle, Robert, *The Art of Practising the Violin: With Useful Hints for All String Players* (London: Stainer Books, 1987), 17.

The sound of a string instrument is based predominately on the use of the bow. The three variable aspects are bow speed, the sounding point, which is the distance of bow placement from the fingerboard, and bow weight. According to DeLay, ‘the first thing necessary to do in laying out bowings and fingerings is to plan bow speed ... and the second thing is to plan the sounding points’.¹⁸ Depending on musical style and perception, each of these factors varies producing an infinite and individual range of sound and colour. In each case, energy is either relaxed or intensified. For example, an increase in harmonic intensity could be portrayed by slowing down bow speed and placing the bow nearer to the bridge. Playing nearer the bridge produces more overtones with a richer timbre, while fewer overtones and a more transparent sound is produced by playing on or near the fingerboard. In phrasing a rising and falling melodic contour, a faster bow speed can be effective.¹⁹ Dynamic contrast is produced by deciding to use more or less effort within each of these factors of tone production.²⁰ One important aspect which is not mentioned in DeLay’s list is that the part of the bow used, either upper or lower, must be decided upon in conjunction with each of the factors relating to right-hand tone production. In general, cellists differ from violinists, in preferring to use the lower half of the bow to produce an equivalent sound. Because of the thicker strings used by cellists, bow articulation is of even greater importance and more physical effort is required to attain clarity of note beginnings and note endings.²¹ Through focusing on detail, such as the sound and articulation of individual notes, decisions are made

¹⁸ Gholson, ‘DeLay’s Energy List’, 43.

¹⁹ See chapter 3, 107-108.

²⁰ Gholson, ‘DeLay’s Energy List’, 43-44.

²¹ See chapter 4, 134.

throughout the study of a work, which bring about the musical structure, character and style of the piece.

The left hand is also involved in sound and tone colour by varying articulation, vibrato and shifting. Articulation in the left hand is concerned with clarity and speed of lifting and dropping the fingers on the strings.²² Once again, as in the right hand, the thickness of cello strings poses particular difficulties for cellists. The difficulty is summed up by cellist Christopher Bunting as follows:

One of the main problems in the left-hand technique of the cello is that of clarity of enunciation.

This is because of the thickness of the strings and the large amount of air and wood that has to be set into vibration with each note. It is a problem of inertia.²³

To prevent injury, the use of minimum effort with maximum result is the main goal of string players.²⁴ According to DeLay, ‘the critical factor seems to be the speed of the drop and the speed of the lift integrated with relaxation’.²⁵ The left-hand fingers must be trained to fall or accelerate onto the string and form instantly into a relaxed position. Depending on whether the passage is rapid or cantabile, the follow-through will either use increasing or decreasing weight before lifting off the string again for the next note to repeat the cycle.²⁶ In playing a slower passage, for example, the increase of weight on a

²² See chapter 3, 104.

²³ Bunting, Christopher, *Essay on the Craft of ‘Cello Playing: Volume 2, The Left Hand*, (Cambridge: Cambridge University Press, 1982), 1. Christopher Bunting, M.B.E. (1924-2005), a British cellist, composer, writer and teacher, was a student of Pablo Casals. As a performer and a teacher he was renowned for combining analysis and musical tuition with a psychological approach to the challenges of cello playing.

²⁴ Statistics relating to the incidence of injury among musicians, taken from a 1988 ICSOM (International Conference of Symphony and Opera Musicians) survey, show that 82 percent of string players reported at least one playing-related medical problem that was severe in terms of its effect on performance; Paull, Barbara and Harrison, Christine, *The Athletic Musician: A Guide to Playing without Pain* (Lanham & London: The Scarecrow Press, 1997), 3-5.

²⁵ Gholson, ‘DeLay’s Energy List’, 43.

²⁶ Bunting, *Craft of ‘Cello-Playing*, 1-5.

particular note changes the colour. Rapid passages usually require faster lifting from the string and descending fast passages need left-hand *pizzicato* for clarity.²⁷

Expressive qualities are controlled by varying the energy of the speed and width of the vibrato.²⁸ DeLay recommends in general that vibrato should use ‘a fast ascending motion to the top of the pitch coupled with a relatively slower descending motion to the bottom pitch of a single vibrato cycle’.²⁹ Dynamics and musical structure dictate which speed and vibrato width are most suitable. A narrow but fast vibrato adds intensity to a soft dynamic. Shifting also depends on speed to provide musical meaning.³⁰ An emphasis is obtained when the shift starts slowly and speeds up towards the end, while a relaxation arises when the shift speed is reversed. The type of connection between notes is different, depending on whether the shift is on the original note or the arrival note.³¹

Rhythm and pacing allow further choices to be made for energy increase or energy decrease. Apart from influence of tempo on the overall character of a work, pacing within each individual phrase helps define its structure.³² A phrase can be made to sound relaxed by beginning it late or more exciting by entering sooner.³³

The final category, intonation, is important not only to tone production, but describes musical ideas. Both melodic and harmonic structure are given colour by the use of

²⁷ Ibid., 6-7.

²⁸ See chapter 5, 168-172.

²⁹ Gholson, ‘DeLay’s Energy List’, 44-45.

³⁰ See chapter 3, 106.

³¹ Gholson, ‘DeLay’s Energy List’, 45.

³² See chapter 3, 103-104.

³³ Gholson, ‘DeLay’s Energy List’, 45.

‘creative intonation’. Untempered tuning is used creatively by lowering or raising the pitch of strategic notes.³⁴ Often the leading-tone is sharpened to add tension before the resolution on to the tonic. Within the cello/piano duo, the voicing of chords and register play a vital role in decisions regarding intonation.

This interpretative model is immediately useful to cellists at any stage of the preparation process. The categorical elements can be combined in various ways to provide creative solutions in the shaping of a musical work. Conversely, by focusing on any single element in its abstract technical situation, an intuitive musical idea often manifests itself.

The second model described is concerned with the processes used by solo musicians to produce a reliable and musically valid performance in spite of the pressure involved. A memorised performance usually requires many months of extended practice so the playing is automatic, yet freshness and spontaneity are expected by an audience who are often hearing the work for the first time. Chaffin and Logan, in asking how a musician resolves this contradiction while preparing for performance, arrive at a working model of the cognitive process involved.³⁵ This model is based on case studies of professional musicians preparing specific works for performance and includes the role of memorisation in this process.³⁶ The conclusion is that a conceptual mental map of the

³⁴ See chapter 3, 108-110.

³⁵ Chaffin, Roger and Logan, Topher, ‘Practicing Perfection: How Concert Soloists Prepare for Performance’, *Advances in Cognitive Psychology* (2006), 113-130. (Accessed 11 November 2008), <<http://www.ac-psych.org>>

³⁶ The principal case study used for examining how professional musicians prepare a specific work for performance was based on data obtained from practice sessions, performances and CD recordings of the concert pianist, Gabriela Imreh. The work being learnt was the *Presto* from the *Italian Concerto* by J. S. Bach. The data collected included verbal discussion with the pianist, recordings of practice sessions with analysis of stops and starts, recall testing at various time periods after the final performance and

piece is the key tool used by performers to integrate ‘automatic motor performance and cognitive control’, which is needed to achieve a reliable, secure yet flexible and fresh performance.³⁷

The mental map used by performers is a hierarchically organised structure. The work or movement is divided into structural sections; initially the broad outlines such as first and second themes, recapitulation and coda etc. are delineated. Each section is then further divided into sub-sections and individual bars. These are the structural cues. Within this structure, performance cues are established during practice sessions.³⁸

Performance cues help the soloist consciously monitor and control the rapid, automatic actions of playing, while adjusting to the needs of the moment. During practice, the musician attends mostly to *basic performance cues* representing critical technical features (e.g., fingerings), and *interpretive performance cues*, representing phrasings, and changes in dynamics, tempo and timbre. During performance, the musician hopes to attend mainly to *expressive performance cues* representing the musical feelings to be conveyed to the audience (e.g. excitement).³⁹

The three types of performance cues are used at different stages of learning a piece. At the early stages when motor skills and memorisation are the focus of practice sessions, the musician uses basic performance cues. These are used in establishing technical aspects like fingering, bowing identifying patterns like scale and arpeggio figures, and deciding which string to use for a melodic phrase or which type of shift to use. Similar motives throughout the piece use identical bowings or fingering unless there is a

comparisons of performances at the end of the learning process to identify flexibility of tempo, dynamics and phrasing. Chaffin and Logan ‘Practicing Perfection’, 117.

³⁷ Chaffin and Logan, ‘Practicing Perfection’, 127.

³⁸ Ibid., 115.

³⁹ Ibid., 113.

particular musical or technical reason not to do so.⁴⁰ These cues are noted consciously while practising the rote repetition which is necessary for motor skills to be refined.

Once the piece has reached a level of fluency, the musician then tends to concentrate on the interpretative cues.⁴¹ This is the stage of learning when the musician works on dynamics,⁴² phrasing, balance with piano (or other instrument) if it is a duo, tempo fluctuations, and pacing. The character of the work is considered along with carefully measured nuances of timbre and articulation. These interpretative features are constantly monitored during rehearsal and, along with the expressive cues, tend to be short but descriptive phrases which have become meaningful to the musician during practice. The expressive cues tend to include short ‘word pictures’ which act as characteristic or emotional landmarks throughout the piece. Words describing ‘meanings’ of the music can include happy, playful, mysterious and brooding, or more physical cues such as heavy, light, warm and distant, which are used for both sound colour (timbre) and mood.

Performance cues are the landmarks of the piece that an experienced musician attends to during performance, carefully selected and rehearsed during practice so that they come to mind automatically and effortlessly as the piece unfolds, eliciting the highly practiced movements of fingers, hands and arms. Performance cues become an integral part of the performance and provide a means of consciously monitoring and controlling the rapid, automatic actions of the hands.⁴³

By the time a musician is ready to present the work in public, motor control is automatic and an interpretation has been developed to such an extent that the work can be readily

⁴⁰ An exception to the use of identical bowings in a similar passage occurs in the second movement of the sonata by Tom Cullivan. See chapter 5, 157-159.

⁴¹ Chaffin and Logan, ‘Practising Perfection’, 116.

⁴² See chapter 5, 162-172.

⁴³ Chaffin and Logan, ‘Practising Perfection’, 115.

repeated. However, it is the aim of the performer to present a distinctive and convincing realisation of a work each time it is performed, without merely repeating an automatic interpretation.⁴⁴ Most performers would agree with Daniel Barenboim that:

... the greatness of a performing musician is directly tied to his preoccupation with detail. The difficulty is to treat each detail as if it were the most important element and yet, not lose sight of the whole piece. It's very easy to do one or the other, but really combining the two is not easy.⁴⁵

Flexibility is the distinguishing feature of the highest level of artistry. Both the overall structure and the smallest nuance need to be attended to constantly throughout the performance.

The third model is the broadest in scope as it discusses issues related to live performance and the specific learning processes that may occur during performance. It is based on the premise that performers 'relate to music in rather different ways'⁴⁶ from either the composer, the music-theorist or the listener. According to Doğantan-Dack, 'knowing music through theory or analysis, and through performance involves two distinct modes of knowing'.⁴⁷ The main difference between an analytical/theoretical and performance interpretation is described as follows:

the former aims to understand how a piece works – how its structure holds together and makes musical sense; the latter, however, aims to '*make the piece work*', to *create* a sounding phenomenon that is effective, moving – even enchanting and transforming. Hence, for the

⁴⁴ See chapter 5, 146-147.

⁴⁵ Barenboim, Daniel and Said, Edward, W., *Parallels and Paradoxes: Explorations in Music and Society* (edited and with a preface by Ara Guzelimian), (London: Bloomsbury, 2002), 54.

⁴⁶ Doğantan-Dack, 'Practice and Theory: Ways of Knowing Music', 8.

⁴⁷ Ibid., 9.

performer, there is a very strong element of ‘making something’, as opposed to observing, and contemplating’.⁴⁸

The knowledge required to ‘make the piece work’ is only gained through actually performing the work. In fact, the affective element, or the freedom to be expressive in a spontaneous way, can often only really be convincing after repeat performances. Therefore, certain learning can only take place within the performing context. In discussing the conductor Wilhelm Fürtwangler’s performance,⁴⁹ Daniel Barenboim echoes this: ‘the impression his music gives me is that it’s being worked out in the performance itself, and these extremes ... are really part of an ongoing process that takes you through the piece from the opening silence to the final silence at the end ...’.⁵⁰

Both analysis and theory study a work from the composer’s point of view and are rarely concerned with discussing ‘particular renditions’ of it.⁵¹ The subtleties created by the performer cannot be notated, so become sidelined when the text of a work is being examined. In order to create a convincing interpretation, this model suggests that perhaps performers should aim to know a piece cognitively, physically and intuitively.⁵² Cognition, within the context of this practice-based research, refers to the decision-making procedure in which a performer engages to form a coherent interpretation. Both intellect and intuition are involved in this activity. The physical aspect is related to movement and gesture which are the technical and expressive components of cello performance. Intuition refers to knowledge based on extensive prior experience that is

⁴⁸ Ibid., 9.

⁴⁹ Wilhelm Fürtwangler (1886-1954) conducted most of the leading German and English orchestras throughout his career, notably the Berlin Philharmonic Orchestra and the London Symphony Orchestra.

⁵⁰ Barenboim and Said, *Parallels and Paradoxes*, 21.

⁵¹ Doğantan-Dack, ‘Practice and Theory: Ways of Knowing Music’, 8.

⁵² Doğantan-Dack, ‘Practice and Theory: Ways of Knowing Music’, 9.

almost automatic in its application. When making a musical or technical decision, an expert performer is not always aware of all the cognitive steps the mind takes in making this decision. These three types of knowledge, which are essential parts of the interpretative process, provide the inspiration for a detailed discussion of the challenges facing a cellist in performing the sonatas by Irish composers.

The starting point for a performer studying a piece for the first time is always sound. The sounding score is played or imagined on the performer's instrument with both its possibilities and limitations instantly obvious to the player.⁵³ The text is usually not analysed in the abstract; there is always a specific sound along with the physical sensation attached to a particular instrument. The muscle movements and kinaesthetic sensations are part of the performer's experiential knowledge of the music.⁵⁴ The phenomenology of sound is also considered the starting point for Daniel Barenboim:

Therefore, you start, already, with a very simple question of balance, of audibility, without getting into questions of interpretation. I don't think the word 'interpretation' comes into all of this. Audibility. Transparency. How do you create it? The minute you make it audible, are you being truthful to the text ...? In a way you are being unfaithful to the text because you're actually changing it.⁵⁵

Based on this initial playing of the piece, the performer then begins to make some decisions based on this immediate non-discursive and physical experience of the work. In this way the piece undergoes a transformation process. In understanding the structure and form of the piece, the player aims to create the shapes and portray their meanings within the parameter of time.

⁵³ See chapter 4, 117.

⁵⁴ Doğantan-Dack, *Practice and Theory: Ways of Knowing Music*, 10.

⁵⁵ Barenboim and Said, *Parallels and Paradoxes*, 33-34.

The preparation and the performance of a work are two different but interrelated processes. Practice consists principally of technical and musical problem-solving: extensive repetition ensures technical security under the stress of performance and certain musical and emotional elements of a work are memorised or automatic. Phrasing and pacing are rehearsed and different dynamics and timbres are tried out both with piano and without. During practice, an aspect of the piece which was unsuccessfully played may be tried again. However, in performance, the work must be played through from start to end with no second chances. This is an inherent part of the stress of live performance. Other causes of performance stress include the following: technical insecurities i.e. particular bars which are unidiomatic for the instrument or simply too difficult to be comfortable; lack of physical stamina (specific to cellists); uncertainty regarding mood and character of the work or of certain passages, tempo or rhythmic instability, for example, choosing an unsuitable tempo. During practice, the player aims to know a piece thoroughly so that in performance spontaneous ideas are allowed to emerge. Flexibility is desirable under performance conditions so that new creative ideas may emerge intuitively. The ‘necessity of uninterrupted flow’ can be a positively challenging factor enabling further learning to take place in live performance.⁵⁶ This explains the importance that expert players place on striving during certain rehearsal periods to replicate performing conditions with an emphasis on playing through a piece no matter what happens. Similarly most other elements of the practice process are carried out with an awareness of the ultimate purpose, that is, the goal of practice is a

⁵⁶ ‘The Alchemy Project: Qualitative Transformations in Chamber Music Performance’, (Accessed 20 October 2010), <<http://www.web.mdx.ac.uk/alchemy/summary.html>>

successful performance. In this research, the focus is on the practice process, rather than on the specific learning that takes place in live performance

Conclusion

Interpretation, from the performer's point of view, involves a process of decision-making. From the overall structure to the smallest detail of a piece, the player needs to be able to make judgements which will lead to a valid and artistic performance. Questions arise relating to both technical and musical aspects of the work. The process of preparing a work for performance incorporates the cognitive, the physical and the intuitive abilities of the player. Three different models of performance preparation are examined: the first is based on achieving a musical performance through controlling energy levels and mastering technical difficulties; the second describes the musician's intellect and analysis of the work as a method of being able to produce a coherent and consistent performance; the third model brings to the fore the importance of the cognitive, the physical and the intuitive aspects of musical performance. This tripartite structure of performance is adapted as an organising methodology to aid a more detailed examination of interpretative decisions faced by a cellist during the process of preparing these Irish cello sonatas for performance.

CHAPTER 3

Cognitive Aspects of Performance

Introduction

‘Players should understand what they play’, wrote Donald Francis Tovey in 1931 articulating the importance of analysis to musicians in the process of preparing a work for performance.¹ An exploration of the relationship ‘between intuitive and conscious thought that potentially characterises the act of analysis in relation to performance’ reveals a diversity of scenarios.² At one end of the spectrum, some musicians claim that a valid performance cannot take place without intensive analysis of the score, while for others intuition alone can suffice to present a clear and effective performance. The reality is probably somewhere between these two extremes, where conscious analysis takes place to various degrees, depending on the individual player, the instrument, the particular work being studied and the practical issue of the amount of time available to learn the piece. As well as being explicitly undertaken by the performer, analysis is ‘implicit in what a performer does’.³ Joel Lester discusses the implicitness of performer-based analysis:

Performers may not necessarily verbalise or even think consciously about these issues, even to themselves in the privacy of their practice studios. Nor do performers necessarily address them (whether consciously or intuitively) with the purpose of understanding how the piece is put together, how it ‘works’, how it can be shown to exemplify a particular structure or how it is

¹ Lester, Joel, ‘Performance and Analysis: Interaction and Interpretation’, in Rink, John (ed.), *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), 197.

² Rink, John, ‘Analysis and (or?) Performance’, in Rink, John (ed.), *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002), 35.

³ *Ibid.*, 56.

reducible to more fundamental structures. That is, their goal is not necessarily to analyse the piece.⁴

He continues by pointing out that performers are concerned with achieving an effective performance, one which is ‘received by their audiences with approval.’⁵ In order to attain this goal, structural elements are usually examined during the process of practice. Although music theorists and performers approach analysis in different ways, the musical structure of a work is ambiguous. Just as in performance, the score itself (like any literary text) contains the possibility of multiple readings. Performers examine musical structure and its main components, rhythm, melody and harmony, continuously (but mostly informally) throughout performance preparation. The term ‘performer’s analysis’, can be used to describe the examination of musical structure and shape, as practised by expert performers.⁶

Performer’s Analysis

In examining the role of analysis within the context of performance preparation different viewpoints abound. Some have argued in favour of rigorous analysis of a work which is being studied for performance, while others emphasise the role of intuition.⁷ Mine Doğantan-Dack describes the difference between a theorist’s and a performer’s definition of analysis as follows: a theoretical interpretation is an understanding of ‘how

⁴ Lester, Joel, ‘Performance and Analysis’, 207.

⁵ Ibid., 207-208.

⁶ Rink, ‘Analysis’, 35.

⁷ An extreme example of intuition as a basis for effective performance is the child prodigy. Numerous players who achieved solo careers as children later attest to the fact that their extraordinary skills, both technical and musical, were mainly ‘unconscious’. Upon reaching maturity, many found it difficult to incorporate an adult awareness into their playing and suffered temporary setbacks. Violinists Midori and Yehudi Menuhin are notable examples of child prodigies who have spoken about the need to ‘relearn’ the violin during their teenage years.

the piece works', while a performance interpretation 'aims to make the piece work'.⁸ The performer relates a cognitive understanding of a work intuitively to previous knowledge of either a particular composer, or another work in similar style or structure. Contrary to this viewpoint, some musicians have questioned 'the very integrity of any performance which is not based on analytical insight and rigour', thus arguing against the validity of intuition.⁹ Wallace Berry wrote:

The purely spontaneous, unknowing and unquestioned impulse is not enough to inspire convincing performance, and surely not enough to resolve the uncertainties with which the performer is often faced ... Although the interpreter's impulsive response to the score can fortuitously hit on convincing approaches through a developed (if often unreasoned) sense of appropriateness, the purely intuitive is unlikely to afford a necessary grasp of – or place in – the comprehended whole.¹⁰

A less extreme, but similar, warning against intuition is found in Eugene Narmour's statement: 'If formal relations are not properly analysed by the performer, as well as carefully delineated in the performance itself, then many negative consequences follow.'¹¹ However, in practice analysis is not usually carried out formally by performers (unless demanded by a particular work or style), but tends to occur informally at various stages throughout the preparation process.

⁸ Doğanatan-Dack, Mine, 'Practice and Theory: Ways of Knowing Music', *Systems Research in the Arts*, Vol. 8, 7-12. Proceedings of the 8th Conference on Systems Research in the Arts, Baden-Baden, Germany. Ontario: International Institute for Advanced Studies, 2007.

⁹ Ibid., 9.

¹⁰ Berry, Wallace, *Musical Structure and Performance* (New Haven: Yale University Press, 1989), 217-218; quoted in Lester, Joel, 'Performance and Analysis', 197.

¹¹ Narmour, Eugene, 'On the Relationship of Analytical Theory to Performance and Interpretation', in Narmour, Eugene and Solie, Ruth A. (eds.), *Explorations in Music, the Arts, and Ideas: Essays in Honor of Leonard B. Meyer*, Festschrift Series No. 7 (Stuyvesant: Pendragon Press, 1988), 319.

A very different perspective emerges when one casts the performer in either the role of the listener or that of the composer. When faced with a musical decision, the performer as listener asks: ‘what are the implications of this passage *for the listener* if I perform the music like this?’¹² In considering the performer as composer, Fred Maus has argued for the uselessness of formal analysis in learning to perform a piece well because he claims that performance is in fact a compositional act.¹³ Performers generally attempt to follow the compositional process or understand the composer’s intent informally while studying a work. At various stages, while practising they imagine the effect from the perspective of a listener. Therefore, in order to form a coherent and aesthetic interpretation, performers must give ‘considerable attention not only to their understanding of the composer’s demands and desires but also to the sensibilities of the audience for whom they make music.’¹⁴ Although examining a piece from the perspective of a composer or the listener is often useful for performers, particularly in the later stages of the preparation process when tempo and balance issues are being considered, it is not the most frequently used type of analysis. Formal analysis, as practised by music theorists, is also not generally used by performers. Instead a performer’s analysis is incorporated into the interpretative and technical process of learning a work.

A performer’s analysis takes place throughout all stages of performance preparation and would appear to be ‘intuitive and unsystematic’.¹⁵ John Rink has proposed the use of the

¹² Ibid., 318.

¹³ Maus, Fred, ‘Musical Performance as Analytical Communication’ in Gaskell, Ivan and Kemal, Salim (eds.), *Performance and Authenticity in the Arts* (Cambridge: Cambridge University Press, 1999), 129-153; in Doğantan-Dack, ‘Practice and Theory: Ways of Knowing Music’, 8.

¹⁴ Narmour, ‘Analytical Theory’, 318.

¹⁵ Rink, ‘Analysis’, 35.

term ‘informed intuition’ in describing this essential part of the performer’s conceptualisation process ‘which recognises the importance of intuition in the interpretative process but also that considerable knowledge and experience lie behind it’.¹⁶ The theoretical understanding of a work is the connecting point between the ‘demands of physical gesture and sound’ and ‘those of notation and its associated verbal traditions’.¹⁷ On a practical level, a performing musician is concerned with musical shape: an interesting and coherent interpretation develops when attention is focused on the basic components of music (rhythm, melody and harmony) and how these are organised into musical shape. This understanding of structure and shape is also used to guide the player in making technical choices.¹⁸ Each of these areas is examined in further detail.

Technical choices

An examination of Casals’s handwritten manuscript of the cadenza to Boccherini’s B flat major Concerto reveals a working part where every note has a fingering, bowing, line, accent or other mark in blue pencil.¹⁹ Almost every player annotates the score in a similar way.²⁰ As described in the first model, Dorothy DeLay recommends the planning of bowings and fingerings as one of the initial tasks to be carried out during the learning

¹⁶ Ibid., 36-37.

¹⁷ Cook, Nicholas, ‘Analysing Performance and Performing Analysis’, in Cook, N. and Everist, M. (eds.), *Rethinking Music* (Oxford: Oxford University Press, 1999), 251.

¹⁸ The terms structure and shape tend to be used interchangeably and non-specifically by professional performers.

¹⁹ Owen, Laurinel, ‘Off the Shelf’, *The Strad* (November 2006), 70-71.

