INTERPRETATIVE ISSUES IN PERFORMING CONTEMPORARY PIANO MUSIC

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SUMMARY

This thesis explores practical and theoretical issues in interpreting contemporary notated piano music. Interpretative problems and approaches are discussed with a practical bias, using a varied selection of musical sources mostly from the last fifty years. The diversity of compositional styles and methods over this period is reflected in the diversity of interpretative approaches discussed throughout this thesis. A feature of the thesis is that no single interpretative method is championed; instead, different approaches are evaluated to highlight their benefits to interpretation, as well as their limitations. It is demonstrated how each piece demands its own approach to interpretation, drawing from different methodologies to varying degrees in order to create a convincing interpretation which reflects the concerns of that piece and its composer.

The thesis is divided into four chapters: the first discusses the implications and ambiguities of notation in contemporary music; the second evaluates the importance of analysis and its application to performance and includes a discussion of the existing performance practice literature as well as short performer-based analyses of three pieces (Saxton's Piano Sonata, Tippett's Second Piano Sonata, and Feldman's Triadic Memories); the third chapter considers notions of style and performing traditions, illustrating the factors other than analysis that can 'inform' interpretation; and the fourth chapter draws together the processes demonstrated in the previous chapters in a discussion of the interpretative issues raised by Berio's Sequenza IV. Although each chapter selects examples which illustrate the concern of that chapter, the discussion of each extract is informed by processes found in the other chapters.

Discussion is based upon personal experiences and those of nine professional pianists, well-known for their performances of contemporary
music. This allows for an objective attitude which accepts a range of possible approaches to a single piece as being valid. It is intended that consideration of these approaches will combine to widen interpretative possibilities and illustrate the complexity and multiplicity of the interpretative process.
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Introduction

An appropriate subtitle for this study might be 'The De-Mystification of the Contemporary Music Learning Process'. For many performers, the nature of most twentieth-century music suggests an intellectual and analytical approach, whilst traditional music (that is, music written before about 1920 and based around tonal principles) is more immediately comprehensible. I would suggest that the primary obstacle which prevents many performers from learning contemporary music is the element of unfamiliarity. Unfamiliarity with notational practices, compositional processes, performance traditions, and many other issues, combine to dishearten and frustrate the performer. Paradoxically, it is these very qualities of unfamiliarity that serve to motivate some performers, including most of those interviewed for this study, toward learning new music. The originality, perhaps radicalness, of much new music, combined with an absence of performing tradition, creates for these performers a sense of freedom which is limited in music which has a well-established performing tradition. The pressures of performance history or the audience's ingrained expectations may constrain the interpretation of traditional music.

In research which draws from interviews with 22 professional musicians Dr. Sue Hallam concludes "It seems a more intellectual approach is required for learning modern atonal music, which is stimulating for the analytic holists, but creates difficulties for the intuitive serialists."¹ Though this may be a fair representation of the attitudes of those interviewed, the conclusion must be challenged. The aim of this thesis is to consider methods of interpretation

1. Dr. Sue Hallam, 'Issues in learning and practice' (paper given at the conference of the Society for research in Psychology of Music and Music Education, 22nd October, 1994). The term 'analytic holists' referred to performers who 'adopted an approach which was analytic in nature'; the term 'intuitive serialists' referred to musicians who processed 'without awareness and a "bottom up" approach where interpretation develops as the music is learnt'.
(applied to contemporary piano music) that extend beyond the preconceptions outlined above. It is hoped that the perceived mystery surrounding the interpretation of new music will be dissipated as issues of unfamiliarity are addressed with a practical bias. The intention is also to highlight problems and specific points of ambiguity in order to challenge received traditions and theories concerning interpretation. It is not the intention to simplify the interpretative process, or to provide a set of formulae to apply to all interpretation, but to clarify and address relevant issues as being demonstrative of different interpretative approaches.

Many issues discussed will be relevant to the interpretation of all contemporary music, and this study is not intended to apply exclusively to the piano domain. However, contemporary piano music is the focal medium from which examples are taken and considered. Primarily this is because I am a pianist, and much of the theoretical discussion, and choice of examples, is derived from my own experience of playing this repertoire. In addition there are certain features which are unique to (or most common in) piano performance. Not least of these is the soloistic aspect of performance: though the solo repertoire of other instruments has increased considerably in the last sixty years, the piano retains a prominent role as a solo vehicle for compositional expression. The independence of the interpreter, unable to rely on an accompanist or partner, is an interpretative factor that unites piano music of all periods.

For this reason, the decision to restrict this study to solo piano music, excluding chamber music, concertos, electro-acoustic music, etc., highlights the interpretative role of the individual. Consequently, issues of ensemble co-ordination are omitted from discussion. Many practical points of interpretation may, however, still apply to ensemble music, such as the interpretation of notation and issues of prioritisation.
The concentration on *notated* music ensures the link with traditional notions of interpretation. It must be stressed that the prioritisation of notated music as *one form* of 'contemporary music' (a term presumptuously appropriated by proponents of notated music to the exclusion of other types, such as jazz and freely improvised music) applies only within the limitations of this study. Consideration of entirely graphic scores, such as those by Busotti or Cardew, is outside the limitations of this study, being more associated with free improvisation.

The plurality of approaches and responses of different performers to contemporary music is comparable to the differences in background and aesthetic of today's composers. This is reflected in every aspect of composition: the multifariousness of musical notation results in new symbols, some of which are adapted to common usage, many of which never become standard, and some of which have multiple meanings; new systems and methods of composition are invented with every piece for some composers, whilst others adapt and renew traditional constructs; the relationship of the composer with Western musical tradition, or other traditions - through modes of harmony, gesture, rhythm - is different for each composer, and is likely to change as the composer develops.

The above factors, and many others, mean that there are no absolutes: the performer can take nothing for granted. Priorities, stylistic considerations, and notational details must be re-examined with each new piece. Though for some this may seem like too much effort, for many, I suggest, the 'tabula rasa' approach to each piece provides an arena for creativity and discovery. This study encourages active consideration of the interpretative options available at every moment in a work. This does not demand total comprehension of every compositional feature, or a rigorously intellectual mind, but encourages deliberation of possible responses, as a performer, to the score. Different levels of discovery, explored in this thesis, produce
different levels of response, some of which may complement another, others of which may be contradictory. It is not the aim to decipher every level of activity in a piece, but rather to form musical and aesthetic responses that will shape and guide interpretation.

A consistent dialectical thread throughout this study is the need for individual performer creativity, and the 'duty' of considering the composer's intentions. The need for both is integral to any performance of a notated work. In the examples given, I have tried to illustrate how both these factors of interpretation can be embraced without contradiction. This may be achieved, for example, by demonstrating individual interpretative choices in extremely detailed works, and appropriately reflecting the composer's intention in more freely notated works. In this context, the issue of the composer's responsibility to the performer is discussed, and likewise the performer's responsibility to the composer.

The main body of the thesis is organised in three chapters representing three aspects of interpretation: notation; analysis; and performance style. It is acknowledged that isolating these three factors in this way is unrepresentative of the interpretative process: it is impossible to discuss any one of these areas without mention of its wider ramifications on the other areas. Thus there is a degree of overlap between chapters. However, each chapter makes a focus of its particular aspect of interpretation, discussing it in detail with reference to music that is problematic in, or illustrative of, that area.

Some individual pieces form a link between chapters, leaving the reader to combine and contrast the different aspects discussed of the same piece. To illustrate how the issues raised in each chapter combine to shape a single interpretation, the final chapter is a case-study of Berio's Sequenza IV. This work raises many questions concerning interpretation of all aspects of its composition and notation.
The selection of repertoire presented in this thesis represents, to some extent, my personal tastes. This is in order to propose theories that are grounded in practical experience, developed through actual processes of interpretation rather than hypothetical notions of 'virtual' interpretation. However, a wide spectrum of musical styles is covered, from varying traditions. Thus music by composers as diverse as Morton Feldman, Michael Finnissy, Robert Saxton, Howard Skempton, Karlheinz Stockhausen and Michael Tippett features heavily. Works of other composers, such as Boulez, Ferneyhough, Schnittke and Xenakis, are presented as being demonstrative of a particular issue. Discussion of these works is based upon 'imaginary' interpretations (developed through careful consideration of the issues they present without actual resort to practice) and through other sources, outlined below.

A comprehensive survey of the contemporary piano repertoire is not the intention of this thesis. Choice of repertoire is thus selective and restricted in order to demonstrate particular issues that may then be appropriated to the interpretation of other works not mentioned. Critical commentary of the compositional concerns of a work is also excluded from this study; methods of realising, analysing, shaping and articulating those concerns are of greater priority. Discussion is always centred around the performer and interpretative concerns.

Most of the research for this study has been drawn from personal experience of playing the works under consideration. Other than this, research has been of two types: i) study of available literature relating to performance and individual composers, and ii) interviews with nine professional pianists, renowned for their performances of contemporary music.

The precedents for a study of this nature are few. Whilst the field of performance studies has witnessed significant developments and additions in
the last ten years, the study of contemporary music performance is almost totally neglected. Though recent performance literature addresses shared issues, particularly the relationship of analysis to performance, the context is generally a strictly functional tonal framework. The appropriation of these ideas within a non-tonal context is explored in the second chapter of this study.

The contemporary music literature is generally restricted to individual composer portraits. Though these provide important background to and discussion of composers and their works, they are not directed toward the concerns of performance. For many composers, this may be because a performance tradition has yet to be established beyond one or two performers. Thus discussion is centred around the compositional structure of individual works and composers' methodology and aesthetic. Broader surveys of contemporary repertoire, such as David Burge's *Twentieth Century Piano Music*,¹ have tended to focus upon the compositions themselves, giving mention to performance only with regard to practical problems of execution. Even studies of the most complex music, where performance problems (technical and interpretative) are a primary feature of the music, divert discussion away from performance and toward the composition itself. Two notable exceptions, both of which discuss the same work, can be taken to be models for this study: Peter Hill's and Marc Couroux's essays on *Evryali* by Xenakis² (discussed in the third chapter). These address practical issues of interpretation, applying aesthetic appreciation and musical reasoning to problematic passages.

The absence of literature related to contemporary music, by performers and for performers, prompted a series of interviews with other pianists, all of whom are experienced in the performance of new music. These included

established pianists and three younger champions of contemporary music. Though much of the repertoire was shared territory, the basic musical aesthetics were different for each pianist, reflected in their preferred choice of repertoire. For example, a greater interest in music associated with the 'new complexity' movement was held by the younger pianists, though for different reasons.

Interviews were semi-structured, with a set of questions common to each (see Appendix A). However, these were not adhered to in a rigorously scientific manner, but used as a basis for discussion. My role was to encourage the interviewees to express honestly their approaches to the learning process. I adapted and added to the questions when appropriate, lending a conversational slant to the interview. Each interviewee was sent the questions beforehand to give them time to formulate some ideas and to prepare them for the issues being addressed.

Discussion of Michael Finnissy's piano music is aided by two substantial interviews with the composer. The first of these is in part based upon the standard questions in Appendix A, given that Finnissy is a virtuoso performer of other composers' music as well as his own. The second interview, conducted about sixteen months later, is an extension of a session in which I worked on a number of his pieces with him, inviting critical discussion of my performances and of the music itself. The nature of his music, and its notation, raises many important questions concerning interpretation, not merely of his own music but of notated music generally, and it is for this reason that his music is discussed at greater length.

The different approaches to interpretation practised by the pianists interviewed reflect the pluralistic nature of this thesis. The intention is not to present a single best method of learning or to propose a single solution to particular problems. Instead, different angles to the same problem are
revealed, which may be complementary or contradictory. Advantages and disadvantages of each response are objectively presented, to allow for the possibilities of contrasting interpretations. There is a need for fresh and varied interpretations of contemporary works if they are to outlast their original impact. It is hoped that this study will encourage active engagement with contemporary works, offering practical responses and stimuli to the interpreter.
CHAPTER ONE

Notation

and

Interpretation
Notation and Interpretation

Ambiguity is inherent in all notation. No two realisations of the same passage will be identical given the uniqueness of each performer and each instrument as well as the imperfections of human playing technique. As Jean-Charles François writes "...musical notation represents only an imprecise concept of a certain way of perceiving sounds, and not their acoustical properties." The duration, dynamic and required attack of a given note will always be subject to query, whether a decision be arrived at through reasoned analysis, notions of stylistic appropriateness, or intuition.

The trend of many twentieth-century composers to attach numerous symbols relating to attack, dynamic, tempo and timbre, to each pitch reveals the sometimes desperate attempt to retain, or rather, to gain control of each sound. Now, in the latter part of the century, many composers are realising the futility of such a totalitarian approach in the face of performer uniqueness and capabilities. Roger Redgate argues

the degree to which composers accept inherited notions of the function and possible limits of the notational system is inversely proportional to their critical awareness of notation's structural function as an integral component of the expressive discourse.²

Many of the composers classed as belonging to the "new complexity" school (Brian Ferneyhough, Chris Dench, Richard Barrett, etc.) write highly detailed music in full realisation of notation's limitations, exploiting it as a feature. Their music is often criticised because their methods of notation are construed as being purely the result of compositional procedures rather than being performance-oriented. At the other end of the spectrum are those composers

who opt for a notational simplicity, such as Howard Skempton, Chris Newman, Arvo Pärt, Morton Feldman (in his early works). The term 'notational simplicity' does not reflect the music's aesthetic or acoustic result, which, in these composers, is by no means simple. The technical and intellectual demands on the performer in music of this kind are no less than in music which is more highly detailed in its notation.

To discuss the complex nature of notation in contemporary piano music is the intention of this chapter. The realisation of notation in performance with regard to issues of style and tradition will be discussed primarily in chapter three, though notions of stylistic appropriateness will have some bearing here. The present chapter is divided into two parts: discussion of i) the meaning and re-evaluation of traditional aspects of notation in contemporary music (such as the use of dynamics, the bar line, phrasing, etc.), and ii) the development of traditional notation, focusing primarily on rhythmic and durational aspects of notation. What is not the intention here is to provide an index to all possible alternative and innovative forms of notation. A comprehensive list of this kind can be found in Erhard Karkoschka's Notation in New Music (1966). It is significant that this list was compiled in 1966 and can still be said to embrace the extremes of avant-garde notation. Since that time it is fair to say that the exploratory, and often graphic, nature of musical notation has not developed beyond these extremes to any significant extent. Today's composers, whether it be Brian Ferneyhough or Arvo Pärt, have been content, certainly with regard to piano music, to employ traditional forms of notation, with added verbal instructions where necessary.

Two years before Karkoschka's work, the renowned pianist Aloys Kontarsky, a key figure in the 1950's and 60's avant-garde, wrote an (at times humorous) article for the collection Darmstädter Beiträge zur Neuen Musik entitled 'Notation for piano'. In it he addressed practical issues of avant-garde

notation, highlighting those innovations he considered to be of value, and dismissing those which he considered to be unhelpful. He questioned the "assertion, made occasionally, that the particular structure of a composition always requires its own method of notation" and noted that "Time and again, two different symbols stand for a single action, or conversely, a specific symbol has totally divergent meanings in two different pieces".¹

As the days when learning a new set of symbols for each piece are mostly past, I have chosen in this chapter not to focus on these isolated works of the 1950's and 1960's avant-garde, with notable exceptions (such as Stockhausen and Feldman). However, despite a return to traditional forms of notation in recent music, it is still the case that one symbol may have opposing meanings in two different works. To counteract this, the pianist Andrew Ball suggests that "It should be down to the composer to write a short foreword explaining which of the various traditions they might be using".² Though this would undoubtedly be of interest to the performer, one could also see how a composer might find this limiting. It is not often that a work is prefaced by more than a couple of sentences referring to some aspect of the notation and its intended interpretation; the performer must consider the possibilities and contradictions each symbol, traditional or otherwise, offers. The following sections consider these implications, focusing upon a different aspect of notation in turn.

OLD SIGNS, NEW MUSIC

As the title implies, this section is concerned with the use of traditional forms of notation in contemporary piano music. Examples will be presented and discussed which illustrate how a symbol may i) signify one of

1. Aloys Kontarsky, 'Notation for Piano' Perspectives of New Music Vol.10, 1972 p.74
2. In conversation with Andrew Ball
two or more distinct and separate approaches in different pieces, and ii) be developed and transformed in new contexts to take on meanings that may not be immediately apparent. The focus is on music from the past fifty years, although examples from earlier in the century are considered briefly in order to provide context and/or to trace the origins of some notational developments.

Notating Pitch

Despite the occasional attack on traditional notation systems (Klaverscribo and Equitone being two alternatives,¹ neither of which have been widely accepted), and the plethora of graphic scores from the 1950's and 1960's, the clef and stave remain the most frequently used system of notating pitch today. For keyboard instruments in particular, without the facility for producing microtones, a single notated pitch remains unambiguously related to a particular position on the keyboard.² More ambiguous, however, is the notation of accidentals. As tonality was undergoing a process of dissolution, around the turn of the century, scores were heavily blackened with accidentals. It became apparent that the rule of an accidental remaining applicable to a note for the duration of the bar in which it occurred was no longer always appropriate. Despite a hundred years having passed since this time, a universal agreement has not been reached as to the appropriate method of notating accidentals.

In the brief performance notes to each piece in Spectrum,³ the recent

1. Both Klaverscribo and Equitone provide alternatives to the traditional stave. For details, see Karkoschka, op.cit. pp.11-15
2. The notation and subsequent production of harmonics by stopping the string is a separate concern and outside of this discussion. For practical details on this and similar issues see: Bunger, R. The Well Prepared Piano (Colorado, 1973); Chun, Y.H. The extension of Piano Techniques in compositions by George Crumb for solo piano (Doc.diss. University of Wisconsin, 1982); Matthew, N.W. George Crumb's Makrokosmos Volumes I and II: Considerations for Performance (Doc.diss. University of Oklahoma, 1981); the prefaces to Crumb's solo piano scores
volume of short piano works by contemporary British composers aimed at pianists of approximately Grade V to VIII standard, all but two refer to the use of accidentals. Out of twenty pieces, twelve state that "Any accidental affects the pitch it precedes for the entire bar, but should only be applied to the stave in which it appears", and six state "Any accidental refers only to the note it directly precedes". These two statements are self-explanatory though both have faults, or need clarification in the notation to some degree. The former arguably needs to naturalise notes in the subsequent bar that were previously sharpened or flattened, and perhaps also needs to reaffirm that accidental within the same bar if it be densely filled. The second method is preferable, but only if a note that is naturalised after being sharpened or flattened is notated so. If not, the natural instinct of the performer is to apply the same accidental to subsequent notes, whether or not a prefatory performance note is given. A further fault with this method concerns repeated notes; preceding each repeated note with an accidental looks messy. Perhaps the preface could be extended to "Any accidental refers only to the note it directly precedes and to immediate repetitions of that note." Unfortunately some composers either mix the two methods, conform to no discernible method, or invent a new one.

Schoenberg's first break from tonality in a piano work, the three pieces of Op.11 (1909), shows an indecisive approach to the notation of accidentals. Most notes are prefaced by an accidental but there appears to be no clear logical principle behind which notes to leave untouched and which ones to naturalise. All ambiguity is lost, however, in the five pieces of Op.23 (1920–23), in which every single note is preceded by an accidental regardless of previous markings (thus all natural notes are marked as such). Curiously, this development is reversed in Boulez's sonatas, the first (1946) of which subscribes to the Op.23 method of attaching accidentals to each note whilst the Second Sonata (1948) is more haphazard in its approach. The Op.23 method
can make the score seem even more dense than it actually is and will clearly be more or less helpful depending on the number of accidentals. The method fails when it becomes a reason for the natural sign to be no longer used. The preface to Geoffrey Poole's *TEN* (1981) instructs that accidentals apply only to the notes they precede. Each immediate repetition of a note is preceded by the same accidental (example 1.1a). There are a number of instances when a different note is intended but the previous flat or sharp has not been naturalised (example 1.1b). The pianist's instinct in such cases is to apply the previous flat or sharp throughout the bar.

Michael Finnissy opts for the Schoenberg Op.23 method in virtually all instances of his music, making it completely clear as to the intended note at first glance. The often large number of notes in a single bar (which can, particularly in his earlier works, measure over a page in length) would make the application of accidentals during the course of a bar impossible without slowly tracing their subsequent appearances. The number of sharps and flats within just a small group of notes also necessitates clarification as to which notes are naturals.

One notable exception in Finnissy's writing is a method found in two extended works for piano, *English Country Tunes* (1977) and *Folklore* (1993-4). The second movement of the former work ('Midsummer Morn'), opens with a slow diatonic melody (example 1.2a) which gradually breaks down chromatically (example 1.2b) into a violent denial of the mood it created. Over the stave is a large natural sign to indicate that all notes here are natural until and unless marked otherwise. This also has symbolic importance relevant to the interpretation, suggesting it is something other than "Finnissy" at this point; the imminent introduction of accidentals has sinister overtones, as the real crux of the movement takes centre-stage. Finnissy's recent music has become more imbued with tonal elements, reflected in the use of occasional key

1. In conversation with Poole and Peter Lawson (who premiered *TEN*)
signatures in Folklore. To a certain extent these are again symbolic of an "other" music (such as folk tunes or negro spirituals) and the composer readily inserts accidentals as reminders or to resolve any hint of ambiguity. As in English Country Tunes, a natural sign over a stave indicates that white-key notes are the norm, though here this device is used more frequently and lasts for short spaces of time, deviating chromatically into a more typical style of writing. Nowhere is there any confusion concerning the application of accidentals.

The Bar-line

Visual and Articulatory Significance

The need for a re-evaluation of the bar-line in contemporary music is predominantly the result of rhythmic developments and the radical treatment of time in music of this century. Two strains of notation resulted from the de-regularisation of rhythm in the early part of the century: a notation in which bars were of a relatively consistent, regular length and notes were grouped or phrased over the bar-line where appropriate; the other method consisting of irregular bars with changing time signatures in accordance with the rhythmic groupings. To trace and illustrate the developments of rhythmic notation is not the intention here. However, through much development and distortion of the bar-line, the performer is faced with a multitude of possible meanings attached to this single symbol. In ensemble music, the bar-line has the added and usually very necessary function of being a reference point. With much contemporary piano music it could arguably be omitted with no significant loss, possibly preventing unintended rhythmic inflections or accentuation. Indeed there are a number of pieces written without (or with very few) bar-lines that in other respects are relatively traditional in their notation. At the
opposite pole there remain many composers for whom a regular sense of metre, and with it bars of regular length, is the norm. The music of the majority of composers today falls between these extremes and it is with these that the ambiguity lies.

If a group of notes consistently crosses the bar-line the effect can be one of instability. The first movement of Webern's Variations, Op.27 (1936), is entirely in 3/16 but the phrasing and grouping of note-stems crosses and re-crosses the bar-line. For example, in the first two bars (example 1.3a) the pianist could, in the left hand, either ignore the bar-line and abide by the phrasing only, so that emphasis lies on the B, or give slightly more prominence to the G and F sharp on the first beat of bar 2. This latter interpretation appears to be representative of that expressed in Peter Stadlen's 'authentic' edition¹ (example 1.3b). Although this edition is an invaluable aid, decisions of this nature would best be treated in conjunction with an independent analytical knowledge of this work and its serial construction.

The final variation of the third movement (bar 56) raises more interesting questions concerning articulation with respect to metre. It is written entirely off the beat (being $\frac{3}{16}$ = c.80), so that an event is never placed at the beginning of the bar or on a minim beat (example 1.3c). If it were rearranged by simply moving each bar-line forward by a crotchet (so that, for example, bar 56 would consist simply of three chords falling on consecutive minim) the result would be very different from the implications of the actual notation. A chord placed on the beat will always produce an articulation that places emphasis (however subtle) on that beat, whilst the same chord played off the beat will generally have a deferred or anticipatory quality to it. The sense of instability, which pervades this variation, would be lost if each event was perceived as falling on a (shifted) beat.

In the preface to his Second Piano Sonata, Boulez writes "the bar-lines must only be seen as visual guides". There are no time signatures and the bars are of irregular lengths. For example, the first page of the printed score presents bars varying in length from two to eight quavers. One presumes that this is not the result of chance distribution but rather of applied compositional reasoning. Boulez refers to the bar-lines as "visual guides" yet gives no clue concerning what exactly they are a guide to. The first page illustrates two different ways in which the bar-line can be applied positively, interpreting it as more than a mere visual guide (example 1.4). Firstly, it delineates gestural and structural events. This can be seen between bars 3 and 4, 4 and 5, 9 and 10, 10 and 11, 14 and 15, 15 and 16, and 16 and 17. Characterising each of these points are silences, mostly either side of the bar-line. If Boulez had begun each event at the beginning of the bar, rather than some time into the bar, then the bar-line would have some kind of functional significance and consequently also an articulatory significance which suggests an emphasis on the first note. Instead, the bar-line here has significance as a compositional device which informs the performer as to the nature of the form, rather than the expression.

A second function of the bar-line in Boulez's Second Piano Sonata is to indicate a sense of pulse, a point from which to propel the music forward. The metronome indication for the first movement is \( \text{J} = 132 \), a speed which denies the possibility of a quaver pulse, and barely a crotchet pulse. Each bar, then, can be counted as a combination of crotchet and dotted crotchet units. For example, bar 3 can be divided into a dotted crotchet + crotchet unit, and bar 4 into 2 dotted crotchet units. The bar-line then acts as a 'springboard' for the A flat – A in bar 4 to react against. If, however, one ignored the bar-line and treated these two bars as a series of crotchet units, the third of which overrides the bar-line, the A flat of bar 4 would have a very different emphasis. Notated as it is there is less of an emphasis on the A flat, entering
on the second quaver of a dotted crotchet unit. For this reason, I suggest that Boulez's directive of the bar-line having only visual significance understates its real (or suggested) function here, that is to bring order to the pulse and consequently to the perception of how notes relate within that pulse.

In this piece, then, the phrasing would at first glance seem to override the function of the bar-line. Yet despite Boulez's effort to steer the pianist from attaching any significance to the bar-line, it has proved to be an important consideration for the interpreter. In the experience of the pianist Joanna MacGregor, "...often composers are a lot more conventional than you'd imagine. They're coming out of an historical tradition as well". Additionally the context may reveal the bar-line to have other implications, perhaps to clarify the compositional or performance intent.

In music that has no time signature, and consequently bars of irregular length, the bar-lines might complement other articulatory symbols, such as phrase marks, accents and dynamics. Instead of interrupting or disrupting, the bar-line is then sympathetic to the natural discourse or melodic contour of the music. Messiaen uses the bar-line in this way, allowing it to function not only in terms of articulation but also to give space to the notes within. The pianist and Messiaen scholar Peter Hill has concluded that "Messiaen means the bar-line as a phrase". George Benjamin (a one-time pupil of Messiaen) in his Piano Sonata (1978) also treats the bar-line as a form of phrasing, in conjunction with the notated phrasing (of which there is very little) and, like most music since Schoenberg, the grouping of note stems. Example 1.5 shows bars consisting of as little as one or two semiquavers. This suggests a less than strict rhythmic treatment, giving more time to isolated notes or chords and ensuring a clear articulation.

Stockhausen, in Klavierstück I and II (1952-3), structures the bar-line

1. In conversation with Joanna MacGregor
2. In conversation with Peter Hill
to coincide with the change in rhythmic ratio so that the beginning of each bar marks a new tempo, usually lasting only the length of that bar (example 1.6). He rarely ties a note over the bar so most bars begin as if on a down-beat. This effect is amplified by the change of rhythmic ratio and the complete absence of any phrase marks. In contrast, Stockhausen's Klavierstücke V-XI, with the exception of IX, are essentially barless. The only points at which bar-lines occur are at major changes of tempo, also coinciding with major structural divisions. Thus, throughout, Stockhausen utilises the bar-line as indicator of tempo changes, but little more. It could be said that Stockhausen's use of the bar-line is more of a visual guide than that of Boulez.

Brian Ferneyhough develops this use of the bar-line to mark tempo changes in Lemma-Icon-Epigram (1981), notating bars with unusual time signatures such as 5/10 or 8/12 (example 1.7). In relation to these effectual tempo changes, the bar-line signifies the point from which to measure the new "internal beat". Ferneyhough discusses the effect this has on the performer's reaction in relation to similar notation in Superscripto (1981), for solo piccolo:

...there is a click, a trigger at the beginning of each bar that coincides with this change of tempo....Ideally, both as listeners and players, our total experience should click, like a computer system, from one type of density and one type of barring system to another. 

Similarly, though in a very different type of music, Morton Feldman occasionally organised changes of tempo within bars in his later music so that each bar has its own internal beat, triggered by the bar-line. An example of

1. In the preface to Lemma-Icon-Epigram, Ferneyhough writes "In each case, the principle applicable to the derivation of more customary lengths (understood as equal subdivisions of a breve) is maintained. For example, 2/10 signifies two beats to a bar, each being equal to one-tenth of a breve. All such passages have an internal beat faster than the original quaver beat."

this occurs near the end of *Triadic Memories* (1981) where, for just two lines, the pulse is completely lost (example 1.8). The bar-line here serves no articulatory purpose save for the propelling of a tempo adjustment.

A peculiarity in the notation of *Triadic Memories* and *For Bunita Marcus* (1985), both late works and extended in length, is the insertion of repeat marks mid-way through a bar (example 1.9). The effect of this in *Triadic Memories* is to extend the length of the bar beyond its regular 3/8 duration, distorting any sense of metre. Depending on the position of the repeat, either the first or last note (or both) of the group encircled by the repeat marks will have a different articulation on the repeat if the bar-line is to have any articulatory function. In example 1.9a, the dyad marked 'x' is likely to be perceived on its first playing as an extension to the previous bar, but on the second playing as the beginning of a new bar. If the bar-line were to be ignored, however, the difference in articulation would be lessened, suggesting perhaps an articulation that is based purely on the grouping of note-stems. This affects the notation of bars 4 and 5 of this line: although the grouping of notes is the same, their position within the bar is different (the group in bar 5 entering a semiquaver later).

It is clear that for Michael Finnissy the bar-line is a crucial interpretative factor with respect to articulation and shaping, though he also exploits the visual aspect to bring order:

It's an aid to actually memorising the shapes and it is a traditional accentuation mark though of course it doesn't mean that 16 tonnes of bricks fall on the first beat of the bar. Within notation...you have to have some device for notating syncopation because you have to be able to write catches in the breath [Finnissy often parallels the way music flows through time with breathing] or ways in which you might not start breathing out on the first beat of every bar.
There is no way of notating that except by reference to a bar-line which is why I think it's so silly of composers like Ligeti to say that bar-lines have no function. Of course they do. If they didn't have any function, don't write them. It's not just a grid - they're placed according to where your sense of the rhythmic ebb and flow is going to be....

...It's something to bounce off. Maybe it has something to do with being around too many dance classes. I was very impressed when one of the dance teachers said "use the floor as something to respond to", i.e., you have to use the floor almost as if it wasn't there. The bar-line is like that - it's something you can see so you spring off it. This applies just as much to, say, a Chopin Nocturne (but people never ask these questions of non-contemporary music).  

Bar lengths in all Finnissy's piano music are irregularly placed with no time signature attached. In the fast sections of Reels (1981), the bar-line is one of only two notated forms of articulation (the other being the grouping of note-stems), as there are no dynamic changes, expression marks or phrasing of any kind (example 1.10). Despite its irregularity, as Finnissy argues, the bar-line acts as an entirely traditional form of articulation, appropriating centuries of inherited tradition within a contemporary context. Finnissy inserts dotted bar-lines in the slow sections, which act more as a visual guide ("an aid to actually memorising the shapes"), occurring mostly when the hands coincide. These do not suggest the articulatory divisions to the extent of the full bar-lines but help to break up the longer bars of the section.

Finnissy's analogy of the bar-line to breathing can be explored in various ways in his piano cycle, English Country Tunes. The vast differences in notation between this work and Reels reflect the differences in scale and intention. The violent activity of the opening lasts for three lines without a bar-line before coming to rest with long held chords which surround the first bar-line of the piece (example 1.11a). The delay of a bar-line is due in part to

1. In conversation with Michael Finnissy
the many varied types of articulation Finnissy employs in the opening lines which act as substitutes. Though the insertion of a bar-line a demisemiquaver after the chord change looks somewhat peculiar after all that has preceded it, the intention is clear - the chord *anticipates* the bar, like a sudden catch of breath, creating a different tone quality to that produced if the chord changed on the bar. The next bar-line has an opposite effect - it is something to react *against*, delaying the release of the ensuing group of notes. The use of the bar-line for this purpose is clearly illustrated in the slow monodic seventh movement ("My Bonny Boy", example 1.11b). There are no expression marks or dynamic changes (all *sempre pp*) and the entire movement falls under a single phrase mark so, as in Reels, the only forms of articulation are the grouping of note-stems and the bar-line. Treatment of the bar-line is defined primarily in three ways here: i) as something to anticipate, ii) as something to react against, and iii) when a note falls on the beginning of a bar, as something to lean on.

A more rhythmic example of a similar use of the bar-line can be seen, and possibly heard, in the final movement, 'Come beat the drums and sound the fifes' (example 1.11c). While the left hand consists of unrelenting semiquavers (six or seven per bar), the right hand, though similarly unrelenting, is more rhythmically complex. The bar-line again serves to differentiate between the three attacks listed above; it is also a clear visual guide to coordination between the hands, serving as a point from which to measure the subtle tempo inflections in the right hand. The rhythmic ratios never cross over the bar-line in this movement so the bar-line acts as a trigger to propel each change of ratio, not dissimilar to its use in the pieces discussed above by Stockhausen and Feldman.

The bar-line in both Finnissy's music and Feldman's later music serves a number of functions, none of which is contradictory. The intentional subtleties of both composers notations implement reactions within the performer, a
process described by Ferneyhough as 'the "psychologising" of interpretative reaction'. It is clear that the bar-line in Finnissy's music always serves some purpose and is never arbitrary. Double bar-lines are used, particularly in English Country Tunes and other works from the 1970's, clearly as a visual structural division, and dotted bar-lines to lend clarity in longer, rhythmically complex passages, usually indicating a synchronizing of the hands. Because Finnissy writes bar-lines only when necessary, sometimes a 'bar' can last several lines of manuscript. In such cases the bar is not meant in a traditional sense but rather as a period, outside of metrical time: the bar-line is more important than the bar length.

Metric Problems

Problems arise with contemporary music which is essentially contrapuntal and which involves a time signature. The difficulties which Michael Tippett encountered in the notation of much of his buoyantly contrapuntal early music are well known. Not needing to meet the demands of ensemble playing allowed him a greater degree of flexibility in his piano sonatas. Thus the Piano Sonata No.2 (1962) is written with no time signatures and bars of irregular length. The difficulties encountered with ensemble co-ordination are paralleled in Tippett's contrapuntal writing between the pianist's two hands. The Third Sonata (1973) opens with 21 bars of two-part counterpoint with the hands at opposite ends of the keyboard in melodic inversion and in canon, three quavers apart (example 1.12). The time signature varies but, due to the canon between the hands, the bar-line cannot be consistent with both lines of the counterpoint. Tippett's only alternative would have been to shift the bar-line

1. Preface to Lemma-Icon-Epigram
2. Tippett has written of the difficulties he encountered in writing polyrhythms (see Tippett on Music ed. Bowen, M. (Oxford, 1995) p.264); and the first performance of the Second Symphony fell apart due to the leader of the orchestra renotating the rhythms.
three quavers along in the left hand. Therefore the interpretative issue to be addressed is to what extent the bar-line has articulatory function, or is it of purely visual significance?