²⁰ This is a practice specific to string players. Fingerings and bowings are decided and marked in the score (traditionally in pencil, so changes can be made) in order to be able remember and learn these decisions for study and performance purposes. Composers (unless they are cellists) usually leave these fingering and bowing decisions to the cellist.

of a new work.²¹ Pencilled marks include fingering and bowing, which relate to string choice, as well as commas (to show punctuation points), arrows (to describe tempo fluctuations), wavy lines (representing slowing of tempo or phrase release) and small *crescendo* and *diminuendo* signs (to represent the rising and falling of phrases). Many pencil marks on the player's part are quite idiosyncratic and are only comprehensible to their owner. Teachers routinely pass on their own working parts to students to save valuable lesson time.²² When revising a previously learnt work, many players prefer to use a 'clean' part, so that they are obliged to rethink the work and while reworking fingerings and bowings may develop a new interpretation or concept of the piece. In choosing the appropriate technical device, the structure is the guide. In other words, the musical context narrows down and sometimes dictates the choice of bowing, articulation or fingering. Sometimes, it is simply the process of elimination that allows a player to arrive at a particular technical choice, when guided by musical intent. Moreover, as noted by cellist Ian Bewley the fingering and bowings of a passage must also be chosen in conjunction with each other:

What we are doing is finding out what happens through understanding the structure! Already the music has guided us to the bowing to choose. Fingering is decided entirely by the way the music goes. The fingering of this phrase has a few possibilities but it must always be chosen in conjunction with the bowing and in the service of the music.²³

As described in the second model by Chaffin and Logan, marking in fingering and bowing is mostly carried out in the early stages of learning a piece, when basic

²¹ See chapter 2, 68.

²² Cleary, Annette, personal experience as student and teacher which also includes contact with string players and teaching colleagues on a full-time basis over a thirty-year period, 1980-2010.

²³ Bewley, Ian, *The Cellist's Inner Voice* (Hedon: Da Capo Music, 1993), 120-121.

performance cues are being established.²⁴ Research into a cellist's preparation of a work for performance has divided the process into three basic learning stages.²⁵ It was found that in the initial stage 'attention was focused on decisions relating to fingering and bowing' and the player referred to many different editions for suggestions.²⁶ However, during the following stage when the performer started to work on more detailed technical matters such as shifting and vibrato, decisions regarding fingering and bowing were changed in the context of a more detailed awareness of musical contour. This later stage involves the establishment of interpretative cues as shown by Chaffin and Logan in the second practice model.²⁷ If there are no performing editions, as in the case of the sonatas by Irish composers, many different options need to be tried, gradually narrowing down the choices until an intelligent and workable option is found. The final stage is one in which the piece is reworked and polished in different tempi and includes learning which takes place during and after public performances of the piece.²⁸

Bach's Suites for solo cello, a cornerstone of every cellist's repertoire, provide useful examples of various individual players' cognitive awareness of musical structure, based on their fingering, bowing, and dynamic and articulation choices.²⁹ Maurice Eisenberg's notes, taken from his lessons with Casals in the early 1920s, contain the following observation: 'one must try to read Bach as it appears on paper; following the ascending

²⁴ See Chapter 2, 72.

²⁵ Lisboa, Tania et al., 'Investigating Practice and Performance on the Cello', *8th International Conference on Music Perception & Cognition* (Evanston, Illinois, 2004), 161-164.

²⁶ Ibid., 161-164.

²⁷ See Chapter 2, 73.

²⁸ Lisboa, 'Investigating Practice and Performance on the Cello', 162.

²⁹ Since the rediscovery of Bach's Suites by Casals in the early part of the twentieth century, almost every well-known cellist has published an edition of the Suites.

and descending lines, curves and tendencies.’³⁰ The most extraordinary edition of the Bach Suites is that of cellist Dirian Alexanian, which is subtitled *Analysis of the art of phrasing, fingering and bowing*.³¹ Although Alexanian’s edition of the Bach Suites is not the only interpretation of these works, it represents a notated and published example of an intelligent articulation of a body of works by a cellist, showing logical bowings and fingerings based entirely on an understanding of musical structure. A new form of notation and symbol system was developed by Alexanian, with the aid of Bach scholar and theorist, Laurent Ceillier. This system portrays phrasing separately from bowing slurs, as well as voice-leading and hierarchical structures from the large-scale to the smallest detail of each musical ‘syllable’.³² Melodic counterpoint is delineated in two ways: firstly, by the use of bowing and secondly, by the choice of remaining on the same string or incorporating a string-crossing.³³ These two technical choices are used to show musical structure in selected passages from the sonata repertoire by Irish composers. Based on an understanding of the musical context, performing suggestions regarding details of fingering and bowing are outlined in the following examples from the cello sonatas by Tom Cullivan, Brian Beckett and Angel Climent.

³⁰ Owen, Laurinel, ‘Off the Shelf’, 71.

³¹ Alexanian, Dirian, *J. S. Bach: Six Suites pour Violoncelle seul: Analysis of the art of phrasing, fingering and bowing* (Paris: Edition Salabert, 1929). Dirian Alexanian (1881-1954), born in Constantinople, was one of the most controversial teachers and cellists of the twentieth century. As a young player he performed with Brahms and Joachim and in Paris was a colleague of Casals. He revolutionised left hand technique, and in 1922 published his treatise *Traité théorique et pratique du violoncello*. His students included most of the next generation of soloists (Eisenberg, Janigro, Piatigorsky, Fournier and Feurmann) and his technical innovations have been incorporated, but rarely acknowledged, into modern cello technique. This edition was the first to incorporate a copy of the manuscript of the Suites.

³² Ibid., iii-viii.

³³ See chapter 5, 159-161.

The second part of the opening theme of the first movement of Tom Cullivan's Sonata from bars 6 to 10 are marked with lengthy slurs in the cello part³⁴ (Example 3.1A):

Ex. 3.1A

Cullivan - Sonata: I, bars 5 - 10

Apart from these phrase marks, there is no other indication of melodic line so the cellist is required to provide a suitable bowing. Different bowings in this context would change the emphasis: if bow-changes occur on the bar line, the first beat of the bar will be stressed, whereas if the slurs begin on each quaver up-beat a more natural flow is attained. A stress can still be played on the first beat of each bar using a slightly faster bow speed on that beat (Example 3.1B):³⁵

Ex. 3.1B

Cullivan - Sonata: I, bars 5 - 10

³⁴ See chapter 1, 50.

³⁵ Suggested bowing by Annette Cleary is shown alongside the original phrase markings in this example (3.1B). The dynamic markings were added by performers Annette Cleary (cello) and Padhraic O'Cuinneagain (piano) in collaboration with the composer, Tom Cullivan. See chapter 1, 50.

The cello part of the second movement (Andante Mesto) of Brian Beckett's second sonata contains a melodic shape that benefits from being played solely on the A-string. Timbre and sound can be used as tools by the cellist in this example to shape a melodic phrase with clarity (Example 3.2):

Ex. 3.2

Beckett - Sonata No. 2: II, bars 12 - 20



Although it would be far easier and would involve less shifting if some of the Cs were played on the D-string, the sound quality of using both strings would be more difficult to match and some unwanted accents could result. In this context, accents could distort the smoothness of the melodic line by emphasising the intervals of the perfect fifth and the augmented fourth. These disturbances can easily be avoided if the passage is played on one string. If played only on the A-string, then more changes of bow would be needed to maintain a sonorous sound but phrase contour would be helped by avoiding string-crossings in this section. This applies also to the following *poco piu mosso* in the same piece, where the use of long shifts on a single string matches the increasing tension throughout this section, up to the return of *Tempo I*.

The tension and release within phrases is often mirrored by fingering, where a relatively 'tense' part of a phrase uses a deliberately difficult fingering (often with almost unnecessary hand extensions), and a 'relaxed' segment uses open strings or a 'simple'

fingering. This use of fingering to shape the musical structure is also mentioned by Ian Bewley: ‘from this we can feel that it is the contraction of the left hand to either tone or semitone which is sculpting the shape of the most important intervals physically, so this positive shaping is serving the music!’³⁶ The following fragment showing this use of fingering as a musical device is taken from the cello part of the first movement (Andantino) of Angel Climent’s Sonata (Example 3.3):³⁷

Ex. 3.3

Climent - Sonata: I, bars 9 - 16

The musical score for Example 3.3 consists of two systems. The first system shows bars 9-16 of the cello part and the piano accompaniment. The cello part is in the bass clef, and the piano part is in the grand staff (treble and bass clefs). The key signature is one sharp (F#), and the time signature is 2/4. The cello part includes a melodic line with various intervals and fingering suggestions (e.g., 4 2 2, 1, 2, 3 4 2, 1, 2 1 1). The piano part provides harmonic support with chords and moving lines. The score is marked 'poco cresc.' in both parts. A 'V' marking is present above the first measure of the piano part.

Apart from the two up-beat quavers to bar 10 and the first two quavers of bar 12, the entire passage is played on the D-string for maximum *legato*. Suggested fingering helps shape this phrase by placing shifts on all descending semitones and a shift and bow change on both ascending minor-third intervals in this passage; these occur in bar 10 on the last two quavers and in bar 13 on the first two quavers. Each time descending minor

³⁶ Bewley, *The Cellist's Inner Voice*, 125.

³⁷ The bowings differ from the slurs indicated in the score. These bowings were chosen by Annette Cleary in conjunction with the suggested fingering to minimise shifting during a slur. This helps avoid unwanted accents.

thirds are played, in bar 9 and bar 12, the fingering incorporates an extension 3-1-4 so that the hand physically ‘shapes’ this unresolved triad.

These examples demonstrate the process a cellist follows in arriving at a workable technical solution for a range of musical contexts as shown in this sonata repertoire. Fundamental choices of fingering and bowing are not only an important part of the technical process but are an integral part of musical detail. Phrasing, articulation and dynamics vary according to the particular technical device chosen, while musical context generally dictates which bowing or fingering option is chosen.

Rhythm, melody and harmony

Roger Scruton has organised music on ‘three primary levels, which are those of rhythm, melody and harmony.’³⁸ Organisation at any one of these levels has an effect on the others, while colour and emphasis are added by features such as dynamics, articulation and timbre. Beats, tones and chords are the essential components of these three primary levels, being ‘heard as directed towards or away from other elements in the sequence to which they intuitively belong and certain events have the character of boundaries, places of rest, points of arrival or departure.’³⁹ In tonal music, the melodic, harmonic and rhythmic levels are ‘functional’ and occur simultaneously, though not necessarily concurrently, fusing in one dynamic and musical intention.⁴⁰ Musical shape is a term often used by performers to describe this understanding of the organisation of a work. Rhythm, melodic and harmony are examined separately in relation to specific musical

³⁸ Scruton, Roger *The Aesthetics of Music* (Oxford: Oxford University Press, 1997), 309.

³⁹ *Ibid.*, 309.

⁴⁰ *Ibid.*, 309-310.

contexts chosen from the sonatas by Joseph Groocock (melody and rhythm), Kevin O'Connell (rhythm), John Gibson (melody and rhythm), Angel Climent (harmony and rhythm), Tom Cullivan (harmony and rhythm) and Brian Beckett (melody and rhythm).

Rhythm

In 1756 Leopold Mozart wrote the following introduction to a chapter in his treatise on violin playing entitled 'Of Time, or Musical Time-measure':

Time makes melody, therefore is the soul of music. It does not only animate the same, but retains all the component parts thereof in their proper order. Time decides the moment when the various notes must be played, and is often that which is lacking in many who otherwise have advanced fairly far in music and have a good opinion of themselves.⁴¹

The score, being a notated text, is not the actual musical work: 'music exists as sound; it fills time rather than space; and it is normally perceived as sound-in-time'.⁴² 'Temporal sequence', according to Joanna Hodge, 'is not just a frame in which music occurs', but is 'the very structure of its articulation' and is intrinsic to its internal construction.⁴³ All musical elements are rhythmic processes. Melody and harmony are sources of motion and direction, with instability resolving to stability.⁴⁴

Cognitive control within performance arises from a clear understanding of the hierarchy of musical structure. This awareness of hierarchy enables players to establish

⁴¹ Mozart, Leopold, *A Treatise on the Fundamental Principles of Violin Playing* (Salzburg, 1756); trans. and ed. Knocker, Editha (Oxford: Oxford University Press, 1985), 30.

⁴² Boorman, Stanley, 'The Musical Text', in Cook, Nicholas (ed.), *Rethinking Music* (Oxford University Press, 1999), 405.

⁴³ Hodge, Joanna, 'Aesthetic Decomposition: Music, Identity and Time', in Krausz, Michael (ed.), *The Interpretation of Music: Philosophical essays* (Oxford: Oxford University Press, 1993), 256.

⁴⁴ Berry, Wallace, *Structural Functions in Music* (New York: Dover Publications, Inc., 1987), 301.

performance cues, as described by Chaffin and Logan, which are an essential part of a secure and memorised performance.⁴⁵ This is explained by John Rink as follows:

Vital for intelligible, effective performance, it means giving the music a sense of shape in time by devising a hierarchy of temporally defined musical gestures from the small to the large scale. While playing, the performer engages in a continual dialogue between the comprehensive architecture and the ‘here-and-now’, between some sort of goal-directed impulse at the uppermost hierarchical level ... and subsidiary motions extending down to the beat or sub-level, with different parts of the hierarchy activated at different points within the performance.⁴⁶

The organisation of sound into musically meaningful phrases, ebbing and flowing rhythmic patterns and varying dynamic levels are the components of shape, which cannot always be satisfactorily notated. The challenge for the performer is to present an articulated musical shape, ranging from the broad outline of the work down to each detail. Paul Tortelier, in his teaching, likened phrasing to musical sculpture.⁴⁷ ‘Hearing structure’, writes Roger Scruton, ‘is part of the *phenomenology* of musical perception, rather than a matter of inference or analysis.’⁴⁸ Decisions made by players, which help define musical contour, should carry the listener forward through the different hierarchical structures so the overall contour is coherent. In the following examples from the sonata by Joseph Groocock musical shape is shown by the use of structural punctuation and the recurrence of rhythmic motifs.

This final movement (Allegro) uses sonata form but has the character of a rondo, and contains fugal episodes throughout. Melodic and harmonic features are somewhat sparse

⁴⁵ See chapter 2, 72.

⁴⁶ Rink, John, ‘Translating Musical Meaning: The Nineteenth-Century Performer as Narrator’, in Cook, N. and Everist, M. (eds.), *Rethinking Music* (Oxford: Oxford University Press, 1999), 218.

⁴⁷ Tortelier, Paul, notes taken during lessons, 1990.

⁴⁸ Scruton, *Aesthetics*, 313.

in the movement, thus interest relies heavily on rhythmic interest. The rhythmic structure is a large part of its character and both the tempo and rhythmic motifs provide unification throughout the numerous repetitions of the first and second themes. Tempo is used to stress the major punctuations, for example, the *ritardando* in bar 117 leads to the recapitulation, while in 157 the *poco ritardando* links with a contrasting melodic episode. These tempo changes (after the *ritardando* in each case) are most effective when played with a change of timbre. The *accelerando* in the final five bars of the movement is an integral part of the humorous character of the principal theme which continually hurries forward. Rests are also used to show structural boundaries and are most convincing when played in strict tempo. These rests sound unexpected (particularly the one in bar 138) and if played freely may sound vague or insecure in performance. Other similar punctuation rests, apart from the minim rest in bar 138, are as follows: bar 6 is a semibreve rest in both parts, bar 26 has a quaver rest in the piano part and feels like a written out breath mark.

The opening three bars of the same movement contain an important rhythmic motif which recurs and is transformed throughout the piece (Example 3.4):⁴⁹

⁴⁹ The bowings in this example were added by Annette Cleary to demonstrate precisely the hooked bowing which may be applied to provide articulation in the opening phrase of the third movement of the sonata for cello by Joseph Groocock.

Ex. 3.4
Grocock - Sonata: III, bars 1 - 3

Allegro (♩ = 76)



The dotted crotchet and quaver figure forms the basis of most of the material in the development section and acts as a unifying device. In soft or *espressivo* phrases like bars 58 to 63 and bars 95 to 99, 112 to 117, bars 170 to 181 articulation is generally *legato* but where the figure is incorporated into sections with greater intensity, for example, bars 80 to 84, 100 to 103 and 106 to 111, the bowing is more suited to a hooked well-articulated bow stroke with a gap between the dotted crotchet and the quaver. It is important to have a well-defined structure in playing this movement. Punctuation of essential resting points and articulation of phrases which are more intense and energetic provides vigour to the performance.

An intrinsic part of the second movement (Adagio) in Joseph Grocock's Sonata is the importance of the rhythmic pulse (Example 3.5):

Ex. 3.5
Groocock - Sonata: II, bars 21 - 24



The bass line in the piano part consists of continuous quaver chords which support the cello melodic line. Flow is maintained by the movement of less stable harmonies to more stable ones. This is a situation where the beat subdivision and pace of harmonic flow follow a predictable pattern. Harmonic changes occur regularly on the downbeat of each bar (with the exception of bars 11, 14-15, 43 and 46 where the harmonic changes occur on both the first and third quaver of the bar). When considering solely the cello line in this movement, it could be envisaged as a free, improvised melody but, in fact, the regularity of the harmonic pace and the steady quaver pulse of the piano bass line suggest a calm mood in this movement. With this in mind, the cellist needs to avoid disturbing the steady pulse of the piano part, so the upper melodic line could be more effective when played in a fairly strict tempo.⁵⁰

Embedded within musical time are the three basic elements, rhythm, metre and tempo,⁵¹ each requiring individual consideration from the performer. A ‘valid performance’,

⁵⁰ Although it is possible to conceive a performance of this movement with tempo flexibility, it is important to note that freedom is basically written into the cello part, thus making it desirable to perform the melodic line in strict tempo. This interpretation was favoured by the composer, Joseph Groocock in conversation with pianist, Padhraic O’Cuinneagain in 1989. Padhraic O’Cuinneagain, personal communication, 11 September 2009. See chapter 1, n. 83.

⁵¹ Rink, John, ‘Playing in Time: Rhythm, Metre and Tempo in Brahms’s *Fantasien* Op 116’, in Rink, John (ed.), *The Practice of Performance* (Cambridge: Cambridge University Press, 1995), 255.

writes Edward T. Cone, ‘depends primarily on the perception and communication of the rhythmic life of a composition’, that is, the discovery of the ‘rhythmic shape of the piece.’⁵² Usually, differences are realised through the use of varying energy levels. This echoes Dorothy DeLay’s concept of the ‘energy list’ as a practical tool for developing a valid musical interpretation based on either increasing or decreasing energy.⁵³ The tension, or increase in energy gives the listener the expectation of resolution.⁵⁴ For the performer this forward impulse informs the timing and shape of a work. An awareness of the rhythmic organisation of a work is ‘a vital basis of construction and interpretation of phrasing and articulation in performance.’⁵⁵ In the following examples from Kevin O’Connell’s sonata accents and stresses, which are in effect ‘energy’ accents, are intrinsic to the rhythmic flow of the work.

Rhythmic tension is probably the most essential feature of both the first and third movements of this sonata. On a detailed level, accents and stresses are notated throughout and coincide with rhythmic patterns. In performing these accents the articulation⁵⁶ and timbre are of importance to the cellist. When a rest or a tie occurs on a main pulse, the following note is almost always marked with an accent (as in example 3.9) – this encourages the cellist to sustain sound on the long A-sharp and to enter earlier on the B with an energetic impulse (Example 3.6):

⁵² Cone, Edward T., *Musical Form and Musical Performance* (New York: W.W.Norton & Co., 1968), 38-39.

⁵³ Gholson, Sylvia, ‘Dorothy DeLay’s Energy List: A Process Model for Musical Interpretation’, *American String Teacher* (February 1999), 42-45.

⁵⁴ Shove, Patrick and Repp, Bruno H., ‘Musical Motion and Performance: Theoretical and Empirical Perspectives’, in Rink, *The Practice of Performance*, 55-57.

⁵⁵ Berry, Wallace, *Structural Function in Music* (New York: Dover Publications, Inc., 1987), 301.

⁵⁶ See chapter 5, 175-180.

Ex. 3.6

O'Connell - Sonata: I, bar 6



Similarly, following a rest on the main beat of the bar, an accent is placed on the entry note, suggesting a forward rhythmic impulse. As the dynamic marking is *piano leggiero* the accent is more an ‘energy’ notation rather than an articulation (Example 3.7):

Ex. 3.7

O'Connell - Sonata: I, bar 38



In formulating a rhythmic interpretation, the performer is often faced with numerous possibilities, many of which may be equally valid. This difficulty is acknowledged by Wallace Berry:

Rhythmic grouping is a mental fact, not a physical one. There are no hard and fast rules for calculating what in any particular instance the grouping is. Sensitive, well-trained musicians may differ. Indeed, it is this that makes performance an art – that makes different phrasings and

different interpretations of a piece of music possible. Furthermore, grouping may at times be purposefully ambiguous and must be understood rather than forced into a clear pattern.⁵⁷

The ambiguous, rather than the obvious, is often the most interesting feature of a piece. However, instead of ‘bringing it out’ it often needs to be simply recognised by the player in order to become absorbed into the unconscious. In this way it becomes, during rehearsal or performance, an intuitive awareness. The following example, taken from the Adagio movement of Joseph Groocock’s Sonata is such a case (Example 3.8):

Ex. 3.8
Groocock - Sonata: II, bars 51 - 52



While the piano part is moving in 6/8 the cello line could sound as 3/4, but within this context the flow of the phrase is maintained by not bringing out this rhythmic ambiguity during performance (although in rehearsal, for ensemble purposes it is important to note this difference between the two instrumental parts).

While learning a new work, performers need to try to examine many different rhythmic aspects, both within the large-scale context and at the detailed level or the ‘microstructure’.⁵⁸ The Chaffin and Logan model demonstrates the use of hierarchy as

⁵⁷ Berry, *Structural Functions*, 302.

⁵⁸ Rink, ‘Playing in Time: Metre and Tempo in Brahms’s *Fantasien*’, 270.

an essential component of a performer's cognitive conception of a work.⁵⁹ Useful questions can be asked regarding rhythm: What are the principal points of intensity? What are the rates of changes of events? Where are the breathing or resting places? Many of these questions are equally applicable to many different hierarchical levels of the rhythmic structure.⁶⁰ David Epstein lists the integral rhythmical hierarchy using the following terms: the pulse, the motive, the phrase and the macroperiodisation of phrase groups.⁶¹ Therefore, the musician needs to pay attention to each of these levels even when focusing on another aspect of the musical structure.

In the second movement (Allegretto) of John Gibson's sonatina an energetic and driving rhythm creates a dance-like character. The second theme consists of a dotted rhythmic figure in the cello part which needs to drive forward to form phrases. In the following example from bars 40 to 44, the piano part moves at a slow rate of harmonic change, that is, the left-hand piano part sounds a pedal A for the five bars. In contrast to this steady crotchet pulse in the piano part, the cello part plays an energetic figure. The phrase calls for a forward driving motion but an *accelerando* would disturb the metronomic crotchet pulse in the left-hand piano part. Therefore the cellist needs to use an alternative device to create the effect of forward motion in this phrase (Example 3.9):

⁵⁹ See chapter 2, 72.

⁶⁰ Scruton, *Aesthetics*, 32-35.

⁶¹ Epstein, David, *Beyond Orpheus: Studies in Musical Structure* (Oxford: Oxford University Press, 1987), 60-63.

Ex. 3.9

Gibson - Sonatina: II, bars 40 - 44



Sound intensity and an intense vibrato can be used effectively to supply energy to this phrase, rather than relying on a drive forward in tempo. Knowing the rhythmic functions of the overall phrase not only provides information on sound and colour but also helps the cellist to decide exactly how much of a gap to place in the dotted figure. This articulation, which involves hooked bowing, should not sound mechanical throughout but can be varied.

Cellist William Pleeth describes some of the technical and musical challenges relating to rhythmic flow. From the purely technical point of view, rhythm has an important influence on perceptual processes related to instrumental technique.⁶² It is the connecting factor between cognition and motor function. Research has shown that certain motor skills are easier to carry out when organised by rhythm.⁶³ Fast passages are therefore both easier to play as well as being more musically coherent, when organised into groups with accents at strategic points. Both slow and fast tempi pose some general problems for the player: in a slow tempo, continuity of sound and musical fluency is difficult to achieve. For music to flow, the mind must sense the connection between

⁶² Thaut, Michael H., *Rhythm, Music and the Brain: Scientific Foundations and Clinical Applications* (New York: Routledge, 2008), 1-18.

⁶³ Sacks, Oliver, *Musicophilia: Tales of Music and the Brain* (London: Picador, 2008), 254-258.

notes and portray ‘a feeling of moving *through* each successive note as it becomes a part of the larger line, rather than grasping at each note as an isolated event.’⁶⁴ The slower the piece is, the more the need for long lines and definite shapes. Pleeth recommends playing a slow piece at a faster tempo, just as a practice device, in order to illuminate the phrase and rhythmic structure.⁶⁵ Then, this sense of movement can be incorporated into the correct slower tempo. This strategy would be useful in the second movement (Andante Rubato) in Tom Cullivan’s sonata where the improvised nature of this Irish traditional song benefits from a stable inner pulse (Example 3.10):

Ex. 3.10

Cullivan - Sonata: II, bars 387 - 390



This rhythmic foundation is the basis of rubato.⁶⁶ Epstein describes the problems associated with distorting rhythm for the sake of adding extra expression or for ease of playing technically, as follows:

It is not uncommon to hear musicians linger over a phrase, or exaggerate a ritard or other temporal nuance for the sake of local expression. This can enrich the music if kept within bounds,

⁶⁴ Pleeth, William, *Cello* (London: Kahn & Averill, 1992), 100.

⁶⁵ Ibid., 101-104.

⁶⁶ See chapter 5, 180-183.

with a larger temporal design in mind. It can destroy temporal plan and structure when overdone.⁶⁷

In situations where a long note is followed by a shorter note, the ‘inner-pulse’ should be maintained in the background by the player.⁶⁸ This is referred to by Pleeth as the ‘rhythmic spine’ of the music and ensures that regardless of character or tempo, the ‘inside-out’ flow is secure.⁶⁹ He continues by saying:

Everything in the world has a free play of rhythm, but that free play rests upon a foundation of order. In music this foundation grows out of a highly developed sense of rhythmic strength and accuracy. [P]ersons of great taste and artistic ability can give the appearance of being free rhythmically without ever being erratic; freedom is never erratic when it grows out of the rhythmic logic of the music.⁷⁰

A rhythmic feature of the second movement (Adagio) of Angel Climent’s sonata is the use of a long note followed by a short note (Example 3.11A):

Ex. 3.11A
Climent - Sonata: II, bars 8 - 9

The musical score for Example 3.11A shows two staves. The top staff is for the cello, and the bottom staff is for the piano. The key signature has one flat (B-flat), and the time signature is 2/4. The cello part begins with a mezzo-piano (mp) dynamic and a 'p subito' (piano subito) marking. The piano accompaniment also features a 'p subito' marking. The music consists of a long note followed by a short note, creating a rhythmic spine.

⁶⁷ Epstein, David, ‘Shaping Time, the Brain, and Performance: a Response to William Rothstein’, *Journal of Music Theory*, Vol. 43, No. 1 (Spring, 1999), 188.

⁶⁸ Bewley, *The Cellist's Inner Voice*, 128.

⁶⁹ Pleeth, *Cello*, 103-104.

⁷⁰ *Ibid.*, 102.

This pattern is heard from bars 1 to 15 and again from bars 28 to 42. In such a passage, the temptation is to play the cello part expressively with free rhythm, varying the length of the tied crotchet. This interpretation results in a loss of the ‘rhythmic spine’ or shape of the music.⁷¹ However, the left-hand piano part provides a stable quaver pulse throughout which encourages the cellist to maintain a secure inner pulse when performing this passage. A secure rhythmic foundation is essential to the *cantabile* mood and for good ensemble between the piano and cello. Freedom within this secure pulse arises mainly from the harmonic context where timbre, rather than rhythmic freedom, adds expressive interest. Hooked bowing, when applied to a pattern of a long note followed by a shorter note, is the most appropriate method of ensuring a rhythmic evenness in the cello part of this passage (Example 3.11B):

Ex. 3.11B

Climent - Sonata: II, bars 8 - 9

The musical score for Example 3.11B consists of two systems of staves. The top system shows the cello part (treble clef) and the piano part (bass clef). The cello part has a melodic line with tied crotchets, marked *mp* and *p subito*. The piano part has a steady quaver pulse in the bass clef, marked *p subito*. The bottom system shows the piano part (bass clef) and the cello part (treble clef). The piano part has a steady quaver pulse in the bass clef, marked *p subito*. The cello part has a melodic line with tied crotchets, marked *p subito*.

Sense of movement is also the most important aspect of fast tempi, where often a fast speed is created through energy rather than actual speed. Leopold Mozart noted that ‘many a violinist, who otherwise plays not too badly, falls into hurrying when playing ... continuously running equal notes’ and follows with the recommendation that ‘such an

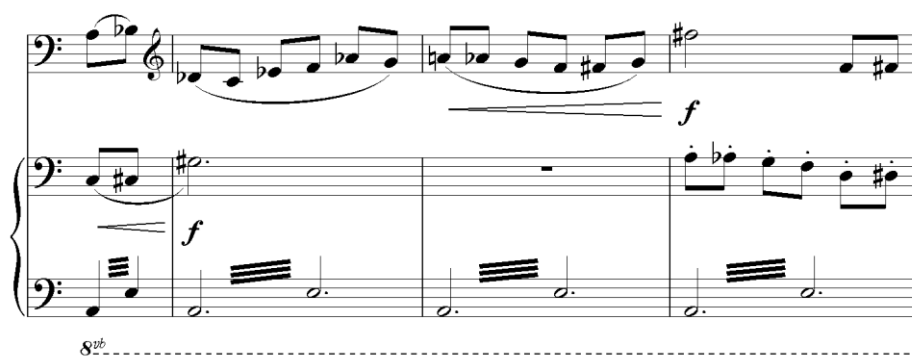
⁷¹ Ibid., 103-104.

evil [can be] avoided by playing with long drawn-out strokes of the bow’ and ‘in particular, not shortening the last two of four equal notes.’⁷² Control is the critical element, where quick sounding passages often need to be given their full sounding-time, with ‘a feeling of being filled out’ and some fast passages even have ‘a feeling of laziness in the way they are played’.⁷³ In other words, too much anticipation is as unwanted as too little flow and the feeling of speed is ‘really more a question of the amount of energy or leisure, which one injects into the tread of the fingers and the intensity of the bow-stroke’.⁷⁴ The importance of using a faster bow speed or a more efficient left-hand articulation to create more energy is reiterated by Dorothy DeLay in her use of the ‘energy list’.⁷⁵

In the Finale of the second sonata by Brian Beckett, fast passages in the higher register of the cello require energetic left-hand articulation, particularly in the lifting motion of the fingers (Example 3.12):⁷⁶

Ex. 3.12

Beckett - Sonata No. 2: III, bars 11 - 13



⁷² Mozart, *Treatise*, 87.

⁷³ *Ibid.*, 98.

⁷⁴ *Ibid.*, 99.

⁷⁵ See appendix D.

⁷⁶ See chapter 2, 69.

Although this Scherzo section of the third movement is marked Presto and has a nervous and energetic character, the passage shown is marked *piano* in dynamic. The soft dynamic along with the chromatic continuous quavers poses a challenge for the cellist in balancing the amount of energy and leisure – the last two notes of each bar need to be given their full sounding-time while the flow from bar to bar also needs to be maintained so that the listener is continually brought to the end of each phrase.

Melody

Aaron Copland observed that ‘if the idea of rhythm is connected in our imagination with physical motion, the idea of melody is associated with mental emotion’.⁷⁷ Melody usually takes the form of themes, which reveal not just pitch contours, but characteristics such as articulations, dynamics and nuances. Thematic shapes or phrases contain the following features: meter, harmonic context, pattern (consistency, recurrence and difference), melodic contour and degree of pitch within a key.⁷⁸ Pattern is connected to themes which recur throughout a movement or a piece, but often contain variation or prolongation. Upbeats often follow a pattern and are significant to the unity and structure of the theme. Donald Barra describes the phrasing in this way:

The musical phrase ... is based upon the principle of the dynamic curve. Typically, tonal actions begin with an anacrusis, or growth of increasing energy, reach a focal point of highest intensity, then end with a concluding phase, a release or relaxation. These phrases normally form several higher-level cycles of motion, each with its own pattern of development.⁷⁹

⁷⁷ Copland, Aaron, *What to Listen for in Music* (New York: Signet Classics, 2002), 39.

⁷⁸ Epstein, *Beyond Orpheus*, 37-38.

⁷⁹ Barra, Donald, *The Dynamic Performance: A Performer's Guide to Musical Expression and Interpretation* (New Jersey: Prentice-Hall, 1983), 19.

Melodic contour is aptly described by Casals as ‘a succession of rainbows’, with each note being ‘a link in a chain’.⁸⁰ This aspect of melody is connected with the natural gravitational attraction of certain notes in a scale to others. In the following three examples from the sonatas by Groocock, Beckett and Gibson, an awareness of the gravitational attraction of certain notes to others help a performer understand how to shape a melodic phrase artistically.

The passage from bars 81 and 82 in the third movement (Allegro) of Joseph Groocock’s sonata is comprised mainly of a descending scale figure, where the melody features intervals of a sixth. The melodic phrase could be easily played using string-crossing to avoid the difficulty of large shifts. However, the sixth is the largest interval and is more complex melodically than the other notes of the phrase, which are mostly consecutive or minor thirds. The leap in bar 81 from B-flat to G (and in bar 82 from A to F) is the most ‘interesting’ aspect of the melody. If performed on the A-string, rather than the simpler option of using a string crossing, the ‘effort’ involved in making the shift⁸¹ is appropriately matched to the inherent melodic tension in the wide interval (Example 3.13):

⁸⁰ Blum, David, *Casals and the Art of Interpretation* (Berkeley: University of California Press, 1977), 15.

⁸¹ See chapter 2, 70.

Ex. 3.13

Grocock - Sonata: III, bars 80 - 83



Dirian Alexanian, in the preface to the Bach Suites, describes a feature of melodic attraction as follows: '[e]very series of similar conjoint degrees proceeding in a uniform direction (from low to high or inversely) should be considered as a single syllable up to and including the first note of the [change of direction]'.⁸² In Brian Beckett's first sonata, the fourth movement is based on a quirky theme which plays on the interval A-B flat and its inversion. The opening theme is first heard on the cello in bar 17 and after a repeated melodic figure based on descending thirds the direction is reversed with a phrase-segment of ascending chromatic intervals. This forms a four-bar phrase with a balanced melodic contour (Example 3.14):

Ex. 3.14

Beckett - Sonata No. 1: IV, bars 17 - 20



⁸² Alexanian, J. S. *Bach: Six Suites pour Violoncelle Seul*, vi.

In performing this segment, the cellist can demonstrate the melodic shape successfully using dynamics combined with a faster bow speed, as recommended by Dorothy DeLay.⁸³ Although not indicated by the composer, a performance suggestion is to play the first three quavers of bar 19 with a *diminuendo*. The fourth quaver of this bar, the B-flat is the start of an ascending chromatic passage, which contrasts with the previous descending segments and would benefit by being played with a slight leaning accent within a piano dynamic. This would allow room for a subtle *crescendo* throughout the remainder of the bar and the following bar, thus helping clarify the melodic shape.

Another feature of melodic attraction is the tendency of notes to gravitate towards the tonic and other notes of the tonic triad. It can be described as ‘the tendency for melodic motion to continue in the same direction ... with the force of tonal attraction not to the tonic pitch alone, but to each member of the tonic triad.’⁸⁴ An underlying image-schema of melodic paths and their gravitational forces represents a ‘template’ upon which melodic motives of actual works can be ‘mapped’.⁸⁵ This awareness (in conjunction with knowledge of the harmonic context) is essential in arriving at a logical and expressive intonation. The first movement of John Gibson’s sonatina requires coherent intonation: the sparseness of texture throws the melodic outline to the forefront and each interval has a definite place within a phrase or a segment of a phrase. While examining the melodic outline from bars 12 to 18, it is apparent the cello part traces a descending

⁸³ See chapter 2, 68.

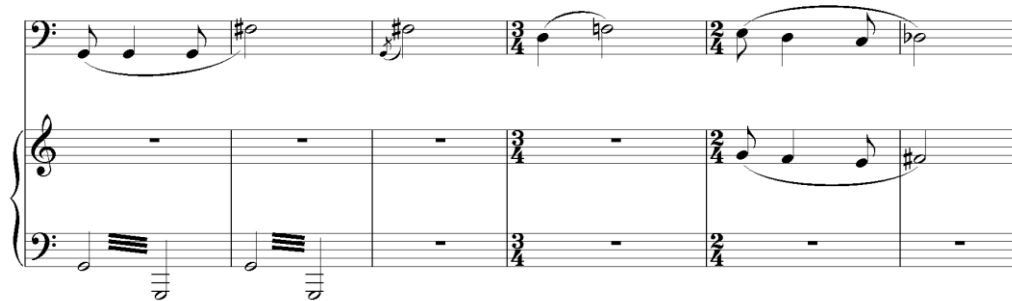
⁸⁴ Brower, Candace, ‘A Cognitive Theory of Musical Meaning’, *Journal of Music Theory*, Vol. 44, No. 2 (Autumn, 2000), 334-335.

⁸⁵ *Ibid.*, 323-324.

partially-chromatic path from G to D-flat (omitting the D in bar 15 and the C in bar 16)
(Example 3.15):

Ex. 3.15

Gibson - Sonatina: I, bars 12 - 17



Even within the context of this apparently atonal work, each individual pitch has a specific direction melodically which is perceived by the listener as an implied tonality, in this case the tonal region of G. Open strings are likely to be used in this phrase (G in bar 12 and D in bar 15 and 16). Because open strings cannot be adjusted during performance, the player needs to work carefully in placing the stopped notes (F-sharp, F-natural, E and D-flat) at a correct pitch in relation to both the open strings and the neighbouring stopped notes. Suggestions for the specific placement of pitch in this example is as follows: the F-sharp in bar 13 feels like a leading-tone and is placed quite high; the F-natural when played flat in pitch then gravitates towards the E; a high E is necessary to create a wide interval of a tone to the open D and another wide tone from the D to the C is important to enable the following D-flat to be low in pitch as it gravitates in the direction of the C heard in the previous bar. Unlike the pianist, the string player can manipulate intonation, which gives an added dimension to expressiveness in melodic shaping of phrases.⁸⁶ Casals, who first used the term

⁸⁶ See chapter 2, 70-71.

‘expressive intonation’, stated that each interval needed a specific ‘sense of *belonging* and/or *direction*.’⁸⁷ The player needs to ‘distinguish between diatonic and chromatic semitones,’⁸⁸ the former being invariably characterized by a sense of connectedness.⁸⁹ ‘Playing in tune’, according to Casals, ‘is a dynamic process, [an expression] of the organic relationship between notes in a musical context.’⁹⁰

Harmony

A sense of motion is attached to harmonic function which ‘corresponds to the tension of dissonant intervals or chords resolving to consonant intervals and chords.’⁹¹ The sixteenth-century theorist, Zarlino, stated that the main role of dissonance was to make the following consonance ‘sound more agreeable’ and to provide ‘great pleasure and delight’ in its resolution.⁹² John Rink recommends that an understanding of form and tonal foundation could be ‘one of the first ‘deliberate’ analytical tasks a performer could undertake’, particularly in the case of familiar forms like sonata form, binary, ternary and rondo form.⁹³ However, he continues by explaining that it is not enough to understand the harmonic processes in isolation: their ‘architectural attributes and function needs to be known within the context of time’.⁹⁴ Similarly, David Epstein described the harmonic character of a work as being connected to fundamental structure

⁸⁷ Blum, *Casals and the Art of Interpretation*, 102-103.

⁸⁸ String players often distinguish between diatonic and chromatic semitones in the context of expressive intonation: a diatonic semitone is often played as a narrower interval than a chromatic one.

⁸⁹ Blum, *Casals and the Art of Interpretation*, 103.

⁹⁰ *Ibid.*, 103.

⁹¹ Shove and Repp, ‘Musical Motion and Performance’, in Rink, John (ed.), *The Practice of Performance*, 57.

⁹² Zarlino, G., *The Art of Counterpoint* [1558], trans. Marco, G. A. and Palisca, C. V. (New York: DaCapo Press, 1983); quoted in Shove and Repp, ‘Musical Motion and Performance’, 57.

⁹³ Rink, John, ‘Analysis and (or?) Performance’, in Rink, *Musical Performance*, 45.

⁹⁴ *Ibid.*, 45.

‘over wide temporal spans’, even to the boundaries of the piece.⁹⁵ This concept of ‘essential unity’ and ‘organic coherence’ is shared by most musicians.⁹⁶ Tonal music can be described as a journey through tonal space with narrative features. The tracing of harmonic motion through space happens both on the overall level and in small detail. The basic I-V-I cycle tends to recur as a cycle of stability followed by instability with a return to stability. This journey through various keys is described by Roger Scruton as follows:

Music will shift through keys in the course of harmonizing a melody or as a result of voice-leading. But these local shifts tend to take place against a far more slow-moving background, in which a tonal centre is reaffirmed through many superficial changes, to be replaced only gradually by another and rival centre. This slowly shifting centre is the operative device of ‘sonata form’.⁹⁷

Other harmonic movements are somewhat ambiguous, with certain pivot chords acting as the ‘intersection of two harmonic pathways.’⁹⁸

The first movement of Tom Cullivan’s sonata is a striking example of effective modulation and this is the principal method used to develop themes and motifs. The following example, taken from the linking section between the development and the recapitulation in the first movement, shows the cello G-sharp in bar 202/203 (A-flat) to be such a pivot note (Example 3.16):

⁹⁵ Epstein, *Beyond Orpheus*, 39.

⁹⁶ Dunsby, Jonathan and Whittall, Arnold, *Music Analysis in Theory and Practice* (London and Boston: Faber Music, 1988), 17-19.

⁹⁷ Scruton, *Aesthetics*, 270.

⁹⁸ *Ibid.*, 341.

Ex. 3.16
Cullivan - Sonata: I, bars 200 - 204



It is part of a chord progression that moves the key centre from E minor in bar 191 through a ‘circle of fifths’ to a moment of arrival at bar 203 in the key of D-flat minor. The colour and placement of each of these G-sharps in the cello part needs to vary according to the degree of harmonic tension on each chord – the second G-sharp of bar 202 should be softer and linger a little before the arrival on the down-beat of the next bar. At the start of the *piu mosso*, the A-flat in the cello part needs an intense but soft timbre. Vibrato, which is fast and narrow, is the best means of producing this intensity to mirror the harmonic intensity of this modulation.

Modulation and the return to a tonic or home key is the main factor in establishing a sense of coherence within a work. This harmonic awareness helps the performer establish structural cues, as described by Chaffin and Logan.⁹⁹ The effect of modulation differs depending on whether the new key is on the sharp or the flat side of the tonic. Theorists from the eighteenth and nineteenth centuries referred to modulation on the sharp side as ‘tensing’ or ‘strengthening’, while the flat side was described as ‘relaxing’

⁹⁹ See chapter 2, 71-72.

or ‘softening’.¹⁰⁰ Rapid changes of mood occur in the following short segment from the first movement of Joseph Groocock’s sonata (Example 3.17):

Ex. 3.17
Groocock - Sonata: I, bars 56 - 58



Bar 56 appears harmonically to be a first-inversion dominant chord of B-flat major which would predictably resolve to E-flat major – however, this resolution is delayed by a bar and inserted in bar 57 is a contrasting second-inversion chord of D-major. This chord in a sharp tonality requires a bright or tense harmonic colour which contrasts with the surrounding flat tonalities and is best achieved with the use of a sounding point near the bridge combined with a warm vibrato.

An important aspect of harmonic structure is its influence on tonal colours and texture.

According to Candace Brower, harmony has two aspects:

On the one hand, tonal harmony provides support for the tones of the melody, its ‘pillars’ making motion along an underlying melodic pathway seem secure; on the other, it traces its own course through space towards its own goals.¹⁰¹

The harmonic support of a melody is one of the main deciding factors in choosing a particular tone-colour to shape a phrase. An unexpected chord or an unusual chord-

¹⁰⁰ Brower, ‘Cognitive Theory’, 344.

¹⁰¹ Ibid., 340.

progression often requires a different colour, while a pedal chord or a rather mundane harmony usually implies that interest lies elsewhere, for example, in rhythmic features. An unusual harmonic progression is heard at the end of the second movement (Adagio) in the sonata by Angel Climent (Example 3.18):

Ex. 3.18

Climent - Sonata: II, bars 90 - 92

The musical score for Example 3.18 is presented in two staves. The top staff is for the cello, and the bottom staff is for the piano. Both are in 6/8 time. The cello part starts with a 'rall.' marking and a 'p' dynamic, playing a melodic line that moves from G4 to A4, B4, C5, and ends on a tied D5. The piano accompaniment consists of chords in the right hand and a repeated D-E-flat pattern in the left hand, also marked 'p'.

The G-major seventh chord moves to the unexpected tonality of B-major. During this progression the cello part remains on a repeated D-E-flat pattern ending on a tied D-sharp on the final chord. A variety of possibilities exist to enable the cellist to colour the phrase with harmonic awareness while resisting making too much *ritardando* and *diminuendo* even where marked. A decrease in vibrato is important for producing a relaxation on the final chord.

Conclusion

An important part of performance preparation is the player's conceptualisation process, which involves an understanding of musical structure and shape. A performer's analysis is the cognitive method generally used to enable the performer to form an interpretation, which presents a work with clarity of texture, rhythmic patterns and melodic phrasing

within a temporal framework. Technical choices, which refer primarily to fingerings and bowings, are made based on the player's cognitive understanding of the structure of a piece. Specific examples from the sonatas by Tom Cullivan, Brian Beckett, Angel Climent, John Gibson, Joseph Groocock and Kevin O'Connell are shown to demonstrate how the primary levels of sound organisation, that is, rhythm, melody and harmony are organised to facilitate a fluid and technically proficient performance.

The score can be seen as a 'map' or a set of instructions which needs to be realised during performance.¹⁰² Performers must make decisions regarding the nuances which can never be fully notated: 'Yet each nuance limits the piece by excluding other options for that element'.¹⁰³ Therefore some options are articulated while others are excluded. In other words the performer must decide not only what to 'bring out' in the music, but what to conceal. 'Performance', observes Nicholas Cook, 'routinely involves not playing what is notated as well as playing what is notated.'¹⁰⁴ It is the performer who controls the way in which virtually every aspect of the work is conveyed to the listener. Which features of the music are 'brought out', which are concealed, which are allowed to speak for themselves – these are only some of the decisions the performer must make. Therefore, if works can contain a number of 'acceptable interpretative possibilities,' then the performers cognitive task is to define the structure of the piece by choosing one of the 'multiple strategies' for interpretation.¹⁰⁵ However, it is not the performer's task to

¹⁰² Barenboim, Daniel and Said, Edward W., *Parallels and Paradoxes: Explorations in Music and Society* (edited and with a preface by Ara Guzelimian), (New York: Bloomsbury, 2003), 33.

¹⁰³ Lester, 'Performance and Analysis', 199.

¹⁰⁴ Cook, Nicholas, 'Between Process and Product: Music and/as Performance', *Music Theory Online* Vol.7 No.2 (Accessed 23 March 2009), <<http://mto.societymusictheory.org>>

¹⁰⁵ Lester, 'Performance and Analysis', 211-214.

provide the listener with an ‘analytical understanding’ of the piece, but rather a ‘vivid experience’.¹⁰⁶ Daniel Barenboim speaks of the art of illusion as being an essential part of a performance realisation.¹⁰⁷ Illusion, in other words the manipulation of sound and time, is partly how a player illuminates certain musical features, while others seem to merge into the background. Determining what features are to be ‘brought out’ and which are to be concealed is the role of analysis for the performer – analysis which is best carried out through a combination of intuition, experience and reason.¹⁰⁸

It is essential for the performers, particularly the cellist who may not always practise from a full score, to prepare this sonata repertoire incorporating tonal awareness within a temporal framework for the following reasons: pacing, to plan varying energy levels throughout performance, for unity and coherence, to establish appropriate balance between the cello and piano, dynamic ranges, to help plan phrasing and principal melodic points of intensity and repose, and finally, for timbre and use of tone colour. Tone colour, dynamics, articulation and texture are essential components in realising an artistic interpretation and are discussed in the following chapters.

¹⁰⁶ Rothstein, ‘Analysis and the Act of Performance’, 238.

¹⁰⁷ Barenboim and Said, *Parallels and Paradoxes*, 30-36.

¹⁰⁸ Rothstein, William, ‘Analysis and the Act of Performance’, 237.

CHAPTER 4

The Physicality of Performance: Mechanics, Movement and Gesture

Introduction

For the performer, the starting point for learning a new piece is always the sounding score; the initial step is to play the music on one's instrument.¹ This leads to a 'knowing' of the work that is often intuitive and is directly related to the advantages and limitations of the performer's particular instrument. A large part of this intuition arises from the physical action involved in playing an instrument. Christopher Small observes that 'music is not a thing at all but an activity, something that people do'.² In performance, the movements and actions made by players can be thought of as gesture and 'for most people the performer is the embodiment of music'.³ This concept of music-making as an activity can be extended to include listeners and composers.⁴ For many people the visual aspect is one of the most important reasons for attending a concert rather than listening to a recording at home. In live performances the energy of the sound being made by performers is experienced by the listener who reconstructs the action as it gives rise to sound. Details such as articulation, rhythm, rubato, intensity and timbre are experienced

¹ See chapter 2, 76.

² Small, Christopher, *Musicking: The Meanings of Performing and Listening* (Hannover: Wesleyan University Press, 1998), 2.

³ Dunsby, Jonathan, *Performing Music: Shared Concerns* (Oxford: Clarendon Press, 1995), 4.

⁴ Mead, Andrew, 'Bodily Hearing: Physiological Metaphors and Musical Understanding', *Journal of Music Theory*, Vol. 43, (Spring, 1999), 1.

physically.⁵ This ‘identification with the embodiment of sound’ is called ‘kinaesthetic empathy’.⁶

The physicality of performance can be examined on three different levels. The basic level contains an overview of the mechanics of sound production with differences between the violin and the cello being observed. A definite relationship exists between the instrument (and its mechanics) and the movements of the player. Certain movements are influenced by the physicality of the specific instrument being played – each instrument encourages certain movements while limiting others.⁷ This affects basic sound production. Problems specific to the mechanics of sound production on the cello are mentioned. The next level involves a description of the technical movements required by the player to produce sound from the instrument. Finally, expressive movement or gesture is described.⁸ This movement communicates a visual meaning of sound to the listener and research has shown that audiences ‘read’ this non-verbal ‘vocabulary’ and from it can deduce the performer’s expressive intention.⁹ Expressive movement cannot be separated from the cognitive awareness of a piece and similarly

⁵ Iazzetta, Fernando, ‘Meaning in Music Gesture’, *International Association for Semiotic Studies*, VI International Congress, Mexico, 13-18 July 1997 (Accessed 21 January 2009), <www.eca.usp.br/prof/iazzetta/papers/gesture.htm>

⁶ Mead, ‘Physiological Metaphors’, 3.