It can be presumed that if the bar-line is to affect one line only it will be the right hand line as this is the part which sets the piece in motion and, although the grouping and phrasing of both lines cross the bar-line, the right hand line most comfortably fits the metric arrangement. Consistency between the two parts is achieved with the phrasing, grouping of note-stems, and accentuation. However, this consistency is threatened due to the differing positions of the bar-line in relation to each part within a phrase. For example, the 'x' motive in bar 3 could be played in one of two ways: with a leaning on, or accentuation of, the first of each group ( \( \text{\textcircled{\textsuperscript{1}}\text{	extsuperscript{2}}} \)), or on the last note of each group ( \( \text{\textcircled{\textsuperscript{1}}\text{	extsuperscript{2}}} \)). The former is suggested by the phrasing, the latter by the position of the bar-line, interrupting the first group. The left hand inversion suggests the former articulation, both by the phrasing and the position of the bar-line preceding the third group.

The first movement of Schnittke's Piano Sonata No. 2 is written entirely in 4/4. Though it starts in a clear 4/4 metre, by the fifth bar the note grouping and rhythmic emphasis has already deviated from the set metre (example 1.13a). Schnittke notates the changing sense of metre predominantly through the grouping of note-stems. When a group of notes crosses the bar-line (example 1.13b), the intention is clearly not to treat the bar-line as a disruption to the unit, such as \( \text{\textcircled{\textsuperscript{1}}\text{	extsuperscript{1}}}\text{\textcircled{\textsuperscript{1}}\text{	extsuperscript{1}}} \). One might argue that Schnittke is deliberately creating extra complexity by notating this movement entirely in 4/4. However the third movement of the same sonata, though equally contrapuntal in nature, is written without a time signature and consists of irregular bar lengths. Here the bar-lines clearly complement the phrasing and articulation of the contrapuntal lines. The reason, I suggest, for notating the first movement in 4/4 is concerned with Schnittke's style and aesthetic. An
important feature of the movement is a distortion of traditional norms of form, rhythm, melody, etc. It is graphically clear to the pianist in reading the score how the music deviates from expectations. Throughout the movement the rhythmic counterpoint moves between metric regularity and irregularity, akin to a sophisticated phasing process, and this is reflected in the notation. When order is regained, after a period when the counterpoint breaks loose from the 4/4 restraints, the music falls on the beat and marks a visual, and audible, return to metric regularity.

Problems of polyrhythmic articulation as illustrated in the above examples are exaggerated in extremis in György Ligeti's first book of Etudes (1985). These are highly original pieces and are established repertoire among those pianists willing to decode the composer's handwriting. The densely scrawled manuscript is replete with unruled bar-lines and note-stems, a proliferation of accent marks and verbal expression indications, and detailed footnotes explaining the meaning of unusual symbols and the composer's 'exact' intentions. Messy handwriting aside, the notation, particularly with respect to the bar-line, is frequently disorientating. Joanna MacGregor felt the need to rewrite the sixth study ('Automne à Varsovie'): "I just rebarred it all, because I thought he'd just written it down the way he'd composed it which was fair enough and you could see very clearly how the music was composed, but actually to be used as a document to work off, I found it very unhelpful". ¹

As a footnote to the third study ('Touches Bloquées'), Ligeti writes "There is no bar metre in this piece. The bar-lines serve only as orientation, they have neither metrical nor articulatory function", and to the fourth study ('Fanfares'): "The start of the bar should not be stressed more than the bar subdivisions [in this case, 3+2+3]: a sense of bar-length should not be

1. In conversation with Joanna MacGregor
created....the beginnings of the phrases in the right hand (the entries after each break) should be stressed to give the impression that the bar starts there". It would be fair to assume, then, that the bar-line in these studies is entirely visual and thus non-functional in any traditional sense. However, the insistence with which Ligeti imposes the restriction of a set time signature in all but the first and third studies, and the irregular bar lengths of the third, suggests that the bar has some compositional importance.

The rhythmic complexities of the music are such that any barring system will inevitably cause difficulties, but there can usually be some compromise. The fourth study is successful in its barring because it is consistent with the rising eight-note scale (3+2+3) that continuously underlies the melody (example 1.14a). For this reason the melody, which frequently crosses over the bar-line, can be measured against the complementary phrasing and barring of the accompanying scalic idea. Ligeti's insistence upon a 4/4 time signature in the sixth study, however, means that the bar-line goes against the characterisation and articulation of both hands. Despite the opening 4/4 regularity of the left hand, by the fourth line (example 1.14b) the left hand figure has realigned itself so that the opening figure is phased backward, each group beginning on the fourth semiquaver of the beat. This phasing process is a primary feature of the study and is applied to other motives in the left hand. The melody, or counterpoint, to these motives has its own rhythmic processes, independent of both the accompanying figure and the 4/4 metre. It would seem more appropriate to have irregular bar-lines to complement one of the contrapuntal strands, probably the accompanying strand so that, as in the fourth study, the melodic line can be measured against its more continuous counterpart (example 1.14c).

Dotted bar-lines are inserted in most of the studies to serve as visual guides to coordination, though due to the un-ruled nature of the manuscript this is not always helpful. The intention is mainly to illustrate the grouping of
one line and to show how it measures against the other (though in the sixth study it primarily marks the half-bar division). Essentially this is the reason for the unaligned bar-lines in the first study ('Désordre'). As the left hand becomes increasingly out of phase with the right hand so too does its bar-line (example 1.14d). This would have been another solution to the barring problem of the sixth study. Here, its function and organisation is clear: the bar-line of each hand is organised with the main, accented, octaves that form the melody, connected by a constant flow of rising quavers. Thus there is very little cross-barring and its articulatory function is restored, albeit at separate points for each line.

Other composers who have chosen to use unaligned bar-lines as a suitable means of organisation include Michael Finnissy and Morton Feldman. Finnissy does so, in the *Vivace moderato* section of *Fast Dances Slow Dances* (1978–79), to distinguish between contrapuntal strands (example 1.15). The lower two staves share a bar-line, which serves to provide a propelling rhythmic drive whilst at the same time lending rhythmic stability to the hocket-like punctuations in the lower registers, always *sforzando*. The upper stave of music is a more freely moving decorative counterpoint with its own bar-line; this sometimes coincides with a change of rhythmic ratio in the lower staves (which themselves often have two superimposed ratios). The bar-lines of the upper stave are usually in opposition to the phrase markings so that they provide additional articulation of the type discussed above in relation to Finnissy's music. Thus the two bar-lines serve two separate functions for two different types of music.

In Feldman's *Piano* (1977), whole chunks of material are taken from sections occurring early on in the piece and superimposed. Example 1.16 shows a passage where seven bars from the previous page are superimposed onto the seven bars that follow it (i.e. [A, 7 bars] [B, 7 bars] [AB, 7 bars]). Instead of uniting them under a common time signature, Feldman retains their
individual time signatures, possibly as a visual guide to the compositional process and to retain the original phrasing and articulation. Previously in the work when ideas have been superimposed they have all been in 4/4 so the problem of notation has not arisen until this point. Whilst the first four bars could have been merged into a common time signature between the two lines (5/8, 4/4, 5/8, 3/4), the fifth and sixth bars pose a problem; the only alternatives would be to create a single bar of 15/8 or to let one of the rhythmic ratios cross the bar-line, neither of which is an attractive alternative as both would lose the articulatory significance of the bar-line and would not be in keeping with the graphic organisation of the remainder of the score. Thus Feldman's notation is the clearest possible for his purposes.

**Expression Marks and Dynamics**

**Note-Stems – An Alternative Grouping**

As a substitute for the bar-line, alternative methods of organisation and articulation have been sought, established or rejected, and similarly imbued with ambiguity. Among examples of music without bar-lines, Charles Ives's *Piano Sonata No. 2 'Concord'* (1909–15, revised 1940–47) is one of the earliest. Though the bar-line is not completely abandoned, there are long passages of music in which the bar-line is absent, particularly in the second and fourth movements. Unlike much post-war music, Ives allows the performer considerable freedom by notating few expression marks. A performing note to the second movement reads, "Marks of tempo, expression, etc. are used as little as possible. If the score itself, the preface or an interest in Hawthorne [the subject and inspiration of the movement] suggest nothing, marks may only make things worse". Ives writes enough to indicate character and style but leaves much to the performer. The combination of phrasing, grouping of
stems,\(^1\) dynamics, type of attack, and gradual shifts of tempo provide ample substitute for the lack of bar-lines (example 1.17). These factors, on their own and in combination, serve to articulate short-term (individual notes) and long-term (phrasing and structural) events. A more recent example of music without bar-lines is the first two movements of Nicholas Sackman's Piano Sonata (1983–4). A proliferation of expression marks and verbal instructions leave the performer with much to consider and the bar-lines are not unduly missed (example 1.18).

The device which most undermines the bar-line is the grouping of note-stems as an alternative form of phrasing and articulation. Whilst it is true that notes have always been grouped together for visual, compositional and articulatory purposes, the need for this form of articulation is arguably greater in music that is less familiar or unrelated to traditional forms. The pianist Susan Bradshaw, in comparing the Gigue from Schoenberg's Op.25 set of pieces (example 1.19a) with a passage from Boulez's First Piano Sonata (example 1.19b), notes "while Schoenberg's rhythmic groupings must be heard to unfold against the metrical background of a 2/2 time signature, Boulez's argument is evidently a contrapuntal one that demands to be counted only in terms of its quaver pulse groups".\(^2\) This passage, lasting for 43 bars, is totally devoid of any phrase markings and very sparse in the distribution of accents. The arrangement of note-stems is thus the primary form of articulation, appearing to ignore the bar-line. Much of the fingering needed to play this difficult passage will be the result of an assimilation of this arrangement. Fingering is a vital aspect of articulation – especially at the tempo marked \(\text{J} = 152\), which is too fast for a 'precious', careful delineation of each group through imposed phrasing and accentuation. If in sympathy with the grouping of note-stems, a considered fingering strategy is often all that is

1. Notes of crotchet length and longer (i.e. which have no tail on the stem to join with neighbouring notes) are generally grouped with a slur instead.
needed to articulate the notation successfully.\footnote{Choice of fingering affects both articulation and tone quality. Peter Hill, discussing Messiaen's piano music, writes "non-pianists may imagine fingering has little relevance to interpretation, whereas in reality its impact on the music is as decisive as, with string instruments, say, are matters of bowing and choice of string and position." (Musical Times Vol.135, September 1994 p.554)}

Messiaen's notation of bird-song is grouped similarly: a passage may consist entirely of demisemiquavers but the grouping may be in fives, fours, threes, even ones (example 1.20). As Messiaen never joins groups across the bar-line, these groupings can be interpreted as sub-divisions of the bar and should be articulated as beats, albeit irregular beats, with a slight emphasis on the first of each group. The same is true of a piece like Finnissy's Reels, which is predominantly composed of small groups juxtaposed (see example 1.10). As with Messiaen, the groups never cross the bar-line, subdividing the bar instead. The bar-line and the grouping of note-stems provide the sole means of articulation in the fast sections (the slow sections also include phrase marks as a form of articulation).

Finnissy's earlier music, from the 1970's, features larger groups where many stems are joined to the one band, perhaps illustrative of Ives's influence. Example 1.21 shows the second page of Jazz (1976). The right hand begins a new group (near the top of the page) with an arrangement of seven hemidemisemiquavers (in the space of six) followed by twenty semiquavers plus five semiquavers in the space of three. These are notated as belonging to the same group, as are all the right hand notes of the next bar and a left hand group that crosses the bar-line. This notation suggests an articulation that groups together these notes with a slight emphasis on the first of the group. However a number of other factors bring disruption to such an articulation. Though the first group of the right hand starts on the high C sharp, denoting the beginning of a new event, the phrase mark starts two notes later, on the G, so that the first two notes of the group also represent the last two notes of
the previous phrase. About half-way through the group, a second line in the right hand is introduced, creating considerable disruption to the articulation and rhythm of the upper line; 'minor' events such as the arpeggiated first chord of this second group have major effects on the notated rhythm. The phrasing of the left hand group similarly contradicts the grouping of the note-stems, and the bar-line contradicts both the overall grouping and the phrasing. However, the bar-line does complement the right hand grouping and also initiates a shift in tempo (a new rhythmic ratio) of the left hand.

Each pianist reacts in their own way to the implications of the notation. To define a 'correct' interpretation is contrary to the freedom which the notation suggests. The pianist will be aware of the articulatory overlaps between grouping and phrasing, and other subtleties of the notation, but will allow the spontaneity of performance reaction to take priority over any pre-deliberated shaping. This is, of course, a stylistic principle that applies across the spectrum of compositional styles. For example, Howard Skempton's Invention (1974) leaves no clue to articulation other than the grouping of note-stems (example 1.22). Skempton sees the grouping of stems as a substitute phrasing and relates it to the additive rhythms of song, suggesting that the grouping should be 'breathed'. Yet there is also the danger of it being over-articulated as such, resulting in a mannered, Bach-like phrasing; as with all Skempton's music, the pianist treads a fine line between communication (through articulation) and indulgence. Peter Hill suggests "Each performance needs a quiet, fresh mind: if one tries to 'practise in' calculated nuances of expression these instantly congeal into mannerisms which rob the music of its naturalness". 2

Groups of notes can often be of visual significance, usually to distinguish between two or more contrapuntal lines or to aid analytical comprehension.

1. In conversation with Howard Skempton
Susan Bradshaw argues that Stockhausen's attempts in *Klavierstück IV* (example 1.23) to "delineate upper and lower voices by means of their attachment to extended beams indicates some contrapuntal intent; but since there is little overlap between the wide-ranging lines, the effect here is monodic, even pointillistic".¹ However, though this may be the aural effect, the beams act as substitute phrases and if the choice of hand (and thus fingering) reflects the grouping then some degree of differentiation is likely to result.

To clarify the contrapuntal strands in his music, Feldman creates extra staves. Extensions of the opening figure of *Triadic Memories* (example 1.24a) lead to superimpositions of two or more related ideas for much of the first half of the work (example 1.24b). The procedure is clear visually and audibly. However, the subtle rhythmic details (such as the release of a note a semiquaver before the end of the bar) and sustained notes cannot be articulated clearly and will be covered by the pedal.

**Dynamics**

The proliferation of dynamic and expressive markings has become a hallmark of the European avant-garde since Schoenberg's Op.23 and Op.25 piano pieces. Boulez continues in similar vein with his first two piano sonatas. However, the radical transition to extremely detailed scores occurs with Messiaen's *Mode de valeurs et d'intensités* (1949–50). Here, each note has attached to it one of seven dynamics (ppp through to fff) and one of eleven levels of attack, six of which are combinations of two modes of attack and two of which are combined with the mark sf (example 1.25). Theoretically one could differentiate between these levels of attacks, and their associative dynamics; in practice, however, it is enough sometimes to be able to reach the

1. Susan Bradshaw, *op.cit.* p.22
note within the context and time allocated to it. Relationships between attacks, dynamics, and the combination of these two will vary according to the piano and the acoustic. The pianist must decide whether the level of a particular dynamic remains static (constant) throughout (if such a notion is possible) or whether it is dependent upon the immediate context, in relation to the surrounding dynamics.

Stockhausen's Klavierstücke I - IV are likewise highly detailed in their dynamic markings but there are no accents of any kind. Articulation of these pieces, then, relies entirely on the grouping of note-stems, the bar-line the dynamics and the precise duration of each note. Few composers today have actually incorporated the type of notation found in Messiaen's Mode de valeurs et d'intensités (though its influence on contemporary music with respect to the freeing of individual sounds remains strong).

Another technique arising from Messiaen's seminal work is that of layering dynamics within a chord, an interesting compositional device but one which proves problematic for the pianist. In Modes de valeurs et d'intensités this arises from the three contrapuntal lines coinciding to form a composite of, for example, ff, mf and p. Generally, these are not over-complicated, being only three notes, and can be executed clearly. Stockhausen, however, in the Klavierstücke, layers dense chords with different dynamics on each note (example 1.26). Whilst it may be possible to play the chord of example 1.26a so, it is unlikely to be heard as a fff p ff pp p ff chord. Given that the chord is likely to be the result of complex compositional procedures rather than the transcription of an exact aural image, it is important for the pianist to give the impression of different dynamics at the expense of the exact dynamic gradation if necessary. It can be summarised as louder short notes and quieter long notes.

The loudest note of example 1.26a is the top note of the chord, played with the fifth, and weakest, finger, which again raises the issue of context -
the pianist can choose to underplay the \textit{ff} bass note in order to give prominence to the \textit{fff} upper note or to try and play each note at the dynamic marked in the assumption that Stockhausen realised the bass note would undermine the volume of the upper note. This is reflective of a general interpretative issue in contemporary music, where the priority at a given point is unclear. Should a \textit{ff} in the higher registers equate with a \textit{ff} in the lower registers of the piano? Has the composer written \textit{forte} in the right hand in the understanding that it will be undermined by the \textit{forte} in the left hand?

Ligeti clarifies his intention during the first of his piano \textit{Etudes}, where he writes "Dynamic balance: play the right hand somewhat stronger than the left so that the stressed chord sounds the same [degree of] loudness in both hands". Without this comment, the priority of the right hand would not be apparent. From the most sparse to the most detailed of scores, decisions must be consciously made concerning the relationships of the notated dynamics to the acoustic result with each new piece. Examination of context and notational relationships must be matched with a renewed exploration of touch, articulation and sound. In a very different way, dynamic layering can be found in music from earlier in the century, as Michael Finnissy pointed out, in Percy Grainger's folksong arrangements and Ives's \textit{Concord Sonata} (example 1.27). However, the prioritisation of material in these two examples is more easily established due to the traditionally thematic and textural context (broadly, melody and accompaniment).

\textbf{Accents}

The greater subtleties and resulting ambiguities of the notation of expression, established as a twentieth century norm since Debussy's piano music, demand a re-evaluation of pianistic technique. Arguably, more than ever before, one's technique must adapt to individual pieces. However, with
such a large number of different ways of notating similar effects, for example, a sharp attack (\(\gg\gg\gg\gg\), etc.), it can be difficult to differentiate each successfully. Those works which involve a greater variety of notated attacks leave more room for experiment yet less audible difference between attacks. Works that involve a more limited selection of notational directives will have a more noticeable audible effect and allow for variation within those restrictions. Wolfgang Rihm's Klavierstück VII (1980) makes a feature of the opposition of dynamic extremes. The levels of attack are limited mainly to \(\cdot\rightarrow\wedge\wedge\); these are mostly used in pairs so that one can differentiate between the two (example 1.28a) and between two passages using different pairs of attacks (example 1.28b).

The abundance of detail in Ferneyhough's Lemma–Icon–Epigram suggests a suppression of interpretative choice. However, as with all the examples cited above, the differences in interpretation between pianists will be many because each detail will produce a very different sonic outcome; a note marked \(\vee \cdot mf\) will be played quite differently by different pianists. Paradoxically it could be argued that the margin for potential interpretative choice is wider given the greater number of details marked on the score. This is a somewhat controversial point for while it may be possible to assimilate such complex details intellectually, effectively articulating and communicating each detail in performance is unrealistic. That is not to say one should not try. Pianists must trust that in attempting to realise the details creatively and to the best of their ability, the composer's intentions and expectations are being met. This will inevitably involve some process of prioritisation, illuminating one aspect of the articulation at the possible expense of another. Peter Hill suggests "You react to all the markings without necessarily acoustically doing them".\(^1\) In a work such as Lemma–Icon–Epigram, carefully differentiated markings indicate some form of variance in playing attack, though to differentiate between \(\gg\) and \(\wedge\)

1. In conversation with Peter Hill
both at $fff$ is unlikely to result in an audible distinction.

Dynamic Extremes and 'Blanket' Dynamics

Pushing dynamic levels to extremes is a characteristic of much twentieth-century music. Ives's *Concord Sonata* moves between $ppp$ and $ffff$, and Schoenberg included the dynamic $pppp$ in his *Drei Klavierstück*, Op.11. The consistently low dynamic of the sixth piece of Op.19 (1911) was unprecedented, creating a static, almost inaudible, atmosphere that was completely at odds with the grandiose nature of much 19th century piano music. It is likely that Morton Feldman was influenced by these extremes in his early works. Certainly there are obvious parallels: static chords and single notes played "extremely soft", "soft and slowly" or "soft as possible" are hallmarks of Feldman's works from the 1950's and 1960's. Later works are usually accorded a blanket dynamic: in *Triadic Memories* the dynamic level is $ppp$ throughout its ninety minute duration, except on two occasions where it drops to $pppp$.

Virtually all Feldman's music is characterised by extremely low dynamics. He was interested in the *decay* of the sound rather than the *attack*. For non-percussion instruments this requires a great deal of control sustaining notes and entering with no audible attack. For the piano the difficulties arise at the *moment* of attack, as nothing can be done after the attack (except possibly through pedalling). It is as if the sound Feldman wanted began *after* the attack, leaving only the purity of the natural decay. People who knew Feldman refer to his unique style of playing the piano, "hunched over the keyboard, his face nearly brushing the keys in his own private realm in intimate communication with the instrument", and how each note was half-depressed before going the full way. This gives an indication as to the type of sound Feldman imagined,

1. Joan La Barbara, CD liner notes for *Only: Works for Voice and Instruments* (New Albion, NA085CD)
even if an imitation of his playing technique is not necessary to give an 'authentic' performance. However one chooses to depress the keys, playing "as soft as possible" will always be problematic, with regard to both technique and context. The sounds must be projected so that they are actually audible at the back of the concert hall. Feldman, in contrast to John Cage, cared deeply about the specific notes he wrote and one must take "as soft as possible" to mean as soft as the notes can sound.

The problem of projection arises also in some of Howard Skempton's music (for example, September Song, ex.1.29). Despite the surface simplicity, there remains always an element of risk in projecting each note. In the music of both Feldman and Skempton, if each chord or note sounds comfortable in its quietness then arguably it is not being played 'as soft as possible'. Feldman and Skempton frequently apply a single dynamic mark to entire pieces. However, the pitch contours, sectional divisions, and harmonic changes all suggest a response in the dynamic levels. Each new chord or harmonic area in Feldman's Triadic Memories suggests a subtle variation in colour and dynamic. The opening few pages pose a different problem concerning dynamics: the pitch material is constant (repetitions of the first two bars with slight distortions of the rhythm) but at different octave levels (example 1.30). Depending on the piano used, the dynamic level perceived at different octave levels will differ despite a relatively constant touch.

At the opposite end of the dynamic spectrum, Ferneyhough's Lemma-Icon-Epigram and Rihm's Klavierstück V (1975) have been described by the pianist David Burge as "being extremely angry with a great deal of unrelenting hammering at the piano". It is true that Lemma-Icon-Epigram reaches a terrifying $f$$f$$f$$f$$f$ and the greater proportion of it lies between the levels $f$ and $f$$f$$f$. However it also reaches $p$$p$$p$$p$$p$ and similarly soft dynamic levels. The piece is by no means "unrelenting": the dynamic variety encompasses all

possible notational degrees between the two extremes cited above. Though attached to almost every note, the dynamics clearly do not belong to a pointillistic aesthetic. Crescendos and diminuendos give direction to the expression and dynamics complement other markings rather than being the consequence of two separate serial procedures meeting. This suggests a differentiation between degrees of dynamics that is dependent on the immediate context and its assimilation with all the other elements of notation at that point.

In *Evryali* (1973), by Iannis Xenakis, the dynamics act as substitutes for accentuation marks. The composer toys with extremes, ranging from ppp to ffff (and all degrees between the two), the latter being used frequently as a blanket dynamic for substantial blocks of music. Because of the complete lack of all other markings the pianist must clearly distinguish between each degree, taking ppp to mean 'as soft as possible', and ffff 'as loud as possible'. The latter will need to be judged with relation to whole passages played at this volume (example 1.31a), rather than to a single note. Subtle changes of colour within the blanket of ffff are unlikely to be the intention; rather the passage should be played as *consistently* loud as possible. Particularly difficult are the instances when extremes of dynamic are juxtaposed in rapid succession (example 1.31b).

Finnissy's use of dynamics varies widely from piece to piece. There are many examples of the composer juxtaposing extremes, as an exploitation of the piano's resonance or as a means of defining structural boundaries. The former is illustrated in the opening of *English Country Tunes* (example 1.11a): the opening chord is played sffffz and, within the resonance of that chord and the pedal being depressed, the ensuing lines drop from mp to ppppp!, the dynamics always in flux through crescendos and decrescendos. Similarly the next sffffz chord is followed by a *subito pppp!* marked "almost unheard in the resonance of the previous chord". Extremes of dynamic such as these are not
uncommon in Finnissy's compositions. Detailed dynamic markings in his music are not generally the result of strict compositional procedures but can be said to function in three main ways: i) as purely gestural indications, often one suspects, the result of Finnissy's expertise as a pianist and a firm understanding of the piano's resonance and capabilities; ii) to delineate subdivisions of a piece or compositional procedures, usually by giving separate indications to each line or layer of activity - some of the early works (Autumnall (1968–71), Fast Dances Slow Dances (1978–79)) feature a ppp subito layer encircled by a dotted line, inserted into a passage of generally loud music, as if it were an imposed event; iii) to act as a further form of articulation, as another aspect with which to 'juggle' in combination with phrasing, grouping, etc.

Paradoxically, a large proportion of Finnissy's music involves very little in terms of dynamic variety. For example, each section of Finnissy's Reels (see example 1.10) is given a starting dynamic (the odd-numbered sections increasingly louder, the even-numbered sections increasingly softer, so that the contrast between sections is at its greatest between the last two sections), which acts as a blanket dynamic for the duration of the section. The pianist Nicolas Hodges argues that the sometimes simplistic dynamic markings in Finnissy's music have resulted in an equally simplistic interpretation by some pianists:

basically they treat it as music where you play what's written and the dynamics are simple so you play very simple dynamics. So an ff passage - lots of notes - bash the shit out of the piano - and it's nothing really. He [Finnissy] doesn't play it like that, and no sensible pianist would play any music, other than Cage perhaps, without responding to its harmonic profiles....there are so many implications from the rhythm and the harmony that you have to respond to those....Worse than that is the attitude of simple, defining dynamics, which leads people to say that therefore Finnissy is a composer for whom his material doesn't matter because he
doesn’t pepper it with dynamics to point out surface structures – Bach doesn’t in The Art of Fugue, or in anything – and the result is that people then go even further and don’t even play the dynamics that he does mark in.

Entire works or movements may consist of a single dynamic: there are many examples of this in Finnissy’s output, among them the seventh movement of English Country Tunes (marked sempre pp (no cres. or dim.)), Short But… (1979) (entirely pp, see example 1.33), the fifth Verdi Transcription (mp), and My love is like a red red rose (1990) (p). In all of these examples, the music is made alive through careful consideration of the melodic and rhythmic contours.

Tempo Indication, Gradation and Modulation

Indication

Generally there are two types of tempo directive – a metronome indication or a verbal direction. Metronome indications are mostly clear concerning actual speed and are often helpful when considering an appropriate unit of pulse or beat. However, they are not entirely unambiguous. For example, the first movement of Tippett’s Third Sonata has four separate expositional ideas, arguably suggesting a slight adjustment of tempo with each theme (example 1.32). However, as there is no tempo change marked for each theme (as there is in the Second Sonata) it could also be argued that the one tempo serves each theme and that the gestural contrast inherently affects the tempo perception overriding any need to deviate from the tempo marked.

Finnissy’s Short But… (example 1.33) is marked \( \dfrac{\text{♩}}{\text{♩}} = 56 \) which not only is an indication of the speed but also suggests that the unit of a crotchet is a

1. In conversation with Nicolas Hodges
common thread to which one can refer (even if one can not actually measure the counterpoint against a crotchet 'beat'). Contrastingly, the same composer's Elephant (see example 1.34) indicates a metronome marking of $\frac{\text{d}}{\text{r}} = 96$, which, whilst complementing the tempo indication (Andante con moto) contradicts the grouping of the upper line which suggests a crotchet (or fast quaver) pulse. Possibly this is an intentional warning against such an interpretation, or could also suggest a highlighting of the middle voice which is occasionally grouped in dotted quavers. Alternatively it is one more object with which to 'juggle'. In conversation, Finnissy was vague about the exact intention of the metronome mark in Elephant:

It has to relate to something. It depends what sort of tempo it is and what I'm measuring it at when I get the metronome out I suppose...It doesn't necessarily apply to the top line or the most obvious line. I try and give metronome marks that are on the metronome because a lot of people these days give rather odd metronome marks....But they're not supposed to be much help.  

Some of Feldman's later music has no tempo marking (resulting in his String Quartet No.2 being marked in the publisher's catalogue as lasting between 3½ and 5½ hours). Triadic Memories generally lasts between one hour, twenty minutes and one hour, thirty-five minutes. The fastest idea in this piece is five demisemiquavers in the space of four (usually a rising arpeggiated figure, example 1.35a), a complex relation to the opening figure of four quavers in the space of three. However, it can be more easily measured against the semiquaver passage that begins page 34 (example 1.35b) and this in turn can be measured against quavers and thus 4:3 quavers.

Many of Howard Skempton's piano pieces omit any indication of tempo, intentionally embracing a wide variety of interpretations. Some employ

1. In conversation with Michael Finnissy
stemless black noteheads, implying a non-restrictive interpretation (see example 1.29), whilst other similar pieces may be notated as semibreves (example 1.36). The white noteheads (semibreves) suggest a more formalised interpretation, possibly slower, that is counted whilst the black noteheads are of no fixed duration. This cannot be taken as a rule, however, as each piece and each performance demands a fresh evaluation of such matters, dependent on the notational implications and on matters of circumstance (acoustic, piano, audience, etc.).

Modulation

The modulation from one tempo to another can be, and has been, notated in a number of different ways, from simply identifying different tempi as 'Tempo 1', 'Tempo 2', etc. to detailed metronome markings. Frequent changes of tempo in a single piece or movement require the pianist to hold these in the subconscious, ready at the given moment to switch from one to another. Constant referral to a 'tempo 1', for example, can be difficult to gauge accurately if the material is notably different from the previous, or original, tempo 1 material. There are three tempo markings in the first movement of Boulez's Second Piano Sonata, all fast (the tempo of the second exceeds that of the first and the third falls between them). When the material at a tempo change is related to that at a previous change to the same tempo, parallels can be drawn in performance that both inform the listener and aid the pianist in judging the correct tempo, providing helpful reference points. However, where the material is less apparently related, the tempo change will not necessarily be audibly related to previous instances. A tempo change may be a reference to a previous event (as is sometimes the case in the 'sonata-form' layout of this movement) or as a gestural, contextual change of tempo, where a perceptibly different tempo (not necessarily the exact 33:42 relationship of tempo 1:tempo
2) would be sufficient.

The relationship of tempi in Stockhausen's Klavierstücke V and VII is somewhat obscure, reflecting the compositional scheme which unites all the Klavierstücke.\(^1\) In the foreword to both pieces the composer writes "The succession of tempi...may be [slightly] transposed"\(^2\) adding, in the seventh piece, "to suit the resonance of the instrument and the acoustic of the room". The word "transposed" suggests an accurate reading of these tempi (and that if pianists wish to transpose the tempi then they should do so proportionately, i.e. \(\frac{40}{63.5} = 0.63\) could be altered to \(\frac{48}{76.2} = 0.63\) but the relationships between tempi cannot be measured accurately in terms of shared note values. Therefore each tempo must be learnt, memorising the transition from one tempo to the next in terms of the material rather than a fixed idea of tempo. Inevitably this will lead to some approximation of the exact metronome marking (any metronome marking with a decimal point must be treated liberally) but the degree of modulation gives a clear guide as to the intention. In Klavierstück V the metronome markings are in any case only at ends of sections, delineating the extremes of the accelerandi and ritardandi which pervade this piece. Any sense of tempo is temporary, as it is in a constant state of flux.

**Metric Modulation**

When two tempi are linked or related proportionately (that is, in a readily perceptual relationship) the clearest indication of tempo modulation is to depict this relationship in the score. For example, the transition from \(\frac{40}{63.5} = 0.63\) to \(\frac{48}{76.2} = 0.63\) is best achieved by writing \(\frac{40}{63.5} = \frac{48}{76.2}\) over the point of transition (an arrangement which is less confusing than the reverse, used by Schoenberg in

1. See Richard Toop, 'Stockhausen's Klavierstück VIII (1954)', Miscellanea Musicologica Vol.10, 1979, pp.93-130 for detailed analysis
2. "slightly" is added in the foreword to Klavierstück V only
the third piece of Op.23).

This method of notating modulation is most effective with highly rhythmic music. When used in a more freely expressive context the accuracy which it suggests can be misleading. Robert Saxton's Piano Sonata manoeuvres between different tempi, predominantly by indicating new tempo and metronome markings, but occasionally also using the type of metric modulation under discussion. Example 1.37a shows the climax of a culmination of whirling demisemiquaver figures, ending with triplet demisemiquavers in the right hand and 5:4 demisemiquavers in the left hand. The second bar retains the beat by transferring the triplet demisemiquavers to the left hand, now written as semiquavers, where the crotchet of the first bar is equal to a dotted crotchet. In this way Saxton highlights the relationship between the two sections and the transference of the right hand figure to the left hand. However, the material of the second bar is notably different, in texture and gesture, to the previous bar and, on its own terms, suggests a variation in touch and intensity, and consequently speed. Though the rhythmic correlation between the two bars demands no reduction of tempo, the expressive content is indicative of the contrary. Conversely, the link between the two contrasting sections of pages four and five (example 1.37b) should be read accurately, measured against the left hand triplet semiquavers which begin the extract shown, converting to semiquavers in the new idea (presto e vivo).

Robert Sherlaw Johnson uses the same method of notation in Seven Short Piano Pieces (1969), though the relationships marked often bear little or no relation to the rhythmic character of the music which follows (example 1.38). Fortunately, the composer offers an approximate metronome marking to complement the tempo modulation which is a far more useful indication in this context.
EXTENDED NOTATION

It is a better musick when one goes a little before or behind the other, than when they play (as they zealously affect) to a touch together. For in that nothing is got by the doubling but a little loudness; but in the other way by frequent dissonances there is a pleasant seasoning obtained. The varied ratios prevent a mechanical performance and enable the music to sound like a conversation.

Life can be interesting; it is not all in 3/4. People do not walk down Oxford Street in time!

The intention of this section is to consider ways in which two aspects of traditional notation have in recent years been developed to an unprecedented degree. The two aspects of notation under consideration are i) rhythmic complexities and ii) grace notes. The differences between intention and notation of both these aspects creates ambiguity, not so much in their relation to tradition (the central concern of the previous section) as in the newness that is created by their expansion from tradition. Both are concerned with the passage of music through time, arguably the central concern of post-war music. Their developments in this respect radically extend and distort their traditional intention. Discussion here is concerned primarily with practical and stylistic issues of interpretation. Detailed exploration of all possible methods of notation can be found in Gardner Read's Modern Rhythmic Notation.