⁷ For example, the bending of the knees often seen in a violinist’s performance is impossible on the cello, due to the necessity of remaining seated while playing.

⁸ It is common practice in string playing to use the terms movement and gesture broadly and interchangeably. This practice is reflected in the discussion which follows. However, a subtle distinction between these two terms is often observed: movement is the term more commonly used in discussion of technical matters, while gesture generally includes both technical actions and movements which are also musically expressive. Detailed research into the use of these terms within the context of string performance is largely unexplored.

⁹ Davidson, J. W., ‘The Social in Music Performance’, in Hargreaves, D. J., & North and A. C. (eds.), *The Social Psychology of Music* (Oxford: Oxford University Press, 1997), 221-222.

cognitive consciousness informs physical gesture.¹⁰ A discussion of these three levels of physicality within the context of the preparing the Irish cello sonatas for performance follows.

The Instrument

In discussing the player's preparation of a work, Daniel Barenboim states that initially there is no 'interpretation'; the first step is the actual audibility of the music.¹¹ In his own words:

You have to start first with the physical realization of the sound. With sound, you have to deal with physical laws, where there's the effect of sound in a room, the space and time ... to perform ... involves a physical act that requires a musician to have understanding and knowledge of the physical side of music, which has to do with acoustics, which has to do with overtone, which has to do with harmonic relationship ... and, of course, technique.¹²

The movements of the player are linked to the concrete, mechanical body of the instrument which influences sound production. An understanding of the mechanics of sound production illuminates difficulties specific to the cello.¹³

The acoustical principles of all stringed instruments are similar: friction between the bow and the string causes the string to vibrate, which is then amplified by the resonator, the body of the instrument.¹⁴ Helmholtz, in the nineteenth century, was one of the first to

¹⁰ See chapter 2, 76.

¹¹ Barenboim, Daniel and Said, Edward W., *Parallels and Paradoxes: Explorations in Music and Society* (edited and with a preface by Ara Guzelimian), (London: Bloomsbury, 2003), 34.

¹² Ibid., 117-118.

¹³ Most literature discusses this topic from the general perspective of string instruments, using the violin as the basic model.

¹⁴ Richardson, Bernard, 'Cello Acoustics', in Stowell, Robin, (ed.), *The Cambridge Companion to the Cello* (Cambridge: Cambridge University Press, 1999), 37.

investigate the relationship between a bowed string and tone production.¹⁵ The energy of the frictional forces was found to produce a wave motion which traces out an oval shape in a *pure tone* or a fundamental string frequency. When a cellist bows an open string, the fundamental string and its overtones are brought into motion. The overtones are represented musically as the harmonic series.¹⁶ Timbre and the tone-quality of particular notes ‘depend on the relative intensities of the fundamental and overtones.’¹⁷ With increased bow speed or pressure the amplitude of the string increases, causing an increase in vibration of the bridge and body of the cello, which results in a change in the sound level. The soundpost provides a fixed point, enabling the bridge to rock and causing the bass bar to move. This gives resonance to the sound. Any change in the angle of the bow to the bridge corresponds with a change of timbre.¹⁸ *Ponticello* is a special effect caused by playing with a light bow stroke directly on top of the bridge, giving a cold, eerie sonority. With increased bow pressure, the vibrations are deadened and a more uncontrolled ‘stretch’ results, hence *ponticello* generally is most effective in the softer dynamic range. The dynamic indication in the sonatina by John Gibson where *ponticello* is used in bars 27 to 34 in the first movement (Allegretto) is slightly problematical (Example 4.1A):

¹⁵ Jeans, Sir James, *Science and Music* (New York: Dover Publications, Inc., 1968), 171.

¹⁶ Beament, James, *The Violin Explained: Components, Mechanism and Sound* (Oxford: Oxford University Press, 1997), 8-10.

¹⁷ Richardson, Bernard, ‘Cello Acoustics’, 40.

¹⁸ Beament, *The Violin Explained*, 16-43.

Ex. 4.1A

Gibson - Sonatina: I, bars 27 - 34

sul ponticello



No dynamic marking is given for this section: the most recent dynamic is *forte* in bar 20 and the next mark is a two-bar *crescendo* leading to *forte* in bar 41, but for a cellist the *ponticello* passage combined with *tremolo* implies a contrasting timbre and dynamic to the surrounding phrases. Another essential element is the importance of articulating each note-change when playing *tremolo*. Therefore it would be useful for the cellist to place an accent mark in every bar, to shape the phrase with a subtle *crescendo/decrescendo* and to use a dynamic which enables the timbre to contrast with the passages on either side of this segment. By starting bar 37 at a softer dynamic level, a longer and more intense *crescendo* helps to achieve a more effective arrival at the *forte* high B-flat (Example 4.1B):

Ex. 4.1B

Gibson - Sonatina: I, bars 27 - 34

sul ponticello



Although the mechanics are similar for all stringed instruments, it is important to note that the cello is not actually a scaled violin. It is over twice the size of the violin and differences in scale lead to some acoustical problems unique to the cello.¹⁹ These are as follows: difficulty in starting a note from silence, wolf notes²⁰ and lack of projection in some registers. The first problem is described by James Beament as follows:

Starting from silence is a bigger problem on the cello [than on the violin] ... because much more energy must be fed into a heavy high-tension string to get it up to the required amplitude. Cellists often talk about ‘picking up the string’. The obvious thing would be to give the string a strong tweak to kick it into vibration. But the precise way in which the string is started has other consequences ...²¹

The consequence referred to is the fact that ‘the bow twists the string as well as moving it sideways.’²² The difficulty is exasperated in the lower register. A cellist needs to be sensitive not only to the initial starting impulse, but to the diameter of the string.²³ Two methods used by cellists to initiate the string are, either to use slight left-hand *pizzicato*, or to make an impulse in the opposite direction with the right-hand wrist before drawing the bow. Both of these techniques are used in the solo Adagio section from bar 16 to 18 in the first movement of Kevin O’Connell’s sonata (Example 4.2):²⁴

¹⁹ Richardson, ‘Cello Acoustics’, 44.

²⁰ The wolf note is generally found between the pitches of E and F in the lower register of the cello.

²¹ Beament, *The Violin Explained*, 24-29

²² Ibid., 29.

²³ See chapter 2, 69.

²⁴ The bowings indicated in this example are for clarification purposes only. They do not differ from the slurs in the score, but are to demonstrate the importance of arriving on the down-bow at the start of bar 17 and on the final note of bar 18.

Ex. 4.2
O'Connell - Sonata: I, bars 16 - 18

Adagio (♩ = 54)

In order to reliably articulate the low register C-sharp at the start of bar 16 and bar 17 the accent is made by combining increased bow pressure with a movement of the wrist which feels like an impulse from the opposite direction: in other words the down-bow is a reaction to an imagined up-bow on the same string. The starting impulse for the low C in bar 18, on the other hand, is carried out by incorporating a left-hand *pizzicato* at the beginning of the down-bow on that note.

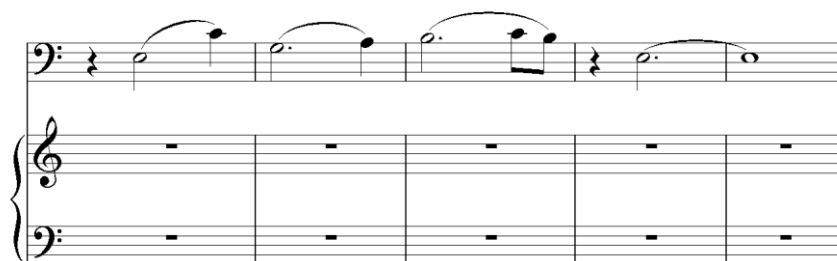
Increased rib height in the construction of the cello helps improve the resonance, but this lighter construction combined with greater pressure of the strings on the bridge causes the wolf tone.²⁵ The string and body frequencies are no longer stable and separated by only a few hertz ‘beats’ with each other. This particular pitch, which is usually around E

²⁵ Richardson, ‘Cello Acoustics’, 45.

to F (c180Hz), makes an unattractively rough sound and is found on the same pitch on every string.²⁶ The player can control the wolf by increasing the pressure of the bow, changing the sounding point, and decreasing vibrato. The third movement (Andante Religioso) of the Sonatina by John Gibson uses the note E (in the D-string register) as a central melodic note from bars 1 to 36, so if an instrument has a wolf note in the region of E, this could pose a problem, especially considering the passage is solo and is marked by the composer *sempre espressivo*. In this case, using a slow even speed in the bow is helpful. Resisting the temptation to depend too much on an intense vibrato for expressivity is advisable; instead a change in timbre and dynamic shading has great potential for achieving an expressive mood in this context (Example 4.3):

Ex. 4.3

Gibson - Sonatina: III, bars 21 - 25



The characteristic richness of timbre associated with the cello is due to a large number of higher harmonics. On the uppermost violin string, harmonics decrease, giving a clearer but less rich tone. On the other hand, the open A-string on the cello has nine harmonics and the first harmonic A, still has eight harmonics, producing a rich timbre.²⁷ This richness enables artificial harmonics in the low register of the A-string to have good volume and clarity. Artificial harmonics are used effectively in the coda of the first

²⁶ Beament, J. and Unwin, D., 'The Nature of the Beast', *The Strad* (February 2002), 164.

²⁷ Beament, *The Violin Explained*, 114-116.

movement of the sonata by Angel Climent, in bars 157 to 161. The first chromatic passage in harmonics played in bar 157 is on the A-string and will project easily but the identical passage repeated in bar 160 on the D-string may require more sensitive approach by the pianist in order to allow the harmonics to ‘speak’ in this lower register. A slight breath after the final harmonic in each segment is necessary to facilitate the change from harmonics to stopped-notes (Example 4.4):

Ex. 4.4

Climent - Sonata: I, bars 157 - 161

Slow

art. harm

p molto legato

art. harm

p molto legato

8va

The projection of the sound in the middle or lower registers of the cello is often a difficulty which needs to be overcome by the performer. One of the reasons is due to the inability of the human ear to discern these lower frequencies easily²⁸ and in certain dry

²⁸ Ibid., 104.

acoustic conditions this problem is exacerbated. *Pizzicato* in this low register has excellent resonance, but some faster bowed passages may suffer, especially if played within a thick piano texture. Such a situation occurs in the first movement (Allegro) of Tom Cullivan's sonata from bar 60 to 63 and again in the recapitulation from bars 251 to 254 (Example 4.5A):

Ex. 4.5A

Cullivan - Sonata: I, bars 60 - 63

The musical score for Example 4.5A shows a four-bar passage from bars 60 to 63 of Tom Cullivan's Sonata: I. The score is written for cello and piano. The cello part (top staff) is marked 'agitato' and 'ff' (fortissimo). The piano part (bottom staff) is also marked 'ff' and 'agitato'. The piano part features a dense texture of semiquavers. The cello part features a melodic line with a crescendo in bars 62 and 63.

This four-bar *agitato* is difficult to project due to use of the cello's lower register combined with a dense texture in the piano part. The dynamic is marked *fortissimo*²⁹ but the semiquavers in the piano probably need to be a little lighter than the identical *agitato* passage heard from bars 52 to 55 where the cello is playing mostly on the A-string with no difficulty in projection. Greater energy, as suggested by Dorothy DeLay,³⁰ can compensate for a lack of volume in these sections by accenting the first note of bar 61 and of bar 62 along with a *crescendo* in bar 62 and 63 (Example 4.5B):³¹

²⁹ This passage is the only one in the first movement with a dynamic marking indicated in the score by the composer. All other dynamics are to be decided upon by the performer. See chapter 1, n. 104.

³⁰ See appendix D.

³¹ The dynamics were added by Annette Cleary (cello) and Padhraic O'Cuinneagain (piano) in collaboration with the composer, Tom Cullivan.

Ex. 4.5B

Cullivan - Sonata: I, bars 60 - 63

The musical score for Ex. 4.5B, Cullivan - Sonata: I, bars 60 - 63, is presented in three staves. The top staff, in bass clef, is marked 'agitato' and 'ff', showing a melodic line with various accidentals and a final measure with a repeat sign. The middle staff, in treble clef, is marked 'agitato' and 'f', featuring a dense texture of chords and sixteenth notes. The bottom staff, in bass clef, is marked 'f' and also features a dense texture of chords and sixteenth notes. The music concludes with a double bar line and a repeat sign.

Technique and movement

‘We cannot have the right aural results if we do not make the right physical movements’, writes cellist William Pleeth, explaining that it is movement and gesture that creates sound.³² In order to produce any sound at all, some technical knowledge is necessary, so it is not surprising that ‘at an elite level a preoccupation with technique in some form will occupy a large part of practice time’. Technique is the discovery and application of the physical means necessary to perform a piece of music but is intrinsically linked to musical intention. For professional performers a conscious awareness of technique is used along with interpretative goals to embed music securely.³³ Recent research has shown that, for instruments where pitch has to be continually created (for example, cello) and decisions regarding the quality of sound are being made, interpretative goals are the ‘precursors of technical decisions.’³⁴ This would seem to be connected to the fact that pitch/intonation is never automatic and needs to be created on a moment-to-moment

³² Pleeth, William, *Cello* (London: Kahn and Averill, 1992), 55.

³³ Pleeth, *Cello*, 217.

³⁴ This study by Patricia Holmes was designed as instrumental rather than pianistic based research. Data was collected from interviews with a cellist and guitarist and the resulting data was analysed using the techniques of Interpretative Phenomenological Analysis (IPA); Holmes, ‘Imagination in Practice’, 224.

basis. A complete technique encompasses ‘mastery over all the potentialities of the instrument’,³⁵ thus allowing the player to perform with control and reliability under the pressure of public performance. The performer must proceed and succeed at each moment throughout the performance, with no possibility of a second chance or a correction.³⁶ Mastery of the fundamental skills of technique depends on a high level of motor skill attainment.³⁷

Ivan Galamian recognises three basic principles of technique: firstly, the striving for naturalness in all physical movement; secondly, the interdependence in an organic way between the individual elements of technique; and thirdly, the importance of mental control over physical movements.³⁸ The first two principles are focused on movement in connection with every performer’s aspiration to have technical control in order to communicate musical meaning more fully. The third aspect refers to expressivity (discussed in the following chapter) in that a player has formed a concept or a musical idea which needs to be carried out technically on the instrument under pressure of performance.

Naturalness of movement in cello technique is connected with balance (alternating tension and release), flow and strength. Each is important to both left and right hand technique, but in slightly different ways. Balance is the basis from which all other

³⁵ Galamian, Ivan, *Principles of Violin Playing and Teaching* (New Jersey: Prentice-Hall, Inc., 2nd edn. 1985), 5.

³⁶ See chapter 2, 77-78.

³⁷ Magill, Richard, *Motor Learning: Concepts and Applications* (Boston: McGraw-Hill, 5th edn. 1998), 1-16.

³⁸ Galamian, *Principles of Violin Playing and Teaching*, 1-2.

movements arise, leading to efficiency of movement. Maintaining balance requires movement, adjustment and flexibility. The main source of physical power is the natural shifting of weight while maintaining balance. Due to the sitting position of the cellist, 'balance is affected by the right and left arms converging with points of contact away from the torso'.³⁹ The suspended arms become a lever system which need to constantly redistribute weight to the contact point (the string) while playing. Gerhard Mantel explores the physics of cello playing, with the constant emphasis on the necessary flexibility which allows the body to 'regain equilibrium with minimal muscular activity'.⁴⁰ The cello is the largest instrument of the string family on which virtuoso works are played implying the need for considerable strength and stamina.⁴¹ Due to the thicker strings, more energy is needed to produce and sustain sound.⁴² Most of this power comes not from the arms or fingers but from the larger muscles of the back. This is described by Bernard Greenhouse as follows:

...the fundamental technique that I apply to playing the instrument is to use the strength of the back as the basic part of the body that produces the ease of motion in both the bow arm and the left arm. The primary movement of the bow does not come from the shoulder; it comes from the movement of the torso. The left arm is also involved in the pivoting motion from the back. In reaching for the upper positions, it is the torso that makes the motion. Involve the back in shifts.⁴³

This involvement of the back is an essential component of both the right and the left arm. In the following fragment from Kevin O'Connell's sonata a deliberate movement

³⁹ Morrow, Elizabeth, 'A Question of Balance', *American String Teacher* (February 2007), 56-57.

⁴⁰ Mantel, Gerhard, *Cello Technique: Principles of Form and Movement*, trans. Haimberger, Barbara (Bloomington: Indiana University Press, 1975), 44-45; quoted in Morrow, Elizabeth, 'A Question of Balance', *American String Teacher* (February 2007), 56.

⁴¹ See chapter 2, 77.

⁴² Eisenberg, Maurice, *Cello Playing of Today* (London: The Strad, 1957), 1.

⁴³ Owen, Laurinel, 'Cello Technique: Reflections of Bernard Greenhouse', *American String Teacher* (May 2003), 31-33.

of the back is necessary for playing these continuous double-stops with maximum energy, while maintaining the correct angle of the bow to the string.⁴⁴ The chords in bar 61 have a huge register leap from the F to the G and need to be as loud and accented as possible. With a smooth motion of the upper torso, the sound quality of the high chord will resonate longer and help keep the dynamic even when moving from the four-note chord to the double-note chord (Example 4.6):

Ex. 4.6

O'Connell - Sonata: I, bar 61



In shifts, it is the back which controls the weight and speed of the movement. In a passage with string-crossings in combination with shifts, as demonstrated in the following example from the first movement (Molto Agitato) of Brian Beckett's second sonata, the back must move sideways as well as forwards. According to Dorothy DeLay, faster shifts require more energy, which helps imbue this phrase with greater musical tension.⁴⁵ In this phrase, three positions, first, fourth and thumb positions are covered within a fast tempo, thus requiring a constant and even motion from the whole body throughout each position change (Example 4.7):

⁴⁴ See chapter 2, 68.

⁴⁵ See chapter 2, 70.

Ex. 4.7
Beckett - Sonata No. 2: I, bars 23 - 24



Flow and breathing are interconnected with movement and are the processes by which the individual elements of technique are connected organically.⁴⁶ Eleonore Schoenfeld describes in her teaching how her early training as a dancer influenced her cello playing. Rhythm, within the ancient Greek culture, is ‘flow transfigured’, and movement shows the direction of ‘breathing and phrasing’ in music performance.⁴⁷ Gerhard Mantel observes that ‘breathing cannot be separated from playing; it cannot be independent of the motional and emotional content of the music.’⁴⁸ Cellist, Paul Tortelier, recommends practising with regulated breathing as a way of avoiding tension.⁴⁹ Another way of releasing muscle tension is to move the arms and relax the shoulders while performing.

⁴⁶ Galamian, *Principles of Violin Playing and Teaching*, 1-2.

⁴⁷ Barrett, Connie, ‘One-On-One: Practical and Creative Thoughts in Private String Teaching’, *American String Teacher* (Summer 1994), 35. This concept is also drawn from notes taken during lessons with Eleonore Schoenfeld 1990. Eleonore Schoenfeld (1925-2008) was regarded as one of the most important cello teachers in the USA. Born in Berlin, she was the youngest student admitted to the Hochschule where, along with her sister Alice, she studied chamber music with Karl Klinger, student of Joachim who was a colleague of Brahms. The Schoenfeld Duo performed the Brahms Double Concerto internationally before emigrating to California in 1952, where both taught at the University of Southern California in Los Angeles. Campbell, Margaret, *The Great Cellists* (London: Victor Gollancz Ltd., 1988), 151-152.

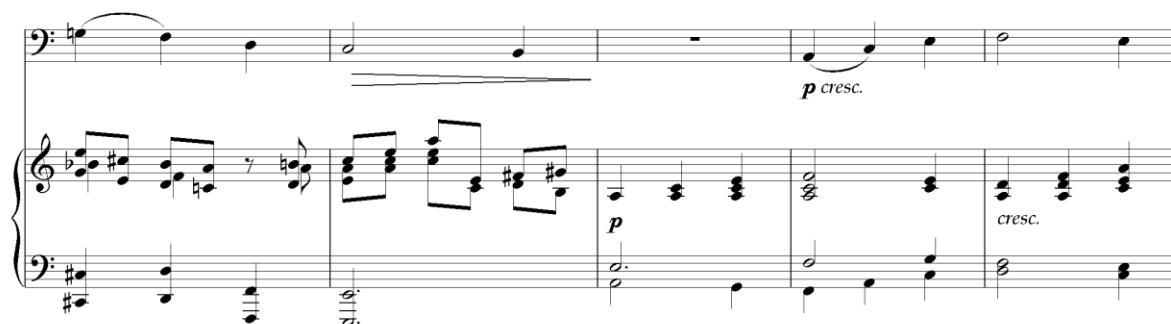
⁴⁸ Janof, Tim, ‘Conversation with Gerhard Mantel’, *International Cello Society* (Accessed 9 April 2008), <<http://www.cello.org>>

⁴⁹ Tortelier, Paul, *How I Play, How I Teach* (London: Chester Music, 1975), 40.

As this should not be obvious, players tend to use rests, ends of phrases or ‘easy’ passages to breathe and to move in a more pronounced way. These movements are not necessary from the technical point of view, but help prepare the performer for the next ‘difficult’ section of the work.⁵⁰ Joseph Groocock’s sonata is contrapuntal in texture and contains numerous examples of rest bars in the cello part which musically are not really ends of phrases at all, but simply punctuation points to allow other voices in the texture to emerge. An example of such a rest is found in the recapitulation section of the first movement (Moderato) from bars 91 to 95. The dominant harmony of bar 92 resolves into a statement of the main A-minor theme closely followed by the same theme on the cello in the following bar. The expected resolution of the cello line to A on the first beat of bar 92 is not heard but inevitably it is imagined by the player who almost must move and breathe as if it were actually played (Example 4.8):

Ex. 4.8

Groocock - Sonata: I, bars 91 - 95



In order to develop a fluid cello technique, natural physical weaknesses must be overcome.⁵¹ For example, the left hand fingers are of unequal length and strength, the

⁵⁰ Davidson, Jane, ‘Communicating with the Body in Performance’, in Rink, *Musical Performance*, 147.

⁵¹ Tortelier, *How I Play*, 9.

bow arm feels too heavy at the frog and too weak at the tip. Technical skills demand the ‘most subtle muscular discrimination and the coordination of the dissimilar activities of the left and right sides of the body.’⁵² To put it simply, in the words of fiddler, David Marsh, ‘the left hand makes the notes, the right hand makes the music.’⁵³ Although visually very different, many gestures of both the left and the right hand follow similar movement design; tension and release are inherent in all technical movements. Selected aspects of both left and right-hand cello technique are described in detail, along with possible interpretative applications, in specific passages from the sonatas by Angel Climent and Tom Cullivan.

Pablo Casals was probably the first cellist to focus on a ‘pianistic’ left hand in which the correct lifting of the fingers incorporates a tension which is released with the falling of the fingers onto the string. The use of a fast finger action combined with relaxation is also advocated by Dorothy DeLay.⁵⁴ This promotes an ability to vary articulation as well as enabling the flexibility necessary for clean and expressive intonation.⁵⁵ Eisenberg refers to this as ‘the living hand’.⁵⁶ ‘Suppleness and pliability of the left hand’, observes Pleeth, ‘is the essential starting point if the hand is to become, as it must become, the tool of the ear.’⁵⁷ The first movement of Angel Climent’s sonata contains a substantial section which illuminates this point. A moving triplet arpeggio figure characterises the

⁵² Bunting, Christopher, *Essay on the Craft of ‘Cello-Playing: Volume 1*, (Cambridge: Cambridge University Press, 1982), 4.

⁵³ Strange, Patricia and Strange, Allen, *The Contemporary Violin: Extended Performance Techniques* (Berkeley: University of California Press, 2001), 1.

⁵⁴ Gholson, Sylvia, ‘Dorothy DeLay’s Energy List: A Process Model for Musical Interpretation’, *American String Teacher* (February 1999), 44-45.

⁵⁵ Expressive intonation was incorporated into cello technique by Pablo Casals.

⁵⁶ Eisenberg, *Cello Playing*, 11.

⁵⁷ Pleeth, *Cello*, 24.

section from bar 30 to bar 55. Beginning softly and *tranquillo*, the left hand needs to use a light finger articulation combined with slow shifts. By bar 43 when the *crescendo* and the *accelerando* starts the articulation in the finger action needs to be more percussive, using left-hand *pizzicato* on descending intervals and on open strings: the second A in bar 43 and the first D in bar 44 can be articulated with left-hand *pizzicato* while a clear note on the final D of that bar is produced by fourth finger *pizzicato* on the F-sharp.⁵⁸ By varying the speed and weight of the left arm during shifting, security and expression can be controlled.⁵⁹ The shapes of the extensions are prepared in advance at a controlled pace, thus ensuring clarity and evenness throughout this section. (Example 4.9):⁶⁰

Ex. 4.9

Climont - Sonata: I, bars 44 - 45



The bow arm is responsible for tone production. As in the left hand, variation of speed and weight along with utilisation of the correct sounding point⁶¹ between the fingerboard

⁵⁸ This pizzicato is desirable to compensate for the thickness of the lower cello strings. See chapter 2, 68.

⁵⁹ Pleeth,, *Cello*, 32-38.

⁶⁰ The bowing in this example is a common-practice method of playing descending arpeggio figures for evenness and technical security.

⁶¹ See chapter 2, 68.

and bridge are the basics of reliable bow technique.⁶² Galamian classifies tone production into two types: the first relying on bow speed, the second using mainly pressure. This classification is similar to that used by Dorothy DeLay in the ‘energy list’.⁶³ He then describes the tonal differences as follows:

These two types [of tone production] differ as to the character of the color in the sound. A tone produced with much bow and little pressure has a light, loose character; one produced with much pressure and little speed has a quality of denseness and concentration. In addition, the accompanying change in the position of the sounding point in itself brings about a change of color: the nearer the bridge, the brighter the color, the more incisive the timbre; in the neighbourhood of the fingerboard, the color is paler, more delicate and pastel-like.⁶⁴

Total control of bowing action is the ‘principal means of reinforcing the character and shape of the musical impulse’, writes Donald Barra, continuing by noting the common tendency of string players to ‘make an automatic crescendo and decrescendo with each bow stroke’, due to natural weakness of the right arm when playing at the tip of the bow.⁶⁵ To prevent this loss of weight, the bow speed has to be adjusted, ‘so that it travels faster when approaching the point.’⁶⁶ A second difficulty of legato playing is the continuation of even tone during the bow change, which is observed by Louis Potter, using the following statement by Carl Flesch: ‘All [string players] ... admit that before a new stroke is begun a peculiar process takes place in the change of the bow, the bow-stroke just ending being prolonged a very little bit, before the arm commences the new

⁶² Kinsey, Herbert, *The Foundations of Violin Playing and Musicianship* (London: Longmans, Green and Co., 1954), 12-17.

⁶³ See appendix D.

⁶⁴ Galamian, *Principles of Violin Playing*, 62.

⁶⁵ Barra, Donald, *The Dynamic Performance: A Performer's Guide to Musical Expression and Interpretation* (New Jersey: Prentice-Hall, Inc., 1983), 162-163.

⁶⁶ Eisenberg, *Cello Playing*, 22.

stroke.’⁶⁷ This is due to momentum and requires flexibility of shoulder, wrist, and fingers combined with a ‘looping’ motion to maintain a smooth flow during bow changes.⁶⁸

In the third movement of Tom Cullivan’s sonata (Presto) a contrasting Andante is incorporated into the middle section.⁶⁹ This includes *cantabile* material inspired by a traditional song with written-out ornamentation. To play this without unwanted accents requires total bow control. Bowing which matches the natural contour of the melodic line must be carefully chosen. Here the difficulty lies in having almost too many possibilities to choose from as the phrasing can be shaped successfully in many ways. However, in choosing a bowing, greater emphasis is placed on bow planning. *Legato* playing is desired throughout this section apart from dynamic nuance at phrase endings. In the opening phrase of this theme in the cello part from bar 98 to 101 suggested bowing is as follows (Example 4.10):

Ex. 4.10A
Cullivan - Sonata: III, bars 611 - 614

The musical score for Example 4.10A is presented in two systems. The top system shows a cello part (bass clef, one sharp) with a melodic line starting on a whole note, followed by eighth and sixteenth notes, and slurs indicating phrasing. The bottom system shows a piano accompaniment (treble and bass clefs, one sharp). The right hand plays chords and eighth notes, while the left hand plays a steady eighth-note pattern. The piano part includes a 'p.' (piano) dynamic marking at the beginning.

⁶⁷ Potter, Louis, *The Art of Cello Playing*, (Miami, Florida: Summy-Birchard Music, 2nd edn. 1980), 61.

⁶⁸ Looping is a technique described by Christopher Bunting where the bow describes an oval shape during bow changes instead of a straight line.

⁶⁹ The dynamics were added by performers Annette Cleary (cello) and Padhraic O’Cuinneagain (piano) in collaboration with the composer, Tom Cullivan.

The slurs over the bar-line encourage flow and down-bows fall on the strongest melodic notes, that is, on the first B, on the first C-sharp in bar 612 and on the highest note of bar 613 which is an E. This E needs an increase in bow speed to provide melodic emphasis. The final note of the phrase is uncomfortable on an up-bow, but can still *diminuendo* with a decrease in bow speed and a movement of the sounding-point closer to the fingerboard (Example 4.10B)

Ex. 4.10B

Cullivan - Sonata: III, bars 611 - 614

The musical score for Example 4.10B consists of two systems of staves. The top system is for the cello, marked 'arco' and 'p' (piano). It shows a melodic line with slurs and a final note marked with a 'v' (vibrato). The bottom system is for the piano, also marked 'p'. It features a rhythmic accompaniment with eighth notes and chords. The key signature is one sharp (F#) and the time signature is 4/4.

To summarise, the fundamental aspects of cello technique, which include intonation, shifting, control of tone production, and smooth bow changes all rely upon balance, strength and flow, which in turn rely upon a constant interplay between tension and relaxation, as described by Dorothy DeLay.⁷⁰ A good posture will allow tension-free flowing movements of the arms and upper body thus not only allowing playing to be pain-free⁷¹ but facilitating control over the amount of energy being used at any given moment during performance. Breathing and flow of movement are the principle tools used by players to achieve a unified and coherent performance. Mental control is one of

⁷⁰ Gholson, 'Dorothy DeLay's Energy List', 42-45.

⁷¹ Wynn Parry, Christopher, B., 'Managing the Physical Demands of Musical Performance' in Williamon, Aaron (ed.), *Musical Excellence* (Oxford: Oxford University Press, 2004), 53.

the most important aspects in combating the physical weaknesses inherent in string-playing. Vigilance is constantly required, as it is easy for players to become accustomed to certain sound patterns caused by these natural disadvantages. A clear vision of musical intention helps motivate solutions to most technical challenges.

Expression and gesture

Gesture in performance is not only a technical necessity but an integral element of expression and communication. With over seventy-five percent of information communicated visually,⁷² the importance of gesture in the evaluation of music performance cannot be underestimated. Musical intention is relayed visually by performers to both the audience and to other musicians on stage as pointed out by Richard Leppert:

Precisely because musical sound is abstract, intangible, and ethereal, the visual experience of its production is crucial to both musicians and audience for ... communicating ... music. Music, despite its phenomenological sonoric ethereality, is an embodied practice, like dance and theatre.⁷³

The expressiveness of gesture can be studied from various points of view: the importance of the visual aspects of performance from the listener's perspective, the role of movement in the integration of technique and musical expression during performance preparation, non-verbal communication between co-performers and the two-way process of communication between performer and audience. The focus here is on an examination

⁷² Gladney, G. A., 'Impact of Visuals in Selecting NNA General Excellence Winners', *Newspaper Research Journal* Vol. 18 (1997), 157-168; quoted in Williamon, Aaron (ed.), *Musical Excellence* (Oxford: Oxford University Press, 2004), 68.

⁷³ Leppert, R., *The Sight of Sound: Music, Representation, and the History of the Body* (Berkeley: University of California Press, 1993); quoted in Iazzetta, Fernando, 'Meaning in Music Gesture', 4.

of movement in the integration of technique and musical expression in selected examples from the sonatas by Irish composers.

In referring to the expressive nature of music gesture, Fernando Iazzetta states that:

Gesture does not mean only movement, but a movement which can express something. Therefore it is a movement which embodies a special meaning. It is more than a change in space, or a body action, or a mechanic activity: gesture is an expressive movement which becomes actual through temporal and spatial changes.⁷⁴

Put simply by Simon Frith, ‘if we are moved by a performer we are moved by what we *immediately* see and hear.’⁷⁵ This movement in music has special significance for both the performer and the listener. Studies carried out by Davidson showed that judgement of expressivity in performance relies to a large extent on the visual information communicated to the audience, even when the movement was reduced to light points on the moving limbs, joints and head.⁷⁶ Similarly, research by Kendall and Carterette showed that listeners could differentiate between three different performances of the same piece, when played in a neutral, normal and exaggerated manner. Both musicians and non-musicians were easily able to perceive the expressive intentions of the performer.⁷⁷ However, only musicians were able to judge differences in the three performance interpretations from sound only. Non-musicians judged the performer’s

⁷⁴ Iazzetta, ‘Meaning in Music Gesture’. 1.

⁷⁵ Frith, Simon, ‘Editorial’, *New Formations* 27 (Winter 1995/6), xi; quoted in Cook, Nicholas, ‘Between Process and Product: Music and/as Performance’, *Music Theory Online* (Accessed 23 March 2009), <<http://mto.societymusictheory.org>>

⁷⁶ Davidson, Jane, ‘Visual Perception of Performance Manner in the Body Movements of Solo Musicians’, *Psychology of Music*, Vol. 21, No. 2 (1993), 103-113; quoted in Lehmann, Andreas C. and Davidson, Jane, ‘Taking an Acquired Skills Perspective on Music Performance’, in Colwell, Richard (ed.), *MENC Handbook of Musical Cognition and Development* (Oxford: Oxford University Press, 2006), 246.

⁷⁷ Kendall, R. A., and Carterette, E. C., ‘The Communication of Musical Expression’, *Music Perception*, Vol. 8 (1990-91), 129-63; quoted in Clarke, Eric F., ‘Psychology of Music’, *Grove Music Online* (Accessed 18 March 2009), <<http://www.grovemusiconline.com>>

intentions solely on the visual information. This would suggest that without the visual aspect, unskilled listeners may miss an essential aspect of a performance.⁷⁸ Therefore, it is important to explore the role of movement and gesture in relation to performing with musical expression.

In studies carried out by Davidson in 1991 it was found that specific movements were related to expressive intentions and were important in delineating musical structure. Examples include phrase peaks, phrase boundaries and rests.⁷⁹ Although the gestures were used flexibly and the same gesture was not used in the same place in repeated performances, a specific point in the piece always occurred with a gesture.⁸⁰ No evidence shows that performers deliberately rehearse these expressive gestures (although many movements are absorbed from watching teachers and other performers play). Studies show that performers who learn a piece with restricted body movement produce a less expressive final performance.⁸¹ Movement is an integral part of the following passages from the sonatas by Tom Cullivan and Brian Beckett. A cadenza-like passage occurs in the third movement in Cullivan's sonata from bar 678 to bar 687 where the opening *Presto* theme returns. Part of this unaccompanied section includes a pause marked *ten ad lib* followed by a *piu mosso* which builds gradually in tempo until the *Presto come prima* is reached. It would be expected that the *accelerando* would incorporate an 'up-beat' gesture on the second quaver of each bar and a 'down-beat'

⁷⁸ Davidson, Jane, 'The Social in Music Performance', in Hargreaves and North, *Social Psychology*, 222-223.

⁷⁹ Ibid., 209-228.

⁸⁰ Davidson, Jane, 'Communicating with the Body in Performance', in Rink, *Musical Performance*, 146-147.

⁸¹ Davidson Jane, 'The Social in Music Performance', in Hargreaves and North, *Social Psychology*, 222. This research was carried out by Davidson and Dawson in 1995 and involved a number of pianists learning and performing a piece using a two-octave range without free physical movement.

gesture on the accented first note of each bar in order to communicate to the pianist for secure co-ordination on the first note of bar 687. Interestingly, the situation in bar 682-683 needs no signal to the pianist but the cellist instinctively needs to describe the length of the pause with a bodily movement; a definite head-motion with an in-breath coincides with the G-flat on a retake up-bow in the next bar (Example 4.11):⁸²

Ex. 4.11
Cullivan - Sonata: III, bars 681 - 687

ten. ad lib più mosso accelerando al presto

Presto come prima

This type of intuition seems to play an important role in performance gesture. In Eric Clarke's words:

The overriding impression (as intuition might suggest) was that the movements were integral to his conception and production of the music, and were generated in performance in just the same way as the expressive features of the sound (timing, dynamics, articulation etc.) are generated from the idea of the music.⁸³

Intuitive movements are strongly linked to rhythm particularly in the early stages of preparation of a work. The final Agitato in the third movement of the second Sonata by

⁸² The bowings are performance suggestions by Annette Cleary.

⁸³ Clarke Eric, 'Understanding the Psychology of Performance', in Rink, *Musical Performance*, 66-67.

Brian Beckett is such a case. Thirteen bars from the end of the work, the piano *tremelo* creates a colour and an agitated texture as background for a dramatic and rhythmic declamatory cello part. From here until the end it is almost the sole responsibility of the cellist to provide the rhythmic impulse which leads to the final *prestissimo* with its rapid quavers in the cello line and punctuated chords in the piano part. The rapid and intense tempo changes are best rehearsed and performed with definite gestures to show main and syncopated beats in this section of the work (Example 4.12):⁸⁴

Ex. 4.12
Beckett - Sonata No. 2: III, bars 140 - end

Agitato

Prestissimo

Visual and aural cues are essential for coordination between players in a chamber music context, particularly for control of timing and dynamics. Eye contact and facial expressions are the most commonly used co-performer interaction and interestingly, research has shown the audiences ‘read’ this non-verbal ‘vocabulary’ to deduce the

⁸⁴ The bowing indicated at the start of bar 141 is added by Annette Cleary to clarify the discussion of gesture (as down-bows and up-bows give rise to very different gestures) in this example.

performer's expressive intention.⁸⁵ Some visual cues are rehearsed in advance, for instance, at section beginnings and endings. Other movements are connected with technical fluency, while some arise more intuitively and are of an expressive nature.

With over twenty tempo markings in the first movement of Kevin O'Connell's sonata, co-ordination at section boundaries between the piano and the cello must be secure. Many of the *ritardandos* and *accelerandos* are located during solo cello passages, which generally allow for freedom in pacing and speed. Visual communication is essential in establishing major tempo changes and unison passages that start after a rest: for example, the signals into the down-beat of each bar 19, 29 (unison), 46, 72, 88, 108, 117 and 126 need to be firmly established to prevent the movement sounding disjointed. An example of gesture in this movement that conveys musical intent is found in bar 18-19: the pause at the end of bar 18 is finished with a slow lift of the bow, and a breath or a slight nod, which 'hands over' the opening notes of the next theme to the pianist. No coordination difficulty exists at this section boundary as the pianist enters solo in bar 19. Another gesture that is musically expressive is found in the string-crossing passage-work in the section from bar 108 to bar 113. The start of this passage in bar 108 is marked tempestuous and forte. This mood continues until the broad and calmer opening theme recurs in bar 113. During the tempestuous section, the string-crossing pattern requires considerable energy and stamina from the cellist. This physical activity resonates with the agitated and restless mood required in this passage and the gestures

⁸⁵ Davidson, Jane, 'The Social in Musical Performance', in Hargreaves and North, *The Social Psychology of Music*, 221- 222.

made by the cellist, which show relentless bow movements across two strings, are musically expressive.

Conclusion

The intuitive knowledge of a work is closely linked to the physical actions of a performer, who embodies details of sound such as timbre, dynamic nuance, rhythm and rubato. The embodiment of sound is also connected with the physical characteristics of the instrument: for example, a cellist is concerned with resonance, projection of sound and articulation. Interpretative goals require a conscious use of technique in order to facilitate control and reliability under performance conditions. The three basic principles of technique are naturalness in physical movement, the interdependence between individual elements of technique and the importance of mental control over physical movement. Naturalness of movement, for the cellist, is primarily based on balance, flow of movement and breathing. The integration of various aspects of both left and right-hand technique is dependent on a specific musical context, while mental control refers to the musical concept which needs to be expressed physically in performance. Musical intent is relayed visually to both listeners and co-performers through the use of expressive movement. Intuition plays an important role in expressive gesture during performance and often enables new musical ideas to occur spontaneously. These new interpretative ideas may be incorporated into future performances of a work.

CHAPTER 5

Emotion: Mood, Character and Expression

Introduction

Expressiveness in music means understanding the emotional character of a work and being able to communicate this understanding in performance. Music is usually connected with emotional expression, either subconsciously or formally as in the theory of affect during the baroque era. The Kaluli of Papua New Guinea associate particular melodic fragments with specific emotions; for example, the descending minor third represents sadness, isolation and loss.¹ Similarly, in baroque music certain melodic figures, keys and harmonies were associated with particular emotional effects. Music is mainly an expression of mood and emotion which requires the use of intellect and technical resources in order that the ‘feelings shall be duly expressed.’² Music conveys emotion by varying harmony, movement and pitch in order to ‘bring to the whole a greater or lesser vitality’.³ Varying energy is the principal way for a performer to convey changes of emotion in performance. Deciding how much energy to use at any given moment depends on the musician’s understanding of the structure and the character of the piece.⁴

¹ Feld, Steven, ‘‘Flow Like a Waterfall’’: The Metaphors of Kaluli Musical Theory’, *Yearbook for Traditional Music* 13, 22-47; quoted in Brower, Candace, ‘A Cognitive Theory of Musical Meaning’, *Journal of Music Theory*, Vol. 44, No. 2 (Autumn 2000), 371.

² Matthey, Tobias, *Musical Interpretation: Its Laws and Principles, and their Application in Teaching and Performing* (London: Joseph Williams, Ltd., 1913), 148-149.

³ Bennett, Victor, ‘Music and Emotion’, *The Musical Quarterly*, Vol. 28, No. 4 (October 1942), 409.

⁴ Gholson, Sylvia, ‘Dorothy DeLay’s Energy List: A Process Model for Musical Interpretation’, *American String Teacher* (February 1999), 42-45.

Three features of the affective aspects of performance are examined in part I, each of which draws on selected examples from the sonata repertoire by Irish composers. Firstly, expression involves an understanding and a communication of the structure of the work, which forms the basis of use of nuance. Secondly, the mood and character of a work or a movement needs to be presented. Thirdly, the importance of tone and colour along with sensitivity to texture are discussed. A more detailed study of the use of tone, colour and texture in relation to the cello is to be found in part II of this chapter with particular focus on dynamics, vibrato, texture and rubato.

I. Structure, Mood and Character

Although structural elements of a piece can inform expression, some musicians have argued in favour of a more complex relationship between structure and expression; one in which the affective and the dramatic factors are equally important in producing expressive and creative performances. In a study by L. H. Schaffer four different performances were analysed for diversity of interpretation resulting in the observation that the main distinguishing feature was a ‘difference of characterisation’.⁵ He proposed that mood and character were not completely interconnected to the intrinsic structure of the work. In other words, the structure of a work is inherent in the score, but unique performances arise by the different character and expression used by players in different ways to portray the structure. This relationship between structure or the ‘intellectual’

⁵ In this 1992 study by L. H. Schaffer four pianists performed a short work by Beethoven several times. Data relating to diversity of interpretations was collected and analysed which showed that the performers were unified in their approach to portraying the structure of the work, but differed in portrayal of mood and character. Schaffer, L. H., ‘How to Interpret Music’, in Jones, M. R. and Holleran, S., (eds.), *Cognitive Bases of Musical Communication* (Washington: American Psychological Association, 1992), 263-278; quoted in Clarke, Eric, ‘Expression in Performance: Generativity, Perception and Semiosis’, in Rink, John (ed.), *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), 25-26.

aspect of interpretation and the more intuitive expressive aspect is described by Schaffer as follows:

Expression, including the choice of tempo, seems relevant to conveying mood as an aspect of musical meaning. ... in principle, a performer can be faithful to its structure and at the same time have the freedom to shape its moods ... If the structures in the music, particularly those governing tension and relaxation, define the implicit event, then structure should be the primary determinant of the patterning of expressive gesture over the musical surface. On the other hand, the shaping of expression and the choice of expressive features – timings, dynamics, timbre and articulation – is a function of the musical character, and is, at least partly, created by the performer.⁶

This describes the difficulty facing players who must coherently communicate the structural shape of a work while playing with expression and nuance. Timbre, articulation, dynamics and pacing are all elements of expression and are described in the model by Chaffin and Logan as interpretative cues. Once a piece has reached a level of fluency, expressive cues are established and these cues are the ones performers hope to focus on during performance.⁷ Flexibility is an important part of this process: it provides the freedom to vary these expressive features from performance to performance without losing the structural unification of the work.

A clear knowledge of the structure of the first movement of Brian Beckett's first sonata informs the use of expressive features. Although dynamic indications are carefully marked by the composer, the use of tone-colour and timbre is left to the performer. The

⁶ Schaffer, L. H. 'How to Interpret Music', in Jones, M. R. And Holleran, S., (eds.), *Cognitive Bases of Musical Communication* (Washington: American Psychological Association, 1992), 263-278; quoted in Clarke, Eric, 'Expression in Performance: Generativity, Perception and Semiosis', in Rink, *The Practice of Performance*, 25-26.

⁷ Chaffin, Roger and Logan, Topher, 'Practising Perfection: How Concert Soloists Prepare for Performance', *Advances in Cognitive Psychology* (2006), 113-130. (Accessed 11 November 2008), <<http://www.ac-psych.org>>

opening eight-bar Adagio introduction begins with ambiguous harmony, a *pianissimo* dynamic and a modal melody in the cello. A rapid two-bar *accelerando* leads to the Allegro in bar 9. This introduction works best with a transparent tone and a narrow vibrato. Phrasing should not be overdone with obvious nuance or audible bow-changes. In fact, the introduction can be played as if it has no definite starting point, thus portraying a calm opening mood which contrasts with the restlessness of the Allegro theme in bar 9 (Example 5.1):⁸

Ex. 5.1
Beckett - Sonata No. 1: I, bars 1 - 9

At bar 53 an Adagio interlude is based on motifs from both the opening Adagio and the main Allegro theme. This time, however, the harmony is more firmly established with a pedal E-minor chordal texture in the piano. While the cello begins similarly to the opening Adagio for the initial four bars, it quickly develops into a more complex

⁸ The bowings in this example are performance suggestions added by Annette Cleary.

statement of this theme. Differences are outlined as follows: the register is higher and naturally more projecting with the cello starting on an E on the A-string; the harmony is more stable being firmly rooted in E-minor; this passage is more extensive with a length of 21 bars (instead of 9); the cello (not the piano) leads the *accelerando* into the Allegro into bar 74 and finally, texture is more active with quaver motion throughout both parts (Example 5.2):

Ex. 5.2

Beckett - Sonata No. 1: I, bars 53 - 74

Adagio

The musical score for the Adagio section (bars 53-74) of Beckett's Sonata No. 1, I, is presented in two systems. The first system shows the cello part (bass clef) and the piano part (treble and bass clefs). The cello part begins with a half note E2, followed by a half note G2, and then a half note B1. The piano part begins with a half note E2, followed by a half note G2, and then a half note B1. The tempo is Adagio. Dynamics include *pp* (pianissimo) and *sf* (sforzando).

Allegro

The musical score for the Allegro section (bars 53-74) of Beckett's Sonata No. 1, I, is presented in two systems. The first system shows the cello part (bass clef) and the piano part (treble and bass clefs). The cello part begins with a half note E2, followed by a half note G2, and then a half note B1. The piano part begins with a half note E2, followed by a half note G2, and then a half note B1. The tempo is Allegro. Dynamics include *p* (piano), *sf* (sforzando), and *mp dolce* (mezzo-piano dolce).

These differences all point to an increase in intensity of expression in the second Adagio, with greater variation of tone and dynamic range. A greater projection of sound and a warmer vibrato suits the less ethereal mood of this interlude. The first note of bar 53 arrives after a pause in the previous bar and is well articulated with a feeling of drama. An expressive melodic interval occurs from the D in bar 60 to the A-flat in the next bar. This needs a slight *crescendo* and a delay before the arrival on the lower note. The *sforzandos* in bars 70 and 72 imply a *crescendo* and a forward flow through the quaver passages. The *staccato* indication works better if the quavers are not shortened too much but given as much expressive quality as possible while still remaining detached. Throughout both of these Adagio sections, it is possible for the performer to aim at spontaneous variation in the details of timbre, flow and tonal-colours from performance to performance once the rhythmic structure remains secure.

Character in music relates more to the dramatic aspect of musical expression, where the performer must not only shape the work within a time-frame but must aim to vary the ‘narrative’ by playing more than one role. ‘Musical performance’, writes William Pleeth, ‘demands *portrayal* and *characterization* ... [and] in any great work in our repertoire there are many different lines requiring different ‘characters’ to speak them, and it is essential that the cellist should both recognize them and know how to let each speak with its own voice.’⁹ Musical phrases have potential for emotional expression rather like an actor’s lines and voice inflections are part of how sound is modified to convey expression through varying colour and texture. Similarly, Leopold Mozart described the need to portray the character of the piece as follows: ‘Before beginning to

⁹ Pleeth, William, *Cello* (London: Kahn & Averill, 1992), 82-83.

play, the piece must be well looked at and considered. The character, tempo, and kind of movement demanded by the piece must be sought out, and carefully observed ...'¹⁰ One can describe the character of a work in different ways – one way is to imagine the character as a narrator within a dramatic context.

The third movement of Angel Climent's sonata is a Spanish dance and this awareness informs the approach to expressive details throughout this movement. By imagining the cello part as representing a singer, dancer or an instrumentalist, variety can be created in both articulation and nuance. These descriptive images could form expressive cues as shown by Chaffin and Logan.¹¹ Energy and an exciting driving rhythm is the cohesive and unifying element in this movement. The quaver pulse stays constant through each time-signature change – 5/8 from the beginning up to bar 20, 6/8 to bar 61, 5/8 to bar 73 and 2/4 to the end. On a detailed level, articulation and bowing-choices play a major role in highlighting the dance-character inherent in this piece. The composer provides scope for the performer to create an individual interpretation regarding bowing and note-lengths in general. Three performing suggestions regarding characterisation derived from bowing articulation (unmarked in score) are proposed.