1. Benedict Mason, Notes Inégales: quote from the score (between staves)
2. ibid.
3. In conversation with Michael Finnissy
4. Though both aspects could be said to lie within the topic of the previous section (and conversely some aspects of the previous section could be said to be 'extended' notation), the developments of both are considered to be a prominent feature of recent music and merit separate discussion.
5. Gardner Read, Modern Rhythmic Notation (London, 1980)
The liberation of rhythm and duration from eighteenth and nineteenth century restraints, in the music of Debussy, Schoenberg, Webern, Stravinsky, et al. is a significant and defining characteristic of twentieth-century music. However, the rhythmic complexity of the opening bar of Stockhausen's Klavierstück I (1954) (example 1.39), in which a group of seven quavers are played in the space of five, which are in turn part of a larger group of 11 quavers played in the space of ten, was completely radical and unprecedented in the piano repertoire. Before the implications and interpretative issues of such complexity are considered, attention must be drawn to historical forerunners (though not parallels) of rhythmically complex groupings.

The arrangements of notes into isolated groups of seven, eleven, thirteen, etc. has many obvious historical precedents. Haydn (particularly in sonata slow movements), Hummel, Beethoven and their contemporaries would notate groups of notes that do not fit into the usual rhythmic scheme (though most of these are even-numbered groups of notes that can be arranged neatly within or around the beat). Chopin and later nineteenth-century composers developed this to a greater extent, writing decorative lines, usually in the right hand, that bear no obvious relation to the rhythm of the other hand, sometimes grouping them in a way that contradicts the other hand. For example, Chopin's first Nocturne has instances of seven or eleven in the right hand against six in the left hand (example 1.40) and the eighteenth Prelude includes a group of seventeen demisemiquavers in the space of sixteen, in both hands (example 1.41). However, the actual execution of these groups is always

1. Messiaen's Messe de la Pentecôte for organ written three years earlier, in 1951, features uncharacteristic instances of a similar rhythmic complexity to that used by Stockhausen. For example, two juxtaposed ratios of 7:8 and 3:2 are, with a series of regular notes, joined under an overall ratio of 3:2. This work was written at around the same time Stockhausen was attending Messiaen's composition classes and it is possible he was aware of and influenced by the rhythms of this piece. (I am indebted to Christopher Dingle for drawing my attention to this piece.)
related to the basic rhythmic pulse. No matter how few or many notes in a group, they function directionally - moving toward the next beat. This does not demand exact measurement of where each note fits with relation to the regular note unit (for example, the exact relationship of seventeen units against sixteen units), or to the other line (for example, where each unit of a group of eleven fits in relation to the other group of six). Instead, the larger unit of the overall pulse is considered, allowing the fingers to fit all the notes into that unit. In addition, the melodic contour creates subtle nuances and distortions of the precise measurement.

Groupings that are beat-oriented have remained a much-employed aspect of notation through to the present day. 'Beat-oriented' music is of the type described above, where the ratio group can be fitted into an easily perceptible beat. The notes of two superimposed ratios do not necessarily have to be pre-coordinated; instead both hands work within a common beat framework. The beat must therefore be small enough to be accurately maintained. A contemporary example of this is seen in Saxton's Sonata (example 1.37a) where quintuplets are combined with groups of four or six in a beat-oriented drive.

The music of Charles Ives, typically, reveals a considerable extension of beat-oriented groupings of notes. The writing in the Concord Sonata is considerably more free than, say, that of Chopin, and the beat is variable. Complex groupings of notes are used frequently (though without indication as to the exact mathematical nature of that group), often juxtaposed so as to suggest a written-in accelerando or ritardando. These generally take the nature of an accompaniment to a tune, and can be easily measured with each note of the tune. As the tempo is generally flexible in this sonata the internal arrangement of notes in each group should also be flexible. The arrangement, in example 1.42, of one group of demisemiquavers into three groups of 17, 17 and 18 should be measured according to the highest and lowest notes and the
D sharp and D natural that mark the mid-points. Thus, the low A to the high C sharp can be read as an acceleration, relaxing slightly on the return to the low A; the third group (with 18 notes) could be read similarly as an acceleration to the high C sharp but with less of a relaxing to the bottom A which should lead into the next section. Similar instances should be treated with the same flexibility, as if they were composed rubatos.

From Schoenberg to Boulez, rhythmic grouping in the music of the European avant-garde is less adventurous. Rarely are there groups more complex than 5:4. The interest is not so much in grouping notes with relation to a larger unit as in the duration of each single note. The notation suggests an exactitude that distinguishes it from the more romantic gestures of Chopin, Liszt, Busoni, etc. Consequently the grouping \( \frac{4}{3} \) is preferred over \( \frac{2}{3} \) and \( \frac{4}{3} \) instead of \( \frac{2}{3} \). The use of dotted notes is found particularly in Messiaen's music, either as a means of grading durational values (as in *Mode de valeurs et d'intensités*) or as a means of lengthening a note within a phrase, a result of Messiaen's fascination with additive rhythms. In *Mode de valeurs et d'intensités* (example 1.25), the durational values are a significant factor of the compositional procedure, and also of performance. Because of the serial procedures adopted to arrange the 24 types of duration, consecutive durations of the same value are not found (thus prohibiting the possibility of grouping notes under a single ratio). Under these restrictions, the type of notation used is very clear, tying notes together rather than resorting to extensive use of double and triple dotted notes.

The notion of 'beat' or 'pulse' is continually disrupted in Boulez's Second Piano Sonata (see example 1.4). Time values are simple divisions of halves (crotchet, quaver, semiquaver, etc.), triplets, and (less frequently) quintuplets. When combined with dotted notes the result is a highly varied series of durations used in many combinations and permutations, all indicative of a very rhythmically precise interpretation. The focus is on successive individual note
durations, which may or may not relate to a changing sense of pulse. Accents occurring mid-way through a grouping or the separation of stem-groups ensure that the motion is not directional toward the next 'beat'. The use of rests to disrupt a triplet or quintuplet group is a frequent device, usually occurring at the beginning or end of a group. This dislodges the sense of being able to 'let go' and allow the fingers to fit the notes into the beat, drawing more attention to each note instead of to where each note leads.

Even a subtle difference in notational detail such as \( \text{\textfrac{\textasciitilde}{\textfrac{\textasciitilde}{\textasciitilde}}} \) and \( \text{\textfrac{\textasciitilde}{\textfrac{\textasciitilde}{\textasciitilde}}} \) implies a variation in articulation (the former suggesting a reaction, or 'bounce', off the 'beat', the latter suggesting a slight emphasis on the first actual note of the group, as if a slightly faster group of four semiquavers. Boulez uses the former method when notating quintuplets but both for notating triplets). The absence of any group more complex than a quintuplet in this Sonata suggests that the composer requires a literal reading. Perhaps Boulez felt that a more complex group would produce an approximation. To a musician well-versed in modern music, groups of five or seven can generally be accurately relayed. It could also be said that in the context of a relatively fast tempo and a secure sense of beat isolated groups of, say, 13 or 15 can be accurately relayed due to the beat-oriented motion. The absence of a fixed beat in Boulez's Second Sonata would create added difficulties in an accurate reading of more complex groups.

In the opening bar of Stockhausen's Klavierstück I (example 1.39), the composer exploits the impossibility of an accurate portrayal. If the 11:10 bracket over the bar is read as being indicative of a quaver duration that is very slightly faster than the regular quaver length of the piece (precisely 1.1 times the duration), rather than a precise measurement of eleven quavers against ten, then a relatively accurate reading of the first half of the bar can be achieved. The dilemma of the second half of the bar concerns whether to apply
the same principle of an increase in speed or to measure exactly where each of the seven notes fits in relation to the five quaver units. I suggest that the first method is preferable, given that the actual note-values themselves are straightforward. The pianist must then learn the tempo relationship between the two sections of the bar so that in performance the switch to a faster quaver unit at the second part of the bar is achieved without hesitation (using Ferneyhough's terminology, 'jerking' into a perceptibly different tempo). Such an interpretation reflects the only footnote to the first four Klavierstücke:

The tempo of each piece, determined by the smallest note-value, is 'as fast as possible'. When the player has found this tempo and determined it metronomically, all the more complicated time-proportions under the brackets (\(\text{\textregistered} \quad \text{\textregistered} \quad \text{\textregistered} \quad \text{\textregistered} \quad \text{\textregistered} \)) can be replaced by changes of tempo.

Not only does this suggest a suitable method for interpreting these complex rhythmic groupings but it reveals the composer's attitude to this style of notation, i.e. that they are an alternative and less cumbersome method of notating subtle changes of tempo.

In practice, applying Stockhausen's instructions creates a number of problems. Though he directs that the tempo should be governed by the smallest note-value, this does not account for any technical difficulties encountered. The smallest values in Klavierstück I, with the exception of a single, isolated note in bar 32, are two pp hemidemisemiquavers in bar 14 (example 1.43a). However, as these can easily be played extremely fast (shared between hands) it would seem more appropriate to measure the tempo according to the triplet demisemiquavers (the next smallest note-values in the piece) in the next two bars (example 1.43b). These are in both hands simultaneously and involve a substantial leap in the right hand, posing greater technical difficulties than those of bar 14. This must then be measured against the quintuplet demisemiquavers in bars 34/5 (example 1.43c) which also pose
problems of registeral leaping and dynamic changes, to determine whether this can be played at the tempo arrived at in bars 15-16. This may still pose technical problems in other areas (such as the extreme dynamics and registeral leaping in bar 6 or the use of the middle pedal in bar 7 (see example 1.39)) and the tempo must then be adjusted accordingly.

Once a tempo has been determined, calculating consequent tempo changes with relation to the complex ratio groupings also creates problems. If, for example, the tempo decided upon is $\frac{3}{4} = 100$ (approximately the tempo taken by Kontarsky in his recording), the first bar would read as $\frac{3}{4} = 110$ with an increase at the seventh quaver to $\frac{3}{4} = 154$; this being an easily divisible number, the resulting metronome markings are readily calculable. However, at bar 6 the overall tempo would be $\frac{3}{4} = 125$, but the first part (7:8) would read $\frac{3}{4} = 109.4$ and the second part (11:12), $\frac{3}{4} = 114.6$; bar 7 would read $\frac{3}{4} = 108.3$ and bar 8 $\frac{3}{4} = 116.7$ with a decrease to 102.1. If considered as relative tempo changes it would seem reasonable to assume a relatively accurate performance can be achieved, if not a mathematically precise portrayal. So for example, bar 6 (see example 1.39) starts with a slight quickening of tempo, increasing in the second part of the bar; bar 7 represents a very slight reduction of tempo from bar 6 but still marginally quicker than the standard tempo (tempo 'zero'), the transition being aided by a contrast of dynamic; bar 8 increases the tempo only temporarily before reducing it almost to tempo zero in preparation for actual tempo zero at bar 9.

The main fault with the above interpretation is the assumption that the performer can recall tempo zero at will. However, this seems to be not so different from the return to a tempo after a change in tempo in any traditionally notated piece. There are frequent returns to tempo zero and never does a significant departure from tempo zero last more than three bars. Thus it is important to maintain a fixed understanding of tempo zero. The notion of relativity inevitably amounts to an approximation, but it is an accurate
approximation. It accounts for all those aspects suggested by the notation (save for the precise mathematical relationships) and is thus aurally and discernibly accurate. Concerning these four pieces, Stockhausen has spoken of "a new way of feeling time in music in which the infinitely subtle 'irrational' shadings and impulses and fluctuations of a good performer often produce what one wants better than any centimetre gauge".¹ This basic statement of intent does not excuse a crude, lazy approximation of the notation but suggests the priorities the performer should focus on - producing subtle fluctuations in the perception of metre.

The use of complex rhythmic ratios since Stockhausen's seminal piano pieces has been largely restricted to music by so-called 'complexity' composers. Though the level of complexity in Ferneyhough's Lemma-Icon-Epigram is far greater than that of Stockhausen's Klavierstück I, many of the principles are common to both. The most notable extension to Stockhausen's method is the independence of lines in Ferneyhough's work. Where Stockhausen applies the same rhythmic ratio to each hand (so the tempo shift is almost immediately perceptible), Ferneyhough writes two, three or more layers of simultaneous contrapuntal activity with different ratios for each. Like Stockhausen's pieces, the ratios last for part or all of the bar but never cross over the bar-line. Each group can thus be measured by some larger unit of subdivision within the bar. Helpfully, Ferneyhough often writes the lengths of these units at the beginning of bars in brackets over the stave (example 1.44).

Another extension of Stockhausen's technique is Ferneyhough's method of disrupting and distorting notes within a complex group. This can be seen to a certain extent in Stockhausen's Klavierstück I, but there the distortions are 'metric' in their organisation, i.e. rests that are of equal length to that of the

notes forming the group, or simple divisions of, for example $\frac{5}{8}$ in a group of five. Ferneyhough inserts further complex groupings, rests, commas, all manner of accents, dotted notes, grace notes, trills, etc. Thus while each new complex group represents a shift in tempo (and these are constantly varied and juxtaposed, and thus very short-lived), within these there are distortions and disruptions so that the new tempo is rarely established or perceived. In the performance notes, Ferneyhough writes

The rhythmic notation reflects the composer's views concerning the 'psychologising' of interpretative reaction, seen as an integral component of the work-structure; 'rubato' interpretation of the indicated values should therefore be rigorously rejected in favour of an attempt to evolve strategies permitting as close an approach as possible to the specificities of the musical text.

The complexity of detail is thus considered as shades of a 'notated rubato' within a constantly changing tempo state.

Treating each rhythmic ratio in Lemma-Icon-Epigram as a new shift in tempo (as proposed above concerning Stockhausen's Klavierstück I) would mean a very large number of tempi to consider, often a few in a single bar. This would obscure any attempt to recall a tempo zero. It would perhaps be more appropriate to consider each group both on its own terms (in isolation), as well as its context within the bar and larger-scale groups of organisation. An appropriate method of measuring the rhythmic gradation of one group will not necessarily be the same for a group in the next bar. For a group consisting of an unbroken succession of notes it might seem best to fit them into the duration of a fixed, larger unit. For another group it will be necessary to grade the change in speed according to a previous group, modulating proportionately if possible or by 'nudging' the tempo up or down to an appropriate degree, taking into consideration the consequent group or groups.
However one chooses to interpret Ferneyhough’s notation, it is certain that careful slow practice over a long period of time is unavoidable. Each group must be measured accurately at a very slow tempo, involving at the earliest stage of learning every dynamic, phrase and accent as these inevitably have consequences for the rhythmic life of the group. However, it is also likely that distortion will take different forms at a faster tempo. Andrew Ball, who premièred Chris Dench’s Tilt, the notation of which is highly dense and complicated, described the practical problems of performing music where the detail conditions the result in different ways according to the tempo:

very complex pieces do require a new way of working. Put crudely, they need an incredible amount of slow practice and then at some point you need to leap into the unknown and you have to go into some sort of physical spasm and hope for the best! You have to train the muscles and make the jump ahead. There comes a point where you can’t follow everything that’s going on and you’ve got to trust that your muscles are going to do it. ¹

The technical difficulties of two or more superimposed rhythmic ratios in different hands are considerable. Primarily this is because the pulse is disguised and the ratios are unrelated, so that the two ratios can rarely be united within a larger pulse unit. Thus Lemma–Icon–Epigram consists of superimpositions such as 7:6 in the right hand against 5:3 in the left hand or \( \frac{3}{1} - \frac{5}{1} \) against dotted notes in the other. However, although these groupings are frequent and constantly varied, the units are usually small and one can detect points of coincidence between the hands. Indeed, where the superimpositions are more complex, Ferneyhough indicates these by inserting a vertical dotted line joining the notes that are together. Once the rhythms of each hand have been mastered, the task of fitting hands together can cause disruption to the individual lines. Working this out at a slow speed can

¹ In conversation with Andrew Ball
sometimes be unhelpful as the detailed mathematics can disorientate the sense of a larger unit, or pulse (where applicable).

Another technical consideration is the exact placement of a note between two notes of another group in the other hand. At a very slow speed the space between two notes can be measured but when played at tempo the effect is likely to be of one inserted randomly between the two notes of the other hand. At best, the division between two notes can be approximated to three degrees of accuracy: i) just after the first note; ii) just before the second note; or iii) exactly mid-way between them. Any further degree of differentiation is based on the perception that one note occurs, for example, *more* immediately after the note in the other hand than another. An equally accurate, arguably resulting in a more exact, approach is to accord conscious independence to each hand, abandoning any exact co-ordination between hands except for points of entry. Given that the moment of entry is accurate, and that the individual lines have been mastered according to a common tempo, the level of accuracy with which the hands are superimposed is likely to be high because of the relative brevity of most groups in this work, leaving little time for the hands to get 'out of phase'. An accurate understanding of the score (i.e. where precisely each note fits in relation to the notes of the other hand) can then be used as a reference point to ensure that the relationships are approximately correct.

In the preface to the score, Ferneyhough describes three processes that, he suggests, are necessary in learning this piece:

1. an overview of the (deliberately relatively direct) gestural patterning without regard to exactitude of detail in respect of rhythm; 
2. a 'de-learning' in which the global structures are abandoned in favour of a concentration upon the rhythmic and expressive import of each individual note (as if the composition were an example of 'punctualistic' music); 
3. the progressive reconstruction of the various gestural units established at the outset on the basis of experience gained
during the above two stages of preparation.

Ferneyhough's second stage is essentially that which is considered above, the working out of individual units. Isolated, each unit can be measured using the methods discussed (and undoubtedly by other means) primarily because each unit is small enough to be considered in its entirety. The real difficulty lies in allowing enough time for this exhausting task and then connecting and absorbing each unit into the whole (Ferneyhough's third learning stage).

The amount and density of the material involved, the number of layers on which events take place, mean that not everything will be articulated as it might be in isolation (a feature, not a fault, of the work). The combination of events produces something new which is dependent on an understanding of each event and the feat of daring required to combine these in live performance. Roger Marsh criticises Ferneyhough's notation as being superficially complex with aurally simple results.¹ Marsh transcribes a passage from Ferneyhough's Second String Quartet (example 1.45), notating the rhythmic details as he aurally perceives them in a recording by Irvine Arditti. The result is a simple rhythm in compound time. Likewise, Marsh cites the opening of Ferneyhough's Intermedio Alla Ciaccona (example 1.46), writing "No performance of this opening would be able to convey the rhythmic relationships which Ferneyhough notates so precisely."² The main fault with Marsh's argument is that he wrongly equates rhythmic notation as affecting duration alone, when as this study has illustrated, rhythmic detail greatly affects articulation. If Arditti were to perform Marsh's transcription the result would be totally different to the performance of Ferneyhough's notation. The articulation of each note would likely bear no resemblance to the original. The detail of all the notational properties combine with the performer's perception of that notation in real-time to create something that is unique.

2. ibid. p.83
A quite different approach is required when interpreting Finnissy's music. The differences between Ferneyhough and Finnissy in the kinds of rhythmic complexities employed, and in their notation, highlight the absurdity of grouping the two composers together under the "new complexity" bracket. Where Ferneyhough, in Lemma–Icon–Epigram, works with relatively small units of rhythmic groupings, Finnissy is more expansive, with groups which constantly overlap. In the works from the 1970's, Finnissy writes extremely long groups, often superimposed with other separate groups, using ratios such as 33:28, 70:67 or 20:16 (these are all taken from English Country Tunes). More recent works replace these long groups with smaller units but remaining within the context of a long phrase or line, thus distinguishing them from the more succinct units favoured by Ferneyhough. In Finnissy's own unmistakable handwriting, these rhythmic groups (long and short alike) have a dishevelled appearance, suggestive of a romantic flavour in stark contrast to Stockhausen's or Ferneyhough's drier notation: "...it isn't Darmstadt numerology and it doesn't look like that on the page". One suspects that if the written ratio-numbers were omitted, leaving irregular groups of notes that simply fit into the mosaic (as in Ives's Concord Sonata), little would be lost. When questioned about a (rare) discrepancy between the graphic layout and the position in time dictated by the ratio (in Taja (1986)), Finnissy admitted "the important thing is where it appears on the page. I usually notate that first and work out the durations afterwards. (I don't always get it right.)"

Thus the rhythmic ratios attached to a single line of Finnissy's music are generally not the result of strict mathematical compositional procedures but are purely gestural indications, grading an increase or decrease in tempo for a certain amount of time. The changes in ratio of groups in the odd-numbered

1. In conversation with Michael Finnissy
2. ibid.
3. Occasionally, changes in rhythmic ratio are more directly determined by formal procedures. The tempo gradations of the 'fall' section of all.fall.down are graded precisely to create a gradual increase or decrease in the overall tempo. Each ratio is thus the result of a fixed large-scale gesture.
sections of Reels, which are entirely single-voiced linear compositions, can be measured in a number of ways. Within their immediate context, each group can be measured against that which precedes and that which follows it. For example, bars 3–5 (see example 1.10) read: a constant (\( \frac{6}{5} = 168 \)) increased slightly (6:5), a steeper increase (8:5), a return to the constant, a slight increase (8:7), a further slight increase (6:5) and another return to the constant. This method would be aided by an appreciation of the speeds of those ratios which are most commonly used (8:5 \( \frac{6}{5} = 269; \) 6:5 \( \frac{5}{3} = 280 \), etc.).

Ian Pace, one of the foremost interpreters of Finnissy's piano music, changed his approach to learning the intricate rhythms that characterise all Finnissy's music:

> When I first started to play Finnissy's music rhythm was a thing I was really pedantic about, putting in all the beats everywhere. Now I don't do that so much because I know more where the rhythms are coming from and I think of it more as a particular way of using spaces of time rather than as metrical pulses.  

However, since the composer has notated durations very precisely, it would seem necessary as part of the actual learning process to relate each unit and phrase to an accurate sense of pulse, or divisions of a pulse. Once the internal durational relationships are mastered the counting can be stopped (or simplified) and submitted to the overall musical flow.

A more problematic facet of Finnissy's notation is the superimposition of two separate lines, often for a considerable period of time. Because the end of a passage where this occurs is so far from its beginning, fitting the notes of both hands into the space allocated by means of a directional, pulse-oriented flow is frequently futile. Finnissy is concerned with two different lines or events running simultaneously, pursuing individual courses, rather than with

1. In conversation with Ian Pace
how two things 'fit' together. Thus the even-numbered sections of Reels consist of two equally important lines superimposed (as opposed to the single line of the odd-numbered sections) rather than, for instance, one line with a decorative or harmonic line to match (example 1.47). Here Finnissy has arranged the two lines so that they coincide at certain points, clarified through the use of dotted lines to articulate their points of contact. Though these rhythmic relationships are not obscure, a 'graphic' reading of the score would presumably produce similar results. Finnissy endorses a graphic reading of his scores, however one feels that certain subtleties would be lost. As it is possible to differentiate between at least three basic degrees of time interval - just after the previous note, in between the two notes, just before the following note - it would be infinitely preferable to obtain as accurate a reading as the notation suggests. Once these relationships are understood they are then subjected to other factors, such as the expressive content of individual lines.

Finnissy talks of there being no actual co-ordination when combining these complex ratios:

You jump and fly. Sooner or later you don't need the safety net or the parachute. It's a very freeing kind of feeling, that you are counting but you've developed a more sophisticated kind of counting which is assessing how long those things are and incorporating anything else in them.

Though this possibly suggests a disregard for relationships between lines, I suggest Finnissy means that any attempt to interlock the separate lines is not the intention, but that a sense of separate strands should be audibly apparent.

The accuracy of durational values is not a subordinate factor; these determine the "detail" within the line, the idiosyncracies (and domain) of the composer,

1. In conversation with Michael Finnissy
2. ibid. ("...anything else..." presumably refers to factors such as grace-notes (which are outside of the main tempo) as well as un-notated factors such as rubato)
but are generally of little significance to the larger structure and concerns of
the piece. Finnissy's own recording of Reels is an interesting document,
giving no authoritative interpretation (there are many idiosyncratic touches,
and deviations from the strict notation of the rhythm, which it would be
difficult and pointless to imitate), but is illustrative of the approach to
interpretation given above. The importance of detail is apparent in this
recording, even if it does not always accord with the exact notated detail.

It is true of Finnissy's earlier music that the relationships between lines
are less easy to work out than those of his later music. The opening page of
Jazz (example 1.48) is unquestionably extremely rhythmically complex in its
notation. A rhythmically precise reading of the first bar (with the 14:9 ratio in
the left hand part) is probably impossible and would in any case be disrupted
by the grace-note figurations. Joanna MacGregor claims to work such ratios
out "very slowly and accurately...but then it's just a process of gradually
speeding it up". However, it is likely that when combined with other factors
into the whole, the rhythm will inevitably be distorted in some way (if not,
presumably some of these other factors will have been sacrificed in order to
gain rhythmic precision). Concerning a piece such as Conlon Nancarrow's
Canons For Ursula, (a piece that MacGregor has played), a strictly rhythmic
interpretation is the preferred option and MacGregor's method is appropriate.
Ian Pace prefers to conceive rhythmic complexities in Finnissy's music as "for
example 31 in the time of 24 is like 5 in the time of 4 but just a tiny bit more.
I'll work out the gesture first and then think this is how long I have to put it
into and just speed it up or slow it down until it fits. So if I find I've come to
the end and I've already got through my notes I'll just do it a bit slower."

It would appear that Finnissy has made a miscalculation in the opening of
Jazz: the upper stave adds up to eight quavers plus a dotted semiquaver,

1. Finnissy plays Weir, Finnissy, Newman and Skempton NMC (NMCD002)
2. In conversation with Joanna MacGregor
3. In conversation with Ian Pace
whilst the left hand stave (within the 14:9 ratio bracket) adds up to 14 quavers plus a dotted demisemiquaver instead of the intended 14. This suggests that the duration values are a guide to their relationships within each individual line only, and that the ratio 14:9 is purely an indication of the degree to which the left hand line is faster. Thus the concern is again for lines rather than for the relationship between them.

The title 'Jazz' suggests an improvisatory quality which has bearing on the level of accuracy at which the pianist chooses to approach this piece. Upon my suggestion that a graphic reading of this bar would be a valid approach, Finnissy agreed that this was "basically the easiest way into the score. If you want to count it, then the brackets give you the accurate counting. It's always going to sound as if it's free of rhythmic constraints anyway, hopefully, so it doesn't make much difference which way you approach it."

The visual complexity of Finnissy's music is the result of an attempt to notate in detail a set of complex actions and reactions. I suggest Finnissy's notation is not intended to procure a 'definitive' performance, one which is as close to the composer's intention as possible, but rather to communicate more of the detail to the performer to which each performer can react as if to a set of suggestions and implications (rather than instructions and demands). Other composers might be content to approximate in some way, leaving the performer to provide the detail themselves. An extreme case (within generally traditionally notated music) is Schnittke's Piano Sonata No.2, the penultimate page of which includes three lines of squiggles with the indication "Tumultuous improvisation from low to high registers" (example 1.49). It is not hard to imagine an alternative version to this, notated perhaps by Finnissy (though not in keeping with Schnittke's musical style). Therein lies the problem, namely that any imposed 'improvisation', in which the pianist is free of constraints other than the squiggles, is likely to sound alien to the piece, unless one goes

1. In conversation with Michael Finnissy
to the trouble of notating a Schnittke pastiche, which seems hardly the point.

Cornelius Cardew, under the heading 'Interpretation' in *3 Winter Potatoes* (1961-65), writes "The crotchet unit is variable. Rhythmic subdivisions within that unit should be interpreted relatively, with reference to the following basic ideas: \( \uparrow \) = on the beat; \( \uparrow  \downarrow \) = just after the beat; \( \uparrow \ddagger \) = suspended between beats; \( \uparrow - \ddagger \) = just before the beat". This bears resemblance both to Finnissy's remark concerning dotted notes and to my earlier proposal of a unit being divided into three perceptible degrees of differential. The main problem with Cardew's notation is that a basic crotchet unit divided in these ways visually represents something specific to the pianist. To re-evaluate these divisions as variables goes against ingrained tradition. Similarly, the second movement of Ives's *Concord Sonata* calls for the pianist to treat the 2:1 relationship between 32nd and 16th notes "not too literally". Here, however, the notation (expansive and not divided into regular units) makes this re-evaluation easier to accept than Cardew's more precise organisations of the beat.

All the rhythmic ratios in James Dillon's *Spleen* are of the '(n+1):n' type, and there are never two superimposed ratios. Within this restriction Dillon creates variety through use of dotted rhythms (within a ratio bracket) and traditional tempo gradations. It could be argued that the use of ratios here is purely a means of notating irregularity and that the intention is more gestural than suggestive of a rhythmically precise reading. Where the unit involved is relatively small a pulse-oriented motion is possible, but often this is disrupted by rests or dotted notes which break up the 'beat' (see example 1.50). The function of a ratio over a single line, then, is to indicate a subtle increase of tempo for a certain amount of time by a *small degree*. This is, of course, relative - a 3:2 ratio marks a considerable and more significant shift of tempo than, say, 17:16 - and the interpretation of each ratio must be considered within its context. However, the insistence with which Dillon uses exclusively
(n+1):n ratios arguably implies a more liberal interpretation – whereby one line moves at a slightly faster rate than the other – over one which strives to fit each note mathematically.

Morton Feldman's later music, from approximately the last ten years of his life, is in part characterised by a considerable rhythmic complexity, often of a more visual than aural nature. Like Finnissy, this is the result of a desire to communicate the detail. In Feldman's case, inspiration is derived from the wealth of detail (of colour, shade and texture) in oriental rugs. Nowhere does this complexity involve ratios other than the (n+1):n type. The composer Bunita Marcus, a close friend and associate of Feldman's, argues that these ratios are not of the 'Darmstadt' type but indicate simply 'a little bit faster', the indication of a gesture, a slight shift of tempo. Whilst it is certain that Feldman would not have advocated a pedantic approach to performance, this method of rhythmic notation, if accepted as a gestural device, is problematic. For example, the introduction of a new semiquaver idea in Triadic Memories at page 34 (example 1.51) involves shifts of tempo such as 4:3, 5:4, and 8:7. Feldman's method is to write, for example, a bar of 4/16 and to write five semiquavers in the space of four (this is usually the case in his later music, which often results in many different time signatures juxtaposed). The notation is problematic because an increase of tempo at the rate of 4:3 is steeper than 5:4, which is itself steeper than 8:7. These subtle variances would not necessarily be articulated if one were to treat each ratio in the same manner, as a temporary 'nudge' forward in tempo.

Similarly complex juxtapositions of tempo units occur throughout Triadic Memories, most significantly during the first two-thirds of the work, in which the transition between a 4:3 quaver and a regular quaver demands minute adjustments to one's perception of the beat. The time signature is 3/8 (until the introduction of semiquavers at page 34 discussed above) yet until page 16

1. Lecture given by Bunita Marcus at the Huddersfield Contemporary Music Festival, 1996
each bar is divided into units of four, so that in effect the quaver unit is three-quarters the duration of the 'real' quaver unit. When, at the 17th bar of page 16 (example 1.9b), the bar is divided into three, the perceived beat is threatened and gradually the quaver unit is established alongside the 4:3 quaver unit.

A unique notational device is found in the earlier Piano in which Feldman uses dotted ratio brackets to group the extreme notes of a bar, signifying that the ratio actually applies only to these notes (example 1.52a). Despite the visual complexity of this method, other means of notating this event would be equally if not more complex (e.g. \( \frac{3}{7} \)). For visual clarification Feldman (later in this piece) extends the graphic layout to four or even six staves, when superimposing previous blocks of material. This requires considerable rhythmic co-ordination as well as the ability to play dense chords very quietly and in rapid succession. The overlapping of ratios causes added complications (example 1.52b) and the simplicity with which the chords are mapped out on the page is deceptive. In such cases the priority is to maintain a comparative articulation of each block of material with its original articulation earlier in the piece. To some extent, Feldman's late scores are visually related to the rugs that inspired the music (Feldman developed a keen fascination in the later years of his life with oriental rugs) in that they are very clearly organised in their grid-like form. The rhythmic inflections are like tiny inflections in the detail of a rug - of no structural significance to the whole but as momentary details within the work as a whole. The effect is of a subtle disorientation rather than a complex rhythmic contortion.
The traditional function of the grace-note, "to ornament or embellish the melody",¹ is one amongst a number of possible interpretations of this notational device in contemporary music. Its function differs according to i) the immediate and wider context in which it is found, and ii) the composer's intention (not always made clear). Where traditionally the grace-note was subservient to the 'regular' note it generally preceded (without which there would be nothing to 'grace'), the grace-note in post-war music has a life and character of its own and can function independently of the regular note. Now, therefore, the expression 'grace'-note is misleading, though for historical reasons the term will be retained in this study on the basis that a grace-note refers to a 'small' (printed) note and a regular note to a 'larger' note.

The prime innovator and modifier in the use and notation of grace-notes was Stockhausen. After the rigorous complexities of Klavierstücke I-IV, Stockhausen sought an alternative method of notating rhythmic flexibility in his Klavierstücke V-X. Though rhythm is still notated precisely in these pieces, gone are the ratio groups, including triplets, leaving binary rhythmic divisions only (i.e. basic quavers, semiquavers, demisemiquavers, all dotted and double-dotted, etc.). Imposed upon this rigid backbone are grace-note figurations. These take two forms: those that are inserted before, after or between regular notes, and those that are within the boundaries of two dotted vertical lines. The former should not disrupt the rhythm of the regular notes and in that sense it could be said that they are subservient to the regular notes, but in no sense are they decorative or of lesser importance. Those that are within the dotted lines are 'outside' of the rhythm (and therefore tempo) of the regular notes, described by Stockhausen as intended to "interrupt the tempo indicated".² This attaches a new dimension to the interpretation of grace-notes

¹. Definition in Oxford Concise Dictionary
². Preface to Klavierstücke V-X
that is, the existence of a new and separate time layer, independent of and unrelated to the regular tempo. In the preface to the scores, Stockhausen describes fully how the grace-notes are to be interpreted:

Small notes are independent of the tempo fluctuations indicated and are played 'as fast as possible'. They are just as important as large notes; they should be articulated clearly and not quasi-arpeggiated. Therefore they must be executed more slowly in the lower registers than in the upper. The various intervallic leaps within groups of small notes should result in a differentiation of the actual intervals of entry (do not make them equal). Groups of small notes between vertical dotted lines interrupt the tempo indicated.¹

There are three main issues to be addressed concerning the interpretation of grace-notes that arise from the above statement: 1) the possible interpretations of "as fast as possible"; 2) the introduction of a new time layer suggested by grace-notes; 3) the articulation of grace-notes in comparison with the articulation of regular notes.

"...as fast as possible..."

With the exception of single grace-notes 'crushed' against the regular note they precede, it is unusual to find examples of grace-notes that are intended to be played "as fast as possible" in traditional music. Instances of long runs (usually scalar or arpeggiated) usually occur in the context of connecting two events or over a regular accompaniment figure, such as in some Haydn slow movements and Chopin respectively (examples 1.53a and 1.53b). These are presumably intended to be measured with some degree of regularity, possibly with phrasing or imposed rubato, and articulated clearly.

Stockhausen's demand that grace-notes be played "as fast as possible" is, then, contrary to the inherited traditional practice of playing grace notes.

¹ ibid.
However, there is a contradiction in Stockhausen's prefatory remarks if one takes these literally, for he demands that they "should be articulated clearly", suggesting that in the bass of the piano, notes will not be as defined as in the upper registers and that the pianist should account for this. The preface should perhaps read: "Small notes...are played 'as fast as possible' whilst ensuring a clear articulation of each note". Yet Stockhausen also warns against any imposed 'stylised' rubato or attempts to equate time intervals, noting that the inevitable variations of time interval caused by the differences in pitch intervals are intentional.

In addition to the distortion caused by pitch intervals, dynamics are used for a similar purpose. It is physically easier to play a group of fast notes at mf or f than at p or pp. Thus "as fast as possible" is dependent also upon dynamics. The irregularities of Klavierstücke I-IV, and the unique individual responses to the rhythmic notation, are replaced in Klavierstücke V-X by irregularities caused by the individual performer's abilities (physically to play "as fast as possible"), sensibilities (to discern the defining limits of articulation) and the acoustical and physical properties of the piano used. Performer idiosyncracies are restricted in meeting these and other demands.

Cornelius Cardew, a pupil of Stockhausen, echoes and extends Stockhausen's usage by notating two kinds of grace-note in his 3 Winter Potatoes: "Written as quavers they should be played as fast as possible; written as semiquavers they should be played 'faster than possible', i.e. the speed should be pushed beyond articulacy."¹ Like Stockhausen, Cardew suggests that "as fast as possible" is not exactly what it means and that grace-notes should not be crushed but as clear as their usage in traditional music, if a little faster. "Faster than possible" is more suggestive of a manic crush of notes where the division between notes is inaudible. Devoid of their traditional implication as decorative, the performer must determine the relation of grace-

1. Preface to the score of 3 Winter Potatoes
notes to regular notes. Without an indication of anything to the contrary, it would generally be safe to assume Stockhausen's definition of grace-notes (to be played "as fast as possible" within the realms of articulacy) as being a standard rule. For example, the grace-notes in Ferneyhough's Lemma-Icon-Epigram, which are less common than in Stockhausen, have nearly as many accentuation and dynamic markings attached to them as the regular notes and would thus suggest a very clear articulation though still played "as fast as possible".

The one exception to Stockhausen's regular grace-note function occurs near the end of his Klavierstück IX. Notated time signatures (this is the only one of the Klavierstücke V-X to feature time signatures) determine bar lengths but each bar is only partially filled, leaving a blank space of varied lengths at the ends of bars (example 1.54). These grace-note figurations are grouped around isolated regular notes and should be played irregularly in both entry distances and speed, nearly 'as fast as possible'. Inside the groups at any place little caesuras of varying lengths can be made (between the groups, however, the longest pause should always develop, so that one can clearly distinguish the groups bar-wise)\(^1\)

Again, execution of irregularities within a set time constraint can be awkward because the sense of both small and large time units is lost. However, a proportionate understanding of each bar's duration, in relation to the surrounding bars can be obtained and should be emphasised. Unfortunately, although the spatial layout clearly suggests a longer break between each figuration, a space-time interpretation within bars is inappropriate as the gaps do not proportionately reflect the variance in time given to each silence (which, for example, between the 21/8, 13/8 and 8/8 bars decreases steeply).

1. Preface to Klavierstück IX
Michael Finnissy’s use of grace-notes resembles Stockhausen’s intention, illustrating again (as with dynamics, rhythmic ratios, etc.) the influence of Stockhausen’s notation, if not so much on the music, on Finnissy’s style. In the preface to *English Country Tunes*, Finnissy directs that the grace-notes be played "as fast as possible, regardless of context". The second half of this direction is an important addition to the usual directive, as it warns against a lingering over grace-notes in, for example, slower music. This stands as the general rule for all Finnissy’s piano music, though the result will likely differ according to the context and the material against which the grace-notes are pitted. A recent example is *Elephant* during which the right hand generally has precisely notated material whilst the left hand consists of grace-note figurations (see example 1.34). Because of the speed and complexity of certain right hand passages, the grace-notes fit in where they can and could almost be precisely notated – indeed their spatial layout is often representative of their positioning in time. The pitch material of the grace-notes is of equal importance with the right hand, and is sometimes imbued with a surface tonality. The only difference is that Finnissy chooses not to notate the rhythm, retaining this element of performer freedom. However, due to the amount of material in certain sections, and to the closeness of the hands (which frequently cross), the rhythm of the right hand is sometimes distorted by the grace-notes in the left hand, revealing another facet of Finnissy’s notation "to juggle with".

Finnissy frequently writes grace-note figurations in both hands, interrupting the flow of regular notation, with a differing number of notes in each hand (example 1.55). The time it takes to play each "as fast as possible" will obviously differ, due to the number of notes, intervals, registral leaps and fingering, and when superimposed will differ again due to the distorting, "gravitational"¹ effect one hand has on the other. However any difference in

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¹ A term Finnissy used in conversation to describe the effect the rhythm of one hand has on the other, in traditional and contemporary music.
time taken by each hand will likely be alleviated to some degree by the notational alignment, which will have a psychological effect on the pianist. It is understood that these examples generally take place in a very short space of time and the end result will usually be somewhat haphazard. Occasionally Finnissy clarifies the intention by writing a performing version example, which inserts rests at the end of the grace-note figuration before the next note if it is combined with an event in the other hand (see example 1.55).

Two unusual grace-note figurations in *English Country Tunes* and other works of the same period are more precisely notated 'small notes', and complex 'umbrella' grace-note attacks. The former are "more precisely rhythmicised and 'not too fast' grace-note groups"¹ (the exact opposite of their function in Cardew's *3 Winter Potatoes* mentioned earlier). These have ratios attached to them to indicate their precise irregularity (for example 24:23 and 77:64 on page 3, and varied superimposed ratios on page 52). The differentiation between these and regular notes is through articulation and the intention that they remain outside of the main tempo (for further discussion see below).

The 'umbrella' groups are a feature of *English Country Tunes* to be played as a single complex attack – consisting of a series of notes or chords piled up on one another, in a hasty and wilfully unpredictable manner. They are to be differentiated as much as possible from the smoother-flowing groups² [see example 1.55]

These can extend to a number of complex groups within a single complex attack (example 1.56a). Finnissy claims to have derived this notation from a realisation he and the pianist Alexander Abercrombie made of Stockhausen's plus/minus, in which you do actually generate complexes of notes which would

1. Preface to *English Country Tunes*
2. *ibid.*
have to precede down-beats but which can't be a single
grace-note or even a chord. So it's like having a very very
complex arpeggio in which some of the notes go up and
down, some go sideways, etc.¹

The notation is also similar to devices used by Busotti in his pour clavier
(1961) (example 1.56b). The events notated under the 'umbrella' would ideally
be a single vertical event but because of its complexity is notated (and
executed) linearly.

'Outside Time'

Grace-note figurations in Finnissy's music may appear incredibly fierce
but once the technical difficulties of playing two simultaneous lines as fast as
possible are overcome, the interpretative issues are less bewildering. Primarily
this is because all grace-note figurations are outside of the main tempo. This is
the most important and liberating aspect of Finnissy's grace-note notation. The
full prefatory note to English Country Tunes reads: "Grace-notes are always
outside of the main tempo (as fast as possible regardless of context),
unaccented, between beats - interrupting the rhythmic continuity (like inhaling
breath)". Further clarification is found in the preface to all.fall.down: "Grace-
notes are ALWAYS supplementary to the pulse and rhythm, functioning as
minute "up-beats" or intakes of breath, and never accented unless specifically
marked". Finnissy is here applying to all grace-note figurations the intention
Stockhausen applied to those grace-notes between vertical dotted lines in his
Klavierstücke.

The notion of grace-notes as being outside of time is a further device to
allow the music to function through time rather than in time. The grace-notes
cause a temporary halt to the progression of regular notes, as if, to use

¹. In conversation with Michael Finnissy
Finnissy's own analogy, the regular notes represent a drawn-out release of breath and the grace-notes break up that release by representing an inhalation of breath for however long it takes. Rather than racing to fit all the grace-notes between two events *in time*, the two events are separated by the time it takes to play "as fast as possible". However, the varied positionings of grace-note groups (connected by a stem or separated from a regular note, slurred or tied to a regular note, etc.) pose problems of interpretation concerning their entry position in time. Once the group has begun they are simply to be played as fast as possible, but the point at which they begin is ambiguous.

For example, the opening right hand line of *Jazz* (example 1.48) features three triplet quavers disrupted by grace-notes. If the grace-notes are outside the main tempo this suggests a time layer totally separate from that of the regular notes. Should the regular notes, then, last their full length, with grace-notes occurring in between as a distinct event, or should the grace-notes borrow from the total duration of the regular notes? In a performance version, these two approximated alternatives are the result:

![Diagram](image)

The former is a considerable distortion (an expansion) of the notated rhythm whilst the second retains a neat triplet figuration. Distortion of notated rhythm is, however, a feature of Finnissy's music, much of which is distorted by huge arpeggiated chords or more than one line occurring simultaneously in a single hand. These inevitably disrupt the visual alignment and the duration of events – an arpeggiated chord is notated as a vertical event but is in real time a horizontal event. However, the second solution meets the requirement that grace-notes are played as fast as possible and retains the *rhythmic* outline
(rather than the *durational* outline) of the regular notes. Where grace-notes occur between two notes of two different *groups* (i.e. the last note of one group and the first of the next), the grace-notes can be more readily considered as separate from the regular notes and should not detract from the total duration of either note (example 1.57). This latter is precisely the meaning of Stockhausen's notes between dotted lines – they anticipate the moment of entry of the note which they precede but not until after the full duration of the previous notes or event.

Though Morton Feldman gives no indication as to the interpretation of grace-notes in his music, their use and notation would also suggest a separate time stratum to that of the regular notes. Feldman notates isolated grace-notes at the end or beginning of a bar with nothing but a rest to follow them, like random dust particles, isolated sounds in mid-air. Like Finnissy, Feldman is concerned with the passage of music through time rather than in time, and any trace of pulse should be disguised. Thus when a bar ends with a grace-note (example 1.58a), or a grace-note precedes a pause (example 1.58b), the listener’s perception is not of an anticipatory note crushed before an imaginary note or a real down-beat, but rather of a note placed outside of pulse-time.

**Articulation**

It would appear that, for Stockhausen, the articulation of grace-notes should be no different to that of regular notes.¹ The purpose of grace-notes in the *Klavierstücke* is essentially to provide rhythmic irregularity. Finnissy would argue that a change in notation from regular to grace-notes causes a change in the perception of the way notes sound

perhaps not to the ear, but inside the performer's head there will be and that's very important, because when you're playing you're not only playing the surface of the music,

¹. See preface to *Klavierstücke V-X*, quoted on page 67
you're playing what's behind the notes which means that to a certain extent you have to be prepared to take on the conceptualisation that the composer has which is reflected in the notation because there's no other means to do it.¹

In all.fall.down, Finnissy describes "the difference between ♫ and ♬ being primarily one of emphasis and rhythmic articulation". This may or may not be audible to the listener but affects the pianist's reactions in some way; the difference between regular notes and grace-notes in example 1.59 will almost certainly not be heard as such but will produce an effect that is particular to that notation, through a combination of the grace-notes being outside the main tempo and articulated with less weight. This is true also of the grace-notes in Feldman's music which suggest an extremely light touch, distinguishing them from the more secure regular notes.

The boundaries are less certain in Gerald Barry's Au Milieu (1981): in example 1.60a the already extremely fast quaver scalic passages are transformed into grace-notes. Presumably these are to be played "as fast as possible" (if that state has not already been reached); the primary difference between grace note and regular note figurations, then, is that of having no tempo restrictions. The optimum speed obtainable will radically differ between, for example, triplet octaves and single lines, or parallel fifths. The passage marked violently (example 1.60b) could be played as two parallel lines (each hand taking one line only) or with hands alternating playing chords; the latter is likely to be more 'violent' but slower than the former technique, so the speed of the grace-notes depends on a number of practical considerations to which no indication is given. Concerning articulation, the grace-notes suggest a smoother flow of quavers instead of the more measured and weighty regular notes which they follow. However, the speed which the regular notes have reached is unlikely to allow for a measured response, hence there are likely to

¹ In conversation with Michael Finnissy
be few audible differences between regular and grace-notes. Rihm's Klavierstück VII plays with the boundaries between regular and grace-notes in such a way that the switch from the one to the other is a gradual 'phase'-like process (example 1.61).

All the examples presented employ grace-notes with the expectation of some internal reaction being provoked in the pianist to articulate them differently. Only Stockhausen draws attention to their means of articulation, outlining in detail his precise intention. Traditional associations are inherent in the perception of grace-notes, but their wide and varied usage in contemporary music demands a re-evaluation of their interpretation.

Throughout this chapter, examples from a wide spectrum of music have demonstrated ambiguities with contemporary music notation. The core of the problem lies primarily with two issues: firstly, musical notation is an historical act, inextricably associated with particular meanings, yet contemporary music has both original concerns and shared concerns with traditional music; and secondly, the intentions of composers today differ enormously and consequently understandings of the functions of notation (and of particular notational details) differ from one composer to another.

Both issues demand a considered response from composers and performers. It is the composer's responsibility to make a specific intention clear, particularly if using a new or rarely used symbol. More importantly, composers must consider and assimilate traditional associations of notational norms if they intend a phrase or line to be articulated in a specific manner. Unless verbal explanation is given at each moment, the notation itself should imply the manner in which it is to be interpreted. For example, if a composer intends a complex rhythm to be played precisely, the notation should be shaped to suggest a precise interpretation, using small units within which to fit
rhythmic groups. If a more free interpretation is the intention, the notation can incorporate distorting elements, such as phrasing, rests and bar-lines, and can perhaps be stretched over beats, rather than within beats.

It is the performer's responsibility to establish some set of priorities (not necessarily those of the composer) that will affect the interpretation of notational details. It has been demonstrated that a single symbol, rather than implicating a single response, suggests a range of responses. The immediate context and both the compositional and performance priorities should be assessed to inform interpretation for that symbol. Likewise, when notational detail is absent, these priorities should shape the performer's intuitive response to the basic musical material. Notational contrasts and similarities, textural and gestural connections, and dynamic and tempo decisions are all conditioned by a set of priorities, the establishing of which is discussed in the subsequent two chapters.
CHAPTER TWO

Analysis, Comprehension, and Performance
Analysis, Comprehension, and Performance

Introduction

The study of performance and performance-related topics is a relatively new field, rapidly developing in recent academic publications. The diminishing gap between 'theorists' and 'performers' is reflective of a growing dissatisfaction with traditional types of analytical and theoretical study that have tended to alienate the performer. Theorists may continue not to aim their research at performers, but the apparent disdain with which performers have been treated, and ignored, in the past is less often present today.

Pioneering works such as Erwin Stein's *Form and Performance* (1962) and E.T. Cone's *Musical Form and Musical Performance* (1968), now regarded as classics of the performance literature, were among the first to address these issues with a strongly practical focus. Contemporary scholars such as Jonathan Dunsby and John Rink have contributed to the field through critical discussion of the above works and others. Numerous analytical studies now contain a high degree of performer bias.¹ In addition, two recent collections of studies, *The Practice of Performance* (ed. Rink 1995) and *Compendium of Contemporary Musical Thought* (ed. J. Paynter et al., 1992), add to and develop research into performance practices and theories. However, nowhere amongst these and associated studies is there to be found serious consideration of contemporary music and performance. The music of the Second Viennese School and of Stravinsky are as far into the twentieth century as this body of literature treads. This seems surprising given that performers have very little to rely on to govern the interpretation of new music in comparison with the passed-on

traditions (inherited through teaching and recordings), historical knowledge, and wealth of musicological study that informs and shapes interpretation of pre- and early twentieth-century music.

In order to redress the neglect of contemporary music in performance practice literature, this chapter will first discuss some of the primary arguments of the existing performance literature and their possible application to contemporary music. The problematic relationship between analysis and performance will be discussed and appropriate methods suggested by which the performers of contemporary music might utilise theoretical work to aid their interpretation. The chapter will then consider ways in which a performer's understanding of a work has a bearing on the practicalities of execution, and ways of achieving an increased understanding of a new work, with a view to performance. To conclude the study, three examples will be presented which illustrate some of the values of applying analysis to interpretation.

Views expressed by noted performers of contemporary music, who are forced to confront these issues on a regular basis, are incorporated in this study, as well as examples drawn from my own experience. These will be presented on the understanding that they represent a personalised route through a particular work and not the only or the best means of achieving a coherent performance. The examples are intended to illustrate methods of comprehension and application, though it is also hoped that the analytical details will be of interest and use to other performers.

Defining Analysis

The issue over which commentators most disagree is the extent and value of the practical application of theory to performance. At one extreme are those who follow what might be considered a traditional theoretical path. For these commentators, the key to an informed, "correct" performance lies in a
thorough analytical understanding, accounting for each phrase and note in relation to its immediate and wider context. In contrast, others highlight the many different, complementary, and often idiosyncratic components that contribute to an end-interpretation. The acceptance by recent commentators of a plurality of interpretative responses may in part be a reaction to the extreme analytical view. However, because the analytical approach is affirmed by a number of writers (though less so amongst recent studies), it is important to address the assumptions that support such a view. Before doing so, clarification must be sought concerning the term 'analysis'.

As defined in the Collins English Dictionary (1993), analysis is "the division of a physical or abstract whole into its constituent parts to examine or determine their relationship." Traditionally, in the context of musicology, analysis focuses purely on the 'abstract' component of music. It is associated with the discovery of connections within the musical score, demonstrating coherence in all aspects of form. In this sense, analysis does not require the realisation of the written note into physical sound; all the evidence is visual rather than acoustical. When relating these findings to performance, acoustic aspects are subservient to the theoretical. The 'physical' component of music, however, adds to this definition many other aspects of production and comprehension. This includes additional factors such as the historical and social context, performance practices of the time in which the piece was written, and of the occasion of its performance, the composer's idiosyncracies, and the physical process of creating sound. Recent commentators have argued that purely score-based analyses can only be a part of a wider process of analysis, and that the factors listed above are also integral to that process. James Webster defines this as 'contextual' analysis:

These consider topics that have often been taken as standing 'outside' the musical work: the conditions of its composition and première (the purpose for which it was written or commissioned, the place and circumstances of performance,
the makeup and attitudes of the audience etc.); the relevant musical conventions (genre, 'semantic' associations of instruments and musical ideas, rhetorical content, etc.); the historical and social context; relations of the work to compositional traditions and influences; its later dissemination, reception and historical interpretation; and so forth.¹

A further type of analysis, one which requires no distribution amongst academic journals and publications, is suggested by John Rink:

The vast terminological gulf between analysts and performers blinds us to the fact that good performers are continually engaged in a process of 'analysis', only...of a kind different from that employed in published analyses. The former sort of analysis is not some independent procedure applied to the act of interpretation: on the contrary, it forms an integral part of the performing process....each performance is an act of analysis, capable of representing even complex structural hierarchies with great economy and...efficiently addressing intractable features like colouring and timing. In this respect, perhaps the best analysis of a work is its performance, assuming that the performers have clearly thought through the piece and that listeners are able to infer analytical content by means of 'structural hearing', which is a necessary prerequisite to communication.²

Indeed, it could be said that the consideration of every aspect of a work, internal and external, is 'analysis'. In this sense analysis extends to the interpretation of its notation (which the previous chapter has shown to be a highly ambiguous and revealing component of any work, accorded varying degrees of significance from composer to composer but always of great significance to the performer), its context within the composer's output and development, consideration of its performance history (presumably relatively short or even non-existent if a contemporary work), and so on.

2. John Rink, op.cit. p.323, 328
Chapter Two

The term 'analysis' in this understanding encompasses the entire subject matter of this thesis, however, for the purposes of this chapter the term 'analysis' is reduced in its scope and refers primarily to an understanding of the compositional intent in its direct derivation from the information printed in the score. Other considerations, external to the score (but not to the interpretation of the score), such as an aesthetic understanding, appreciation of the composer's critical approaches, and those factors embraced by Webster's 'contextual analyses', will be considered in the next chapter within the contexts of style, authenticity and performance practice.

Concerning Analysis and its Relationship with Performance

[the performer] should not begin with preconceived ideas about music or emotions to be expressed, but seek the character in the music's formal features....The character is given by the structure. In fully realising the second he will convey the first, but by pulling the music about he will contort both. ¹

If Stein's dictum quoted above is correct (and despite the number of contemporary writers who emphatically dispute such a claim, there are also a number of writers and performers who would affirm this approach), then the performer of a contemporary work has a considerable task ahead. Stein repeatedly stresses the need for comprehension of a work's structure: "If [the performer] understands the structure, he will phrase sensibly, distribute correct accents and stresses, and properly balance the texture" ² and, later, "There is no other means of access to correct performance than by way of the music's structure. Rightly understood, it reveals the phrasing and tempo that are required for clearly projecting every detail." ³ This view is shared by

2. ibid. p.70
3. ibid. p.122
Wallace Berry in his book *Musical Structure and Performance* (Yale, 1989), a laboriously analytical study which emphasises the rationale of analysis to illuminate all interpretative decisions: "Analysis tempers the purely subjective impulse, resolves unavoidable dilemmas"; "...no performer can reach a persuasive judgement...with only inarticulate preference: any choice must be constructively substantiated."  

Both writers allow for the variations in interpretation caused by the selective procedures an individual employs during analysis: "To judge the relative importance of structural features is not always easy", writes Stein. "When this is so, opinions inevitably vary and may present a legitimate cause for different interpretations."  

Berry upholds analysis not so much as the provider of a solution but as the guiding principle informing every stage of interpretation: "...if, as commonly conceded, there is no 'best' or 'correct' interpretation of a piece, there are nonetheless infinite possibilities of misrepresenting, and of interpretive intrusion; analysis must often tell the performer what should not be done."  

The extent to which analytical insights can effectively determine the correct phrasing, tempo and tempo fluctuations, and other articulatory functions is questionable. Stein takes an extreme view, suggesting that formal features alone determine correct articulation: "Not a preconceived style, but features of the melody, harmony and texture teach us the reasons why we must phrase Scarlatti differently from Debussy".  

Roger Sessions implies that the performer's sensibilities and idiosyncrasies are subservient to the formal features of the work: "...having discovered as well as he can the composer's intentions, he must then apply himself to the task of reproducing them with the utmost conviction."  

2. ibid. p.218  
4. Berry, *op.cit.* p.10  
5. Stein, *op.cit.* p.32  
associated with the Second Viennese School. Jonathan Dunsby draws attention
to the view taken by the violinist Rudolf Kolisch concerning the extent to
which analytical understanding bears upon performance:

It has to penetrate so deeply, that we are finally able to
retrace every thought process of the composer. Only such a
thorough examination will enable us to read the signs to their
full extent and meaning and to define the objective
performance elements, especially those referring to phrasing,
punctuation and inflection, the speechlike elements.

The views espoused by the composers of that circle appear to oppose the
above theory directly. This is exemplified by Webern's attitude to the first
performer of his Piano Variations, Op.27, Peter Stadlen:

Even when I asked him [about the serial construction of the
work] he declined to go into it with me - because, he said, it
was important that I should know how the work should be
played, not how it was made....He seemed to imply by his
behaviour that both he and we need only be concerned with
the prima facie appearance of the correspondences and
structures as we see them in the score and as they are made
to sound according to his instructions - and that knowledge
of their serial implications was not required for a full
appreciation of the music.

Yet the score of the Variations is typically bereft of detail concerning
expression. Webern's own ideas of "how the work should be played" are
recorded in Stadlen's performance version of the score and reveal all manner
of expressive nuances that are hardly suggested by the printed version of the
score. There are no such versions for other works by the composer, yet in the
absence of the composer himself all that remains is the printed score. To avoid

1. Dunsby, 'Guest Editorial: Performance and Analysis of Music' *Music
Analysis* Vol.8 No.1–2, 1989 p.6
2. Quoted in Joan Allen Smith, *Schoenberg and His Circle: A Viennese Portrait*
the "music of a madman", as Webern described a performance of his Symphony,\(^1\) analysis must be thus acknowledged as a reasonable vehicle by which to achieve a coherent performance. Without the knowledge of a compositional system, or of the composer's personal methodology, knowledge of "how it was made" is arguably just what the performer does need to find a route into a work.

**Concerning Analysis and Contemporary Music**

The problems of analysing contemporary music are great not only for performers but also for theorists, and there is relatively little analytical work on new music to compare with that covering older music. The available studies of contemporary works frequently tend to be of a highly computational nature, involving complex tables and symbols, meaning very little to most performers (indeed, one suspects, to the majority of musicians working in any field). Pitch-class analysis is the most frequently-used analytical method in relation to modern music. However, a pitch is generally perceived by performers as a physical and acoustic entity rather than as a unit in a numerical series, and a chord or phrase is understood in terms of its notated spacing and contour. To substitute pitch, intervallic and harmonic properties with numerical groups is antithetical to the mode of thinking of most performers.

Jonathan Dunsby writes

In modern music analysis...and because it is a relatively new body of knowledge and methods, the favoured theories have held their majestic sway, immune as they deserve to be from trivial pragmatic assault, and as yet unchallenged by their successors. This is the era of assimilation and codification, a breathing space for analysis between the great theorists of the twentieth century and those of the next...\(^2\)

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This pessimistic view of contemporary music analysis is accurate in its portrayal of current analytical methodologies, but shows no sympathy towards the performer of contemporary music. Jonathan Cross proposes a type of analysis which reflects better the concerns of the contemporary musician – composer, performer, or listener – rather than the traditional concerns of the 'analyst':

many analysts of modern music have been more concerned with demonstrating the consistency of their own theories and with perpetuating the nineteenth century belief that the only great music is that which is wholly unified, than with actually asking themselves whether or not their critical approach was fully appropriate to the music....Modern art...needs to be understood in its own terms and, in order even to begin to be able to discuss it, one has of necessity to adopt the language of modernism, the language of opposition, of difference, of crisis.¹

Though this is a concern directed at theoretically-based analyses, it points toward a more dialectical approach that is reflective of the performer's interpretative procedures.

Performers constantly balance and prioritise all those elements contained within a 'contextual analysis' in order to gain a greater understanding of a work, always directed towards actual communication in performance. However, an important element of that understanding remains an appreciation of the work's formal and structural properties – 'analysis' as it is traditionally understood. This need not – in many cases, should not – take the form of traditional analyses in which the reader is taken step by step through every note with regard to its connections and functions of unification, if this were indeed possible. "A work of modern art can be intelligible, can be coherent, without necessarily being organically integrated", writes Cross, but he also

suggests "...it is likely that the disparate and opposed elements in any given composition, if it is a coherent utterance, are ordered or controlled in some way, but that any investigation might well be different for every piece - or at least different composer or 'style'."  

Performer Analyses

One obstacle to critical examination of a detailed nature, and a major factor left unmentioned by recent performance literature, is that of time: analysis is a time-consuming process. Professional performers often have very little time to devote to in-depth analysis. Performers of contemporary music have even less time. The reality is that many performers of contemporary music, whether through their own choice or not, feel the need to spend as much time as possible working on the technical challenges of the piece and the opportunities for in-depth analysis are infrequent. Thus there is a need for more published and available analyses, or studies of some kind, of contemporary works. For example, Richard Toop's in-depth analysis of Ferneyhough's Lemma-Icon-Epigram is invaluable to the pianist preparing the work for its step-by-step illumination of connections and compositional procedures. Though this is traditional analysis, discussing few of the dialectical and contextual facets of the work, and not specifically written as a performance aid, it is an apt and articulate means of disentangling the intricate compositional procedures at work.

The sensitive performer will also assimilate aspects of the compositional aesthetic that lies behind the notes on the page. If this is considered to be a necessary contribution to the preparation of a work, then, given the possibility

1. ibid, pp.187-8
2. If giving the première of a piece, the performer may not receive the complete work until even up to a week before it is due to be performed. The interpretation will therefore likely be based primarily on instinct.
3. Richard Toop, 'Ferneyhough's Lemma-Icon-Epigram' Perspectives of New Music Vol.28 No.2, 1990 pp.52-101
(often probability) of the composer being uncontactable, written source material, whether of an analytical or other nature, is invaluable to the performer. However, Tim Howell argues

...performers will have to undertake [the analytical process's] application for themselves, since it is the actual experience of analytical enquiry that is of value to its practitioners. Reading someone else's analysis, even if specifically targeted as 'performer friendly' is almost the equivalent of asking someone to practise on your behalf. Performers need to be acquainted with the early stages of the analyst's thinking so as to be able to pursue this approach for themselves.¹

This view, whilst sympathetic toward the value of analysis for performance, fails to account for the time needed to analyse certain works in detail (with no starting point other than the score). It demeans the intelligence of performers to extract those elements of another's analysis deemed appropriate to them with a view to performance.

Whilst it is important for the performer to find their individualised route through a work, the study and consideration of other commentaries can only aid interpretation, providing different perspectives and revealing unseen connections. If the structure and compositional techniques of a work are found to be impenetrable, a published study or analysis may provide the 'gate' through which performers may then embark on their own 'journey of discovery' through the work. The term 'performer-friendly analysis' is for this reason misleading. A 'performer-friendly analysis' is one which is articulated in a widely comprehensible form (but not necessarily a simpler form), not one that dictates to the performer how each analytical discovery should affect the actual execution of the work in question. Reliance on this type of analysis is indeed 'almost the equivalent of asking someone else to practise on your behalf'.

¹ Tim Howell, 'Analysis and Performance', in Compendium of Contemporary Musical Thought op. cit. p.702
Analysis by theorist, student, composer or performer is always a subjective act. The possibilities of variation in interpretation are as open in analysis as in the performance of a piece of music. The analytical route a performer takes through a work is likely to be substantially different from that of an 'analyst' seeking to exemplify the compositional and possibly perceptual procedures at work. For performers engaged in analysis as an act of preparation for a performance, their route will generally embrace aspects of the work perceived to be relevant to its execution, possibly excluding elements considered to be of interest only with regard to compositional technique. Depending on the piece and the composer, this could be a basic, surface-level process delineating primary structural divisions, or it could be an exhaustive structural and thematic bar-by-bar analysis. Neither of these procedures need necessarily affect ways in which notes and phrases are articulated by attempting to reflect in sound the (often abstract) connections on paper, but may instead be crucial to the performer's perception of the totality of the work. For example, Ian Pace says of Ferneyhough's Lemma-Icon-Epigram:

...in the 'Lemma' section I could see how a lot of gestures came from previous gestures, but when you take a series of notes and you add all the odd-numbered tones on to the even-numbered tones and then somehow you turn them backwards and you cook it under gas mark 5 for however long then eventually you'll get the next thing – but as long as you know they are related then you can try and make some sort of continuity. 1

Three of the pianists interviewed for this study, all of whom are renowned for their performances of contemporary music, expressed no desire to prepare each piece by means of analysis. Another confessed to rarely analysing (in its traditional sense) new pieces, but felt that "at the very least an analytical understanding is unlikely to do any harm and may do a lot of good,

1. In conversation with Ian Pace
so in theory I'm very much in favour of it." In complete contrast, three other pianists (who, incidentally, are all of a younger generation than those referred to above), felt that an analytical understanding to some degree was essential, though always in close relation to other aspects of understanding.¹

With music that neither conforms to an archetypal form, such as sonata or variation form, nor adheres to a prescribed method, such as fugue or the 12-note row, the performer will likely have no initial clue as to the composer's working method. Joanna MacGregor describes it as like being "given a map and you know there are lots of directions on this map but you don't know what the code is."² Serious studies of individual contemporary works are generally restricted to those works which have achieved 'classic' (or 'near-classic') status. It is the unfortunate reality that performers frequently have only a programme note on which to base their non-score research, and possibly a lone article portraying an individual composer which give little insight into their compositional methods. The performer is thus continually searching for things to 'hold on to', both thematically and notationally. This is a problem cited by most of the pianists interviewed for this study, here described by Nicolas Hodges:

With a lot of music the shape of the piece is very difficult to discern, even when you can play it, the shape of the piece can be very difficult to understand. With the death of the sonata, being such an obvious formal archetype, it never happens any more and you don't know where you are. So I spend a lot of time, if not analysing in any great depth, initially trying to find some sort of landmarks....I'm very concerned to find the shape of pieces in as clear a way as I can.³

1. Unknowingly, one of the 'analytically-minded' pianists praised the performances on disc of one of the other pianists interviewed who had admitted to not finding analysis at all helpful.
2. In conversation with Joanna MacGregor
3. In conversation with Nicolas Hodges
Applying ideas about shape and gesture to interpretation is a feature of performer preparation, as Rink suggests

Whereas analysts concentrate on musical structure, performers attend primarily to musical 'shape', which is analogous to structure but tends to be more dynamic through its sensitivity to momentum, climax, and ebb and flow, comprising an outline, a general plan, a set of gestures unfolding in time.¹

In the absence of an apparent or archetypal structural layout, then, the performer to some extent relies on other functions of musical form to provide a sense of overall shape. The result of this special kind of analysis is a performer-concept of form based on gestural patterning, stylistic and textural shifts. The search for thematic (pitch and rhythmic) connections is matched by a delineation of gestural characteristics - comparing and contrasting, allowing gestures to interact and react against each other. Nicolas Hodges admitted to imposing a 'system' on a work where there wasn't a discernible system already in play, or where it was difficult to comprehend:

In Finnissy's Snowdrift, for instance, the ebb and flow of the piece between textures which focus on one melody and textures which are chordal, grace notes, all these different distinctions, which may even simply be notational, I grab hold of. Then while learning the piece I may discover that they are all wrong or that there are more apt ones and then I will jump onto those ones.²

An extreme example of music for which traditional analysis holds no clues concerning its performance is John Cage's Etudes Australes (1974–5), which were composed using the I Ching and star maps to determine the ordering, details and types of events. Peter Lawson's first approach was just to learn the notes, which is very hard just ploughing through them, and after a while concord and discord starts to

1. Rink, op.cit. pp.323–4
2. In conversation with Nicolas Hodges
come through. You're aware of a certain pattern of notes making a kind of sense within itself, being off-set against a neighbouring pattern of notes which seems to make sense with itself. You bring a kind of logic, a sense of form as you learn the piece, although in that particular case its obviously not been composed with that in mind.¹

Though it could be argued that in this case, imposing order on 'un-ordered' sounds is counteractive to the Cageian aesthetic, it is illustrative of the ways in which performers, willingly or not, need to create their own shapes and landmarks. In this way, a performer will always have some valid, and unique, understanding of a work which may or may not relate to a theoretical or compositional understanding of it. The process of comprehension is a gradual one as the performer continually makes new discoveries. The shape of a composition may develop and radically alter in conception in the performer's mind as it becomes more familiar.