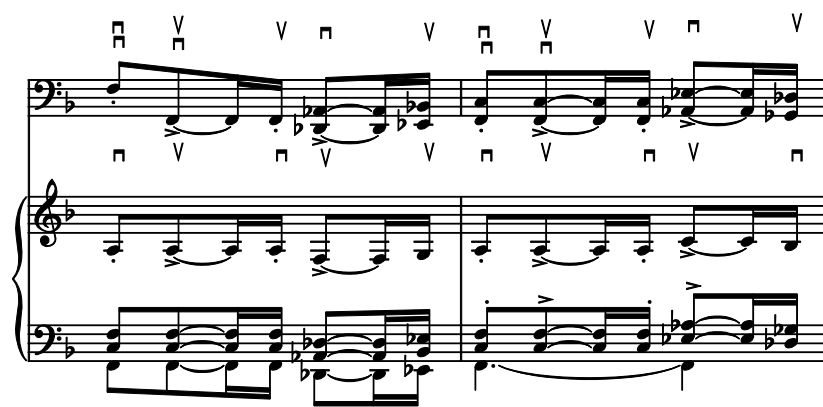
The opening theme is based on the rhythmic patterns of a Zortzico, a Basque dance, with an energetic opening in 5/8 which is grouped as 3 + 2 quavers with a staccato over the first note. A light but sharp *staccato* first-beat followed by an accented second quaver is best achieved with a retake. The hooked bowing for the remainder of the bar allows the

¹⁰ Mozart, Leopold, *A Treatise on the Fundamental Principles of Violin Playing* (Salzburg, 1756); trans. and ed. Knocker, Editha (Oxford: Oxford University Press, 1985), 218.

¹¹ See chapter 2, 73.

cellist good control in placing the last semiquaver of the bar on the early side, thus driving the rhythmic impulse forward into the following bar. An optimal tempo for this bowing pattern is: quaver = 180. If played too fast, the sound quality of the double-stops suffers and some of the lightness of the dance-rhythm is lost due to a hurried retake (Example 5.3):¹²

Ex. 5.3
Climent - Sonata: III, bars 10 - 12



Only one *piano* dynamic passage is found in this movement so its contrasting character needs to be emphasised. This *subito piano* begins on the first beat of bar 25 and lasts until bar 33, where a gradual *crescendo* leads to more dramatic and loud material. The texture in the accompaniment is quite transparent encouraging the cellist to conceive this moving quaver motif with *legato* bowing. Slurs here, although not marked in the score, allow the player to produce an ethereal and delicate colour in the sound, with plenty of scope to vary tonal-shading during performance (Example 5.4):¹³

¹² Three bowing options are indicated in this example by Annette Cleary. Each is an equally valid performance suggestion for this passage.

¹³ This bowing is suggested by Annette Cleary to match the timbre and dynamic of the passage as discussed above.

Ex. 5.4

Climent - Sonata: III, bars 25 - 26

a tempo

Articulation in the arpeggio passage from bars 45 to 61 is inspired by imagining the plucking of a Spanish guitar. This is an example of a ‘word picture’ or expressive cue as described by Chaffin and Logan.¹⁴ Here, the cello provides a rising and falling harmonic motif which accompanies the vocal figure in the piano part. The chords at the start of every second bar could be imagined as a *pizzicato* motif, therefore detached bowing¹⁵ (brush-stroke) is recommended with an arpeggiated chord, which begins before the beat to allow the top note of each chord to arrive on the beat. To keep the sonority dry in this passage, little vibrato is used apart from the first note of each bar and ‘new’ harmony notes (the E-flat in bar 47, for example) where warmth and length are appropriate (Example 5.5):

¹⁴ See chapter 2, 73.

¹⁵ Although lengthy slurs (over two bars) are indicated in the score, a more conventional performance practice for this passage is detached bowing as suggested.

Ex. 5.5
 Climent - Sonata: III, bars 45 - 48



Another way of describing the voice differentiation is as a type of orchestration. The sonata by Kevin O'Connell is composed on a large scale with virtuosic and dramatic elements throughout each of the movements. Much of the work can be approached almost as a cello concerto with the piano fulfilling an 'orchestral' role in many places. According to Pleeth, 'the stature and emotional range of a composition should not be smaller just because it is written for a smaller ensemble', but instead the small-scale composition, like the sonata, depends upon a 'more highly developed use of colour and texture.'¹⁶ An example of a passage which benefits from an orchestral viewpoint occurs in the third movement of O'Connell's sonata, from bar 57 to 65. The piano and cello interact equally in the first four bars of this passage. The piano uses different registers in both bar 57 and bar 58 to differentiate between two different voices; the low left-hand segment is solo piano but is answered in the second half of each bar by the higher triplet motif with punctuation from the cello. The energy increases in bar 59 with a development of this triplet motif played in unison by both instruments. Strong rhythmic drive and possibly a *crescendo* is implied by the indication of *fff* in the next bar and an

¹⁶ Pleeth, *Cello*, 82-83.

energetic demi-semiquaver figure in the cello which is passed in the second beat of that bar to the piano. The *diminuendo* marked in the piano part in bar 60 needs to be controlled in order not to lose too much energy. From bar 61 the cello starts a motif which builds gradually in intensity until the *fortissimo* is reached on the down-beat of bar 66. Using the high register of the cello and bars of alternating or repeated double-stop octaves, the virtuosic character is exemplified, reminiscent of the violin section in an orchestral work. Punctuated and accented chords in the piano part sound like a brass fanfare interrupting the driving rhythmic passage-work in the cello in bars 61 to 65. Expressiveness in this section relies mainly on texture and variation of accentuation, especially on the repeated notes in the cello part (Example 5.6):

Ex. 5.6
O'Connell - Sonata: III, bars 57 - 65

The musical score for Ex. 5.6, O'Connell - Sonata: III, bars 57 - 65, is presented in four systems. The first system shows the piano part with a treble and bass clef, featuring a complex rhythmic pattern with triplets and sixteenth notes. Dynamics include *ff* and *f*. The second system continues the piano part with similar rhythmic patterns. The third system shows the piano part with a treble and bass clef, featuring a complex rhythmic pattern with triplets and sixteenth notes. Dynamics include *f* and *cresc.*. The fourth system shows the piano part with a treble and bass clef, featuring a complex rhythmic pattern with triplets and sixteenth notes. Dynamics include *cresc.*.

Tone, for a string player, includes not only texture and colour, but also dynamics, vibrato and rubato. Two types of colour can be kept in mind when imagining an ideal

sound for a specific work; the textures and sounds which are part of the composer's background and the 'big, warm string sound' which is part of today's classical music culture. However, these sounds are not the only possible colours and it is recommended by Pleeth that players refer to the colours and textures used in string music of earlier centuries¹⁷ as inspiration for incorporating a wider range of nuance into sound.¹⁸

From the technical point of view tonal colourations are produced through fingering choices, vibrato, string choice and 'interplay among the three bowing factors which influence the production of tone – the speed at which the bow is drawn, the degree of pressure exerted upon the string, and the position of the bow between bridge and fingerboard.'¹⁹ An open tone is produced by long fast bow-strokes with an avoidance of pressure. In contrast, by bowing more slowly and closer to the bridge a dense and more concentrated tone can be created.²⁰

The second movement (Andante Rubato) of Tom Cullivan's sonata is based on a traditional Irish song and can successfully be played using a wide spectrum of tonal colours. After a lengthy *maestoso* middle section the first theme returns in bar 471. The section from bar 471 to 497 is identical to the opening 29 bars of the movement but in both sections the dynamics are mostly left to the performer's discretion. The return of the principal theme provides an opportunity to exploit the possibility of demonstrating various sonorities in the cello. A suggestion would be to perform the second rendition

¹⁷ String players in the past relied less on vibrato for varying tone colours and used bow speed and pressure to create a wide range of nuance. In part this was due to instrument and bow design limitations.

¹⁸ Pleeth, *Cello*, 78-85.

¹⁹ Blum, *Casals and the Art of Interpretation*, 120.

²⁰ See chapter 2, 68.

with a calmer and more contemplative mood: this could be achieved by use of a faster bow stroke nearer the fingerboard along with a restrained use of vibrato. Another possibility is to use a mute for this section – at bar 489 there is a four-bar rest which would allow the player plenty of time to remove it for the coda section. In a similar way, the four-bar linking phrase at bar 493 is a repeat of the passage at bar 403, with a different placing of the bar-line (which may be intentional). If, the first time, a warm and strong tone is needed, then a suggested bowing is as follows (Example 5.7):

Ex. 5.7
Cullivan - Sonata: II, bars 403 - 406



The identical passage heard in the recapitulation requires a different sonority.²¹ A softer and more improvised character can be achieved by using a different bowing. By placing slurs across the bar-lines as shown and by using an even bow-speed and a narrow constant vibrato, the melismatic qualities of this passage can be best brought out (Example 5.8):

²¹ It is necessary to play the final two notes in each of these phrases an octave higher than written.

Ex. 5.8

Cullivan - Sonata: II, bars 493 - 496



‘String colour and texture’, comments Pleeth, ‘is where the question of fingering really starts’. He advises cellists to explore a wide range of fingerings and string choices as follows:

Almost any group of notes can be played in a different way – on another string, or with a different combination of strings, or on the same strings but changing over in another place. Cellists must consider these other possibilities and try them ... It could even tell them what was right about their original choice.²²

The final part of this statement is crucial – it is often the case that after trying out various alternatives, the player returns to the option first played intuitively on the initial play-through of the piece – but with an enhanced understanding of why that option is preferred and not another. Bowings and fingerings along with string changes must all be established together, depending on the priority for a particular phrase: for example, if a string change is important for the shaping of a phrase, then shifts and bow changes are matched to the string change. According to Dorothy DeLay’s model, fingerings and bowings are established according to the musical context.²³ This example from the third movement (Andante Religioso) of the sonatina by John Gibson illustrates how it is

²² Pleeth, *Cello*, 81-82.

²³ See chapter 2, 68.

necessary to match bowings and fingerings to a particular string or in conjunction with a string-crossing in order to portray a particular mood. New material starts at bar 36, which is indicated *piano* with *sempre crescendo* building gradually to the *fff* in bar 51. The mood at the start of this passage is quietly dark with a sense of foreboding and this awareness helps the cellist choose which string would best suit the character.²⁴ This passage is *legato* and *cantabile* in character with a very gradual increase in intensity. A closer look at bar 39 reveals that two options are available – either to play this bar on one string or with a string-crossing. If the interval of a sixth in bar 39 is played across two strings, the only note in this four-bar passage on the A-string would be the D in bar 39. The obvious difficulty lies in ensuring that this note does not ‘stick out’. A bowing solution would be to use a slow-moving bow and slur these two consecutive bars in one bow. Alternately the entire passage can be played on the D-string and this would be a better way to maintain even sound. In this case, with a shift both up to the high D it becomes essential to change the bow on the second F-sharp of bar 39 in order to allow for enough bow during the first shift. The high D in this bar is a harmonic so the left-hand can move above the string back to the F-sharp. The bow change is important here to avoid a gap in sound during this movement (Example 5.9):²⁵

²⁴ The A-string has a bright well-projected timbre, while the D-string is darker and softer in colour.

²⁵ The indicated bowings, fingerings and dynamics in this example are interrelated performance suggestions by Annette Cleary.

Ex. 5.9
Gibson - Sonatina: III, bars 37 - 40

The above illustration is an example of a particular passage having numerous performance options depending on musical intent with fingering and bowing working in tandem. As the study of a work progresses and new ideas emerge, initial technical choices may change to accommodate new musical concepts of the piece.

The importance of choosing bowings to portray musical character and expression was emphasised over two centuries ago by Leopold Mozart who noted that in choosing bowings ‘one ... must accommodate oneself to the prevailing mood of each passage.’²⁶ He recommended that ‘[m]erry and playful passages must be played with light, short, and lifted strokes, happily and rapidly; just as in slow, sad pieces one performs them with long strokes of the bow, simply and tenderly.’²⁷ In other words the string player has a responsibility to choose articulation and tone-colour which is appropriate in each musical situation. Having examined the importance of structure and mood in relation within the context of the cello sonatas, the role of dynamics, vibrato, texture and rubato are examined in relation to musical expressiveness in part II.

²⁶ Mozart, *Treatise*, 223.

²⁷ *Ibid.*, 223.

II. Dynamics, Vibrato, Texture and Rubato

Dynamics

While fingering and bowing decisions are generally fixed and learnt long before the first performance of a work, other aspects of expressiveness tend to vary from performance to performance. Although these details of expression, such as dynamic variation, vibrato, tone-colour and pacing are also studied and absorbed during rehearsal, these aspects allow for spontaneity and experimentation during performance.

Dynamics are fundamental to musical interpretation and are a vital tool in producing a sense of musical flow. The cellist Maurice Eisenberg commented that dynamics provide ‘the underlying power that enables the intensity to be carried from note to note, and gives a sense of continuity that leads forward from the start to the finish of a musical sentence’.²⁸

Although dynamics are notated in the score, the player needs to study the relative ranges carefully with regard to balance between piano and cello, the acoustics of the venue, and of course, the character and mood of the work. In fact, since all dynamics are simply relative to a contrasting dynamic, a *piano* indication in a text may actually need to sound *pianissimo* or *mezzo-forte*, depending on context. The second movement of the first sonata by Brian Beckett illustrates this point. Although the opening Adagio is marked *forte* this should be read as more of a mood indication rather than an actual volume

²⁸ Maurice Eisenberg (1900-1972) was born in Königsberg but moved to the United States at the age of two. He became principal cellist of the New York Symphony at the age of eighteen and in 1921 he met Pablo Casals who encouraged him to continue his advanced training. Apart from Casals, other teachers included Klengel, Becker, Alexanian and Boulanger. He performed cycles of the Bach Suites and Beethoven’s complete works for cello and piano internationally and he also taught at Julliard School of Music. Eisenberg, Maurice, *Cello Playing of Today* (London: The Strad, 1957), 125.

instruction. A projected singing tone is required but if the cello line is too loud at the very opening, it then becomes very difficult to increase intensity later in this substantial movement. Moreover, this register is naturally strident in sound – there is no need to use much bow pressure in this register to project, so a *mezzo-forte* range would be more appropriate and would balance better with the chordal texture in the piano (Example 5.10):

Ex. 5.10
Beckett - Sonata No. 1: II, bars 1 - 2



In his treatise on string playing, Leopold Mozart wrote of the need for the performer to be able to judge exactly where and how to incorporate dynamics which are not specified by the composer. He compares these nuances to light and shade:

From this it follows that the prescribed *piano* and *forte* must be observed most exactly, and that one must not go on playing always in one tone like a hurdy-gurdy. Yea, one must know how to change from *piano* to *forte* without directions and of one's own accord, each at the right time; for this means, in the well-known phraseology of the painters, Light and Shade.²⁹

This variation of dynamic is created and controlled on the cello by increasing the speed of the vibrato, adjusting the velocity of the bow and changing the pressure of the hair on the string. Subtle dynamics which are not indicated in the score are an important

²⁹ Mozart, *Treatise*, 218.

component of characterisation in the imitative third movement of Joseph Groocock's sonata. These dynamics are shown in example 5.11 as a recommended performance suggestion. The four-bar phrase starting in bar 19 is marked *forte* but in order to shape it with an appropriate increase in tension in bar 22 a *crescendo* needs to be incorporated, so that the resolution onto the A-minor down-beat of bar 23 can be more relaxed in dynamic. The best place to begin the *crescendo* is on the last quaver of bar 20, where an *mp* dynamic will provide the cellist with potential for a gradual energy increase through this repeated descending scale-passage, thus avoiding a static *forte* throughout the phrase (Example 5.11):³⁰

Ex. 5.11

Groocock - Sonata: III, bars 19 - 23



This change in dynamic is best carried out by changing the amount of bow used while maintaining the same sounding point, so tone colour remains unchanged and only the actual volume varies.

Mozart continued with the practical advice that notes marked by an accidental should be coloured with a stronger tone.³¹ Usually an accidental signals a change in harmony or an unexpected chord and the harmonic context helps decide how such a note in a melodic line should be expressed. The inherent tension in such dissonances needs to be brought

³⁰ The indicated dynamics in this example are performance suggestions by Annette Cleary.

³¹ Mozart, *Treatise*, 218.

out by varying the tone colour. This emphasis of a note outside the key centre was also mentioned by Johann Joachim Quantz who described the importance of harmonic awareness in determining dynamic nuance:

If the violoncellist understands composition, or at least something of harmony, he will find it easy ... to bring out and make apparent the different passions expressed in a piece by its composer. He must also determine which notes must be stressed and brought out more than the others. These are, first, notes that have dissonances such as the second, diminished fifth, augmented sixth, or seventh above them, or those that are raised irregularly by a sharp or natural sign, or lowered by a natural, or a flat.³²

The harmonic structure informs much of the character and expression in Tom Cullivan's sonata. For example, in the second movement (Andante Rubato), the melodic line modulates from an A-flat tonality to the key of E-flat major at the end of the first theme (Example 5.12):³³

Ex. 5.12

Cullivan - Sonata: II, bars 396 - 398



The D-natural in bar 396 is unexpected and needs to be highlighted in the cello part. As this is a phrase-ending with the usual tapering off it is important not to play this particular note too loudly. Rather, expressiveness could be more successfully attained by

³² Quantz, Johann Joachim, 'Of the Violoncellist in Particular', *On Playing the Flute* (1752), trans. by Reilly, Edward R., (London: Faber and Faber, 2nd edn., 1985), 244-245.

³³ The bowings indicated in this example are suggested by Annette Cleary.

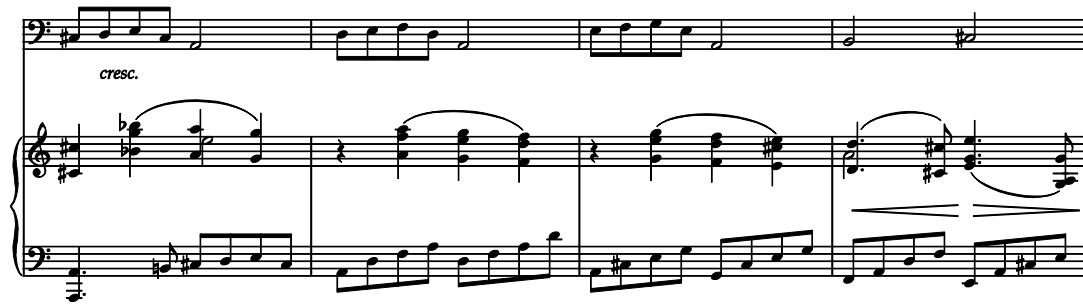
the use of faster vibrato and a prolongation of the note which would delay the first beat of the following bar. This gives the illusion of a more intense tone-colour without actually playing it louder. Although phrases often have a dissonant note or interval that needs to be brought out, this happens within the context of a larger phrase contour. Dynamic markings indicate not only volume levels, but increases or decreases of tension, which may or may not require a change in actual loudness or softness. Example 5.12 illustrates this particular point.

Crescendos or *decrescendos* describe nuances, which ‘should proceed gradually to a definite highest or lowest point.’³⁴ In his teaching, Casals constantly referred to the natural rules of nuance which included the following principles: dynamic nuances respond to the rise and fall in pitch; long notes have ‘to say something; one must give form, expression and interest’ and generally it will mean *crescendo* or *diminuendo*; repetitions, either of one note or a phrase ‘should provide contrast – a little more forte or piano; a change of colour’.³⁵ In the following three excerpts, these natural rules of nuance form the basis of interpretative decisions regarding unspecified dynamics. The first principle concerns the relationship between dynamics and pitch. In the step-wise pattern in bars 85 to 87 in the third movement of Joseph Groocock’s sonata the rise in pitch on the first note of each bar corresponds to an increase in dynamic. The recommended dynamics in the cello part of this example are performance suggestions. In this way the rising melodic contour, C-sharp, D and E is matched by a *crescendo* (Example 5.13):

³⁴ Kinsey, Herbert, *The Foundations of Violin Playing and Musicianship* (London: Longmans, Green and Co., 1954), 41.

³⁵ Blum, *Casals and the Art of Interpretation*, 20-21.

Ex. 5.13
Grocock - Sonata: III, bars 85 - 87



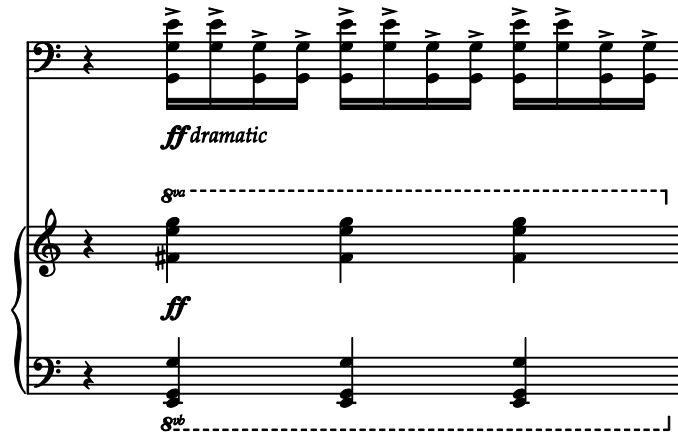
In the first movement of Kevin O’Connell’s sonata long notes and pause marks are an essential part of the declamatory character of this work. In the following passage from bar 113 to 115 the pause on the last note of bar 115 differs from the pause in the previous bar. The long E in bar 115 is part of a *diminuendo* and a breath would be helpful in restarting the new idea in the next bar. The function of the pause in bar 114 is different, as it is an interruption of this thematic material which continues on the third beat of bar 115. To demonstrate this difference, an up-bow, as indicated could be used for the *crescendo* on the long D in bar 114, with a sudden cut-off to portray the dramatic character (Example 5.14):

Ex. 5.14
O’Connell - Sonata: I, bars 113 - 115

Come prima (♩ = 96)

In the same movement a repeated *fortissimo* motif occurs in bar 139, 141 and 143 as follows (Example 5.15):

Ex. 5.15
O'Connell - Sonata: I, bar 139



In the first two repetitions a decrease in dynamic is implied in order to begin the rapid *crescendo* from *mezzo-forte* in bars 140 and 142. For the third recurrence of this figure an increase in intensity is advisable in order to aim for the *fff* in bar 144. This demonstrates how a repeated figure can be varied dynamically to match the context. All dynamic markings indicated in the score need to be placed within the musical context and adjusted accordingly. Where few or no markings are indicated by the composer, as in some of the sonatas discussed,³⁶ the player needs to develop a dynamic scheme which is appropriate to the composer's musical intent.

Vibrato

Vibrato, if it is to be used as an expressive device in music, 'must be instinctively sensitive to what one is saying musically and emotionally' and the way vibrato is used

³⁶ A dynamic scheme needs to be worked out by the performers in Tom Cullivan's sonata. See chapter 1, 50.

has to be part of the overall musical concept.³⁷ Casals expressed the importance of using vibrato not in the abstract but always relating it to the aesthetic material:

Vibrato in itself cannot be expressive ... because that depends on how it is applied. The vibrato is a means of expressing sensitivity, but it is not a proof of it. ... When you hear all the time a beautiful vibrato – well, you’ve had enough! A big vibrato is an energetic forte ... but the sound without vibrato is very beautiful also, particularly in piano and pianissimo.³⁸

Players were also reminded by Casals to use vibrato sensitively when performing sonata repertoire as the piano is an instrument without vibrato. A thoughtful use of vibrato can create colour, shape phrases and illuminate dynamic nuance. The use of a slower vibrato is shown by Dorothy DeLay to provide contrast with other more energetic phrases, where a faster vibrato would produce greater musical intensity.³⁹ This applies especially to passages where the cello has an accompanying role.⁴⁰ A contrasting middle section of the first movement of Angel Climent’s sonata is based on the *Tantum Ergo*, a Gregorian chant. It is heard for the first time in the piano part from bar 60 to 77 and continues in the cello part thereafter. During the initial playing the cello has an accompanying role and is also marked *con sordino* to ensure that the countermelody is not overpowering. This passage lends itself to a sparing use of vibrato – both instruments have almost identical rhythmic patterns and the cello voice is placed mid-register in the chordal texture of the piano part. A transparent cello tone through judicious use of vibrato ensures a unified sound between both instruments during this passage (Example 5. 16):

³⁷ Pleeth, *Cello*, 92-93.

³⁸ Blum, *Casals and the Art of Interpretation*, 134.

³⁹ See chapter 2, 70.

⁴⁰ Blum, *Casals and the Art of Interpretation*, 134.

Ex. 5.16
Climent - Sonata: I, bars 60 - 67



A sensitive vibrato can help create colour, shape phrases and fulfil dynamic nuance. There is ‘no definite dividing line between the musical and the technical when it comes to applying vibrato to the *creation* of tone colour’, wrote cellist Maurice Eisenberg, who continued by saying that ‘once its action is understood, its use must be determined by the degree of the player’s musicality.’⁴¹ Practising without vibrato is a common recommendation to players to prevent the automatic use of vibrato. Instead, vibrato should be regulated according to the expressive demands of the piece.⁴² Performers need to be able to shade vibrato through all the varieties of tone qualities and articulations in the following way:

There is a tremendous potential for variation in vibrato: in intensity, in gentleness, in warmth, in quietness, or in the most passionate outburst. If we start our vibrato from nothing, we can build it into whatever the music requires. It is the endlessness of it we are after.⁴³

This aim to return to thoughtful use of vibrato is strikingly similar to advice given by Leopold Mozart on the ‘naturalness’ of colouring the sound with vibrato or *tremolo*.⁴⁴

⁴¹ Eisenberg, Maurice, *Cello Playing*, 111.

⁴² Practising without vibrato was advocated by many cellists, including William Pleeth and André Navarra. From notes taken during lessons with André Navarra and William Pleeth (1988-1990).

⁴³ Pleeth, *Cello*, 96.

⁴⁴ During the eighteenth century vibrato was called ‘tremolo’ or ‘tremulant’ or ‘tremolete’, which is distinct from the modern use of the word as a series of rapid bow strokes.