For Peter Lawson, this process is the primary means of achieving an understanding of an otherwise bewildering structure: "...as I get to know the piece, things about it which seem to make sense come across. As they seem to make sense, I encourage them to make more sense".² Although it is true that this process occurs also in the preparation of more traditional music, the framework of established forms acts as common ground in the experience of all performers. When this framework is taken away, a re-evaluation or dismissal of accepted notions of structure and form is demanded with each new piece. However, even with music that conforms to some system, I suggest that the preparatory process will be similar to that described above.

Jonathan Dunsby simplistically suggests

...everybody now accepts that a sensitive performance of [Second Viennese] scores, especially perhaps of Webern's, is unlikely to occur unless the performer is thoroughly familiar

1. In conversation with Peter Lawson
2. ibid.
with the interval properties of the tone row or rows and the rhythmic structure of their presentation. Every detail of the score and all the interrelationships are considered vital study for the performer.¹

I would argue that a musical response to the melodic shapes and rhythmic gestures produced by the system would be an equally valid interpretation, based on the familiarisation of the musical patterns. Christopher Wintle’s analysis of Webern’s Concerto Op.24ii² is undoubtedly of interest to any conductor/ensemble wishing to perform this piece, but its importance regarding articulation of both small and larger units is limited. Knowledge of how the work connects must be balanced with musical ideas of shape, pattern, ebb and flow, and so on, together with an appreciation of the musical (Austro-German) tradition in which Webern was working.

Intuitive Analysis

'Alternative' observations such as those described above are the combined result of notational interpretation (similar gestures within the same piece will have similar notation) and the performer’s intuition. Howell describes instinct as being "in some way...the product – albeit a creative product – of experience",³ and calls for it to be subservient to analytical reasoning: "In the absence of individual analytical enquiry into the working of music, over-reliance on instinct will result in an interpretation that is merely reflective of someone else's."⁴ Rink, however, referring to it as "informed intuition (or 'acquired intuition')", suggests that "Ultimately, the simplest, most direct solution to many performance problems is reliance on this sort of 'intuition'".

1. Dunsby, op. cit. 1989 p.6
3. Howell, op.cit. p.700
4. ibid.
rather than on the complex 'mathematics' of some analysis,"¹ and "analytical expertise should certainly be brought to bear on one's performance if this facilitates one's understanding of a piece, but...it is by no means the only way in which to penetrate the work: sometimes, 'informed intuition' is sufficient."²

Both writers acknowledge that the intuitive impulse in a performer is in part, possibly entirely, conditioned by 'external influence' – a teacher, another performer (perhaps a recording), colleagues, general experiences of listening, and so on. Howell and Rink, however, are writing in the context of traditional repertoire. In relating the concept of intuition to contemporary music the primary difference is the much narrower potential for 'informed' intuition, given both the radical break away from tradition of much post-war music, and the highly individual styles and methods of composers today. Performances of even the major avant-garde works of the 1950's and 1960's are rare, as are teachers willing to tackle these works with their young students. Informed intuition in traditional music is a process that is instilled through the instrumental educational system and familiarity with (generally conservative) concert and broadcast programming. Intuition as regards contemporary music must generally be self-informed; performers must pro-actively seek recordings, contemporary music concerts and background information. Despite this, Andrew Ball claims

There's no substitute for intuition with contemporary music or music of the past. Some analytic procedures can help the performance, but some can get in the way. Given a degree of experience of music and intelligence and awareness, that intuition can include a certain amount of analysis; it can include quite a lot of perception of shape, etc....I think the feeling with most analytical methods is that they'll show you different bits of the global surface, but no analysis is going to show you the whole lot. Each pianist's way of approaching

¹. Rink, op.cit. p.327
². ibid. p.328
a piece, traditional or contemporary, probably comprises their own particular way of analysing it or of putting into practice some analytical procedures. If more so-called intuitive pianists could be persuaded to play contemporary music we might get very different, other performing traditions which I'm sure would cast a very different light on such music.¹

For pianists well-versed in baroque, classical or romantic repertoire, it could be said that their intuition is based primarily around tonal principles. In the context of contemporary music, depending on the composer or the piece, such a pianist's reliance on intuition could be damaging to the stylistic premise of the work. For example, the mathematical processes that determine much of the ordering of events in Stockhausen's Klavierstücke I-IV, or the chance processes that determine Cage's Etudes Australes, imply a radical disconnection from traditional compositional techniques. Should, then, the pianist attempt to erase all historically and traditionally-based impulses that might affect the phrasing and shaping of lines and gestures? The detailed scores of Ferneyhough, Redgate et al. arguably counteract any such intuitive notions, amassing so many instructions around each note as to leave no room for 'informed intuition' other than the subjective interpretation of and reaction to each written symbol. Conversely, composers such as John White and Chris Newman force the pianist constantly to reassess preconceived ideas of harmonic direction and textural delineation by writing in styles lifted from traditional and established types but decontextualised, sometimes parodied, confounding expectations and 'intuition'. Analysis in its traditional mould is likely to be of little practical use in the music of these composers.

Upon what, then, do pianists rely to guide their sense of shape and gesture in contemporary music when traditional analytical methods holds no key? Intuition, if it is to be informed, should be guided by what one knows

¹. In conversation with Andrew Ball
about composers and their aesthetics, and what one knows about the work in question. It is also subject to both stylistic and analytical concerns. Rink suggests that "one's...'informed intuition' in performance develops with greater experience and, perhaps, exposure to theoretical and analytical principles".¹ This is true in cases where the same or similar stylistic principles apply — where certain events have certain implications. In contemporary music there can be no parallel as there is no unifying language.

It may be that an intuitive response, based on traditional (tonal) concepts, is entirely appropriate for a particular piece. References are frequently made to past musics and other genres or traditions, either as parody or, more usually, absorbed into a composer's own language or style. Allusions to jazz music are common in contemporary 'art' music — Ligeti's Etudes, Finnissy's Gershwin Arrangements (and other works), the music of Graham Fitkin, and so on — and to other musics, such as folk, blues and various dance musics. The extent to which the accepted characteristics of these types affect interpretation is the primary issue, rather than simplistically appropriating notions of, for example, 'jazz style' to a piece that contains 'jazzy' elements.

Another governing factor adding to, and sometimes replacing, analytical thought is that of notation. Michael Finnissy is a composer for whom notation serves a very specific function, though at the same time he allows for performer's idiosyncracies to shape the specifics. It is generally agreed among those pianists familiar with Finnissy's music whom I interviewed that it is "completely unanalysable"² or "just about impossible [to analyse] unless you have some of his sketches because there are such a variety of techniques used and a lot of what is basically his personal choice".³ Finnissy himself admitted to taking "quite large pains to guarantee that [the compositional processes are]

1. Rink, op. cit. p.327
2. In conversation with Nicolas Hodges
3. In conversation with Ian Pace
not audible, at least in the sense that you normally think that analysis is going to make things audible". ¹

'Analysis' of Finnissy's music must be of a contextual nature, and an understanding of the larger structural delineations, the textural contrasts as well as those of colour, dynamics and motion:

...on the most monolithic level it's quite obvious, on the micro-level it becomes very difficult to perceive, even when you see how it's going to end, and I wonder if one's missing the point there, by getting too het-up by the procedures by which it's come about rather than the intention which produced those procedures as a means to getting to a particular end. ²

Discussion concerning the interpretation of the micro-level - the detail - features in the chapters on notation and style. However, it seems likely that analysis will be of little use in its application to the individual shapes and contours in Finnissy's music. Intuition is guided here by, among other things, the notation itself. This kind of 'informed intuition' is attained not by imitation (by hearing), but by seeing and the historical associations one brings to one's interpretation of notation through experience.

The 'analysis of notation' is a factor largely unaccounted for in the performance-analysis literature. Dunsby describes at length the multiple functions of a single note in the opening of Berg's Sonata (example 2.1a), "where the second G...must be heard as: an upbeat to the following note; the subsidiary rhythmic member of a dotted-note figure; the filling-in of an unattacked first beat after a busy two-beat anacrusis; and as having many further functions". ³ Yet all of this is suggested by the actual notation, and, whether or not performers appreciate each of these functions in as many words, they will likely achieve the desired result by responding to the notation.

¹ In conversation with Michael Finnissy
² In conversation with Ian Pace
³ Dunsby, op.cit. 1989 pp.14-15
itself. Though Dunsby uses this example to illustrate how analysis, in his understanding of analysis as "the explanation of how things work in music", does little to enhance the practical realisation of this passage, Rink argues "this is precisely the sort of analysis I would have thought of inestimable value to performers: that is, consideration of the contextual functions inherent in a given pitch or passage, and how to convey them in one's playing." In reality, articulation of the one note cannot be guided by all the meanings ascribed to it by Dunsby and any attempt to do so will likely result in an awkward-sounding distortion. However, an appreciation of one or more of these meanings ascribed to the note in this context may aid the performer's perception of the phrase and the ambiguities inherent in it.

Likewise, Dunsby's exhaustive account of the performing concerns of a short piece by Stravinsky, 'Lento' from Les Cinq Doigts (example 2.1b), tells the reader nothing about the piece which the notation does not already convey. Though Dunsby admits that the "skilled performer sight-reading Stavinsky's score may pick this all up instinctively", he also affirms that "this sort of examination...is necessary for that animation". However, I would suggest that most pianists would articulate those points to which Dunsby refers simply by responding to Stravinsky's careful notation, without necessarily examining the work in this way. Likewise, for the performer of a contemporary work who does not know how each detail relates analytically to the surrounding details, responding sensitively to the notation itself will often suffice to result in a coherent performance. Berry, discussing the third of Berg's Three Pieces for Clarinet and Piano (Op.5), reveals methods of applying analytical insights to articulation yet admits, "To draw conclusions for performance is largely to verify the composer's abundant directions". The analysis of notation as

1. Rink, *op.cit.* pp.319-320
3. *ibid.*
4. Berry, *op.cit.* p.110
discussed in the previous chapter is more concerned with a composer's style and with a comparative evaluation of notational details with regard to performance than it is with traditional analytical insights.

Concerning Analysis and its Application

Discussion of analysis with respect to interpretation must be complemented with practical illustrations of the application of analytical insights to performance. Three important functions of analysis in relation to performance are i) to generate coherence in terms of direction (rhythmic and tempo flux), ii) to prioritise pitch material, and iii) to guide choices concerning the colouring and articulation of musical ideas. However, analysis may either show no connections of this nature (some Finnissy, Cage, early Feldman) or reveal connections that seem in opposition to the work's expressive functions. The latter is often the case with music which is serially constructed, in which the order of pitches is of paramount importance compositionally but may have little to do with the phrasing and/or rhythmic groupings. The pianists interviewed were all in agreement that serial techniques should be subservient to the expressive content of the piece; that is to say, articulation of the phrasing and rhythmic character is to be prioritised over articulation of the pitch series.

Beginnings of rows and their permutations, however, may have both expressive and structural significance. For example, the row sequences in Webern's Variations, Op.27 are clearly spaced, and generally demarcate broad structural divisions. A key feature in all three movements is the continuity of the series across blocks of material (or, in the third movement particularly, across variations). This is achieved by row permutations in which the first note (or a note of the first chord) of one block may double as the last note of the previous block (example 2.2a). This basic analytical detail, requiring no
sophisticated method of analysis, is crucial to the pianist.

The outer sections of the tripartite first movement structure combine the row with its mirror image (example 2.2b) which then amalgamate in the following statement (example 2.2c). The performing edition suggests Webern's intention to highlight both statements of the row (marginally favouring the upper part) for the opening phrase, but generally emphasising the upper part for the consecutive phrase, despite the rows crossing over (example 2.2d).

When playing serial music of this type, where the row sequences are fairly apparent, there is a danger that the row assumes the dominant role in performance. It is not so much the notes themselves which are as important for performance as the hidden structures which they determine. Joanna MacGregor compares the process with that of fugal writing: "Very bad fugue playing is where someone plonks out the subject every time it comes regardless of where it is. I guess the same applies to tone rows". In Webern's Op.27, where the row can be readily perceived by the sensitive listener, I suggest it is the continuity which the performer should emphasise. In music which is gesturally clear with regard to its sense of flow the serial procedures may be lost within the movement and the texture. The performer must then decide to what extent an articulation (not necessarily through emphasis in dynamic or attack) of the row - together with its inversions, retrogrades and other distortions - is helpful or detrimental to the expression or gesture.

Performers need discretion in deciding what aspects of an analysis, whether it be their own or one already available, to 'discard' as irrelevant to performance. Often knowledge of methods used to organise some aspects of material will be important for performers with regard to their perception of the piece, informing stylistic considerations, but will be of little or no

1. In conversation with Joanna MacGregor
relevance to the shaping, phrasing, etc. of the _details_. For example, Stockhausen's *Klavierstück I* is constructed by rigorously serial procedures applied to pitch, duration and dynamic. The pitches are divided into two hexachords consisting of the notes C to F and F sharp to B; in all the 36 statements of the row only once is the ordering of a hexachord duplicated, though occasionally the ordering of a hexachord is the same as that of another but is shifted slightly to start on a different note. Robin Maconie writes:

> one set of measurements is used to determine the larger 'phrase' structure, and other sets to determine the scale of subdivision of each structural duration....Barring and time signatures are guides to the phrase structure, which is based on a six-value 'magic square' rotated like a combination lock.¹

Yet there appear to be several discrepancies between the mathematical logic that determines pitches and larger scale phrasing and that which is notated. This suggests that Stockhausen did not feel compelled to adhere strictly to the compositional methodology and thus the performer also need not assume it to be of great importance for interpretation. Understanding the mechanics of the 'magic square' or other similar devices is unlikely to be of practical use to the pianist. Far more useful would be to delineate oppositions such as fast/slow, rising/falling, linear/chordal.

There are, however, certain connections to be made. By tracing the sequences of rows (every 12 notes) and also the sequences of hexachords (every six notes), certain correlations are proved between these delineations and the pitch, dynamic or rhythmic contours. For example, the _fff_ B flat ending the second bar (example 2.3a) breaks the downward succession that characterises the bar and is also the first note of the second hexachord; thus it could be seen as belonging to the next group of notes, slightly detached from the remainder of that bar. Likewise the bass dyad in bar 5 (example 2.3b)

marks a new hexachord and could be articulated as a new beginning (perhaps aided by a sense of closure attached to the pp dyad that ends bar 4). The next change to the second hexachord, in bar 6, coincides with a slight increase in tempo, from 7:8 to 11:12 (all under a 5:4 bracket); the F and A flat are separated by the grouping (and also in time due to the large intervallic leap) and the A flat is the event which propels the new tempo. Details of this nature, correlating row sequences with other aspects of the music's rhythmic and dynamic properties, can be noted throughout the piece.

Though in some ways the above reveals a simplistic relationship between analysis and performance (albeit, I would suggest, not a forced relationship), it is findings of this nature that can aid the pianist to formulate a conception of the music without having to impose an alien or contrived sense of form based purely on intuitive ideas. In highlighting just this one aspect of the work's construction there is a danger of presenting not only a selective interpretation (all interpretations, analytical and practical, are to varying degrees 'selective'), but a distorted and exclusive portrait of the work. However, it must be emphasised that analytical insights should work in cooperation with (and frequently be tempered by) other aspects of an effective contextual analysis, most notably in this case a reaction to the notation. The other highly complicated formulae used by Stockhausen to organise the sounds are, I suggest, of no relevance to the actual realisation of the sounds because they determine the compositional ordering of time signatures, arrangements of bars, dynamics, and so on.

Relating analysis to performance, then, necessitates a selective approach, reflective of the interpretative process generally, (reflective also of good analytical methodology). A global approach to analysis (in its traditional usage), in which the sole aim is to decipher every compositional process at work, frequently results in a dry narration of musical events. Successful analysis aims to highlight certain aspects of a work and proceeds to comment
upon them. Likewise, a successful performance depends on the conviction with which the performer illuminates one or more aspects of the piece in question. E.T.Cone writes:

The composition must proceed inexorably in time; we cannot go back to explain; we must therefore decide what is important and make that as clear as possible, even at the expense of other aspects of the work...Every valid interpretation thus represents, not an approximation of some ideal, but a choice: which of the relationships implicit in this piece are to be emphasized, to be made explicit? ¹

Interpretation of this nature may be achieved through attempting to apply analytical insights to the realisation, or it may be that the individuality of the performer of itself brings new perspectives independent of any analytical processes.

When analysis either fails to provide insights relevant to performance, or if the procedures behind the notes are too complicated, the performer is forced to be selective on the basis of gesture, sound and texture. Nicolas Hodges found the permutating series in Bill Hopkins's piano pieces to be completely impenetrable....I would love to know serially what is going on because I think it would actually illuminate the texture a lot in some ways. It bugs me - not that I don't know what's going on serially...but with a texture on 3 staves of such complexity, either one plays it as a texture and one just gets what one can or one makes intelligent choices about what one is going to go for. ²

Hodges' choices were based on the relationships between harmonic change and tempo. The selection process, even if totally intuitive, represents one of the possible routes through the work, and thus an interpretation which is analytical of itself.

The selective approach, then, aims to trace certain elements through a

1. E.T.Cone, Musical Form and Musical Performance (New York, 1968) p.34
2. In conversation with Nicolas Hodges
work, based upon a set of priorities for that piece, established at the outset and arrived at intuitively or as the result of theoretical research. Peter Hill's approach to analysis summarises this process well:

[my approach is] to investigate certain questions that I'm interested to follow up. It's usually a question to do with relationships and then I would cast around for any evidence I could for the establishing of relationships, using my common sense and intuitions to determine whether the results I got were valid or simply fanciful, unrealistic.¹

In reviewing Berry's *Musical Structure and Performance*, Joel Lester suggests that performers actively seek out different routes in different performances of the same piece:

In accord with a desire for renewed inspiration, performers will often seek to rethink their interpretation of a work precisely at the point that they feel they have gotten it right; to do it again in the same manner might rob future performances of spontaneity and excitement. By contrast, how many theorists do we know who launch the search for a new way of analysing a passage because they have come up with a solution with which they are satisfied? In sum, in analysis we often seek absolutely justifiable answers; in performance we often relish diverse answers.²

Considered interpretation demands a pluralistic approach to performance.

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1. In conversation with Peter Hill
decision to articulate them. The three examples - Robert Saxton's Piano Sonata, Michael Tippett's Piano Sonata No.2, Morton Feldman's *Triadic Memories* - are chosen to represent works which respectively a) have little or no information available concerning their composition, b) are well-documented or are more easily analysed, and c) are generally considered 'unanalysable' or ill-suited to analysis.

**Robert Saxton, Piano Sonata (1981)**

On first hearing Saxton's Piano Sonata, the ear is impressed by a strong, overriding sense of structural and harmonic unity (as confirmed by a number of listeners present at one or other of my performances). It is clear that certain compositional principles govern each section of the work, and the very title 'Sonata' suggests a systematic approach to composition. However, what those principles are is not so readily apparent. As a performer, my desire is to pinpoint some of those factors which combine to create the aural unity. My task is not necessarily to achieve total comprehension of the methodology used by the composer to arrive at the notes on the page, but rather to determine certain landmarks or key features that may be traced throughout the work.

Gesturally, the score is animated in its notation; Italian markings such as *cantabile e tranquillo*, *poco a poco più agitato*, and *Allegro vivo e feroce* abound, alongside frequent indications of fluctuations and gradations in tempo and dynamic. In addition, Saxton draws attention to some of the compositional priorities through occasional use of an 'H' (a Schoenbergian device, meaning 'hauptstimme', the "main voice") with brackets delineating the more thematically important line. Elsewhere, he writes comments such as 'the accented notes in the L.H. must be brought out clearly'.
A dramatically convincing performance could, then, be based purely on creative and sensitive reactions to the notation. Yet one pianist who had performed this piece (not one of those interviewed for this study) with the composer's apparent approval, told me that it made no sense to him and that he had no idea what was going on musically. This did not endear the work to him. My reason for striving to attain some analytical understanding of this piece, then, was not that it was necessary, but that it would undoubtedly aid interpretation through an appreciation of some of the harmonic connections, even if I could find no way to articulate these findings in performance.

There is currently nothing of value written about Saxton's Sonata in particular, and relatively little about the composer in general. From what writing there is, very little is of interest to the performer. However, one does gain the impression from the available writings that harmony and harmonic unity is a primary concern in all Saxton's works:

His music is traditional in its working out of clearly presented musical propositions that are based on identity of pitch and interval, and the overall designs of his structures create a strong sense of harmonic progression. This is not a tonal logic in the sense of key, but the creation of a harmonic field for each work, within which change is felt as movement.¹

Saxton himself writes in the score, "the basic harmonic character of the music is heard gradually, as the opening tritone grows into dancing contrapuntal writing. During the course of the work much is made of fast 'foreground' counterpoint delineating slower 'background' harmonic progressions...".

It seems reasonable, then, to attempt a definition of the harmonic characteristics, to compare moments of harmonic stability and instability. The Sonata is comprised of many varied, short sections, the characters of which appear to be in a constant state of flux, without repetitions of character types

¹. David Wright, 'At the threshold of eternity' Musical Times Vol.131, 1990 pp.363-4
(in contrast to Tippett’s Piano Sonata No.2). Sections are generally connected gesturally, by means of a crescendo, or accelerando, as a seamless flow or an abrupt change of mood, but never (except for the final chorale theme) separated by a silence. My first goal was to see if and how these sections connect harmonically, and to consider ways in which any such connections might be articulated and consequently highlighted in performance.

Taking as a starting point Saxton’s prefatory explanation: "The basic harmonic character of the music is heard gradually", and his isolation of the tritone as a key interval, the opening introductory section gives an initial clue to the harmonic features of the piece (example 2.4a). It can be seen that there are two polarised harmonic fields delineated at first by the arpeggiated chords and the melodic line above. These can be arranged as two hexachords (example 2.4b) which alternate as the counterpoint develops into more decorative writing, sometimes separating the hexachords between hands. The basic character of each hexachordal group remains the same despite sometimes overlapping (the notes E flat and B particularly are often shared between groups). The first hexachord has a chromatic edge to it, and the two tritones it contains (E flat–A and F–B) feature prominently, as a defining characteristic. The second hexachord has a warmer quality to it, due mainly to the spatial arrangement of the chord (example 2.4c) in which the lower tritone sounds more like an augmented fourth (rather than an 'angular' tritone) complementing the perfect fourth interval above it. The tension created from these two opposing harmonic fields can be heightened by a differentiation in colouring between them and the occasional fractional 'breath' to separate them in time.

On page 2 the two hexachords remain as a harmonic basis but the counterpoint is more developed and 'foreign' notes from each hexachord frequently infiltrate the other group. There is an increase in tension here as the original idea 'fights' against its deviation and inevitable development.

As the music becomes more contrapuntally complex the separation of the
hexachords gradually becomes less clear and the harmonic character is submerged (example 2.4d). It becomes clear that this is a recurring idea in the Sonata. Sections mostly open with a clear harmonic grounding only to have it swept away by the character and gesture of the music's development, as if the music has to tear itself away from the governing principles at the beginning of each section. The music which opens each section is frequently related to the initial hexachord idea. For example, the section marked *Tempo giusto, più calmo e lirico* (page 3, example 2.5a) clearly delineates between hexachords, with the left hand focused around hexachord 1 and the right hand focused around hexachord 2 (with chromatic deviations into hexachord 1). Likewise, the section ending page 6 (example 2.5b) delineates the two harmonic fields similarly, with an ambiguous B flat/B moving between hexachords. Again, the section on page 8 (example 2.5c) starts entirely based around hexachord 1 and gradually breaks free from its constraints. The tension may be heightened here by slightly emphasising each new note as it is added to the harmony and then by allowing the ensuing development of the music to take over.

Other sections may be less directly linked to the opening, but feature shared elements. The intervals of the tritone and the perfect fourth prove to be a recurring characteristic. Most sections open with one of these two intervals in at least one hand, as harmony or counterpoint (see example 2.6 for a selection of instances where this occurs). The relationship between the section opening page 10 (example 2.7) and the first section (example 2.4a) is melodic, the upper line being the same pitches (in the same order) as the original counterpoint against the opening chords. Though this is clearly marked as separate from the accompanying two lines of counterpoint, if these six notes are clearly heard as belonging together, there is a sense of continuity that travels over the intervening rests. If the underlying counterpoint is restrained in its dynamic variety the upper line will be heard clearly, though the notation of these two lower lines demands a sensitive response to the phrasing,
grouping and accentuation. The following section (example 2.8) is related to the opening in that it opposes two harmonic fields in a similar manner to the chords and melody of the opening. The harmonies are different here and evolve more rapidly; however, the effect is comparable. The tensions created by the two harmonic fields can be amplified by adopting a warmer, resonant sound for the chords and a more angular, agitated mood for the melodic line.

Sections which are apparently less related to the opening or other sections – i.e., which are more autonomous – may still feature aspects which are characteristic of other ideas. For example, the section ending page 11 (example 2.9) consists of an ascending scale made up of all twelve notes of the chromatic scale. This is in contrast to the previous section's polarisation of two separate harmonic areas. This is played legato as the twelve notes are brought together. In addition, one could perhaps slightly emphasise the perfect fourth that ends the scale so as to contrast it with the following tritone motive and the tritone which ends the third scale. In noting the above harmonic features there is no claim to have deciphered the harmonic ground-plan or the reasoning behind each harmonic outcome. Instead, these are observations which have an immediate and obvious application and which can be followed through and built upon relatively easily.

The observations above relate to the manner of transition from one section to the next. The transition between pages 3 and 4 (example 2.10a) is particularly problematic because the music of page 3 is flowing in nature, lyrical and expansive, and the final bar shows no signs of stopping. Yet the next section is entirely different in tempo, register, and texture. The double bar-line suggests a slight separation of the two sections. For this to be achieved, either there needs to be a slight pause between the two sections or the first section needs to rallentando as it approaches the end. If the
interpretation makes a feature of the tritone as discussed above, the left hand tritone which closes this section could be highlighted by allowing more time over its execution, thus slightly pulling back on the last part of the bar.

Similarly, the two tritones which end page 4 (example 2.10b), can act as agents of transition, emphasised by an exaggeration of the crescendo of that bar. The left hand should be prioritised over the right (as notated by the 'H' sign) so as to provide the continuity between it and the right hand of the next section, which utilises the same pitches.

Parallels to Webern's method of sharing the end and beginning notes of two row statements (mentioned earlier in this chapter) are found in Saxton's Sonata. For example, the transition between pages 7 and 8 is marked by rising fourths on every half-bar in the bass (example 2.11a). Underneath the volatile right hand counterpoint these accented notes are clearly connected, and carry through to the B that opens page 8 so that this acts as both the last note of one section and the first note of the next. Likewise, the accented left hand notes amidst the flurry of counterpoint ending page 9 push through to the E of page 10 (example 2.11b) so that the E acts in the same way as the B in the previous example. Whilst it is true to say that the accents suggest such an execution, it seems important to know why the accents are present. Understanding that the fourths lead towards the first note of the next section ensures an effective drive through into the next section and ensures against a culmination on the last note of the previous section. Notation cannot communicate this unless by written explanations. Accents alone could equally imply a holding back or a static quality which contradicts the directional nature of the succession of fourths.

The prioritisation of particular lines, or, as in example 2.11b, lines within lines, is reflective of the process of "fast 'foreground' counterpoint delineating slower 'background' harmonic progressions" described by the

1. The score is incorrect at this point: the mp should be placed under the second note of the page, the E, not, as written, the B.
composer in the preface and in personal communication. Each section was composed on long strips of paper, separately, with certain rules and restraints, and chromatic groups of pitches, applying to each. One feature of this was the deliberate prominence of certain intervals in different sections, for example, fourths, tritones and octaves, and the deliberate avoidance of certain intervals. The importance of fourths and tritones has already been discussed; the occurrence of octave doublings proves to be of greater compositional significance than mere colouring or thickening of texture. Two passages in particular reveal the distinction between octaves and the remainder of the counterpoint. First, the rising decoration on page 2 (example 2.12a) shows four irregularly placed octave B's which could be stressed, as if a restraint on the otherwise accumulating counterpoint. More developed, and of motivic interest, is the section on pages 8 and 9 (example 2.12b). Here, the octave doublings represent another layer of counterpoint, the "slower 'background' harmonic progressions". However, accenting each octave could detract from the 'foreground' counterpoint. The octaves could therefore be articulated in such a way as to differentiate them from the ongoing line, but not in a way that disrupts the overall gesture. The octaves act as if they were another form of phrasing, combined with the notated phrasing and the grouping of note stems as the main determinants of articulation.

Michael Tippett, Sonata No.2 (1962)

This work belongs to Tippett's most experimental period of composition. Unlike the First and Third Sonatas, the Second Sonata conforms to no traditional formal type. Like the opera King Priam, which precedes it and from which some of the thematic material is taken, the Sonata has a 'mosaic'-like
This means that themes are juxtaposed without any transitional passages, each theme retaining its independence and individual character. Themes either lead straight into the following theme or are separated by a rest or pause.

Interpretation of the themes themselves is not as problematic as their relationships to their immediate contexts and within the overall structure. Tippett writes careful and often colourful instructions which inform as to the character of each theme, whilst at the same time allowing for variety in individuals' reactions to his wording. However, consideration of the broader structural concerns will make clear the character of each theme in relation to the whole. Because of the 'mosaic' layout there is a danger of the piece sounding fragmented, with each theme being interpreted, and perceived, in isolation. Further clues concerning character and style can be gained through an appreciation of other works by Tippett, and not only those surrounding the Sonata. Many themes are idiosyncratically typical of the composer, a fact which is not always recognised in what is considered one of his most austere and hard-edged works. The following is my own analysis of the piece, based upon and developed from ideas by noted Tippett scholars such as Ian Kemp.

Though the Sonata could not be said to conform to any traditional form, it is, I suggest, permeated by formal types. Kemp describes these as: 'first movement', 'slow movement', 'scherzo', and 'slow finale', all linked by 'transition' sections. My own interpretation deviates slightly from this, depicting the opening five themes (bars 1-29) as an exposition, and those sections which Kemp labels as 'transitions' as developments of exposition themes. Whilst giving little clue as to matters of articulation, labels such as

1. Tippett originally intended for the Sonata to be titled 'Mosaics'.
4. 'Development' in this context is taken to mean processes of expansion, compression, transposition, inversion, and repetition.
these inform the character of themes and their contextual references. Thus the 'slow movement' (bars 69-134), taking the form of a rondo, can afford to sound fragmented, creating a feeling of stasis and a directionless circling of themes. If one is to consider bars 174-206 as a 'scherzo' section, one must detach oneself from the war-like character of the same material in King Priam in order for it to have a more playful character in its new context.

The grouping together of the first five themes as an exposition implies the contrasting of two subject types, the 'passionate' and the 'lyrical'. Confirmation of this is given by the first three themes (bars 1-14) loosely rooted in C ('tonic') and the fourth theme (bars 15-20) in G ('dominant'). Though the opening themes are obviously forward thrusting, the fourth theme is more ambiguous (example 2.13a). If treated as an archetypal second subject, its lyrical qualities may be suggested by rubato, a light touch and liberal pedalling (in contrast to the presto, dry and unpedalled interpretation favoured by some pianists).¹

Arnold Whittall argues that the work presents no "connected harmonic argument...there is little point in attempting to trace a harmonic process through the sonata. Tippett verges on a style in which 'the actual notes' could genuinely be held not to matter, beyond the extent to which they facilitate the identification of 'similarities and contrasts' ".² Whilst it is true to say that there are no harmonic connections in the Sonata (save for the tonic-dominant relationship mentioned above), there is a linear connection which is a pervading, determining force throughout, concerning the motivic importance of 'the actual notes'. A three note cluster (three consecutive notes: semitones, tones or a combination of the two) informs the pitch selection of each theme and its connection with the subsequent one.

The themes are united by this simple 3-note cell principle. However, it

1. For example, Paul Crossley's recording CRD 34301
would be inappropriate always to emphasise the cell at the expense of the
general context which it generates. For example, the fourth theme (the lyrical
second subject) disguises the cell by interpolating a 'foreign' note between each
pair of notes (see example 2.13a). By leaning a fraction on the first, third and
fifth notes of this figure, without actually increasing the dynamic, and then
again in its immediate repetition, the cell will be evident to the discerning ear,
and the lyrical focus of the theme will not be lost. Many themes are
conspicuous in their obvious utilisation of the cell, such as the eleventh theme,
taken from the slow section (bar 109, example 2.13b). Here the articulation of
thematic unity is self-evident in relation to the contextual 'balance of
similarities and contrasts'.

A more explicit way in which analytical insight into Tippett's Second
Sonata can be related to performance is in the connection of themes, which are
here generally separated by rests. The 3-note cluster acts as a linear,
sequential link between themes, joining the last note or notes of a theme to the
first note or notes of the next. Together these form another cluster, bridging
the silences that separate themes. Example 2.14 shows how some of the
themes are connected in this way. Though many of these pitch sequences are
disrupted by octave displacements, and thus may not be immediately apparent,
it should be possible to make them more aurally transparent by articulating a
sense of continuity between themes. Indeed, it may be that an emphasis of the
actual notes which form this join is unnecessary, but rather a sense of
continuity is required to articulate the process which connects themes. Inherent
in this is a warning not to prolong endings through use of rubato, or by
'tailing off' just as the theme approaches its end. This may mask the unnotated
link into the next theme; any imposition of a 'gestural' link compromises the
inbuilt aural cohesion.

1. Tippett, in programme note to Paul Crossley's recording CRD 34301
2. If a theme ends with a chord, generally the lower or upper note (or both
notes) forms the link with the first note of the next theme
Those themes which do not conform to the principle described above differ for a particular structural reason. The interval linking the last and first notes of themes 3 and 4 respectively in the 'exposition' is a tritone (example 2.15), replacing the expected D with a G, emphasising the shift from 'tonic' base to 'dominant' base. If theme 3 were played as if it were leading to a D (instead of a G) the contrast between the two themes would be heightened and would be in keeping with later developments of theme 3, most of which do lead sequentially into the next theme. The slow section opens independently of the notes ending the preceding theme, emphasising that this is a completely new section, somewhat separate from the remainder of the Sonata (only to be referred to again in the coda section). The themes within this section also are not always related according to the cell sequence; this adds to the already fragmented nature of the section.

There are, however, only a few exceptions to the cluster link principle, and generally the effect is greater if these instances are treated as if they did actually conform to the principle, thus generating greater surprise when they are shown to be different. The final coda section (bar 249) deliberately ignores the cluster link principle, and themes return in their original or other pitches. This increases the intensity of the fragmentation and build-up of ideas, and makes the lead from Tempo 3 to Tempo 1 (bar 300, example 2.16), which is linked sequentially, all the more effective. It is important to ensure that each theme retains its original impact, regardless of the context in which it appears in the coda section. In this way the build-up of themes is made more chaotic because of the very lack of sequential connection. If the cluster link has been articulated throughout the Sonata, its abandonment in the coda will be more noticeable and effective.