‘The Tremolo is an ornamentation which arises from Nature herself ... so [it] would be an error if every note were played with the tremolo. Performers there are who tremble consistently on each note as if they had the palsy. The tremolo must only be used at places where nature herself would produce it ... ’⁴⁵

Apart from ‘the variation of tone-colour needed to interpret mood and emotion’, a vibrato which matches ‘the intensity of the notes according to their heights and depths’ usually means using a faster and narrower vibrato in the higher registers of the cello.⁴⁶ An extremely fast intensive vibrato produces a pure tonal texture, while vibrato set in motion before the bow strikes the string and continuing after the end of the note gives extra resonance to the overall sound. All of these aspects of vibrato can be used to expressively realise the four-bar link between the Scherzo and the Romance sections of the third movement in the second sonata by Brian Beckett (Example 5.17):

Ex. 5.17
Beckett - Sonata No. 2: III, bars 36 - 39



The F-sharp at the start of bar 36 fulfils two structural functions: it marks the final note of a descending quaver figure and it announces the start of a more broadly lyrical passage, which in turn gives way to the slower *cantabile* Romance in bar 41. With an indicated *fortissimo*, an intense and wide vibrato helps establish the new character while

⁴⁵ Mozart, *Treatise*, 203-206.

⁴⁶ Eisenberg, *Cello Playing*, 110-111.

in the higher register of the following bar a faster and narrower vibrato would be more suitable. Instead of using bow-speed or weight to produce the accent on the high E in bar 38, an increase of intensity in the vibrato should suffice. By continuing the vibrato after the bow has left the string at the end of this tied E the sound lingers thus linking this material to the contrasting theme of the Romance. Vibrato is generally used in an individual way by players, thus providing scope for its imaginative use. In this sonata repertoire, there is scope for a wide range of vibrato colours to be applied, depending on the overall musical context.

Texture

Texture is described in the *Oxford Companion to Music* as the ‘vertical build of the music – the relationship between its simultaneously sounding parts – over a short period of time.’⁴⁷ It may be influenced by timbre, rests (silence), intensity and articulation.

Wallace Berry defines musical texture in the following statement:

The texture of music consists of its sounding components; it is conditioned in part by the number of those components sounding in simultaneity of concurrence, its qualities determined by the interactions, interrelations, and relative projections and substances of component lines or other component sounding factors.⁴⁸

Musical texture is related to density, which ‘may be seen as the quantitative aspect of texture – the number of concurrent events (the thickness of the fabric) as well as the degree of ‘compression’ of events within a given intervallic space.’⁴⁹ The term concurrent refers to musical elements which coexist or overlap in time. The basic

⁴⁷ Newbould, Brian, ‘Texture’, *The Oxford Companion to Music* (Accessed 29 April 2009), <<http://www.oxfordmusiconline.com>>

⁴⁸ Berry, Wallace, *Structural Functions in Music* (New York: Dover Publications, Inc., 1987), 184.

⁴⁹ *Ibid.*, 184.

parameters of pitch, duration and intensity are not independent but tend to be synchronised or concurrent when an increase in one corresponds with an increase in another. Concurrence ‘reduces the amount of information that is transmitted’ to the listener.⁵⁰ On the other hand, nonconcurrence implies the independence of parameters giving a greater number of possible textural understandings of the organisation of the work. In this situation the interpreter has to choose which element at a given time to emphasise and the listener has to divide ‘attention between the competing factors’.⁵¹ Tension is created by the conflict between the state of concurrence and nonconcurrence, with the greatest tension occurring at the extreme ends of either notable nonconcurrence or total concurrence. Contrasting tension and relaxation within a musical context is carried out by a performer by varying energy levels, as shown by Dorothy DeLay.⁵² Textural contrasts are produced by the various simultaneous parameters – melody, harmony, dynamics, timbre, tessitura and rhythm – each of which ‘carries its own internal means of closure.’⁵³ The closure in one parameter may or may not coincide with closure in another.

Nonconcurrence is a prominent feature of the texture in the development section of the first movement of Joseph Groocock’s sonata. Material from the opening theme is developed by the use of imitative entries, creating a mood of restlessness, intensity and

⁵⁰ Cohen, Dalia and Wagner, Naphtali, ‘Concurrence and Nonconcurrence between Learned and Natural Schemata: The Case of J. S. Bach’s Sarabande in C Minor for Cello Solo’, *Journal of New Music Research*, Vol. 29, No.1 (March 2000), 24-25.

⁵¹ Wagner, N., ‘Investigation in Tonal Structural Perception (a preliminary survey)’, *Israel Studies in Musicology* Vol. 5 (1990), 147-170; quoted in Cohen, ‘Concurrence and Nonconcurrence’, 24-25.

⁵² Gholson, ‘Dorothy DeLay’s Energy List’, 42-45.

⁵³ Narmour, Eugene, ‘On the Relationship of Analytical Theory to Performance and Interpretation’, in Narmour, E., and Solie, R., (eds.), *Explorations in Music, The Arts, and Ideas: Essays in Honor of Leonard B. Meyer* Festschrift Series No. 7 (Stuyvesant: Pendragon Press, 1988), 326.

interruption. In this section from bar 47 to 85 the texture progresses with a continuous increase in intensity which illustrates nonconcurrence of harmony, melody and rhythm. Initially, the piano presents the four-bar theme in bar 49 based on a dominant-seventh chord on F, but it is interrupted two bars later by the cello voice imitating this dominant-seventh chord on A, which is a harmonically unexpected chord. Once again the piano presents the theme in the increasingly remote tonality of D-flat major, without allowing the motif to finish in the cello part (Example 5.18):⁵⁴

Ex. 5.18
Grocock - Sonata: I, bars 49 - 59

The texture is imitative and features cross-rhythm starting in bar 53 with a 6/8 meter in the left-hand of the piano part. In bars 56 and 57 the third beat of each bar has rhythmic stress, a pattern which leads to the hemiola 3/2 figure of bars 58 to 74. With a stable 3/2 rhythmic pattern and a slow descent to a low register in both parts, the tension dissipates gradually until a sparse texture with concurrence of harmony and a predictable rhythm

⁵⁴ The bowing indications in this example are performance suggestions by Annette Cleary.

emerges. This example demonstrates how texture can be said to progress or recess, producing its own contour within the structure of the work.⁵⁵ In this example the texture is dense from bar 49 to bar 57, with a *crescendo* coinciding with the gradual rising of pitch in each entry. Although marked *forte* at the start of this phrase, it is necessary for the cellist to plan this *forte* very carefully to allow room for a gradual but continuous *crescendo* over the next nine bars. A progressive texture, with an increase in intensity arises mainly from the following events: dissonant pitches (either sounded together or in succession), intense dynamic levels, rhythmic acceleration, ascent in pitch, weight in chords, register changes⁵⁶ and overlapping imitative entries. The latter three aspects of texture relate especially to the interaction between the cello and the piano parts of the sonatas, while all of these events within texture 'are assumed to be evocative of the impression of rising intensity, an intensity which increases the more the progression is prolonged.'⁵⁷ The converse is found in a relaxation or a recession of these events, resulting in a sparse texture.

An important part of texture is articulation – by changing the length and weight of notes a variety of different textures can be created. This aspect is vital for a string player and is not usually discussed in connection with texture. The player must try different articulations but flexibility is vital. A well chosen articulation for a particular passage may need to be changed once the cellist rehearses with the piano (due to balance issues) or may need to be adapted if the tempo changes. The speed of a passage often dictates

⁵⁵ Berry, *Structural Functions in Music*, 184-190.

⁵⁶ A change in register is recommended in Joseph Groocock's sonata, third movement, bars 139 to 154. A clearer texture may be produced by playing the cello part an octave higher.

⁵⁷ Berry, *Structural Functions in Music*, 190.

the articulation, for example, a *spiccato* bowing is not feasible beyond a certain speed and a *sautille* bowing takes its place. In discussing the functions of detached bowings, Eisenberg observes that different bowings are used to give ‘colour, variety and character to the interpretation through helping in the articulation, punctuation, and inflection’.⁵⁸ In deciding ‘whether and to what extent the bow should leave the string, each case has to be considered individually’, and even when *staccato* dots are marked by a composer, it is still a player’s decision to choose exactly how percussive or lyrical the detached notes should sound.⁵⁹ In the second movement of John Gibson’s sonatina, the player must decide on the length and weight of the *staccato* notes in bar 12 (Example 5.19):

Ex. 5.19

Gibson - Sonatina: II, bars 11 - 12



To maintain the energetic character which is required throughout the movement, these notes need to be accented with a fast bow-speed at the start of each *staccato* note. An energetic vibrato ensures resonance so that the notes are not too dry. However, any slight variation of tempo affects the realisation of such *staccato* notes, with a faster tempo requiring a lighter interpretation. Flexibility during performance, therefore, is essential in determining the lengths of detached notes.

⁵⁸ Eisenberg, *Cello Playing of Today*, 40-41.

⁵⁹ *Ibid.*, 45.

The natural *diminuendo* as an articulation or inflection was considered by Casals to be the secret of musical interpretation as recollected by Christopher Bunting. In language and singing, there are ‘varieties of consonants, hard and less hard’, and the vowel ‘has a natural tendency towards a diminuendo.’⁶⁰ Articulation, which is the shaping of an individual note is carried out by changing the pressure on the bow at the point-of-contact with an adjustment of arm weight. Varying the point-of-contact produces a change in timbre and ‘hence the identifiable qualities of the note’.⁶¹ This *syllabic diminuendo* produces a rapid diminuendo at the start of a note, followed by a tapering out and a more even sound at the end of the note. Sometimes it may be advisable to ‘vary the vibrato as the sound diminishes in order to avoid the impression of a sagging in the intensity of the note’.⁶² A consonant sound can be produced with the use of a percussive left hand. The throwing of the bow onto the string is another way of producing a ‘natural accent’.⁶³ Within a passage, these articulated notes can be further shaped to form a phrase, which has its own contour depending on musical context. Violinist Sandor Vegh referred to this subtle clarity of articulation as ‘etching’,⁶⁴ and William Pleeth stresses the importance for cellists ‘to learn to breathe with the bow: to pause and retake the bow again, to allow space between notes and between phrases in the same instinctive way

⁶⁰ Bunting, Christopher, *Essay on the Craft of Cello Playing: Volume 1* (Cambridge: Cambridge University Press, 1982), 90-91.

⁶¹ *Ibid.*, 91-94.

⁶² *Ibid.*, 94.

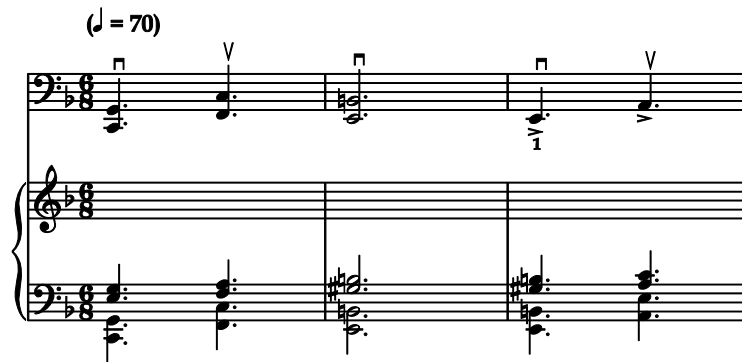
⁶³ Blum, *Casals and the Art of Interpretation*, 112.

⁶⁴ Bunting, *Essay on the Craft of Cello Playing*, 94. Sandor Vegh (1912-1997), violinist and founding member of the Hungarian String Quartet, studied violin with Jeno Hubay and composition with Zoltán Kodály. He founded and taught at many Chamber Music festivals and from 1971-1997 taught at the Mozarteum in Salzburg.

they breathe and articulate in speech.’⁶⁵ The following motif illustrates these points and is from a linking passage in the third movement of Angel Climent’s sonata (Example 5.20):⁶⁶

Ex. 5.20

Climent - Sonata: III, bars 20 - 22



The piano and cello play the five chords in rhythmic unison. It is the role of the cellist to mimic the percussive piano texture at this point by slightly accenting the start of each double stop and playing a rapid *diminuendo*. This highlights the start of each note thus matching the natural articulation of the piano. The dotted-minim in bar 21 will have a longer *diminuendo* and suggested bowing includes a retake down-bow on the first beat of bar 22. This ‘breathing’ between notes in a detached passage helps punctuate the texture and gives a light-hearted character to this particular passage.

Similarly, Casals uses the *diminuendo* as a practical means of demonstrating articulation. The fading of a note is an ‘integral part’ of its sonority and particularly on a long note, the *diminuendo* must ‘go to the *infinite* otherwise the note is not completed.’⁶⁷ When the bow leaves the string, resonance prolongs the sound. This *diminuendo* and the resonance

⁶⁵ Pleeth, *Cello*, 56-57.

⁶⁶ The indicated bowing demonstrates the detached qualities of these notes.

⁶⁷ Blum, *Casals and the Art of Interpretation*, 117-118.

at the end of the note can 'relate the music in a natural way to the silence which surrounds it.'⁶⁸ In the *tranquillo* passage from bar 45 to 53 in the second movement of the sonata by Kevin O'Connell, silence at phrase endings is an important structural feature. The piano introduces the new material in the first four bars with a long note and a pause at the end of the initial three bars. This improvised character is continued in the cello part with short tentative fragments contrasting with the repeated arpeggiated chordal texture in the piano. The mood in this section is influenced to a large extent by the players who must decide how long each of these pauses should be held. More importantly, the length of the note is decided by the amount of *diminuendo* and enough time should be allowed for a fading into silence at the end of bar 52. As this note is an open-string, it will resonate (depending on the acoustics of the hall) long after the bow leaves the string (Example 5. 21):⁶⁹

⁶⁸ Ibid., 121.

⁶⁹ The bowings in this example do not differ from the slurs in the score, but are shown to emphasise the importance of arriving on the final note of bar 52 on a down-bow.

Ex. 5.21
O'Connell - Sonata: II, bars 49 - 52

Tenderly ($\text{♩} = \text{c. } 126$)
2+3=3

Intensity and articulation are the principal means of highlighting textural differences in these sonatas. Melodic intensity is varied through use of dynamics levels while rubato and control of the pulse are essential to rhythmic intensity as shown in the following section.

Rubato

Timing variations in performance have different functions depending on the rhythmic context and the character of the piece.⁷⁰ A performance that sounds metronomic and steady is in fact an illusion:⁷¹ it is not actually physically regular but deviates almost

⁷⁰ Drake, Carolyn and Parncutt, Richard, 'Psychology of Music: Performance Perception and Cognition', *Grove Music Online* L. Macy (ed.), (Accessed 29 April 2009), <<http://www.grovemusiconline.com>>

⁷¹ Pleeth, Cello, 102.

imperceptibly in a musically expressive way.⁷² Other functions of timing variations are the clarification of metrical structures and the shaping of phrases: for example, the placing of agogic accents informs the listener where downbeats arrive,⁷³ shows phrase boundaries,⁷⁴ or emphasises the most intense point of a melodic phrase. A rubato can show a pulse, or accent on a rest or a tied note. Finally, timing variations, usually referred to by players as rubato, ‘affect the emotional character’ of musical rhythm.⁷⁵ One possible explanation for this emotional affect may be due to recent suggestions that timing variations and rubato used naturally by performers follow fundamental physical laws and a performance is perceived as being ‘natural’ when it mimics ‘the behaviour of physical objects in the real world’.⁷⁶ In a study by Bruno H. Repp, it was found that ‘listeners preferred parabolic curves’ which are to be found in nature, over other timing systems.⁷⁷ The curve of phrasing was observed by Tobias Matthay in 1912 as follows:

Rubato must always be more or less in the nature of a curve – it must be applied over more than a single note. Otherwise, in place of a beautifully curved effect ... we shall have time-spikes (notes

⁷² Penel, A. and Drake, C., ‘Sources of Timing Variations in Music Performance: a Psychological Segmentation Model’, *Psychological Research*, 1, xi, (1998), 12-32; quoted in Drake, Carolyn and Parncutt, Richard, ‘Psychology of Music: Performance: Perception and Cognition’, *Grove Music Online* L. Macy (ed.), (Accessed 29 April 2009), <<http://www.grovemusiconline.com>>

⁷³ Sloboda, John, ‘The Communication of Musical Metre in Piano Performance’, *Quarterly Journal of Experimental Psychology*, xxxv, (1983), 377-396; quoted in Drake and Parncutt, ‘Psychology of Music’, *Grove Music Online*.

⁷⁴ Todd, N. P., ‘A Model of Expressive Timing in Tonal Music’, *Music Perception*, iii, (1985-1986), 33-58; quoted in Drake and Parncutt, ‘Psychology of Music’, *Grove Music Online*.

⁷⁵ Gabrielsson, A. and Juslin, P., ‘Emotional Expression in Music Performance: Between the Performer’s Intentions and the Listener’s Experience’, *Psychology of Music*, xxiv, 1, (1996), 68-91; quoted in Drake and Parncutt, ‘Psychology of Music’, *Grove Music Online*.

⁷⁶ Kronman, U. And Sundberg, J., ‘Is the Musical Ritard an Allusion to Physical Motion?’ in Gabrielsson, A. (ed.), *Action and Perception in Rhythm and Music* (Stockholm, 1987), 139-152; quoted in Clarke, Eric F., ‘Psychology of Music: Performance’, *Grove Music Online* L. Macy (ed.) (Accessed 18 March 2009), <<http://www.grovemusiconline.com>>

⁷⁷ Repp, B. H., ‘A Constraint on the Expressive Timing of a Melodic Gesture: Evidence from Performance and Aesthetic Judgement’, *Music Perception*, x, (1992-1993), 221-241; quoted in Clarke, ‘Psychology of Music’, *Grove Music Online*.

actually out of time) sticking out all over our performance – spikes just as uncomfortable as physical spikes.⁷⁸

Rubato and rhythmic pulse are connected to the bodily movement of the performer, which are also related to the specific instrument being played.⁷⁹ Historically, two types of rubato can be identified, both of which are found in the sonata repertoire: the earlier one is referred to as melodic or contrametric where the pulse remains steady but small rhythmic changes are made to the melodic line to create expressiveness.⁸⁰ The latter type is a structural or agogic rubato described in 1801 by Busby as ‘time alternately accelerated and retarded for the purpose of enforcing the expression’.⁸¹

Melodic rubato is found in abundance in these Irish sonatas: for example, the slow movements of the sonatas by Kevin O’Connell, Tom Cullivan, Joseph Grocock, and Brian Beckett all demonstrate lengthy sections where the cello plays an expressive melodic line accompanied by a chordal harmonic accompaniment. In the following example from the third movement of John Gibson’s sonatina the piano plays a steady quaver pulse, allowing the melodic line in the cello part to be played with more freedom. To show melodic contour in this phrase the cellist could place the second note in bar 28 a little early to allow more time for an expressive shift to the C and a delay on that note facilitates a rich vibrato (Example 5.22):

⁷⁸ Matthey, Tobias, *Musical Interpretation: Its Laws and Principles, and their Application in Teaching and Performing* (London: Joseph Williams, Ltd., 1912), 104.

⁷⁹ Shove, P. And Repp, B. H., ‘Musical Motion and Performance: Theoretical and Empirical Perspectives’, in Rink, *The Practice of Performance*, 55-83.

⁸⁰ Hudson, Richard, ‘Rubato’ in *Grove Music Online* L. Macy (ed.), (Accessed 29 April 2009), <<http://www.grovemusiconline.com>>

⁸¹ Busby, T., *A Complete Dictionary of Music* (London: c1801); quoted in Hudson, ‘Rubato’ in *Grove Music Online*.

Ex. 5.22

Gibson - Sonatina: III, bars 28 - 29



A structural rubato uses a change in tempo to show a structural boundary: in the following example from Angel Climent's sonata tempo is slowed to emphasise increasing intensity and a change of register. The *meno mosso* at bar 36 uses a repeated triplet figure in the cello part and is marked *forte* with a *crescendo*. As the dynamic is almost at maximum force the player needs to find another method of increasing energy in the following bar. By stretching the tempo gradually in bar 37 the illusion of a dynamic increase is created. A short gap at the end of that bar prepares the listener for the sudden change in register in the cello part (Example 5.23):

Ex. 5.23

Climent - Sonata: III, bars 36 - 38

Meno mosso (♩ = 126)

A secure and technically controlled performance alone is insufficient for a successful performance and the addition of an expressive and communicative facet is needed. It was observed by Leopold Mozart in 1753 that to play artistically was more difficult than merely following the ‘instructions’ and practising difficult passages, which he thought anyone could achieve, given enough ‘energetic practice’.⁸² The combination of both diligence and creativity as required by an artistic player is described by Leopold Mozart as follows:

For, not only must one observe exactly all that has been marked and prescribed and not play it otherwise than as written; but one must throw oneself into the affect to be expressed and apply and execute in a certain good style all the ties, slides, accentuation of the notes, the *forte* and *piano*; in a word, whatever belongs to tasteful performance of a piece; which can only be learnt from sound judgement and long experience.⁸³

Recent research has aimed at specifying exactly what ‘sound judgement’ and ‘experience’ in music performance might entail. Computer modelling has been used in this research, combined with analysis to examine how performers vary tempo, timbre, articulation, vibrato and dynamics to achieve expressive performances. Some of the most interesting results which appeared to apply to all solo performers included the naturalness of musical expression (physical and bodily), the stability of expression in repeated performances and the instant ability of a performer to change an expressive device at will.⁸⁴ It was also found in studies by Bruno H. Repp that performers basically

⁸² Mozart, *Treatise*, 216.

⁸³ *Ibid.*, 216.

⁸⁴ Clarke, Eric, ‘Understanding the Psychology of Performance’, in Rink, John (ed.), *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002), 59-69.

agree about the overall shaping of a piece, but show individuality ‘by manipulating the finer details of structure and its expressive implementation.’⁸⁵

Although expression may have some ‘rule-like’ qualities, performers use a variety of methods to achieve expression within the performing context. These include imitation or mimicking of an expressive pattern from aural memory, memorised verbal instructions (for example, speed up on ascending scale passage, slow down at end of phrase, etc.), and mental choreography where expression is connected to a bodily image (for example, an increase in intensity within a phrase is matched by an increase in vibrato width and the faster speed of the bow arm in producing longer bow strokes). Chaffin and Logan describe performers’ use of ‘word pictures’ or descriptive phrases as expressive cues to be drawn upon during performance.⁸⁶ Some of these expressive cues are almost intuitive to the player and appear to arise unconsciously during the preparation process, others are imitations of aspects previously heard either ‘live or recorded’,⁸⁷ while some are simply instructions remembered from teachers, being applied intuitively to new contexts. Most musicians are familiar with the practice period during the learning process where the music seems to stagnate and sounds lifeless. During such practice sessions, while engaging in ‘rote’ practice, sometimes a new expressive idea often appears as if from nowhere, thus enabling the performer to engage with the piece in a new way. Advice has been given by two noteworthy cellists on how to redirect focus towards another aspect

⁸⁵ In a study of twenty-eight recorded performances of a piano piece by Schumann, it was found that most of the players agreed on timings and overall phrase structure. Similar results were found in Repp’s later studies in which he used a sample of over one hundred performances of the same piece. Clarke, Eric, ‘Understanding the Psychology of Performance’, in Rink, John (ed.), *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002), 59-66.

⁸⁶ See chapter 2, 73.

⁸⁷ Clarke, ‘Understanding the Psychology of Performance’, 66.

of playing in order to allow the player's intuition to provide new expressive ideas. Cellist André Navarra⁸⁸ advised players, when unsure how to proceed musically, to simply pick up the score and re-read all the expressive and dynamic markings.⁸⁹ This advice is identical to Leopold Mozart's recommendation to 'observe exactly all that has been marked'.⁹⁰ Eleonore Schoenfeld recommended that cellists, when 'bored' with a well-known piece, need only return to working on intonation with concentrated listening for a number of new expressive ideas to spontaneously arise.⁹¹

Conclusion

Emotion in music is expressed by varying the intensity of energy in the harmonic, melodic and rhythmic aspects of a work. An expressive performance requires the player to convey the structure, character and mood of a piece. While the structure of a work is inherent in its composition, it can be portrayed uniquely by individual players with a flexible use of character and expression. Although intuition is an essential component of musical expression and mood, a conscious awareness of decisions regarding timbre, dynamics, articulation and pacing are equally important in attaining a spontaneous performance.

⁸⁸ André Navarra (1911-1988), born in Biarritz, graduated from Toulouse Conservatoire at the age of thirteen and from the Paris Conservatoire with first prize at the age of fifteen. From then on he was influenced by well-known musicians, including Casals, but received no further formal tuition. Much of his extraordinary technical mastery (mainly self developed), in particular that of the bow, is attributed to contact with renowned violinists and his sporting and athletic career. As a teacher, he was able to inspire students to overcome technical difficulties with a combination of discipline and intuition. Campbell, Margaret, *The Great Cellists* (London: Victor Gollancz Ltd., 1988), 212-213.

⁸⁹ Navarra, André, notes taken during lessons, 1988.

⁹⁰ Mozart, *Treatise*, 216.

⁹¹ Schoenfeld, Eleonore, notes taken during lessons, 1989.

The dramatic aspects of expression inform the character of a work which is portrayed by modifying the colour, texture and articulation of the sound. Bowings and fingerings are chosen with a specific expressive intent. Tone is varied through the use of timbre, dynamics and an understanding of the texture. The technical aspects of articulation are essential for producing a range of different textures: in the left hand shifts and vibrato need to be sensitive to the musical context, while the bow needs to be able to shape each individual note within a phrase to produce a meaningful melodic contour. Tempo, pulse and rubato are essential to shaping a rhythmic contour. Timing variations not only demonstrate the structure of a work, but are part of mood and character portrayal.

Many of these expressive nuances cannot be notated fully in the score and it is the role of the performer to explore a range of options in order to choose the most suitable method of depicting emotional expression of a piece. To summarise, it would appear that the ‘sound judgement’ and ‘long experience’ mentioned by Leopold Mozart as being necessary for achieving a musical and expressive performance, involves intuition and the intellect, both of which use structural cues as the basis for shaping musical contour.