"If [I was accused] of killing melody, I would hang my head. But pitch relationships? I can't get that excited about pitch relationships."¹

The inclusion of a work by Morton Feldman in a chapter concerned with analysis may seem surprising. Feldman's music is much discussed for its aesthetic values but rarely for its compositional processes. The reasonable explanation for this neglect is that Feldman's method of composing was to abandon any compositional system and to rely instead on his own instinct for each moment of composition:

Feldman's ability to escape from methodology as the 'controlling metaphor of the composition' was accomplished through a reliance on instinct, at a time when European composers were more than ever seeking refuge in methodology and denying the force of the instinctive.²

However, this does not necessarily mean that analysis has no function in this music. Where traditional analysis often searches for a system and seeks to place each aspect of the composition within that system, a different approach is needed to form an understanding of Feldman's music. The current dissatisfaction with traditional analytical methods is paralleled in Feldman's distaste for contemporary compositional techniques in the 1960's: "Although they claim to be so selective, so responsible for their choices, what they really choose is a system or a method that, with the precision of a machine, chooses for them".³ What is required of the analyst, then, is not so much analysis in the traditional sense as *isolated* observations of some of the choices made in the piece being studied, their effect on the material which they precede and

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follow, and possible connections or resemblances with other moments in the piece.

**Triadic Memories** belongs to that group of pieces written in Feldman's final decade, which utilise a precise and, at times, complex notation (particularly with regard to rhythm), and which are extended in length. Feldman likened the difference between his earlier works and these later, extended works to that between "objects" and "evolving things" respectively. This suggests a greater degree of correlation between moments, ideas, and motives in his later works. Yet these connections do not necessarily imply a systematic permutation of elements in order to produce something else. Feldman makes connections but does not pursue them in order to reach a goal. **Triadic Memories** is in part a play with these types of connections – hence the 'memories' of the title. Of one section, in which different chords are repeated at slightly different tempi for an irregular number of repetitions, Feldman comments, "There is a suggestion that what we hear is functional and directional, but we soon realize that this is an illusion".¹

Some passages are literal repetitions of previous sections; others simply recall a previous idea, now developed – through compression, extension, inversion – possibly to include the germ cell of a future idea. Another passage may be reminiscent of a previous idea, through its harmonic or motivic similarity, whilst at the same time acting as a separate idea in itself. Some connections are deliberately ambiguous in the degree to which they are audibly apparent. Feldman spoke of a tendency in his later music to reiterate "the same chord in inversions. I enjoy that very much, to keep the inversions alive in a sense where everything changes and nothing changes."² One anecdote, which cannot be taken too seriously, serves, however, to illustrate Feldman's attitude to form, and thus the futility of traditional analysis of his music:

1. Feldman, 'Crippled Symmetry' *ibid.*
Morty admitted when he was writing the long pieces near the end of his career that sometimes when he was 'stuck' he went back a few pages, pulled out a page and recopied it with, perhaps, some changes and then returned the first page to its original position and put the new page in where he had been 'stuck'.

An appropriate method of analysis of Triadic Memories - if it is to relate to performance - would be to start at the beginning and work through each moment in succession, observing deviances from the patterning (motivic and harmonic) and relationships with other moments. Any broader sense of how the moment fits into the whole is less important regarding articulation and directed motion given Feldman's predilection for the present. This is not to say that the structure itself is unimportant but rather that it exists within the extended time-scale and is adequately conveyed by the contrasts of material. Concerning performance, the priority is to create subtle shades of colour and rhythmic detail with each moment. This will emerge partly as a reaction to the subtleties of the notation and an intuitive response to the piano's timbral variances in different registers. However, careful observations of the music's unapparent or hidden connections can also suggest additional reasons for subtle details of colouring and articulation. The following observations are not exhaustive, and represent only a selection of those illuminated by my personalised route through the work. The reason for articulating these observations at all is to nudge or trigger the listener's memory - to enhance the memory games already inherent in the piece.

The opening idea, a 6-note cell (example 2.17, referred to as the Triadic Memories (TM) cell) remains essentially unaltered for 3½ pages. Only the register and the minute rhythmic details are subjected to change. When the expected pitches G sharp-D are replaced by G flat-F (example 2.18a), the

1. James Fulkerson, 'Morty Feldman is Dead' in Compendium of Contemporary Musical Thought op.cit. p.752
pattern starts to evolve; further notes are discreetly added, sometimes as new chords or new colourings of the established patterns, and the rhythmic idea of the TM cell is extended to contain three simultaneous lines (example 2.18b). The introduction of new notes (such as the G flat–F) can be articulated, perhaps by a slight drop in dynamic and/or a slight delay of their exact notated position, placing them carefully. When these notes recur in similar contexts, either immediately or much later in the piece, the colouring can match that of their original context. It becomes apparent that the six notes of the opening cell recur together repeatedly throughout the work, often in very different contexts, either as a chordal aggregate or as a linear progression (example 2.19). As it is the sole thematic material for the first 3½ pages, and the primary material for the following few pages, it can be considered as a 'home-base' – a firmness of touch, with a secure use of the pedal,¹ will set this apart from later deviations from its original harmonic and motivic characteristics. Later appropriations of the same six notes (such as those in example 2.19) can then share the same sense of security. This is not to suggest that each time these notes occur the pianist should draw immediate attention to them; rather it is more a psychological appreciation of their significance which, it is hoped, will create an audible differentiation. Feldman often precedes a completely new section of new material with a short reference, no more than a bar or two, to the TM cell, as if to lull the listener into a false sense of security. The suggested drama in such cases can be heightened by colouring the TM cell as discussed above, and giving no hint of what is to follow.

Likewise, music that deviates from the harmonic plateau established by the TM cell can be differentiated in character by adopting a sense of 'rootlessness', of having drifted from its foundation. This can be achieved by a

¹. The pedal is marked to be depressed half-way throughout Triadic Memories with no changes marked. At a recent performance by John Tilbury, the pedal was fixed at a certain position. However, I would suggest that the pedal may be continually adjusted subtly to achieve a greater degree of colour variation. This would then balance the difference in effect between pedalling in the lower registers of the keyboard and the higher registers.
dramatic use of rests, less use of the pedal, or by employing a more detached touch. Example 2.20 shows an aggregate comprised of five of the notes from the TM cell followed by C-B, two notes outside of the TM cell, in the bass; the aggregate is then transposed up a semitone, and followed by five bars of 'unrest' made up of notes outside of the TM cell. This move away from the original harmony might be made more effective if played with a less secure touch than previously. There is then a brief one-bar return to TM cell harmony before a new idea is introduced. Because this is new material, introduced without forewarning, it suggests an immediate differentiation of articulation. My solution here is to use less pedal than at any previous point in the work and to attain to a thinner texture generally. The upper line, G flat-F, can perhaps be marked out as relating to the previous pairing of these notes, when they represented the first move away from the notes of the TM cell, and could thus be given a slightly warmer touch. The bar that interrupts this idea can be related to the the final bar of line 1, page 5 (example 2.21), which uses the same notes as the upper two staves and which marks the first time a bar does not feature the notes G or B flat (from the TM cell).

Within the same section based around the rhythm of the TM cell, there is a further distinction between pairs of notes. The first two bars of page 9 divide the notes into two hexachords, so that the first bar uses the notes C sharp to G flat and the second bar uses the notes G to C (example 2.22a). The following bars alternate between these two hexachords and they feature again later in the section and later in the piece. To delineate between them the pianist could adopt different dynamics for each,¹ or impose a sense of directed motion onto the rhythmic shape. For example, a slight sense of pushing forward over the notes belonging to the first hexachord and a pulling back over those belonging to the second hexachord. Once established, these minute nuances of tempo can stand as a constant whenever future notes are grouped

¹ The opening dynamic ppp acts as a blanket dynamic within which the pianist may create subtle shifts and nuances (see Chapter One, p.37-38)
in this way (example 2.22b).

As mentioned above, a characteristic of Feldman's later music is the rearranging of chords so that they sound different, despite being made up of exactly the same notes. There are a number of instances of this in *Triadic Memories*, many of which will only be spotted through careful comparison of note groupings which are sometimes considerably separated in time. Many of these groups then become established as a new idea, or provide the link into a new idea. A case in point is the chord that first appears on page 11, the first time a grace-note figuration occurs in the piece (example 2.23, marked 'x'). This chord is made up predominantly of notes from the TM cell (with an added E flat) and is also related in its intervallic composition to the chord which precedes it (marked 'tm'), which is itself a rearrangement of the TM cell. Chord 'x' thus shares the stability suggested by the TM cell ('home-base'), yet has an uneasiness due both to the E flat and the grace-note. Again, the pedal would seem an appropriate vehicle to differentiate between the two chords 'x' and 'tm'; perhaps using less pedal for chord 'x' whilst retaining the same firmness of touch. It becomes apparent that 'x' is an important chord, referred to many times in the remainder of the piece. Thus its status as a new event needs to be asserted on its first appearance.

Another example of an idea which has greater significance at a later stage in the piece is the new idea introduced in example 2.20 (isolated below as example 2.24a). The articulation of the upper line here has already been discussed, relating it to the G flat–F pairing on page 4. However, if this new idea is compared with the idea introduced at page 15 (example 2.24b), it can be seen that it is a mirror image of the lower two staves of the earlier example. This confirms the appropriateness of a differentiation in colour between the upper stave and the lower two staves of example 2.24a. Thus example 2.24b (which, incidentally, can also be understood as being the first, second, fourth and fifth notes of the TM cell transposed up a fourth) can be coloured in a
similar manner and connections can perhaps be made between the two ideas. Thus the benefits of analytical observations of a particular moment in Triadic Memories can also be brought to bear upon the articulation of earlier moments in the piece. The colouring of example 2.24b can also, I suggest, be applied to the new rhythmic idea at page 34 (example 2.25). This is the first occasion semiquavers are used in succession and is quite obviously the beginning of a new section of the work. Despite this, however, the pitches are rooted firmly around those of the idea in example 2.24b and its consequent developments: C, D flat, D and E flat.

Almost all the ideas in this work can be related to three main pitch aggregates and/or rhythmic motives. Restricting the variety of colour to three main types is not the intention. However, each idea can be related to one of the aggregates and its many contextual variances, creating a rich working out of subtle colouristic detail. My aim in this piece is to complement the motivic variety within the restrictions laid down by the composer. Analytical insights such as those outlined above reveal choices that can be made in achieving this aim.
CHAPTER THREE

Style

and

Authenticity
Chapter Three

Style and Authenticity

Introduction

"Performances in which the performer is not caught up in the imaginative world of the composer ultimately do no-one any good."1

This uncompromisingly extreme statement (taken from an article which describes an unfortunate experience involving the pianist Andrew Ball and the aborted première of a work that proved in the end to be impractical) expresses the need for performers to relate to some degree to the work being performed. Faced with often forbidding notation, the learning process is made to seem less arduous if the performer is in sympathy with the composer's musical and aesthetic concerns. If not for the cause of 'authenticity' then for practical and learning purposes, actively seeking out writings by or about the composer, or even meeting the composer, are likely to have considerable implications on the method of approach to a piece.

A major stylistic consideration is the relation of the composer to traditional musical concerns. Do the composers see themselves as continuing in line with the Western musical tradition or does their position represent a tabula rasa, distanced from any previous compositional, and thus performing, trends? The rigorously serial Klavierstücke I-IV by Stockhausen (see example 1.39) lie uneasy in their relation to musical tradition. The notation, though extreme, is directly related to Western notation. Though rhythmically complex, the complexity relates to the context of Western tradition, and thus includes time signatures and regular durational values. Stockhausen here notates "a new way of feeling time in music, in which the infinitely subtle 'irrational' shadings and impulses and fluctuations of a good performer often produce what one

1. Andrew Ball, 'Bridging that Gap' Contact No.31, 1987 p.28
wants better than any centimetre gauge". Yet the performer is continually working with (or against) the pulse, a pulse which is in a constant state of flux. It is important, then, to ensure against any regularity in the perceived metre, responding to each of the smallest changes of pulse to produce the desired "infinitely subtle 'irrational' shadings".

The construction of these pieces, derived from complicated mathematical permutations, suggests that they are as far removed from the influence of tonality as are the chance-determined pieces by John Cage. The organisation of pitch and rhythmic parameters exhibits the influence of Messiaen's Modes de valeurs et d'intensités, the effect of which Stockhausen described as the "fantastic music of the stars...existing for themselves in complete freedom and formulated individually in considerable isolation from each other". This suggests a performance style that avoids the shaping or phrasing of those intervals found in other contexts to be physically related.

To the majority of performers, trained in the classical tradition, suppression of traditional notions of phrasing entails a denial of the intuitive impulse. However, based on the notation alone, there is no suggestion that such a denial is appropriate here. Indeed, some of the arching pitch shapes might be construed as having an inherent phrasing shared with traditional music. In the first piece particularly (actually the last to be written), this may be a reflection of Stockhausen's transition away from a pointillistic focus at this time toward a concern with 'groups'. The groupings make it difficult to dissociate certain intervals from their traditional (i.e. tonal) properties (example 3.1).

A balance needs to be struck in performance between the actual groupings implied by the notation of Klavierstück I and the isolated, pointillistic nature of the pitches themselves - "existing for themselves". The groupings could be articulated by means of colouring, timing, and sometimes

2. ibid. p.81
pedalling, rather than through traditional shaping founded on essentially tonal principles. In addition, the previous chapter shows how connections can be made as a result of an analytical appreciation of the structure and pitch ordering. Another interpretative approach - such as phrasing within the groups according to tonally-based principles, or imposing rubato onto the rhythmic groupings - might be justified on the grounds that it reveals a new or neglected dimension to Stockhausen's music. However, I suggest that the most successful interpretation of the score is one that accounts for the factors of its creation outlined above, for it is these that inspired Stockhausen to compose and consequently notate the pieces as they are.

The appropriation and misappropriation of stylistic stereotypes

The interpretation of Stockhausen's Klavierstück I discussed above is founded on a desire to reflect the composer's concerns when writing the piece. It is important to account for the immediate context in which a piece is written, as Nicolas Hodges suggests: "...if you take one work of Stockhausen, for instance, like Aus den sieben Tagen [1968], there'd be no way you'd guess that he's also written Klavierstücke I-IV, so you would have a completely weird understanding of those pieces."¹ The tabula rasa of these early pieces became less of a priority for Stockhausen in later music. Philip Mead recalls playing under the composer's direction in one of his large epic works: "he was very concerned that people played musically. 'Are you a human being?' he used to shout! But under no circumstances was his music to be played mechanically, always with warmth and expression."² Likewise, Peter Hill recalls Aloys Kontarsky, one of the principal early interpreters of Stockhausen's music, suggesting that some passage in Stockhausen be played like Brahms.³ One

1. In conversation with Nicolas Hodges
2. In conversation with Philip Mead
3. In conversation with Peter Hill
could interpret Klavierstück I-IV in the light of Stockhausen's development as a composer, with hindsight, but the priorities would then be very different from those with which the piece was written.

Too often, generalised concepts of a particular composer's (or group of composers') style are applied to all their works, even to other composers' music that might bear a superficial resemblance. Professional performers seldom have time to get acquainted with a composer's musical and aesthetic background. Brian Ferneyhough suggests that the different musical styles prevalent in contemporary music force some performers to develop a technique of rapid reading and standardized, averaged-out presentation in order to maximalise effectivity for the vast majority of works and contexts. It seems to me that there is a certain tyranny involved in frequent attempts to impose this approach on the composer as some sort of desirable aesthetic norm – a 'good, healthy common sense' of music....[I] presuppose a species of interpreter for whom a lengthy and intense involvement with the artistic and technical demands and assumptions of a particular composer or group of composers would be an essential prerequisite for adequate performance activity. That's the performer who's willing to spend six months or so really trying to penetrate to the roots of a style.¹

This idealistic vision of a performer embraces all those elements discussed thus far – consideration of notation and analysis – as well as the notion of stylistic appropriateness. None of these aspects of interpretation is exclusive, instead they are mutually dependent. Style is suggested by both the notation and analysis, and yet constitutes more than just the sum of the two. Musical style should combine both the individuality and originality of the composer with an historical awareness, or even rejection, of traditional notions of style accumulated through years of musical training.

1. 'Shattering the Vessels of Received Wisdom: Brian Ferneyhough in Conversation with James Boros' Perspectives of New Music Vol.28 No.2, 1990 p.7
Performing Traditions

The desire to be 'caught up in the composer's imaginative world' is frustrated when the means to do so is limited. The lack of available literature is only one obstacle to this process; composers are often very reluctant to discuss details of or inspiration behind the composition. The performer is left with only the score to guide stylistic priorities, based purely on (traditional) intuitive impulses. Robert Black writes, "[the] traversal of modes [between notation and sound] by contemporary performers is achieved before traditional frameworks of stylistic perspective can be established".¹ Performers giving premieres of works may unwittingly influence the work's future performances, establishing a performing 'tradition' with the first performance. This may be broadcast - it will almost certainly be recorded in some form - and the recording very often kept by the publisher or composer to be distributed to other potential performers.

The issue of establishing performing traditions is one which the pianists interviewed responded to with unease. All of them emphatically rejected the notion of the authenticity-value of their performances of works which they premiered, expressing the desirability of different approaches and interpretations of those works in the future. Even Michael Finnissy dismissed the elevation of his own performances of his works as objects of reverence: "They're interesting because it's the composer playing. Beyond that, anyone who wants to play them can play them completely differently and it really doesn't bother me, so long as they are genuinely trying to play what's behind the music."² Yet some pianists also recognised the importance and responsibility of their contribution towards the performing tradition of a particular work or composer.

1. Robert Black, '...and each harmonical has a point of its own...' Perspectives of New Music Vol.17 No.1, 1978 p.127
2. In conversation with Michael Finnissy
Joanna MacGregor admitted to listening as much as possible to other recordings: "I'm really interested in other people's performances and I try to get an aural sense of it. I try and learn it by ear in a way because I think it's going to make life easier....It's just in order to become familiar with the piece and the sound world and then I'll just switch them off and do my own thing."¹ This approach is problematic, because "if a composer's only ever been performed badly", argues Nicolas Hodges, "then the composer's 'soundworld' may actually be complete rubbish."² Andrew Ball also expressed a concern for performing traditions being built up that are not necessarily good ones. For example, I think that as far as the complexity music goes, there are more pianists now than there were who specialise in that music and some of them play with amazing facility, but I think there's a tendency to be too readily in the performance of that music with getting the notes at all costs or getting as many of the notes as possible, and an insufficient awareness of colour and that sort of thing. I've heard quite a lot of performances of those pieces where I've felt that the level of playing as far as execution of the notes was on an incredibly high level and the level of playing as far as making colour and sounds at the keyboard was on an incredibly primitive level. So there might be some unhelpful traditions that are being built up.³

The after-life of a composition can create a number of traditions which provide very different routes through it. For example, Webern's Variations Op.27 could be approached today from at least three contrasting understandings, and thus performing traditions: a) a 'modernist' serialist conception, b) an 'experimental' tradition, and c) the late-romantic Austro-German tradition. The first of these approaches reflects the European avant-garde established in the aftermath of Webern's serialist methodology. This

1. In conversation with Joanna MacGregor
2. In conversation with Nicolas Hodges
3. In conversation with Andrew Ball
might prioritise a literal translation of the score, perhaps highlighting pitch relationships and the row, devoid of any nineteenth century, or 'pianistic' mannerisms. A more experimental approach might regard the work through Webern's influence on Cage and Feldman. This is reflected in John Tilbury's description of the piece: "the 7ths and 9ths seem to me be warm, even sensuous. They are not dissonances as they would be in a harmonic context – they are more like timbres. I feel them as displaced octaves. Webern concentrates the attention on the quality of each sound individually", and of the final bars, "This suggests to me a 'sourcelessness' – sounds which appear to have no source, as in Feldman...".¹

A more recent, but paradoxically more traditional, performing trend when playing Webern's music is to place it in the context of Webern's own tradition. In the Variations this is aided by Peter Stadlen's performing edition of the work, which details Webern's own comments and ideas about performance. In a separate article Stadlen writes,

He kept on referring to the melody which, he said, must be as telling as a spoken sentence. This melody would sometimes reside in the top notes of the right hand and then for some bars be divided between both left and right. It was shaped by an enormous amount of rubato and by a most unpredictable distribution of accents....He would occasionally try to indicate the general mood of a piece by comparing the quasi improvisando of the first movement to an intermezzo by Brahms or the Scherzo character of the second to that of the Badinerie of Bach's B minor Overture, of which he said he had thought when composing this piece.²

These insights appear to contradict the first two approaches described above.

A performance which accounts for the kinds of ideas discussed by

Stadlen would undoubtedly be closer to 'authenticity' than other approaches, which, arguably, reflect the pianist's priorities rather than the composer's. However, the changing perceptions of Webern's music as the century progresses illustrate the variety of fundamental approaches one can and should consider in preparation for learning new music.

Problems With Authenticity

A problem which arises when researching performing traditions of contemporary works is that the first performance or performances are likely to have been given the seal of approval by the composer. The significance of this must be questioned. The performer will often have worked to some degree with the composer on the piece and for this reason a first performance is burdened by the stamp of a composer-authenticated interpretation. The responsibility of a first recording of a work is also greater on account of its permanence. Frequently, a new recording features a photo of the composer with the pianist, or some other representation of the composer's approval. Robert Black writes,

The advent of 'composer-supervised' recordings will contribute new dangers to the afterlives of the works they represent. Dire economic conditions often mean inadequate rehearsal and studio time, the effects of which the presence of the composer cannot counterbalance. Recording as literal documentation is often a goad and spirit shared – uneasily at times – by composers and performers alike, fostered by the almost certain knowledge that a work will be recorded only once. In many cases it will be a great shame for these recordings to be taken as anything resembling intended models, either of 'authentic' readings of the score or as representations of cherished ideals of performance practice.¹

¹. Robert Black, 'Contemporary Notation and Performance Practice: Three Difficulties' Perspectives of New Music Vol.22 No.1 1983/4 p.117
These concerns are particularly evident when there exists more than one 'composer-authenticated' recording of a single work. Black proceeds to comment upon the discrepancies between the then available recordings of Barraqué's Piano Sonata, a work which poses many problems to the performer, not least in its notation:

Three different recordings of the work exist, each a performance by an artist coached to some degree by the composer. None resolves the textual discrepancies in any coherent way, nor are they consistent among themselves, and the latest of the three amounts to a virtual recomposition of the original work, differing strikingly from its notated form, not only in rhythm, but also in dynamics, articulation, and tempo relationships.¹

The recordings of Stockhausen's Klavierstücke by the pianists David Tudor and Aloys Kontarsky² both hold 'authentic' value. The former pianist is the dedicatee of Klavierstücke V–VIII and his is the first recording of these pieces, preceding the other by six years. Kontarsky was closely associated with Stockhausen at this time and his recording comes complete with the notorious liner notes written by the composer (who also acted as recording supervisor) describing the recording session in detail, including the amount of food consumed. The differences between the two performances, however, amount to more than mere performer idiosyncracies. Kontarsky's interpretation of the first piece, for example, is considerably more erratic than Tudor's, grouping notes within an evenly notated group in an uneven, seemingly random, manner. Tudor is more faithful to the exactitudes of the score, to the extent that the subtle differences between fff and ff are perceptible. Given that both are 'composer-advocated' recordings, listeners must draw their own conclusions as to the relative merits of the two interpretations. The listener must also accept the value of these interpretations as recordings only, not

¹ ibid.
² Kontarsky, Sony S2K 53 346; Tudor, HatART CD 6142
necessarily definitive performances, a point raised by Stockhausen in his liner notes: "I was shaken by the extremely artificial situation, the amount of influence exercised by 'imponderables', and the technical intervention in the musical sphere."

Similarly, recordings of Tippett's Third Piano Sonata differ considerably in their timing, due mainly to the difference accorded to the slow central section. Paul Crossley completes this in less than 12½ minutes and the whole Sonata in 23½ minutes, whilst Graham Caskie, in his recording, takes more than 15 minutes over the central section and over 28 minutes for the Sonata as a whole. Despite these marked differences, both performances (judging by the photos of each pianist with the composer at the piano that accompany both discs) may be taken as endorsed by Tippett. No doubt, the considerable differences in tempo were accepted by the composer, who always maintained that, once written, a composition was out of his hands and in the care of the performers. (Documentary evidence, however, of Tippett in rehearsals of his own music reveal him to have had very clear ideas concerning even minute interpretative details.) Furthermore, it is possible that Tippett's own 'ideal' interpretation may have changed somewhat from his original conception, in this case over twenty years ago. The performer, then, must beware recordings or particular interpretations that propose or even suggest an authentic stamp. There undoubtedly are elements of both these interpretations which reflect the composer's ideal or preference in some way, but these must not be taken as the only or best interpretation.

One must also account for the personalities and sometimes generosity of composers when assessing the validity of their opinions. Not only must their apparent approval of a particular interpretation be treated with caution, but

1. crd 34301
2. MSV CD92004
3. Tippett's Time (BBC); String Quartet No.5 (Yorkshire TV)
also any comments made by them to performers studying a work with them. Composers will generally be delighted that someone is wanting to perform their music, be they amateur or professional. This may result in an uncritical, glowing approval of any interpretation, regardless of its merits.

A case in point is Morton Feldman's *Triadic Memories*, which is dedicated to two renowned pianists, Roger Woodward and Aki Takahashi. Both pianists have recorded the work, though the latter's recording is unavailable in this country. Despite the joint dedication, the two recordings are strikingly different. Woodward's recording appears to contradict generally perceived notions of 'the Feldman performing tradition' (discussed later) in a number of ways. Instead of an overall dynamic level of *pp*, Woodward opts for a louder and more emphatic dynamic, often rising to what I perceive as a *forte*. In addition, Woodward's interpretation contradicts the details of the notation, particularly with regard to rhythm. Instead of the intricate rhythmic nuances accorded to the opening motive, Woodward approximates the rhythm, resulting for the most part in a straight three quavers (example 3.2). When he does deviate from this approximation the result bears little or no similarity to the notation at that point. One could suppose that Woodward's priorities are associated with the idea that Feldman's intention is to create irregularity through the notation while the exact details remain inconsequential. Thus he has assumed that the irregularities produced by an instinctive, individualised approach are justified by having a similar effect to those produced by an exact interpretation of the notated rhythm.

There are many other examples of an approximation of the notation in Woodward's interpretation, including notes sounded together when notated as consecutive events and vice versa, playing pitches at the wrong octave level, and generally smoothing out rhythmic irregularities to give an impression of metric regularity (see example 3.2). What makes this recording difficult to

1. Woodward, KTC 2015; Takahashi, A1 CD-33
dismiss as simply an inappropriate and insensitive interpretation – admittedly a highly subjective view, but one which is shared by other pianists interviewed – is the fact that the work is dedicated to the pianist and it is known that Woodward is a pianist of whom Feldman spoke highly.¹ John Tilbury expressed the opinion that Feldman was "perhaps vulnerable to flattery....Maybe he was saying the same things to me as he was saying to all the people. I mean, he liked me, so who knows? He was very complimentary...".² Woodward’s recording is an interesting document for the reason that he is the work's dedicatee, but, I suggest, it says more about the performer than the composer.

Before one readily accepts a recording or interpretation as having authenticity value, then, one should have formulated some ideas of one's own concerning interpretation of the work in question. Peter Hill resisted listening to the recordings of Messiaen's piano works by the composer's wife, Yvonne Loriod, during the period in which he was preparing his own interpretations and recordings: "There is this undoubted disadvantage of once having listened to something that you were enormously impressed by, it's impossible not to be influenced by it. I clearly thought that if I listened to the whole of Loriod playing Messiaen I was bound to be impressed by a lot of it..."³ The appropriateness of this approach was confirmed to Hill by the composer actively encouraging an individualised interpretation. This also implies that Hill's recordings should not necessarily be assumed to be definitive interpretations merely because of Messiaen's approval.

This is admittedly an extreme example of a close composer-performer relationship, where the composer's wife was the first performer of the majority of Messiaen's works. Undoubtedly this lends Loriod's performances a degree of authenticity surpassed only by recordings of the composer himself

¹. John Tilbury spoke of Feldman's tendency to "praise Roger Woodward...[and] write so glowingly about him."
². In conversation with John Tilbury
³. In conversation with Peter Hill
playing. However, other interpreters of these works should beware a naïve acceptance of these documents, always remembering that Loriod also brings to these works aspects of her conditioning and musical training that may or may not be generally helpful or even appropriate when interpreting Messiaen's music.

Style and Notation: Problems with a Non-Prescriptive Notation

For many pianists, the absence of a performing tradition is a liberating experience and indeed a prime incentive for playing contemporary music. John Tilbury is one pianist for whom the ideal of a 'stylistically correct' or 'authentic' performance is not a priority: "I like to feel that I don't need the composer or the composer doesn't need to be there. He's given me the notation and that's enough....really everything should be in the notation. Let's face it, if a composer is going to allow his music to be published, distributed to far away places, then he has to bear the consequences of that."¹

Tilbury is a pianist mostly associated with the 'experimental' tradition (Cage, Feldman, Skempton, and others). Much of the music of these composers purposefully leaves facets of its execution open to interpretation. Yet there are inherent problems with this approach. The capacity for variation in these works is generally wider than for those with a more detailed notation, particularly with respect to unprescribed tempi, dynamics or durations. Presumably this is an intentional aspect of the nature of the composition. The notation in such instances suggests, even demands, a responsible and considered approach on the part of the performer. If the performer adheres to the limited information that is given, then whatever the result, the interpretation will remain true to the composer's notated intentions.

Despite the freedom allowed by such notation, it is more than likely that

1. In conversation with John Tilbury
composers may have a fixed notion of an ideal interpretation - how the composers themselves would play it. My brief encounter with Howard Skempton illustrated this. It became clear that Skempton had very fixed ideas of how he would (and no doubt does) play each piece under discussion. About my performance of a single piece, First Prelude (example 3.3), which has no dynamic, expression, or tempo markings, Skempton talked about my slight rubato and the flexibility...the ebb and flow. The chords ride into each other...which is what I try to do when I play it...leaning into the next bar so that there's a real sense of momentum...it's got a lot of warmth...I like your dynamic level because there's scope for subtle changes and I like your tempo because there's scope for rubato which is crucial...the slightly clipped 5-beat notes....I'm definitely aware of the thing being driven. It's a question of being driven from which point, and I like a sort of tenderness to start and then it's a matter of cajoling it along so that it doesn't drag. So I like the warmth and the rubato but essentially it's a matter of sound. It's a question of balancing it, letting the sound speak for itself, not forcing it, and yet playing the music as well.

Specifics of this type were discussed with each piece, yet the composer also made it clear that he could have written these things in the score but chose not to, preferring instead to allow the performer a greater freedom of personal expression. Discrepancies between any given interpretation and the composer's favoured interpretation, however wide, are the result of differences in 'taste' and reasoning. John Tilbury, giving his students pieces by Skempton to play, has been "jolted by some of the performances/interpretations, and I haven't really liked them but I've thought, 'well, I can't really find fault'. If Howard wants it differently then he's got to write it differently." The notation is a

1. In conversation with Howard Skempton, during which I played and discussed, among other pieces, First Prelude, September Song, Toccata and Invention
2. In conversation with John Tilbury
map through which performers find their own route. However, a sensitive performance - the most appropriate or most colourful route - might choose to be guided by consideration of the principles that led the composer to notate the piece so.

The problem of variation in interpretation, deviating from the composer's favoured style, caused Morton Feldman to abandon his graphic notation for a more prescriptive method. Early performances of his work were presumably not in agreement with his idiomatically soft and 'unattacked' soundworld - which is inextricably linked with the composer's name today - and, when pitches were not prescribed, featured pitches and intervals that were not 'Feldmanesque' (seconds, sevenths, ninths, etc.). "After several years of writing graph music, I began to discover its most important flaw", Feldman wrote.

I was not only allowing the sounds to be free - I was also liberating the performer. I had never thought of the graph as an art of improvisation, but more as a totally abstract sonic adventure. This realization was important because I now understood that if the performers sounded bad it was less because of their lapses of taste than because I was still involved with passages and continuity that allowed their presence to be felt.¹

Today performances of these works benefit from the hindsight of an appreciation of the Feldman 'sound' as developed in later notated works. John Cage described Feldman's "conventionally notated music" as "himself playing his graph music"² an insight worth considering and appropriating when interpreting these early graphic scores.

The difficulty that arises when approaching Feldman's works is the incapacity of notation to prescribe the timbral quality of sound desired. In a

². quoted in Michael Nyman, Experimental Music: Cage and Beyond (London, 1974) p.45
discussion of Feldman's *Durations I* (1960) (which prescribes only pitch, leaving free details of tempo, duration and dynamic), David Behrman writes,

> The unwritten rules describing such limits [concerning the appropriate tempo] may in fact be imposed in rehearsal by the composer, the conductor, or by the players familiar with the composer's work upon those unfamiliar with it. They describe the boundaries of a personalised style (or tradition or "common practice") built up by the composer and passed on in the course of performances to his players. They might be compared to the rules governing those facets of performance, unsettled in the scores of the past, which have become perennial subjects of speculation among musicologists: aspects (such as rhythmic alteration in the Baroque) which were passed on through oral rather than written tradition.¹

Likewise, the Feldman 'sound' is reliant to a large degree on an oral tradition. However, by studying other scores (for other instruments) and listening to these pieces, one can be brought closer to perceiving a mental and aural image of the density and substance of Feldman's sounds. The idea of a source-less sound, free from any sense of attack (generally applied to non-percussive instrumentation), influences the quality of execution of a single note or chord in the piano works.

John Tilbury queried whether

> the notation [in Feldman's music] does tell you everything you need to know. There are lots of possibilities for misunderstandings as well because it's for the piano, and the piano's associated with a kind of piano sound which is quite different to Feldman's piano sound...most people who would have come across that music would have a piano and if they have a piano then they know Western piano music, 19th century stuff, and therefore there could be lots of misunderstandings about what *p* and *pp* mean. So it would be

¹ David Behrman, 'What Indeterminate Notation Determines' *Perspectives of New Music* Vol.3 No.2, 1865 p.61
quite a shock to hear real Feldman pp's...it's not part of their experience to play that soft. They wouldn't necessarily play in the way we know he wanted it to be played.¹

Documentation of how Feldman "wanted it to be played" is available in the form of a recording which includes performances by Feldman himself, Tilbury, and David Tudor, a close associate and frequent performer of Feldman's music in the 1950's and 1960's.² This recording - which complements all his writings about music, standing out from even today's performances of his music for its extreme softness and tenderness - together with descriptions of Feldman's piano playing (see chapter on notation), are perhaps the most reliable sources available concerning the tradition of playing his piano music. As has already been discussed, recordings of other musicians, apparently approved of by the composer, are not necessarily a good indicator of Feldman's intention. The current danger, with the increased popularity of Feldman's works and the abundance of recent recordings, is that a Feldman performing tradition is built which is concerned with superficial notions of 'soft dynamics' and 'long pauses', rather than his ideas of sound production and isolation. The interpreter would be better guided by his writings and the original context of his music, rather than subsequent performances and recordings, or even an (historical) understanding of the notation.