Conclusion

This thesis provides insight into the process of interpreting the seven sonatas for cello and piano by Irish composers all of which were composed from 1968 to 1996. The focus is mainly on the cello part of these works but within the context of a duo where both instruments are of equal importance. Although composed at the end of the twentieth century the works do not use extended contemporary techniques in either instrument but follow the classical/romantic tradition of sonata-writing for cello and piano. Each of these composers, John Gibson, Brian Beckett, Joseph Grocock, Tom Cullivan, Angel Climent and Kevin O'Connell, has adapted this genre to suit their own artistic purposes. The result is seven individual works, which present interpretative challenges for the performers particularly in view of the fact that both performing editions and recordings of these works are unavailable in most cases. The performers need to rely on their own experience and knowledge to present interesting and valid performances of these sonatas.

Key concepts which form the basis for a discussion of the interpretative issues surrounding these works are the cognitive, the physical and the intuitive aspects of expert performance. The cognitive element corresponds to a performer's knowledge, which is derived not only from intellect, but from intuition. Intuition refers to knowledge based on prior experience which is almost automatic in its application. A performer is often not aware of all the cognitive steps the mind takes when making an intuitive musical decision. Gesture and movement relate to the physical embodiment of

performing. This physicality is concerned with the mechanics of cello performance, movements needed for technical purposes and gesture which is musically expressive. Intuition plays an important role in musical expressiveness which includes mood, character and emotion. In examining the preparation process of the seven sonatas by Irish composers, these three aspects are studied separately but in practice, the cognitive, the physical and the intuitive aspects of musical expertise are interconnected organically. A discovery in one area influences another area. Similarly, a difficulty within one of these aspects often mirrors a difficulty in another. It is the role of the performer to establish where and when, within the context of these diverse cello and piano sonatas, to use each of these aspects in order to gain benefit from practising and to produce a convincing performance. Practising and performing are two very different processes but are inter-related, with performance being the goal of practice. In discussion of both practice methods and performance goals, examples drawn from the seven sonatas are used to illuminate specific points.

Each of these areas of enquiry, the cognitive, the physical and the intuitive are examined separately to show how interpretative decisions, in selected examples from each of these cello sonatas, are reached during the learning process. Both technical and musical challenges are discussed throughout all stages of performance preparation with emphasis on how technical solutions to difficult passages can serve musical intent. Similarly, when a player has a clear musical concept of a specific passage, then knowledge and experience often combine to suggest the most appropriate technical solution. Three interpretative models are adapted to cello performance. The first model focuses on the

technical devices required to achieve a particular effect. The second model is based on a hierarchy of performance cues and is closely connected with the cognitive approach. The ability to securely repeat an interpretation of a work is a feature of this model. The third model suggests that a secure and expressive performance requires a solo performer to use a combination of intellect, technical mastery and informed intuition. During the preparation and performance process, these three models provide a useful framework for further discussion into issues relevant to cello performance. This practice-based research can be readily applied not only to these sonatas by Irish composers, but to other works from the cello repertoire, where similar interpretative challenges are presented to the performer.

Increasing or decreasing energy is the method used to carry out the performer's decisions on all musical levels, both on the large-scale and on the detailed level. Recent research into the expressivity of music demonstrates that music consists of 'continuously variable energy levels' which are integrated over a time period into a 'hierarchy of energy profiles' comprising the main components of musical expression: tempo, articulation, dynamics, timbre and vibrato.¹ This technologically based model is identical to Dorothy DeLay's process model for interpretation, which is based on varying energy levels in all technical and musical aspects of a work in a creative way.² The importance of using varying energy levels in shaping either a short phrase or a

¹ Todd, N., 'A Model of Expressive Timing in Tonal Music', *Music perception*, Vol. 3, No. 1 (1985), 33-58; quoted in Clarke, Eric, 'Expression in Performance: Generativity, Perception and Semiosis', in Rink, John (ed.), *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), 24-27.

² Gholson, Sylvia, 'Dorothy DeLay's Energy List: A Process Model for Musical Interpretation', *American String Teacher* (February 1999), 42-46.

movement of a work are demonstrated in examples from each of the seven Irish cello and piano sonatas.

During the practice process, as musical decisions are reached, the technical goal is to ensure that these decisions are easily repeated – certain aspects of performance then are memorised or automatic. This is necessary and is advantageous in allowing the performer more ‘freedom’ in other aspects of performance. Flexibility is one of the key elements of vital and expressive performance and is essential in this sonata repertoire where both instruments are equally important. For example, a change in dynamic or pacing in one instrument often demands a reaction from the other player. The performer’s ability to ‘adjust the energy elements of the tonal impulse in a way that enhances and reinforces’ the musical tension that is inherently part of its structure is probably the most important element of interpretation.³ This flexibility gives rise to spontaneity in performance which in turn can give lead to discovery of new ideas which can then be incorporated into further performances of a particular work. In this way some ‘learning’ of a new work can take place only through actual performance.⁴ Post-performance evaluation involves reflection on passages that did not succeed and may need to be reworked. More significantly, reflection on passages that were effective or simply different from rehearsal often leads to new discoveries and concepts that can be transferred to future performances of the same or another similar situation in another work. In this way, it can be seen that although each of the sonatas being examined

³ Barra, Donald, *The Dynamic Performance: A Performer’s Guide to Musical Interpretation and Expression* (New Jersey: Prentice-Hall, Inc., 1983), 2.

⁴ ‘The Alchemy Project: Qualitative Transformations in Chamber Music Performance’, (Accessed 20 October 2010), <<http://www.web.mdx.ac.uk/alchemy/summary.html>>

present different challenges, fundamental aspects of the preparation process and performance remain constant.

These seven sonatas by John Gibson, Brian Beckett, Joseph Grocock, Tom Cullivan, Angel Climent and Kevin O'Connell provide ample scope for flexibility and individuality for the cellist, particularly in view of the fact that they are not, as yet, part of the standard cello and piano duo repertoire. All of these sonatas offer interpretative and technical challenges that can be transferred usefully to other works. A diversity of styles is represented with some of these works being suitable for pedagogical purposes.⁵ However, musical maturity is still required even for the sonatas that are technically easier. In general, these sonatas are idiomatically written with a strong musical value which provides an important body of repertoire for cello and piano by Irish composers.

⁵ The sonatina by John Gibson and the sonata by Joseph Grocock provide suitable material for pedagogical purposes.

Appendix A

John Gibson (b. 1951)

John Gibson was born in Dublin and began piano lessons at five years of age with his mother.¹ His piano studies continued at the Dublin College of Music with Patricia Herbert and later at the Royal Irish Academy of Music with Rhona Marshall. He also studied composition with A. J. Potter at the Royal Irish Academy of Music, where he was a fellow student with Brian Beckett and Derek Ball.² He was a founder member of the Association of Young Irish Composers.³ Gibson has performed solo and chamber music recitals internationally and his compositions have been performed in Ireland, Europe, Japan, South America and China. Awards include the ‘Nijinsky’ Medal (awarded by the Polish Ministry of the Arts in 1997), the Dublin Arts Festival Prize and second prize at the O’Riada Competition at the Cork International Choral Festival. He has worked with such renowned musicians as Karlheinz Stockhausen and Witold Lutoslawski.⁴ Five CDs of his music have been released, the most recent being the chamber opera ‘Judith and Holofernes’ (2002) and a compilation album ‘The John Gibson Collection’ (2004).⁵ In 2006 Gibson was awarded a first class honours MA in composition from the Cork School of Music, where he lectures in piano and co-ordinates

¹ Contemporary Music Centre, ‘John Gibson’, (Accessed 24 June 2008), <<http://www.cmc.ie>>

² CMC, ‘An Interview with John Gibson’, (Accessed 24 June 2008), <<http://www.cmc.ie>>

³ The Association of Young Irish Composers (AYIC) was founded in 1971 as a representative body for emerging Irish composers. Founder members included John Gibson, Derek Ball and Brian Beckett. This later became the Association of Irish Composers (AIC).

⁴ CMC, ‘What’s it like to be John Gibson’, (Accessed 24 June 2008), <<http://www.cmc.ie>>

⁵ These CDs are available from CMC: *Judith and Holofernes*, JG004 and *The John Gibson Collection*, JG005.

the Masters course in composition. Recent commissions include a work for the Dublin AXA International Piano Competition and *Ikon* for the RTÉ Vanbrugh String Quartet.

Brian Beckett (b. 1950)

Brian Beckett was born in Dublin and started composing at the age of eight. Having studied piano at the Royal Irish Academy of Music with Valerie Walker and Dina Copeman, his studies continued there in the field of composition with A. J. Potter and James Wilson.⁶ In 1973 he graduated with a BMus from Trinity College Dublin.⁷ Beckett was one of the founder members of the Association of Young Irish Composers and later the Association of Irish Composers.⁸ Awards for composition include the Chamber Music Prize (Composition) at the *Feis Ceoil* and the Vandeleur Academy Scholarship for composition at the Royal Irish Academy of Music.⁹ At Kilkenny Arts Festival in 1977 Beckett was selected as composer of the year and three years later he represented Ireland at the European Rostrum of Composers.¹⁰ At the Royal Irish Academy of Music Beckett lectures in piano and in 1986 was elected chairman of a committee of newly appointed senior examiners to the local centre examination board.¹¹

⁶ CMC. 'Brian Beckett', (Accessed 10 October 2000), <<http://www.cmc.ie>>

⁷ Ibid.

⁸ The Association of Irish Composers (AIC) developed directly from the earlier Association of Young Irish Composers which had been founded in 1971 to provide a forum for performances of new works by emerging Irish composers. Notable founding members of the AIC were Gerald Barry, Gerard Victory and Raymond Deane. At present the AIC is the principal representative body for Irish composers and is the Irish branch of the International Society for Contemporary Composers.

⁹ CMC, 'Brian Beckett'.

¹⁰ The Irish work performed at the European Rostrum of Composers 1980 was Beckett's Preludes for Harp and Piano.

¹¹ Pine, Richard and Acton, Charles (eds.), *To Talent Alone: The Royal Irish Academy of Music 1848-1998* (Dublin: Gill & Macmillan, 1998), 312.

Joseph Grocock (1913-1997)

Born in Croydon, England, Joseph Grocock began his musical studies as a choral scholar at St Michael's, Tenbury where he became head chorister. At Christ Church, Oxford, Grocock studied classics and music.¹² In 1935 he moved to Ireland to take up a position as Director of Music at St Columba's College, Rathfarnham.¹³ He was a lecturer of music at Trinity College Dublin from 1970 to 1981 where he worked alongside his friend and colleague Brian Boydell in developing the music department.¹⁴ He conducted the University of Dublin Choral Society for forty years.¹⁵ Upon retirement, he returned to teaching at Trinity College Dublin, the Royal Irish Academy of Music and the Dublin College of Music.¹⁶ His input into Ireland's music education was considerable and, apart from his huge output of writing,¹⁷ his influence on the careers of music students was invaluable. In the 1950s Grocock was commissioned by *Foras Éireann*, an educational body, to carry out an extensive survey of musical activity in Ireland.¹⁸ Grocock was also active as an organist, composer and a radio broadcaster. In 1964 his services to music were recognised by a Doctorate in Music, awarded by the University of Dublin.

¹² CMC, 'Joseph Grocock', (Accessed 9 October 2000), <<http://www.cmc.ie>>

¹³ 'Joseph Grocock: Obitury', (n.a), *New Music News*, September 1997, (Accessed 24 June 2008), <<http://cmc.ie>>

¹⁴ Ibid.

¹⁵ CMC, 'Joseph Grocock', (Accessed 9 October 2000), <<http://www.cmc.ie>>

¹⁶ 'Joseph Grocock: Obitury', *New Music News*.

¹⁷ Topics of interest include discussion of ear-training, counterpoint, harmony and sight-singing.

¹⁸ Joseph Grocock, *A General Survey of Music in the Republic of Ireland* (Dublin: Foras Éireann, 1961). The survey was begun in 1957 by Joseph Grocock to assess the state of music in schools throughout the country as a starting point in order to plan the development of a national music educational programme. In the introduction to the survey the chairman of *Foras Éireann* stated that it was 'the first step in a campaign to revitalise music in Ireland': quoted in McCarty, Marie, *Passing it on: Transmission of Music in Irish Culture* (Cork: Cork University Press, 1999), 244.

Studying the works of Bach was a life-long project culminating in his analytical treatise on Bach's fugal compositions which was published posthumously in 2003.¹⁹

Tom Cullivan (b. 1939)

Tom Cullivan was born in Cavan and began his musical studies on the piano at an early age. Coming from a family background with an interest in Irish traditional music his compositions show influence of both classical and traditional music. Cullivan is a former Chairman of the Association of Irish Composers.²⁰ While still a student at the National University of Ireland, Galway, he was involved with the College Drama Society as composer and musical director. During the 1970s Cullivan composed fourteen scores for other theatre companies, including *An Taibhdhearc* and *Druid*. Later work for the theatre includes four musical shows on aspects of Irish culture (the great harper/composers, the poetry and song of the Jacobite century, the 1798 and 1803 rebellions and John Stanislaus Joyce) which he created for the late actor/singer Martin Dempsey, as well as his involvement as musical director for the Dublin Theatre Company's recent revival of J. P. Donleavy's *The Ginger Man*.²¹ Cullivan's work has been performed throughout Ireland, Europe and the USA. He has composed in all genres and his chamber music catalogue includes seventeen sonatas.²²

¹⁹ Groocock, Joseph, (Tomita, Yo ed.), *Fugal Composition - A Guide to the Study of Bach's '48'* (Westport, CT: Greenwood Press, 2003).

²⁰ CMC, 'Tom Cullivan', (Accessed 24 March 2009), <<http://www.cmc.ie>>

²¹ Tom Cullivan, personal communication, 14 June 2010.

²² Tom Cullivan has composed sonatas for the following instruments: piano (eight sonatas), violin and piano (two sonatas), violin and harp (one sonata), viola and piano (two sonatas), cello and piano (one sonata), flute and piano (one sonata) and bassoon and piano (two sonatas).

Kevin O'Connell (b. 1958)

Kevin O'Connell was born in Derry and started to compose at a young age. While still a student he was winner of the composer's prize at the RTÉ Musician of the Future competition and at the age of twenty-five composed his first commissioned work for BBC Radio 3. His work is played internationally and is regularly broadcast on RTÉ and BBC. During the 1990s his output included three chamber operas: *Sensational!* and *My Love, My Umbrella* were both commissioned by Opera Theatre Company and toured Ireland, the UK and Germany, while *The Fire King* was conducted by the composer in performances in Derry and Los Angeles. Instrumental works include a commission for the 2000 AXA Dublin International Piano Competition (this was the first Etude of a set of five) and an enormous forty-seven minute work for string quartet which was commissioned by Dun Laoghaire-Rathdown County Council as part of a composer-in-residence scheme. This work was premiered in 2002 by the Lotus Quartet of Stuttgart. More recent commissions include Four Orchestral Pieces (2003-2006) which are called *Vestiges*, *Sláttar*, *Tubilustrium* and *Prelude with Carillon*. In 1995 O'Connell was artistic director of RTÉ Living Music Festival. Kevin O'Connell teaches composition in the Musicianship Department of the Royal Irish Academy of Music and is a member of Aosdana.²³

²³ CMC, 'Kevin O' Connell', (Accessed 9 October 2000), <<http://www.cmc.ie>>

Angel Climent (b. 1942)

Although born in Spain, Angel Climent has lived in Ireland for most of his creative life. He started musical studies at the Valencia Conservatoire where he learned piano.²⁴ Under the guidance of choirmasters Vincente Sansaloni and Eduardo Soler, Climent sang as a chorister in Valencia Cathedral and absorbed the repertoire of sixteenth-century polyphonic church music and Gregorian chant.²⁵ The choir was expected to perform at other churches in the area and Climent was called upon to play as organist on these occasions. Keyboard improvisation was taught by Climent's instrumental teacher, Leopold Magenti, and became an important compositional tool for Climent.²⁶ In 1962 Climent moved to Ireland to take up a position as organist and choirmaster in St Anne's and St Mary's churches, Cork. Two years later he took a position in the Spanish Army in Africa until, in 1966, he returned to Cork School of Music to take up a position in the keyboard department, where he remained until 1999. His works consist mainly of choral church music, mostly masses and motets, while his chamber music compositions include a string quartet, a suite for flute and piano and three works for cello.

²⁴ CMC, 'Angel Climent', (Accessed 22 October 2001), <<http://www.cmc.ie>>

²⁵ De Barra, Seamus, 'A Profile of Angel Climent', *The Journal of Music in Ireland* (January/February 2002), 21.

²⁶ *Ibid.*, 21-22.

Appendix B

Irish Works for Cello from 1950-

WORKS FOR CELLO AND PIANO

Composer	Birth	Title	Time
Agnew, Elaine	(1967)	<i>Philip's Peace</i> (1994)	10'
Ball, Derek	(1949)	<i>Plumed Serpent</i> (2007)	10'
Beckett, Brian	(1950)	<i>Fantasia</i> (1972)	7'
		<i>Sonata for Cello and Piano, No. 1</i> (1970)	18'
		<i>Sonata for Cello and Piano, No. 2</i> (1973)	30'
		<i>Caddy</i> (1974)	3'
Clarke, Rhona	(1958)	<i>The Waterford Suite</i>	8'
Climont, Angel	(1942)	<i>Sonata for Cello and Piano</i> (1996)	33'
		<i>Gitana</i> (1995)	4'
Corcoran, Frank	(1944)	<i>Gestures of Sound and Silence</i> (1976)	12'
Cullivan, Tom	(1939)	<i>Sonata for Cello and Piano</i> (1993/rev. 2000)	22'
Deane, Raymond	(1953)	<i>Lichtzwang</i> (1979)	8'
Gibson, John	(1951)	<i>Sonatina</i> (1968)	9'
		<i>Five Irish Airs</i> (1994/rev. 2004)	10'
Grocock, Joseph	(1913-1997)	<i>Sonata for Cello and Piano</i> (1985)	15'
		<i>Quite Contrary</i> (1994)	10'
		<i>Passacaglia</i> (1994)	12'
		<i>Theme and Variations I</i> (1983)	15'
		<i>Theme and Variations II</i> (1984)	20'
Ingoldsby, Marion	(1965)	<i>For Catherine</i> (2004)	8'
O'Connell, Kevin	(1958)	<i>Sonata for Cello and Piano</i> (1993-1995)	27'
Sweeney, Eric	(1948)	<i>Mandala 3</i> (1996)	6'
Wilson, James	(1922-2005)	<i>Sonata</i> (2004)	15'
Victory, Gerard	(1921-1995)	<i>Air Exotique</i> (1975) Cello/bassoon	5'
Wilson, Ian	(1964)	<i>Six Days at Jericho</i> (1995)	9'

WORKS FOR CELLO AND ANOTHER INSTRUMENT (NOT PIANO)

Deane, Raymond	(1953)	<i>Ein Blatt Baumlos</i> (1977/1990) Cello, percussion	5'
Cleary, Siobhan	(1970)	<i>Pipoon</i> (2000) Harp, cello	6'
Guy, Barry	(1947)	<i>Redshift</i> (1998) Two cellos	8'
Hayes, Paul	(1951)	<i>Bounce</i> (1989) Cello, tape	10'
Hurley, Donal	(1950)	<i>Recitative for Horn or Cello</i> (1986)	4'
Kinsella, John	(1932)	<i>Upstairs, Downstairs</i> (1999)	10'
Mills, Alan	(1964)	<i>Memorial</i> (1998)	6'
Mulvey, Grainne	(1966)	<i>Arachnid</i> (1991) Cello, percussion	7'
O'Connell, Kevin	(1958)	<i>Contratempo</i> (1999) Cello, flute	5'
O'Leary, Jane	(1946)	<i>Duo for Violin and Cello</i> (1994)	16'

Sweeney, Eric (1948)	<i>Comhra</i> (1998) Violin, cello	6'
Wolf Brennan, J. (1954)	<i>Dialogos</i> Op. 106 (1994) Two cellos	8'
Wilson, Ian (1964)	<i>Bane</i> (1989) Violin/cello with digital delay	11'

SOLO CELLO WORKS

Buckley, John (1951)	<i>Three Pieces for Solo Cello</i> (1995)	9'
Clarke, Rhona (1958)	<i>In Umbra</i> (2000)	4'
Climent, Angel (1942)	<i>Suite for Solo Cello</i> (1997)	20'
Corcoran, Frank (1944)	<i>Ice-Etchings</i> No. 2 (1996)	8'
	<i>Suite for Cello</i> (1972)	10'
Farrell, Eibhlis (1953)	<i>Stillson</i> (1994)	3'
Geary, Bernard (1934)	<i>Prelude and Interlude</i> (1980)	4'
Martin, Philip (1947)	<i>Suite for Solo Cello</i> (1997)	15'
McLachlan, John (1964)	<i>Two Movements for Solo Cello</i> (1988)	5'
O'Connell, Kevin (1958)	<i>Epithalamium</i> 1 (1998)	3'
	<i>Epithalamium</i> 2 (1998)	3'
	<i>Accord</i> (2010)	7'
O'Farrell, Anne-Marie (1966)	<i>Suite for Cello</i> (1998)	12'
Wilson, Ian (1964)	<i>The Harlequin's Carnival</i> (1995)	12'
Wilson, James	<i>Fantasia for Solo Cello</i> (1974)	10'
	<i>For Cliodhna</i> (1992)	9'
	<i>Aceldama</i> (1998)	30'

CELLO AND ORCHESTRA

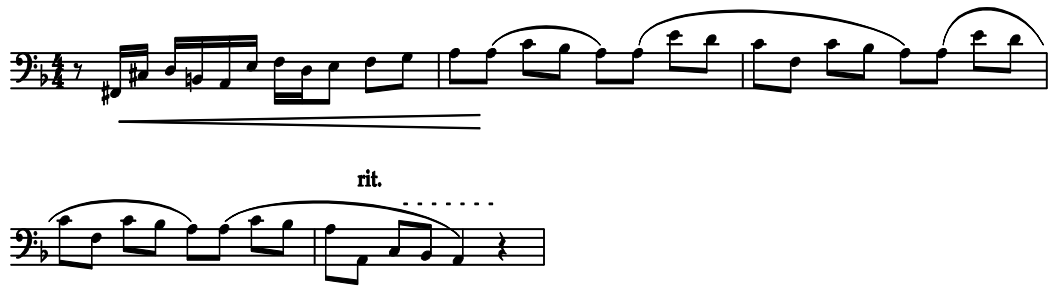
Kinsella, John (1932)	<i>Music for Cello and Chamber Orchestra</i> (1971)	17'
Volans, Kevin (1949)	<i>Cello Concerto</i> (1997)	21'
Wilson, Ian (1964)	<i>Shining Forth</i> (1998)	21'
Climent, Angel (1942)	<i>Concerto in A minor</i> (2000)	25'

Appendix C

Angel Climent: Sonata for Cello and Piano, second movement, bars 23-37, first version
(1996):¹

Appendix C

Climent - Sonata: II, bars 23 - 27



¹ The first version (handwritten) differs in the piano part. The above segment, which is more idiomatic for the cello, is only in the corresponding handwritten cello part.

Appendix D

Dorothy Delay's Energy List¹

less	<u>ENERGY</u>	more
	<u>Sound</u>	
	Bow	
slower	1. Bow speed	faster
towards fingerboard	2. Sounding Point	towards bridge
less pressure	3. Weight	more pressure
	Left hand	
slower finger action	4. Articulation	faster finger action
slower	5. Vibrato	faster
slower	6. Shifting	faster
	<u>Rhythm & Pacing</u>	
slower	1. Tempo	faster
getting slower (rit.)	2. Tempo change	getting faster (accel.)
Slower	3. Small groups (double dotting) etc.	faster
	<u>Intonation</u>	
lower vibration (lower)	1. Pitch	higher vibration (higher)

¹ Gholson, Sylvia, 'Dorothy DeLay's Energy List: A Process Model for Musical Interpretation', *American String Teacher* (February 1999), 42-45.

Appendix E

Irish Cello Sonatas: Details of performances and recordings up to 2008

John Gibson: premiere performance Aisling Drury-Byrne (cello) and John Gibson (piano), Young Composers Concert Series, Royal Irish Academy of Music, 1968, no recording.

Brian Beckett: Sonata 1, premiere performance, Aisling Drury-Byrne (cello) and Brian Beckett (piano), Dublin Festival of Twentieth-Century Music, 9 January 1971, recorded and broadcast by R  , a tape of this live performance available in CMC

Brian Beckett: Sonata 2, premiere performance, Aisling Drury-Byrne (cello) and Brian Beckett (piano), Dublin Arts Festival, 1973, no recording

Joseph Grocock: premiere performance, Niall O'Loughlin (cello) and Padhraic O'Cuinneagain (piano), St Ann's Church, Dublin, 1989, no recording

Tom Cullivan: premiere performance, David James (cello) and Padhraic O'Cuinneagain (piano), O'Connell Hall, Dublin, 24 November 1994, no recording

Kevin O'Connell: premiere performance, Raphael Wallfisch (cello) and John York (piano), Guildhall, Derry, 12 September 1996, recorded and broadcast for BBC Radio 3, a tape of this recording available in CMC. Second performance, David O'Connell (cello) and Francis King (piano), Hugh Lane Gallery of Modern Art, Dublin, 12 March 2000, no recording

Angel Climent: premiere performance, Gerard Kelly (cello) and Jan Cap (piano), Crawford Art Gallery, Cork, 29 June 1997, no recording

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