Informing Interpretation

Disregarding the possibility that an entirely 'bad' performing tradition has plagued a composer, the influence of the composer's other works, especially those immediately surrounding a composition chronologically, will almost certainly have a bearing on the soundworld, structure, and aesthetic of the work being considered. For example, Tippett's piano sonatas as a sequence

1. In conversation with John Tilbury
2. ed.RZ 1010
represent key stages in the development of the composer's style, and each share hall-marks with the works surrounding them. The themes at Tempos 2 and 7 of Sonata No.2 can be directly related to themes from *King Priam* (example 3.4). The pianist may feel, however, that the contextual differences in the sonata take priority over a forced association with the opera. In this example, should the war-like reference of these themes in *King Priam* condition the character of the sonata, or should the pianist re-interpret them with respect to their contextual and structural significance within the sonata?¹ For some listeners both themes will instantly recall the opera because of the literalness of the parallel, whilst for others any allusion to the opera will be left unrecognised.

Other themes (tempos 4 and 8) bear more than passing resemblance to harmonic and motivic ideas in the opera, as well as to the lyricism of earlier works such as the Piano Concerto (example 3.5). These examples are probably more illustrative of the harmonic and lyrical inclinations that preoccupied Tippett's compositional mind at this time rather than direct references to the earlier works. However, comparison of these features in other works broadens the interpreter's understanding of their nature in other contexts, bringing fresh approaches to interpretation of the sonata.

Factors other than the composer's actual music may sometimes act as an important interpretative influence, and may often be of greater significance to interpretation than any formal musical analysis. For example, the paintings of Mark Rothko in particular are, if not directly influential, analagous to Feldman's subtly detailed later music. In these later works, such as *Triadic Memories*, valuable insights may be derived from reflecting upon the similarities between composer and painter. The textures, formal contrasts, and infinite shades of colour of a Rothko painting are an indicator of the minute

¹ See chapter two (p.114) for further discussion of the structural importance of these themes.
details and structure of a Feldman work – static, yet always changing, within clear structural boundaries. One could also prepare for these works by a study of the writings and transcribed lectures of Feldman, which include discussion of Rothko's work. Research of this nature is often extremely valuable and frequently of greater significance than any formal musical analysis.

Most of the prefaces to Messiaen's works offer lengthy explanations of the programmatic or thematic concerns contained within them. Generally this will be concerned with either Catholic imagery or detailed descriptions of the birds depicted, or both. The relevance of these images to the actual execution of the notes varies considerably, though they are of obvious importance to the composer. Some of the more graphic imagery in, for example, any one of the pieces of the Catalogue d’oiseaux (1956–8), can more obviously be related to performance with regard to mood painting, touch, pedalling, extremes of contrast, etc. Peter Hill recalls Messiaen's desire for him to understand "the 'character' of each birdcall and the atmosphere of the well-remembered landscape...he urged me constantly to phrase musically and poetically...A case in point is the dazzling flight of the kingfisher (from 'La bouscarle'), which was to have the grace and flexibility of Chopin playing."

The relation of 'the star and the cross' to the short, 8-note theme in Vingt regards sur l'enfant Jésus (1944) which represents them is less direct, however (example 3.6). Analytically, one can single out the theme's recurrences throughout the work and colour it in some way that recalls its previous context whilst retaining its significance in its new context. Messiaen writes prefaces to each of the twenty movements, as indications of both mood and theological importance. Occasionally he offers suggestions for the communication of these ideas in the execution of the notes and phrases, but generally pianists are left to respond to the extra-musical ideology in their own way. However, the theological aspect of Messiaen's music represents only

1. collected in Essays op.cit.
one route through the work under consideration. For the pianist unsympathetic
to the religious connotations, consideration of Messiaen's beliefs can be
reflected and translated into purely musical expression. There are many other,
more abstract, points of entry open to the interpreter as an alternative to the
expression of faith which is fundamental to Messiaen's own route. The
performer must decide to what degree the religious factor can be ignored. I
suggest it is important to acknowledge the inspiration behind the notes if not
actually to reflect it in a personalised interpretation.

In a discussion of the music of Arvo Pärt, Henryk Görecki and John
Tavener, Ivan Moody writes,

> The performer is...required to experience and convey at least
> a part of the spiritual import of the music. (This is something
> neither necessary nor desirable in music of another kind. This
> is not to say that with other kinds of music the performer
> should not be conscious of the composer's philosophical or
> spiritual intent, and should not attempt to project it, if that is
> what the composer requires.)...it must certainly help if one
> knows something of Görecki's religious, political or aesthetic
> concerns as they affect the performance of spiritual music in
> a secular ambience. [Moody's brackets]

For these composers, their sound-worlds are inextricably bound up with
spiritual concerns, which then affect interpretation of all their works, including
those with an apparently secular agenda.

Pärt's *Für Alina* (1990) (example 3.7), in its sparse, open notation and
its resonant soundworld, suggests a meditative approach to both composition
and performance. Yet there is no immediately apparent programme attached to
it and no obvious spiritual connotation to be found. A sensitive performance
would take account of Pärt's output as a whole, embracing the meditative
qualities inherent in his music generally, and reflecting these in interpretation.

1. Ivan Moody, 'The Mystic's Point of View (or a Byway of Post-Modernism)'
   *Contact* No.31, 1987 pp.28-9
This distinguishes Für Alina from a similarly notated piece (that is, with durations left free) by Skempton, such as September Song (example 3.8). Both pieces demand close and intense listening to the sound produced and to the decay of that sound and both are to be played very quietly. However, whereas September Song generates its own character, dependent on the intensity of the moment and different with each performance and performer, Für Alina arguably suggests a pre-ordained soundworld imposed upon the notes. In the latter piece, the overall structure and mood are influenced less by the individual moment and more by the harmonic, linear and gestural sense of direction, as well as an appreciation of Pärt's other works which share similar characteristics.

Moody goes on to suggest,

From an educational point of view, it might seem that we all need to go to seminaries to penetrate such clearly religious music. (This would bring a fourth element into the eternal triangle of composer, performer and listener (or musicologist!)) But then this is probably no more necessary than studying with René Char in order to understand Boulez. Performers and listeners must each decide for themselves how far they wish to enter into a work, how long they need to meditate. [Moody's brackets]¹

Substituting the word 'research' for 'meditate', performers likewise choose the extent to which researching a piece of music is considered beneficial to interpretation. Michael Finnissy argues,

The performer has a greater responsibility to explore what the music is about other than just first impressions. If you're playing Clair de lune do you read Verlaine, whose poems Debussy knew? Do you go to Paris? Do you tread the same streets that Debussy did? There's no end to what you can do to try and put yourself there and none of that's wrong and ridiculous, but eventually it's you and the music.²

1. ibid.
2. In conversation with Michael Finnissy
Just as some 'religious music' implies a certain approach and even particular sound, so too does music that has another agenda. The politically-motivated music of composers such as Cornelius Cardew, Christian Wolff and Frederic Rzewski, often based upon established political songs, are clearly founded on the tradition of song and accompaniment, but also on the classical tradition of theme and variations. The clarinettist Roger Heaton expressed concern in a controversial article in *Contact* that "Some music depends on conditioning and education and requires a context....With some post-modernist pieces, particularly those of post-Cardew Britain, being forewarned seems essential if one is not to hear them simply as poor tonal pastiche."\(^1\) One may hope, however, that the performer who chooses to perform these pieces does so out of a sympathetic attitude to the political and/or social conditions and background to their creation. Many of the interpretative choices will consequently be governed by the political priorities, which will determine what the performer attempts to communicate. The musical language of many of these pieces is tonal, though not necessarily the functional tonality of the classical tradition. Thus interpretation is to be guided by a combination of musical intuition, based on tonal principles, and a personal response to the extra-musical ideas behind the piece.

Amongst pianists interviewed, there were extremes of approaches to research regarding 'style'. At one extreme was John Tilbury, a pianist reliant most of all on that which is suggested by the notation: "Composers need to realise that everything that they want has to be in the notation...I think that if the notations can take off in a way which the composer didn't envisage I think this is very important and good for the composer, whether he likes it or not...He should know the consequences of what he's written".\(^2\) However, Tilbury generally today plays only music by a select few of the experimental composers, most of whom he knows on a social basis and with whose artistic

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1. Roger Heaton, 'The Performer's Point of View' *Contact* No.30, 1987 p.31
2. In conversation with John Tilbury
priorities he is entirely in sympathy. Tilbury's reactions to the notation of these composers are preconditioned by his established relationships with them. Consequently, his interpretations, though undoubtedly idiosyncratic, are likely to be sympathetic to the composer's intentions.

Andrew Ball felt that with most music "the amount of background research that you do into it and the weight with which you take stylistic considerations are less important than the imagination and the flare with which you try and lock into the world of the piece."¹ At the other extreme is the stance of Nicolas Hodges: "I'm very keen to explore other contexts before I work on something...I don't think I would ever play a piece without knowing a handful of other pieces very well, not necessarily piano pieces, by that composer. I consider that to be absolutely necessary."² Ian Pace concurs:

I think an aesthetic understanding of the music is probably the most important thing of all. An understanding of the composer's priorities and aims, general socio-critical ideas which are usually in some sense implicit in the music. I think that's of vital importance....These considerations, the way in which there's tension between intention and result, process and intention, processes and result, processes and aesthetic, and just in the substance and the composer's worldview, these can often be more informative than the actual technical procedures.³

Difficulties inevitably arise from the lack of available information. Failing contact with composers themselves, the performer is forced to seek out writings and information about the composer and piece, often going to considerable lengths to get results. The attitudes of Andrew Ball, John Tilbury and others is thus partly reflective of an unfortunate practical reality. However, considered responses to the notation and the physicalities of the soundworld alone are, I suggest, valid forms of 'research', inasmuch as

1. In conversation with Andrew Ball
2. In conversation with Nicolas Hodges
3. In conversation with Ian Pace
research constitutes some method of 'systematic investigation'. Informed interpretation could, then, extend to a self-informed interpretation, involving an exploration of the instrument, the sounds and the form of the work - a process that evolves as one becomes better acquainted with the piece.

Michael Finnissy frequently lends a helping hand to the interpreter through the titles of his pieces. Consideration of the title and its relationship with the score constitutes one aspect of research, combining some extra-musical information provided by the composer and an individualised reaction to the connotations suggested and implied by this information.

It starts with the title. The titles are not what they seem to be in many instances. There is an element of humour, irony or something else there under the surface. A lot of times the music is making reference to other musics, either obliquely or very obviously, so if you know anything about the other musics you bring that to it. You gradually accumulate a pile of objects on a table which then enable you to identify what it might be. I believe in music where there's a kind of dialectical process, so it is very much often a critique of the world of experience. I expect my pianists to be fascinated by that idea, to be people who go to the movies, theatre and art galleries and see lots of things other than the surface of the piano. I try to make it as rich as I can and a bit like a game.

All of Finnissy's music encourages the performer to explore and consider the implications of the piece, using the title as a primary basis from which to 'research' in this way. A classic example of this is the relationship between the title and notation of his most famous work, English Country Tunes:

Having read the title English Country Tunes and then seeing the first page of the score, you would think 'How is this meant to relate to the idea of English country tunes? What is this person trying to say? It's obviously a bit different from

1. Collins English Dictionary, 1993
2. In conversation with Michael Finnissy
"down on the farm". There is a tension between these two things. The easier passages, nice modal melody with sustained harmonies provided by the pedal, are more related to English country tunes, and information is gradually built up....anyone who tries to make English Country Tunes sound like Cyril Scott is completely up the wrong tree. You have to think about what lies behind the notes...

On a more abstract level, the title of the piece Short But... (see example 1.33) implies an inherent ambiguity. Is the effect one of 'sweetness' or not? Its absence in the title suggests that the performer should avoid a 'sweet' performance. Jonathan Cross, reviewing the collection of short piano compositions in which this piece appears, argues, "There is a sweet simplicity about the music. Certainly it seems to encapsulate the essence of Finnissy's work: that is, despite the surface activity there is a deeper stillness which attempts to capture a single moment, a mood, a feeling." At certain moments in this piece one might easily agree with Cross, as the physical implications of single intervals prompt one to linger over, or 'caress', the notes. However, the title is an important indicator of mood and should be treated as an imposed restraining factor when faced with such instincts. Commenting on my own performance of this piece, Finnissy stressed, "Short but not sweet, so don't project it too lyrically. Try and play it quite dry."

Likewise, the musical vocabulary, notation, 'harmonies', and general movement of Jazz is anything but the type of music generally associated with its title. The sheer complexity of the first page (see example 1.48), visually and practically, combined with the flamboyance of Finnissy's notation, suggests randomness (with the exception of the middle stave's 'cantus firmus') and improvisation. This music, then, has its roots not in a stylised conception of jazz (as espoused by musicians such as Wynton Marsalis) but in a spirit of

1. ibid.
improvisation and within a wider expressive context, as developed by artists such as Ornette Coleman, Evan Parker, and AMM. An appropriate route through the work and preparatory interpretative decisions might be governed by this aesthetic, perhaps taking the form of a more improvisatory, 'reckless' approach to the exactitudes of the notation, possibly attempting a gestural approximation of the more extreme complexities.

Finnissy's use of folk music is less of a stylistic concern than are its contextual implications. The contradictions and issues arising from Finnissy's settings, distortions, or simply choice of song (and its associated lyrics) are an indicator of the appropriate expression and mood for one's performance. Ian Pace argued, "I find it interesting to know from him what the sources are and they often give me a different perspective on the piece. However, I don't spend ages tracking down the original folk song. That would take a lot of time!"¹

There is no element of 'pastiche' in Finnissy's 'sourced' music. It is the spirit of the music which Finnissy conjures, not the surface elements of its notation or particular sound-world. However, many of the sources (particularly folk songs and blues or jazz tunes) are of a tonal nature, and the end result reflects this. Nicolas Hodges suggests "You've got to respond to every harmonic nuance in Michael's music, because one would say that that was his pianistic background as a high romantic pianist. That's how he would respond to Liszt or Godowski, etc."²

A characteristic of Finnissy is to make reference or allude to characteristics of the source, such as the grace notes, and also elements of its reception, such as the textural arrangement. An example of this is Sometimes..., a short piece written in aid of 'Children in Need' and based on the spiritual 'Sometimes I feel like a motherless child' (example 3.9). The style is clearly derived from the blues, but filtered through Finnissy's individual techniques and personality. At the same time, by its restraints and occasionally

1. In conversation with Ian Pace
2. In conversation with Nicolas Hodges
forced harmonies, it alludes to "the set of spirituals arrangements by Coleridge Taylor, so they have elements of 19th century pianism, salon pianism, which this is critical of". There are thus at least three stylistic considerations to balance in performance: i) a sympathetic approach to the word-setting of the original spiritual and its reflection in the general mood of the music; ii) an appropriation of the blues style, whilst sensitively reflecting Finnissy's subtle rhythmic inflections (which are themselves guided by an intuitive representation of blues singing); and iii) a slight distancing from a wholly blues-authenticated style, occasionally dampening the emotional attachment generally associated with original blues.

One consequence of the multifariousness of Finnissy's music is that different pianists will focus on different aspects of a single work. This is exemplified in the range of approaches to Finnissy's Gershwin Arrangements (example 3.10), which use the original melodic and rhythmic contour to a greater and more perceptible degree than many of his arrangements (or transcriptions). There is no doubt that these pieces lie musically within a jazz idiom, and no attempt need be made to disguise this. The danger is, however, for these pieces to be interpreted purely as 'jazz' and to import elements from that idiom that perhaps contradicts the notation. For example, the rhythmic nature of Finnissy's arrangements, which feature frequent dotted or double-dotted notes, complicated triplet figures and more complex rhythmic ratios, indicate a precise lengthening of a note or a rhythmic twist that is to be played as written, rather than as approximate rubato inflections. It is important to attend closely to the details of Finnissy's notation whilst retaining a feel for the jazz idiom. As a performer himself, Finnissy is aware of the dangers:

the problem is that they were written very much as self-expression kind of things, like jazz singers often do to give

1. In conversation with Michael Finnissy
2. This is not to say that other composer's works are not multi-dimensional, but in this context Finnissy's works are better analysed in this way due to their more concrete allusions (to other styles or social/political issues).
reign to the mood of the moment. But the problem is then you're revisiting that. I find that I can't use them as vehicles for the mood of the performance moment, because they already contain all that to such an intense point. If you then try and supplement that with a load more intensity it just boils over, so you can play them on the whole rather detached and they will still sound almost threatening as to be over the top.¹

Prioritisation: Impossibilities and Near-impossibilities

All the issues discussed thus far are concerned primarily with the relative importance of musical material. These are decisions that also need to be made in traditional music. In a Mozart sonata, for example, one may choose to prioritise a particular harmonic progression in the left hand, for a period of time, over a more stylised articulation, perhaps because of an analytical observation. Likewise, one may choose intuitively to focus on an upper melodic line in a chordal piece by Skempton, deciding against long durations in order to achieve this, instead of focusing on the decay of each individual sound.

With more technically complicated music, the issue of prioritisation extends beyond merely highlighting one element over another. The decision to focus on one (or more) aspects of a passage may necessarily involve a degree, however small, of approximation concerning the less important element (or elements). For example, the final six bars of the first movement of Beethoven's Appassionata, Op.57, (example 3.11) contains one brief moment where such a decision must be made. As it is written, the left hand has a rising then falling F minor arpeggio, derived from the opening of the movement, whilst the right hand has a rocking semiquaver figure around F minor. At the point where the two hands converge at the centre of the

¹. In conversation with Michael Finnissy
keyboard (bar 259, marked 'x') the right hand shifts upwards from C/A flat to A flat/F in order to maintain the left hand line. If all the notes of the first beat are played in time, there will inevitably be a delay before the second beat in order for the right hand to reach the A flat/F position (unless one takes the C/A flat with the second finger and thumb leading to fingers 5 and 3 on the A flat/F, which will then cause the same delay before the next beat).

The obvious solution would be to switch hands at bar 257, taking the arpeggio with the right hand, and then to switch again at 'x'. However, I suggest that this would be detrimental to the line of the arpeggio, as it would make some audible difference at 'x'. If the priority is to be the continuity of the left hand arpeggio line (as most pianists would agree), there has to be some approximation of the rocking figure in the right hand, cutting it short and allowing the pedal to maintain the harmonic and gestural effect.

The above is an illustration of the minor decisions performers make in traditional music, founded upon realistic practical necessities. The process of prioritisation here is a relatively simple one, dealing with only two types of material, one of which is, traditionally and intuitively, of greater significance. When dealing with related problems in contemporary music, the benefit of an historically-based guiding principle – such as bringing out the melodic line over the accompaniment – is denied the performer.

A response founded solely on an intuitive system of priorities is potentially flawed, and should be questioned on two levels: on what is intuition based, and how does it compare with knowledge of the composer's priorities (in general and concerning this piece)? It is potentially flawed, but it may on the other hand be an entirely appropriate response, complementing the stylistic approach brought to the piece by the composer. Of a newly-composed piece, Hill writes, "It is most desirable not to jump too rapidly to conclusions; one needs to re-examine carefully one's habitual instincts in order to avoid obliterating the newness of the piece by projecting onto it one's familiar
musical responses."¹ In addition, there is a danger for performers well acquainted with contemporary music of adopting priorities appropriate to one or a number of composers which may be totally inappropriate to the piece under consideration.

Assessment of the composer's musical and aesthetic priorities can be crucial in achieving an appropriate system of priorities for performance. Whilst it is important to find a personal way into the piece, nurturing an individualised set of priorities with each new work, evolved through the character and sensibilities of each performer, the composer's agenda must mark the parameters of interpretative choice. The composer is often working from a fount of experience shared with the performer, especially when the notation follows traditional methods to which the performer trained in the Western tradition immediately relates. Robert Saxton's Sonata is an example of this, where gesturally and notationally there is nothing radical or particularly new. The interpretative problems, discussed in the previous chapter, are concerned primarily with making connections of a compositional nature, harmonically and motivically.

Interpretative decisions which rely on a consideration of the composer's priorities for a solution (though not necessarily the solution) are at their most extreme in music which requires highly complex technical procedures or which contains passages which are impossible to play as notated. A notorious example of the latter is the piano piece Evryali by Iannis Xenakis. Contained within this piece are a number of demands on the pianist which are literally impossible (example 3.12). Many of the intervals cannot physically be reached by any human hand as a single 'chord' event, and many of those that can (just) be spanned are unlikely to be accurate at the prescribed speed. However one plays these passages, compromise and distortion of at least one aspect of the notated intention is inevitable. Peter Hill, in an article about the interpretative

1. Peter Hill, 'Authenticity in Contemporary Music' Tempo No.159, 1986 p.5
problems of Herma and Evryali, chose to rearrange the score in some way so as to be physically playable whilst preserving the effect of the original (example 3.13). This meant transposing some pitches up or down the octave, or, more radically, by some other interval, arguing that though it "would be unthinkable in traditional music, here it might be preferable because it does more to preserve the shape of the original", and omitting some notes that would be less audible, perhaps because they are in the shadow of a louder event. Hill also argues that "exactness of pitch is more important in the middle of the keyboard than in the extreme registers".

Hill's article was responded to in later editions of Tempo by two pianists, Stephen Pruslin and Yuji Takahashi. The former condemned Hill's methods of omission, particularly the notion of greater approximation accorded to notes at the extreme of the keyboard. Pruslin's approach presumes fidelity to the text of paramount importance, yet the reality is that absolute fidelity to the text is unachievable when the notation prescribes the impossible. Pruslin's claim to have "found it possible to give numerous performances of Herma over the past five years without resorting to octave transposition (and at a tempo at least respectable enough to lead score-carrying members of the audience through quite a paperchase)" may be true enough, but one must assume that some other aspect of the notation must have been compromised in his performances. In his presumption that Herma is playable accurately, the compromises in Pruslin's performance may have been the result of an attempt, in the moment of actual performance, to attain to accuracy, rather than the result of a predetermined interpretative decision. In itself, the decision to attempt an all-inclusive performance is the result of a prioritisation process, the priority here being an encyclopaedic interpretation, with any omissions during actual performance being the result of either technical inefficiency or the momentary

2. Ibid. p.19
3. Letters to the editor, Tempo No.115, 1975 p.54
4. Ibid.
choice to play whatever was possible in the time available, omitting as little as possible.

These interpretative issues are not unrelated to the decisions one must make when performing the music of Howard Skempton, or other music which is partially or freely notated. Decisions in Skempton's music concerning tempo, duration, dynamics, pedalling, etc. may be pre-planned or left to the moment. Despite Tilbury's general absorption with the 'nowness' of the moment, he admitted to predetermining some aspects:

[I decide upon] the overall tempo, more or less, overall pedalling style, but not the details, like if I'm going to pedal all the way through, or if there are any changes, sometimes I might actually notate them, put them in, other times I might leave it....I like to leave a lot of things to the moment, like the phrasing, the dynamic - maybe the overall dynamic is fixed, but all the stuff within the limits, articulation even, all those things that make up the expressive content of the music - that I like to leave to the spontaneity, the moment.¹

Likewise, one can choose to leave certain decisions in Evryali or Herma to the moment, or choose to predetermine which aspects to prioritise, even notating in advance one or more aspects as Hill did.

Pruslin's response fails to confront the issues of prioritisation and choice necessary for any performance of these pieces. Takahashi's argument with Hill's article, in contrast, is based upon a different set of priorities rather than a challenging of the actual notion of prioritisation. Where Hill chose to prioritise the pitches, Takahashi argues "the octave transpositions we find in Hill's 'performing version' disrupt the continuity of lines. Evryali is not a twelve-tone etude. The names of pitches (G#, A etc.) are less important than the register or pitch zones."² From Takahashi's recording,³ we can also discern that conforming to the tempo marked is not a priority for him -

1. In conversation with John Tilbury
2. Letters, op.cit.
3. Denon 33CO-1052
Takahashi takes it at a considerably slower pace than the minim = 60 marked. The differences between the two approaches are differences of personality, and neither could be said to be 'wrong', given that each represents a considered interpretative response to the impossibilities of the piece.

Takahashi argues that the "performer is an adventurer who explores sonic nebulae following the star map provided by the composer. A composition is a model which is used again and again to open the door of perception. It will be modified, if necessary, and discarded when it is no longer valid."¹ His case is that one may use the score of Evryali as a fixed basis for one's own preferred route through a work at any given time. Hill's own interpretation, however, through use of a notated reduction, creates a fixed preferred route, unopen to further interpretation. By predetermining the result to this extent, Hill leaves no room for changing twists in the "sonic nebulae". One could renotate a passage differently with each performance (if one were so dedicated), but this would still leave no opportunity for different approaches during actual performance.

Hill's 'reduction' could have been made in reaction to an overtly improvisatory approach, towards which Takahashi's analogy of the composition as 'star-map' arguably points. Hill warns against such an approach, quoting Xenakis: "The interpreter is a highly conditioned being, so that it is not possible to accept the thesis of unconditioned chance, of an interpreter acting like a roulette game"² Thus the pianist must deal with these two polarities - the score is unrealisable, yet one must realise the score. In a recent article considering further the practicalities of performing Evryali, the Canadian pianist Marc Couroux writes, "The pianist must choose a path considering impossibilities, which then prevents the interpreter from taking refuge in uncontrollable improvisation in public."³ Couroux's criticism of Hill's

1. Letters, *op.cit.*
reduction is that "a version which corresponds to the capacities of the interpreter at some moment of choice does not allow for his future potential, when he will have acquired the virtuosity necessary to add to the notes. He must always have the chance to review his 'priorities' ".

In this way, Couroux questions whether Evryali is an "open-form work, formally closed, but, on the other hand, ruled by the personal priorities of the interpreter as for the final 'expressive' result?". If not, what are the essential priorities of the composer and how may they be of influence on the necessary interpretative choices in Evryali? Couroux and Takahashi dismiss Hill's method of octave transposition on the grounds that the counterpoint (or the 'arborescent' nature of the lines) is lost by confining the lines within a narrow intervallic space. Couroux argues that the notation itself indicates the nature and importance of the counterpoint: "The refinements of notation, also disconnected as they are from an interpretative reality, contribute to the strength of a work. The interpreter must take into account the entirety of the thick information, and not distort in order to better suit his perceptual needs."

Excluding the possibility of octave transposition as 'stylistically inappropriate', the pianist must decide how technically to execute this passage. Couroux admits that Takahashi's method of arpeggiating certain impossible chords and generally reducing the tempo is approved of by Xenakis, who has suggested the same to other pianists. Indeed, Claude Helffer's recording, apparently approved of by the composer, takes the tempo slower still, making it sound very much like an étude. However, Couroux prefers to keep the initial tempo, maintaining "the mass effect...even though this supposes a much bigger approximation of other elements."

The difference between the interpretative approaches of Hill and Couroux

1. ibid.
2. ibid. p.64
3. ibid.
4. MO 782 0005
5. Couroux, op.cit.
at this point results from the former's priorities being based mostly upon his own perception of pitches, whilst the priorities of the latter are founded on a desire to reflect those of the composer. Hill admitted that his priorities were personal and probably unique: "I've always thought that if you were to play [Xenakis's] scores at a slow or moderate tempo you'd find buried treasure in there that gets lost in all this super-virtuoso style - play it as fast as possible and as loudly as possible, and I find it a curious hyper-romantic approach which I don't like." The 'controversy' surrounding Hill's approach, then, lies not with the fact that he chose to omit notes, or approximate at certain points, but with the issue of authenticity. The criticisms of Hill's article suggest that, for those other pianists, a performance which reflects the composer's priorities is a 'good performance' and a performance that reflects other priorities is 'bad'. In this particular example, Hill's priorities arguably reflect neither the notation nor the composer's characteristic branches of counterpoint, as demonstrated in his ensemble works. However, the decision to highlight the pitches represents a generally neglected facet of Xenakis's music and, however 'inauthentic', should not be dismissed but valued as an alternative and individual interpretation.

A composer's priorities are important, however. There is undoubtedly a difference between highlighting a neglected, or possibly hidden element of a composition, and creating a feature that actively opposes the composer's known intention. There are many sections in Evryali which feature a rapid succession of chords, each slightly different but with a cumulative static effect as the same pitches recur (example 3.14). The constant variations in the order and distribution of these chords is such as to depict a chaotic and random effect. Hill outlines one of the dangers for performance of these passages: "To organize the notes by inventing repeated orderings, and disguise the patterning by changing the system as frequently as possible, say every minim. Clearly, if

1. In conversation with Peter Hill
such patterning were to be perceived by the listener, the musical intention of randomness would be lost."¹ Couroux also warns against a too regular, 'patterned' approach, suggesting, "One must jump 'aperiodically', certainly in keeping with the general logic of each line, but also as irregally as possible [see example 3.15]."² This is unfortunately not the case in a recording of the first UK performance of Evryali by Alexander Abercrombie.³ His solution was to jump, if not entirely regularly, then in such a way as to suggest a rhythm of some kind in the left hand. Another live recording, by Michael Finnissy,⁴ solves the problem by washing the passage in a mass of pedal, and effectively blurring any sense of rhythm, allowing for a just perceivable sense of harmonic flux. The alternations of this passage in Claude Helffer's recording are suitably irregular but because of the slowness of his tempo it sounds like an ordered irregularity, and, in this context, any hint of regularity - of rhythm - is clearly inappropriate. However one chooses to compromise the text is of subsidiary importance if kept within the governing priority of irregularity.

The piano music of Xenakis presents an extreme case in that it contains moments of known physical impossibility. Here one must establish a fundamental difference between absolute impossibility and 'temporary', or near-impossibility. The former is generally concerned with instances that are impossible to achieve on a piano with two hands, i.e. intervals which are too wide for any human hand, or impossible simultaneities, as found in Evryali. The latter is more common and embraces music that theoretically could be achieved by a single pianist with an advanced technique. The ideal performance of such a passage can be imagined, and aimed for, but, in the end, may not actually be realised. In such cases, Joanna MacGregor chooses to work on it

1. Hill, 'Xenakis and the Performer' op.cit.
2. Couroux, op.cit.
4. National Sound Archive, BBC recording (May, 1992)
very slowly:

When I've played this kind of music, I've worked on it very very slowly for a very long time, so in theory I'm able to play everything slowly. When it's brought up to speed it suddenly becomes impossible and what I've done is leave it to a spontaneous performance where you're just going to go for it and play as much as you can. I've never decided in advance that something's unplayable, I can't make that decision....I'm going to assume that it's playable and that if I'm, in the heat of the moment, dropping some notes, that is due to my lack of technique, due to my inexperience and so I'm going to keep on trying to play it.¹

This differs from Hill's approach to even the theoretically possible passages in Evryali, where his aim was to 'minimise inaccuracy', accounting for factors 'such as one's technical proficiency and even the time available for rehearsal'.² Music of this nature may have to wait for a new generation of 'super-pianists' to achieve absolute accuracy.

The solution to an instance of absolute impossibility must be based upon the set of priorities underlying one's interpretation of the piece, as discussed with reference to Xenakis's music. Accordingly, results will vary, but it is certain that the notated intention will never be heard in reality. Examples of this are not restricted to so-called 'complex' or even particularly difficult music. Feldman's Piano Piece 1956b features two chords which are impossible (for someone without a particularly wide hand-span) to play as the simultaneity notated (example 3.16). The solution must be either to omit one of the notes, alter one of the notes, or spread the chord in some way. Simply omitting one of the notes considerably changes the density of the chord, affects the resonance through the pedal, and affects the articulation. For these reasons, if the chord is not to be spread, it would be better to alter one of the notes. This might seem to contradict Feldman's definition of composition as

1. In conversation with Joanna MacGregor
"the right note in the right place at the right time".¹ However, there is no methodological pitch-ordering device at work here to generate unity other than Feldman's intuitive selection.

In choosing a substitute note one can restrict the possibilities to complement Feldman's general harmonic and pitch field. The new chord should retain its approximate spacing - transposing the E flat up the octave, for example, would alter the density of the first chord too much - and should be considered in its immediate context. Thus, to substitute an F sharp for the E flat in the first chord, keeping the G sharp above to retain the effect of its subsequent repetition whilst ensuring it is still a different chord from the subsequent G sharp octaves, would seem a reasonable solution. Likewise, a D sharp could be substituted for the C sharp in the second chord - substituting an E would equate the interval between the upper and middle notes of the two chords in this bar and sound too much like a transposition. The other, equally valid, solution would be to spread the chords, thus distorting the rhythmic outline. An argument against this is based upon the notation, which suggests that these chords, particularly the second, are to be played as a single event (the first chord, after its initial attack, goes on to be a complex three-part event), equal to other similarly notated chords which are physically within reach.

It is perhaps the case that music which is 'near-impossible' poses more problems than music which is absolutely impossible. For the latter type, there is no option but to compromise in some way, whilst for the former, underlying every compromise, pre-determined or otherwise, is a sense of guilt for one's own technical deficiency. Arguably, this has been the case throughout the history of Western music, particularly in music from the nineteenth century, as composers have waited for a new generation with more advanced

¹ Feldman, in Essays, op.cit.
technical abilities to cope with the new demands placed upon them. However, many of the composers writing so-called 'complex' music today have no interest in virtuosity for its own sake. For some composers, a crucial aspect of their compositional make-up is a preoccupation with the tensions and resolutions produced by the performer from moment to moment. Their compositional intent is reliant upon the performer's reactions to the notation, or upon the superimposition and juxtaposition of a number of separate events, rather than to expect a clean, 'tidy', and accurate execution of those events.

Finnissy provides examples of these two types of performer difficulty. In his earlier music particularly, the notation can sometimes act as a gestural, almost graphic, indication of intent. Indeed, Finnissy draws attention to the relationship of his scores to graphic scores: "The slower moving music [of *Autumnall* (1968-71)] is probably as much realisations of Busotti's graphic scores as it is anything else".¹ For example, in the opening page of *Jazz* (see example 1.48), the prescribed exactitudes give the inner detail whilst the broader gesture is clearly perceived. The gestural impact of the score must take precedence over absolute accuracy of the pitch detail. The rhythmic detail is in any case distorted by grace notes – the combination of two separate events – but those aspects of the rhythm which can be clearly perceived, such as the triplet quavers in the right hand and the trilled quavers in the bass, should be clearly articulated. Concerning pitch accuracy, nothing is beyond physical reach and all is theoretically achievable. The notation suggests a prioritisation of the central stave's 'cantus firmus', which is dynamically more prominent and marked *poco accentuato*. Concerning the pitch detail in the outer staves, it seems of greater importance to the density and texture of the material to concentrate more upon the *gesture* of, say, a large upward leap than upon the *precise notes* of that leap. This is not to say one should not try to obtain accuracy, but rather that one should pay more attention to the *cantus*

¹ In conversation with Michael Finnissy
firmus at the possible expense of an entirely accurate reading of the outer staves. However, the detail is important; the score is not merely a notation of Finnissy improvising and thus a forum for further improvisation. Ian Pace writes: "Just as overly 'improvisatory' performances of Cage fly in the face of his denial of human intention... interpretations of these scores as mere approximations of a general intent will most likely fail to capture the requisite quirkiness and asymmetry."¹

The beginning of the third bar poses a number of problems, some of which are discussed in Chapter One (pp. 61–62). Even if one could manage to play all the pitches accurately, to do so would create considerable distortion of the rhythmic values due to the arpeggiated chords and the addition of a middle line of material. The basics of this gesture are two lines of material, the upper moving at approximately twice the rate of the lower, and a further third (central) line added half-way through the first grouping; the pitches of the two upper lines generally take the shape of a wave, slowly rising at first, then falling dramatically from its peak and rising again, and so on, whilst the lower line is less eventful, enlivened only by widely spaced chords, spread downwards. The actual detail of the material is unmemorable in itself and, I suggest, is less important than the outline of these basics. Finnissy suggested that one method of playing this passage (and presumably many more similar passages) is to:

- go for the general profile of the gesture...and not play the pitches accurately. There are lots of ways round moments like that where you can make it sound what it looks like or what it feels like. In fact a totally accurate rendition where you might need two pianists actually might not sound any different from a rather more approximate transcription of it by one pianist.²

This suggests that if Finnissy had wanted it to be played accurately he

1. Ian Pace, 'The Panorama of Michael Finnissy' Tempo No.196, 1996 p.28
2. In conversation with Michael Finnissy
might have written it for two pianists. Instead, an integral feature of this music is the tension, the drama, and the resulting improvisatory release of having a solo pianist embrace the totality of the score. This is a feature of much of Finnissy's music, paralleled also in the music of composers such as Richard Barrett and, to an extent, Brian Ferneyhough, (particularly in his *Time and Motion Studies* (1971–77)).

With Finnissy's music, the intention is partly to present a complex problem which when interpreted results in a romanticised, freely extemporised web of ideas. Some pianists interviewed expressed a reluctance to engage with music that is not necessarily affected by the omission of some notes, or that is not reliant on a wholly accurate rendition. For Andrew Ball the problem is that "as soon as you start writing a built-in approximation, it begs such huge questions about how far you are allowed to approximate and what's the difference between writing in a hugely complex passage and Schnittke-esque squiggles meaning any rumbling sounds you like in the bass." However, as has already been discussed with relation to Feldman's graphic notation, there are stylistic problems inherent in any aspect of notation that is left free for the performer to interpret, even in Skempton's music. A performance of a piece by Skempton, for example, which superimposes a strict rhythmic idea upon free durations, is arguably a 'bad' interpretation in that it negates the musical aesthetic of the composer, yet it does not directly contradict the potential allowed by the notation.

For some composers, composing the impossible, or 'near-impossible', reveals other intentions. Instead of allowing the performer a degree of freedom to establish a set of priorities, Ferneyhough expects the performer to read each notated event literally. In the preface to *Cassandra's Dream Song* for flute, Ferneyhough writes, "A 'beautiful', cultivated performance is not to be aimed at". This could also be said of Finnissy's music, though the demands of

1. In conversation with Andrew Ball
his music on the performer are of a quite different nature. Ferneyhough continues:

...some of the combinations of actions specified are in any case not literally realisable (certain dynamic groupings) or else lead to complex, partly unpredictable results. Nevertheless, a valid realisation will only result from a rigorous attempt to reproduce as many of the textural details as possible: such divergencies and 'impurities' as then follow from the natural limitations of the instrument itself may be taken to be the intentions of the composer. No attempt should be made to conceal the difficulty of the music by resorting to compromises and inexactitudes (i.e. of rhythm) designed to achieve a superficially more 'polished' result. On the contrary, the audible (and visual) degree of difficulty is to be drawn as an integral element into the fabric of the composition itself.¹

Jonathan Harvey notes:

The player must obviously be highly motivated and willing to subject himself to the discipline of practising one layer of actions at a time, only gradually superimposing them....Ferneyhough hopes that by presenting [the performer] with almost insuperable difficulties he will suppress his subjectivity and any personal desire to interpret the music - there simply would not be time or concentration left while struggling to comply with all the notated instructions²

The performer here is slave to the notational, and thus technical, demands of the work. This is one reason why, in Lemma-Icon-Epigram, Ferneyhough arranges events in successive short units. A unit may contain a number of separate strata combined to produce an event that is the sum of these smaller events (example 3.17). Each layer needs to be practised separately and then combined without compromising the demands of each

¹ Ferneyhough, preface to Cassandra's Dream Song (Edition Peters, P7197)
² Jonathan Harvey, 'Brian Ferneyhough' Musical Times Vol.120, 1979 p.723
layer. This is not the same as the superimposition of events in Tippett’s Piano Sonata No.2, in which each event has its own defining character and should be heard as retaining that character when combined with other, equally defined, events. Ferneyhough combines events which are less defined in isolation but which together define the outcome of their superimposition.

In general, a set of priorities for a particular piece may be established through consideration of the composer’s own aesthetic and musical priorities. Once established, these priorities govern all stylistic considerations not immediately suggested by the notation itself. With composers such as Ferneyhough, the wealth of material written by or about him makes the establishment of a priority system considerably easier. In the absence (or ignorance, intentional or unintentional) of information about a composer, performers are forced to establish a set of priorities based on intuitive reactions to the notation and the physicalities of the particular sound-world. However, it is hoped that the above discussion emphasises the usefulness, and importance, of an interpretative approach which accounts for the relevant stylistic concerns of the composer and the application of these findings. Rather than restricting interpretative values, the attempt to look beyond the notes enables performers to consider other approaches, opening new routes into a work, and enlarging their perceptions from an historically-based vision to a wider vision.
Chapter Four

Berio's *Sequenza IV*

A Case Study
Berio's *Sequenza IV: A Case Study*

"When music has sufficient complexity and semantic depth, it can be approached and understood in different ways."¹

"For all its rich surface detail, Berio's music tends to root itself in processes that are relatively simple, and can thus offer access to the newcomer without starving the experienced listener of fresh discoveries."²

**Introduction and Background**

*Sequenza IV* is a complex work, leaving much that is unclear in the way of interpretative choice. Its structure is evident at certain levels, yet follows no common or historical method. The notation is detailed in many respects, yet omits some traditional notational practices and is ambiguous with regard to others. Berio provides few clues regarding historical musical context, preferring instead simply to present the pianist with the score, without preface and with few performance notes.

The intention of this study is to illuminate some of the complexities and ambiguities of *Sequenza IV*, and offer some insights for performance. It would be wrong to presume that a rigorous analysis or bar-by-bar commentary could reveal every connection to be made, at either the global or immediate level. However, it is hoped that the outcome of this study will be twofold: firstly, to demonstrate how the problems and issues outlined in previous chapters may be addressed collectively in a single work, and secondly, to offer a plurality of responses to, and insights into, *Sequenza IV* that may aid interpretation.

A number of factors led to the choice of *Sequenza IV* as a suitable case-study. The most determining of these is my own ongoing relationship with the piece as a performer. This began with bewilderment and an almost total lack of comprehension. However, over the three years I have been performing it, my interpretation has evolved considerably. Understanding has increased through a combination of analysis, greater awareness of Berio's musical aesthetics, and experience gained through repeated performances. These experiences will form the basis for discussion of interpretation, together with other commentaries on the work and on Berio's compositional methods.

Specific discussion of *Sequenza IV* in other sources is limited. Brief commentaries are to be found in the standard study, *Berio*, by David Osmond-Smith,¹ and in a 1975 article by George W. Flynn, titled 'Listening to Berio's Music'.² The only detailed analytical discussion of the work is by John MacKay - 'Post-Serial Structuralism in Berio's *Sequenzas IV & VI*.³ In addition, the American pianist David Burge relates his experiences playing the piece to Berio in a number of his writings, giving helpful insights into the composer's own thoughts about the performance of *Sequenza IV*.⁴

Stimulus from other pianists arose out of a generally negative response to the work. Three pianists interviewed for this thesis had chosen not to learn *Sequenza IV*, considering it an unattractive work. Three pianists interviewed had played it. However, one of these, Joanna MacGregor

found it a terribly hard piece to play. I got hold of a tape from the publisher which sounded similar to what I was doing yet wasn't the same at all. I thought, 'I really don't know what I'm doing with this piece...It was quite hard, I'd never done it before and I haven't met Berio so I was quite in the

1. ibid.
dark....It's not a piece which I felt I had any particular handle on how to play. After one performance I wouldn't say I knew how to do it at all.¹

The two other pianists who had played the piece felt an affinity with it, enjoyed it and would play it again. It is interesting to note, however, that their interpretations were based on a purely intuitive understanding of the score. The aspects which they focused on were the differentials of attack, dynamics, pedalling, etc. These are undeniably extremely important factors in playing Sequenza IV, a work which thoroughly exploits the piano's capacity for variety and colour – common to all the Sequenzas is the extension of instrumental technique to create a wide spectrum of timbre and effects. However, an appreciation of the work's formal features, such as harmonic and thematic developments, did not form a part of their interpretation, and neither pianist showed any awareness of such considerations.

A complication to this study, though an intriguing one, is the recent revision of the score by the composer, made in 1993, twenty-seven years after it first appeared in its original form. For the purposes of this study, all references to the score are to the revised edition. As no bar numbers are given in either score, references will take the form x/y/z, where x signifies the page number, y signifies the line on the page (i, ii, or iii), and z signifies the bar number of that line.

The new edition, again published by Universal Edition, is larger in its print-type and generally more legible. Some of the alterations correct mistakes which appeared in the earlier edition (such as the change of clef at 4/i/4) or are clarifications (such as a more legible distribution of notes between the two staves). However, most of the changes suggest Berio's dissatisfaction with aspects of the notation in parts of the earlier edition. These include sometimes substituting precisely notated rhythmic detail for the original's grace-notes

¹ In conversation with Joanna MacGregor
(example 4.1a); rhythmically simplifying odd-numbered groups in the original score to even-numbered groups in the revised score (example 4.1b); altering or omitting tempo changes; altering time signatures, mostly extending bars by adding another beat's rest; adding occasional pauses followed by a number by which they should be multiplied (example 4.1c);¹ and, finally, changing pitches within both chordal and melodic events. The last of these may take the form of a slight chromatic alteration (which may or may not affect the resonance produced by any underlying sustained chord), an octave displacement, or a completely different pitch, such as at 2/iii/2 (example 4.1d), where the bass D takes the place of a C three octaves higher, radically distorting the melodic shape and the effectual rhythmic outline (given the time taken for the right hand to reach across the left hand's held A flat and back again).

The reason for the revision of the score is unclear, and the composer is not forthcoming with an explanation, asserting only that "the new edition...is the only one to be performed."² One must settle for speculation, then, as to the reasoning behind the revision. Possibly a combination of dissatisfaction with the original edition and a frustration with 25 years of performances which may not have met the composer's expectations is 'to blame'. A similar motivation can be attributed to Berio's more drastic revision of Sequenza I (1958, rev.1993) for flute. Anticipating this revision, which is a rhythmicisation of the original's freely notated score (example 4.2), Berio said: "[the original's] notation has allowed many players – none of them by any means shining examples of professional integrity – to perpetrate adaptations that were little short of piratical....maybe [the new notation] will be less 'open' and more authoritarian, but at least it will be reliable."³

In comparison with that of Sequenza I the revision of Sequenza IV is less

¹. No explanation is given as to the exact meaning of these numbers. Presumably it is a unit of grading the duration of the pause, perhaps by a number of quaver beats.
². Letter from the composer to myself
³. Two Interviews op.cit. p.99
radical, possibly because the original score was not as extreme in its notation as that of Sequenza I. The controversy surrounding the interpretation of freely-notated scores which lies behind Berio's remarks is thus not such a factor with regard to the piano piece. However, the revision of Sequenza I demonstrates Berio's awareness of the implications of notation and the importance of choosing a suitable means of communicating a particular intention. The rhythmic and durational changes in Sequenza IV perhaps reflect a greater attention on the part of the composer to the subtleties and nuances of gestures, particularly those which were formerly grace-note figurations. In this respect, comparison of the two editions is valuable at the least as an interesting exercise, and, insofar as the alterations may clarify Berio's intention, may indeed yield interpretative insights.

One general observation concerns durational changes between the two editions. The new edition is more spacious, both because of the addition of rests and pauses and because tempos (which are invariably slower) remain constant over a longer space of time, changes which are reflected in the superior spacing of the new print. With regard to pitch alterations, it would seem that these generally reflect the composer's preference at each moment rather than being the result of a change of compositional scheme. The changes are thus of colouristic value rather than thematic significance. My analysis (outlined later) is not effected by the changes in the new edition. This is because the revision does not effect the essentials of Sequenza IV - the compositional and pianistic priorities, its structural and relational properties; instead, the changes focus on the momentary aspects of their execution and colour.

The only recording of the new edition currently available is by David Arden.\footnote{New Albion Records NA 089 CD} Past recordings, no longer available, include performances by David Burge, Marie-Francoise Bucquet and Aki Takahashi.\footnote{Burge, Vox ST GBY 637; Bucquet, Philips 6500 101; Takahashi, Angel EAC 60154} The National Sound
Archive also holds two broadcasts of live performances by Susan Bradshaw and Bruno Canino. Those by Arden and Burge have a special status, since both pianists have worked with the composer. Burge, as already mentioned, has documented some of Berio's comments to him about interpretation, and Arden's CD is accompanied by a photograph of the pianist with composer, and notes which proclaim the composer's "enthusiastic endorsement of his interpretation". Aside from the obvious differences due to the revised edition, the two performances differ considerably in mood and character. Arden's performance is warmer and more resonant than Burge's, whose drier interpretation is perhaps symptomatic of the early performance style of the avant-garde. However, both reveal a lyrical approach to the ostensibly unmelodic style of the work, a feature which is less detectable in other recordings.

First Approaches to Interpretation: Intuition and Understanding

From a first glance at Sequenza IV the reader will see that there are three main features of the piece: i) short, staccato chords; ii) a linear outworking of melodic, decorative, and gestural material; and iii) an almost constant use of the middle ('sostenuto') pedal, which sustains single notes or chords underlying the presentation of the two other features. These three features directly oppose each other in character and function – staccato chords against sustained chords, and horizontal events against vertical events.

Berio uses these oppositions to delineate sections of material, creating degrees of tension through the combination, juxtaposition and opposition of these features. There are sections which focus primarily on one of these three features and other sections which combine two or all three. Material types are combined through juxtaposing opposites within a section or a phrase, as in 2/i

1. Bradshaw, Radio 3 1.9.74; Canino, Radio 3 15.1.90
which juxtaposes all three types (example 4.3a), or by breaking the defining limitations and infiltrating one type of material with another; this can be seen on page 14, where chordal material forms part of the melodic material (example 4.3b). In addition, it could be said that staccato chords which create after-resonance by reacting with notes sustained by the sostenuto pedal represent a combination of those two types of material.

At the simplest level is the opposition between action (linear material) and non-action (isolated, single chords). Between these come the sustained chords - a 'continuous' non-action, or 'filled silence'. In addition, short bursts of linear material may have the effect of prolonged chords (example 4.4a), and arpeggiated chords (or rolled clusters) have the effect of compressed melody (example 4.4b). Berio explores all aspects of these extremes and the degrees between them. Concentration on one aspect may delineate a section, just as another section could present a prolonged discourse between opposites. For example, pages 14 and 15 juxtapose brief moments of action, often vigorous filigree, with moments of silence, or filled silence. The overall effect, because of the brevity of each gesture and the absence of directional activity, is of stasis and fragmentation.

The development of contrast and variety within each material type is suggested by the detail of the notation, particularly with regard to the chordal material. The opening page (example 4.5) serves to illustrate the enormous variety in sound Berio expects. This introductory section is primarily a presentation of chordal material, the opposition here being between short and sustained chords. The first appearance of the linear material is at 1/iii/1-2, interrupting the chordal material only briefly, but hinting at what is to come.

The notational detail on this first page creates a sense of both stasis (reflecting the emphasis on solitary chords) and constant variety. The succession of material provides the directional element, marking a progression
towards greater continuity. The chords of the first line, with the exception of the sustained chord in bar 3, all have the same notated attack, a single staccato, within the same dynamic of ppp. However, there are at least two means of creating a discernible differentiation between attacks. As MacKay points out,¹ there is an apparent grouping of chords in pairs on this opening page. This grouping frequently takes the form of a chromatic chord rising to a chord more redolent of tonality (often two superimposed triads). The differences in pitch placement (low-high), density, and harmonic nature of these two chords may be reflected in the colouring and degree of lightness of touch, a principle which may be continued throughout the piece.

Another articulatory nuance derives from the rhythmic notation. After the initial downbeat, the second chord is placed on the fifth quintuplet demisemiquaver of the second quaver beat. It would be difficult to imagine how this could be communicated as such to the listener, for whom this chord could just as easily be falling on the second, third, or half-beat. For the music on this page particularly, which features six changes of tempo, a sense of beat is rarely perceived. However, the psychological effect of placing this second chord is all-important. The second chord, as a fractionary anticipation of the third beat, will have an effect on the articulation that perhaps makes the chord slightly more clipped than the more emphatic first chord, certainly creating a difference in attack and sound between this and the first and subsequent chords. Thus, whilst the dynamic and type of attack are constants in this first line, there is scope for subtle nuances in both, much like the changes of colour within a limited dynamic field in a Feldman piece. As with Feldman's music, careful treatment of the rests, presenting the chords within a silent, though metrically defined, landscape, will heighten the concentration on the isolated chords here, in contrast to later sections.

With the second line comes a greater degree of notated differentiation.

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Dynamic levels fluctuate between \( p \), \( pp \), and \( ppp \), and there are careful distinctions between staccato attacks and accented staccatos. This attention to detail is sustained for the remainder of the piece, which attaches a wide dynamic range to these staccato chords. The effect of combining the rhythmic subtleties with the notated dynamic and attack should be of a rich tapestry of shades and colours. In addition, the harmonic properties of the chords provide a rich source for colour variation, even if on the slightly simplistic level mentioned above, of pairing chords as dissonant and consonant. The harmonic nature of this work, and the stylistic consequences for performance, will be discussed later.

The pedalling, though virtuosic, is self-explanatory. When a new chord or note is sustained by the sostenuto pedal, there is generally plenty of time to adjust the necessary footwork and there are no points at which the pianist is in danger of being unable to catch the relevant event with the pedal. However, events that are combined with the use of the sostenuto pedal vary in effect. There may be a succession of superimposed chords or events which combine with the sustained note or notes to produce no, or negligible resonance (example 4.6a). Alternatively, superimposed events may produce some, or much resonance as a result of the sustained notes (example 4.6b). The varying degrees of resonance are a feature of \textit{Sequenza IV}. The silences and resonances are spaced so as to be heard, providing that the chords are sufficiently staccato and the rests are not cut short.

The use of the sostenuto pedal frequently provides clear structural delineations. For example, underlying the whole section between 3/i/3 and 4/iı/3 is a single held C sharp which then expands into a D flat/C/D natural sustained chord lasting another 12 bars. These pedal points affirm gestural and mood delineations. Because they underline entire sections they also lend a continuity and unity to long passages of otherwise fragmented material.
Similarly, the sustained G sharp beginning 5/iii/4 is gradually built upon (adding a B flat in 6/i/5, an A in 6/iii/1, and a C sharp in 7/i/3). Not only does this clarify structural divisions in the score, but it also reflects a build-up in tension towards the climax of the whole work at 8/ii/1, by which time a further G and D sharp have been added to the sustained notes. The subsequent shorter divisions of sustained notes perhaps reflect the gradual disintegration of the work as it eventually returns to the texture of the opening idea. Passages between sustained notes (i.e. which have no pedal) often seem unstable and interruptive by comparison, suggesting a more volatile mood.

The use of the sustaining pedal (the right pedal) combines with that of the sostenuto pedal to create variety of texture and resonance. A novel use of this pedal occurs in 1/ii/3 (see example 4.5), where the pedal is to be depressed immediately after the attack of the chord, which is an accented sffz, collecting "only random noises and resonances". There are also periods, ranging from a half-bar through to three whole bars (example 4.7), where the sustaining pedal is depressed, blurring all notes into a massed chromatic event. John MacKay suggests that there is a formal structuring of resonance:

The resonance continuum ranges from dry silence, to the subtle shades of the sustained after-resonances, the richer sustaining pedal resonances and the full blurrings of the damper pedallings after attacks and through intensely active passages. The play of resonances is often like a mysterious shadow or counter-presence to the foreground activity contributing significantly to the formal tension of the piece by filling in the intentional silences and quasi-cadential pauses.

1. In the new edition, the B flat is mistakenly not taken with the pedal
2. Note in the score
3. MacKay, op. cit. (footnote)
Problems: Melody and Style

Melody, Tonality and Rubato

In comparison with the two types of chordal material discussed above, the third feature, the 'melodic' material, is considerably more problematic — notationally, analytically, and stylistically. The analytical problem — of how pitches are related to one another — will be discussed later. Notationally, the linear material is detailed with regard to dynamics and, to a lesser extent, attack. However, it lacks phrase marks, is rhythmically complex, moves between grace-notes and 'regular' notes (that is, notes which are not grace-notes), and makes a feature of rolled clusters.

Berio's rhythmic exactitude, combined with a lack of phrasing, gives the music a very 'dry' appearance on the page. Each note stands connected only by the grouping of stems. The direction of motion of these groups is unclear, particularly if given a blanket dynamic and attack (or absence of attack). Though Berio's notation bears similarities to that of Stockhausen's Klavierstücke — the tenth of which provided particular inspiration to Berio — Stockhausen is careful to add phrasing where appropriate. In contrast, the grouping in Sequenza IV is left open for the performer to interpret in whichever way seems to be appropriate. A single group could be played precisely or with varying degrees of rubato, leaning at the beginning, middle or end.

In order to determine the appropriateness of imposing particular stylistic refinements on groups of notes, Sequenza IV must be placed in the context of Berio's musical language and aesthetic. From only passing acquaintance with these it is clear that Berio stands apart from the Boulez ideal of establishing a

1. Burge states that Berio heard Klavierstück X "just months before starting Sequenza IV. He spoke often of the overwhelming effect it had on him, and I am sure he learned a great deal from it." Contemporary Keyboard op.cit.
new musical grammar, as far removed as possible from any Western traditional precepts. Berio works alongside tradition, not against it. Historical and traditional conditioning is ingrained in his music, famously exemplified in his Sinfonia (1968–9), written just two years after Sequenza IV, which features extracts from Mahler's Second Symphony as well as other music from the turn of the century. Similarly, the short piano piece Wasserklinger (1965), almost contemporary with Sequenza IV, reworks ideas and gestures from Brahms and Schubert.

David Osmond-Smith suggests that Berio "never assumes that the mind exploring his music is a 'tabula rasa'...He assumes a working knowledge of the European tradition, but militates against nostalgia". Thus the classically trained pianist who relies on an intuitive approach is likely to bring an apposite spirit to the work. Certainly, an intuitive shaping and phrasing of the groups in Sequenza IV seems justified by reason rather than being merely a fall-back in the face of bewilderment. It is perhaps for this reason that Berio dislikes the notion of the 'contemporary music performer' who plays nothing else. "Anyone worth calling a virtuoso these days has to be a musician capable of moving within a broad historical perspective and of resolving the tension between the creativity of yesterday and today. My own Sequenzas are always written with this sort of interpreter in mind."

Confirmation of these ideas in their application to performance is provided by David Burge, who writes, "Often in the preparation of an early performance of Sequenza IV [Berio] spoke of his love for Chopin's music, particularly the Etude in A flat major, Op.25 no.1, and he begged that the same kind of supple leggiero touch be employed in the more ecstatic filigree passages of his own work." It seems correct to assume, then, that Sequenza IV is from a quite different aesthetic (and requires a correspondingly different

1. Osmond-Smith, op.cit. p.37
2. Two Interviews op.cit. p.91
performing approach) to the piano music of Boulez or Stockhausen, composers with whom Berio is sometimes associated.

If the above considerations are applied to the reading of linear material in _Sequenza IV_, one layer of inaccessibility is stripped away since it suggests the familiarity of a European tradition that is tonal, though _Sequenza IV_ is by no means a tonal piece. Intervals which are common in _Sequenza IV_ include major and minor thirds (though these are more often used to form chordal aggregates), sixths, sevenths and ninths. These last two intervals frequently suggest a 'bluesy' element, not dissimilar to the quality found in Webern's _Variations_, Op.27 (see pp.130-1). While they are largely influenced by the gesture in which they occur there frequently appears to be tension between a major seventh or minor ninth and the octave. This is particularly noticeable when chords or melodic lines are pitted against a note or chord sustained by the sostenuto pedal. An example of this is at 10/iii/4-5 (example 4.8a), where the pedal holds a C sharp and G in the right upper stave under which a fortissimo D and G sharp followed by a C and F sharp are sounded. The tension between these tritones is made stronger by the grating slowness of the pulse at this point. Similarly, on the next page at 11/ii/2-3 (example 4.8b), the upper note of the sustained chord is B, over which a B flat persists during a bar of rapid linear material. This passage occurs within a section of great flux between moments of rapid, nervous excitement and still tranquillity, creating a highly volatile state.

Some passages seem to be preoccupied with particular harmonic and intervallic properties, as if reluctant to progress to new material. For example, the intervals of the gesture presented in 3/i/4 are reworked and re-emphasised throughout the page, at 3/ii/1, 3/ii/2, 3/ii/4 (in the left hand), and 3/iii/3 (example 4.9). Likewise, the alternation between two chords (extended also to the two pitch areas) at 9/ii (example 4.10a) and 13/iii (example 4.10b) creates tension through the concentration on certain intervals, contradicting the
perpetually changing nature of much of the piece.

The range of tonal ambiguity common to *Sequenza IV* is illustrated on pages 14 and 15. Tension is created between the upper note, B, of the opening cluster chord (sustained by the sostenuto pedal), and the B flat which follows in the next gesture (example 4.11). The gesture as a whole is a crescendo from *ppp* to *f*, centred all the while on the B flat. This B flat alternates with an E flat, creating a perfect fifth, a consonant interval. However, tension is heightened in this simple alternation by its very persistence, combined with the crescendo. Rhythmically it slows down, moving from 7:4, through 6:4 to 5:4, perhaps the opposite of the gestural expectations, but making the E flat/B flat idea more emphatic in the quintuplet.

The above single gesture is reminiscent of an earlier, more extensive passage (6/iii/1 – 7/iii/2, example 4.12). Here the repeated interval is a major sixth, another consonant interval. This passage resembles two-part counterpoint, with one part, at first the upper part, pervaded by a repeated alternating F-D figure. The persistence of this figure becomes intrusive until, unresolved, it breaks off suddenly at 7/i/2, interrupted by a chord adapted from the opening page. After a momentary respite, the F-D figure is taken up again, completely taking over one part. Most of the tension is created by the repeated figure's persistence, despite the variation in dynamic levels, whilst the other part remains fiercely independent, creating frequent unresolved semitonal clashes with the F-D figure. Tonal ambiguity continues to pervade page 14, after the initial gesture discussed above (see example 4.11). The pitches appear to be grounded on an upper G in the melody, making a feature of the relationship between G and F/F sharp (see 14/i/4, 14/ii/1, 14/ii/4 – 14/iii/2).

Similar tensions are activated on page 15, though by different means. Both sustained and staccato chords are pitted against rapid linear material, presented in isolation, disconnected from any wider directional purpose. The shaping of these gestures is largely determined by the gestural shape of the
dynamics and the intervallic properties.

There are advantages in not treating the exact rhythmic notation too literally. For example, the 11:8 in 15/ii/3 (see example 4.13) could be understood merely as an indicator of the number of notes that form the gesture. An exactly measured 11:8 would not be heard as such in any case due to the change of tempo at that point and the pause over the final note of the gesture. However, it must be noted that Berio does not write a 10:8, placing the final G sharp on the second quaver. This would have a different articulatory effect and details such as this should be accounted for at all times in this piece. The shaping of gestures, then, need not be as exactly measured as they appear on the page; a degree of licence may be taken to heighten the gestural intention.

Grace-notes

Rhythmic accuracy is less problematic when interpreting grace-note figurations. With the exception of those featured on pages 12 and 13, all grace-note groups precede a regular note. The use of time signatures throughout suggests that they should not be added outside of time, but fitted into the metric scheme. The rhythm of the regular notes always fits the given time signature of that bar, but the occasional insertion of grace-notes over, or under, a notated rest (example 4.14) indicates that their function is to fill the space that would otherwise be taken up by that rest, not that they should fill the space between the rest and the consequent event. This understanding is given extra credence by the subsequent rhythmicisation of some of the original grace-notes in the revised edition.

The issue raised, then, is in what manner should the grace-note groups fill the space allocated to them? The two main alternatives would be: a) to play them as fast as possible, or b) to treat them as freely notated groups, to be
shaped in any way as long as they don't exceed the time space allocated. Given that, as mentioned earlier, Berio was influenced to some degree by Stockhausen's Klavierstücke, it is possible that he meant grace-notes to be played as directed by Stockhausen - "as fast as possible" - with the condition that "they should be articulated clearly and not quasi arpeggiated".\(^1\) This appears to be the approach taken by David Arden in his recent recording. Certainly, in many instances there is little room for anything other than a rapid execution of these groups. However, there are occasions when a routine rapid production would seem to restrict the dramatic and expressive potential of the gesture within its context (example 4.15).

The significance of the grace-note groups in Sequenza IV, and their differentiation from real notes, is unclear. In addition to single, 'anticipatory' grace-notes, there are extended groupings of all shapes, and even isolated grace-note chords mirroring the staccato chords that open the piece. Dynamics are allocated to grace-notes, and individual notes occasionally have an accent attached. As will be demonstrated later, their pitch significance is of equal importance to that of the real notes, leaving only rhythmic detail as the distinguishing factor. Many of the grace-note F-D's on page 7 of the original edition are now fully notated as real notes in the new edition (example 4.16). Yet not all the grace-notes have been so transformed, leaving a few small groups as they were. These revisions suggest that Berio desired a greater control over these groups, possibly because they had been glossed over in past performances (the notated revisions are generally at a more measured pace than grace-note groups might suggest).

Given that the significance of the grace-notes runs deeper than merely rhythmic freedom or speed of execution, the relationship between their shaping and that of regular notes must be considered. If the principle laid down by Stockhausen was intended by Berio, the shaping of grace-note groups is

\(^1\) Stockhausen's performing notes to Klavierstücke V-X
determined by the pianist's ability to play "as fast as possible" within the boundaries of a clear articulation. Any irregularities, or unevenness, within a group would be the result of awkward stretches or fingering problems. However, one could apply the principles of shaping and phrasing, discussed above with relation to the regular notes, to the grace-note groups. These include consideration of the context – to what point is the group leading, and what are the compositional processes at work during the passage as a whole –, the pitch contour of the gesture (and the dynamics attached), and the intervallic properties of the group with possible relation to tonal expectations (of the kind discussed above with respect to the regular notes).

Because grace-note groups generally constitute small units, the application of the interpretational strategies outlined above will result in only slight nuances in their delivery. For example, in playing the group in 8/iii/5, the pianist may choose to simply lean on the D/C sharp alternation, reflecting the pitch contour and the 'bluesy' element created by the major seventh (see example 4.15a).

The most densely-filled passage of grace-notes occurs on pages 12 and 13, anticipated also by the grace-notes on the final line of page 11. Sustained chords open each bar, related to the chords of the opening section, and these are followed by extended grace-note groups (example 4.17). These are linear extensions of the opening chords (see example 4.5); for example, the first sustained chord (2/i/5) is followed by a linear extension of the second sustained chord (1/ii/3), and vice versa. Even though the dynamics of the first two lines span pp to ff, the colour and degree of lightness of touch can still distinguish the grace-note groups from the regular note chords. As the dynamic from 12/iii/3 to 13/ii/3 becomes a blanket ppp, the pace has necessarily to slow in order to prevent the dynamic increasing considerably, especially given that the sustaining pedal is depressed almost constantly.

Example 4.18 gives a comparison of approximate transcriptions of 13/i/2
as it is rendered by the pianists on the recordings heard. The transcriptions reflect my perception of their phrasing rather than an accurately measured rhythmic grouping. The example illustrates the very different ways of shaping this group of notes, although it also demonstrates a favouring of an even distribution of repeated notes (such as C sharp-G, and E-F), with a more irregular distribution of the disparate cluster sequences. This may be the unintentional result of playing the grace-notes "as fast as possible" due to the spacing of the notes (i.e. neighbouring notes are more rapid, whilst notes/chords far apart are more disjointed).

An important interpretative issue (concerning tempo) is highlighted on pages 12 and 13. Each grace-note bar (including those marked with a dotted bar-line in the new edition) is marked by Berio as lasting a specific number of quavers (three or four). This is difficult to count, given that the notes contained in the bars have no rhythmic values. If the notes were to be played as fast as possible, for example in 12/ii/2, it would be likely that the group would be completed somewhere between the second and third quaver pulses, perhaps acceptable given that there is a comma at the close of the bar. The notes in the next bar, however, stretch the full length of the bar, suggesting some sort of measuring of the notes if the duration of the bar is to last exactly three quaver durations (a considerable length of time at quaver = 50). Here, the time signatures suggest that the "fast as possible" option is not always appropriate.

**Tempo**

The treatment of tempo throughout Sequenza IV is similarly open to different interpretations. The tempo indications used are quaver = 40, 50, 60, 72, 84 (once only), 104 and 124 (also once only). The tempo changes are of a different kind to those in Tippett's Piano Sonata No.2, where the tempi are
associated with particular themes, making transitions easier to memorise. In *Sequenza IV* the tempo changes are developmental. That is, they evolve independently of thematic or gestural associations, though similar gestures may sometimes share the same tempo mark.

There are three main uses of tempo in *Sequenza IV*: i) the same tempo may be used for a long stretch of music, providing a sense of either stability, stasis or restriction; ii) a single section may consist of a number of short gestures with independent tempi juxtaposed; or iii) a tempo may increase or decrease to reflect the gestural idea. An example of the first type may be seen between 4/iii/1 and 5/ii/3 (see example 4.19), where the tempo quaver = 60 unites the sense of rhythmic drive over the same type of material. The change to quaver = 40 which follows is set in motion by the final chord of 5/ii/3, which acts like a trigger for the new tempo. This tempo, however, is rarely perceived as such because of the length of the chord which follows, the pause in the subsequent bar, and the subsequent rhythmic irregularity. The same tempo, quaver = 60, controls the next section, 6/iii/1 - 7/iii/2 (see example 4.12). The constraints of uniformity here add to the increasing tension created by the repeated F-D figure already discussed, particularly given that in so much of the piece the rate of tempo change is relatively fluid.

The discontinuity generated by a succession of disjunct tempo markings can be seen on pages 10 and 11. Here, the tension created by contrasting juxtaposed gestures is reflected in the choice of tempo marks. In the space of six bars (11/i/2 - 11/ii/3) the tempo changes five times, from quaver = 40 to quaver = 72 then 104, returning to quaver = 40 followed immediately by quaver = 104 (example 4.20). The rapidity of these changes reflects the instability of the section.

The change from quaver = 72 to quaver = 104 at 11/i/4 is more gradual than immediate. This bar marks an increase in speed from an already excited gesture in the previous bar. In fact, read literally, the quintuplet
demisemiquavers are slower than the fastest notes in the previous bar. Thus the tempo transition is an extension of, and progression from, the previous bar, and represents a shift mid-way through a gesture. There are many similar instances where a tempo change marks the development of a single gesture or phrase, rather than the beginning of a new idea.

Clusters

The fastest notated tempo occurs at 8/ii/3, where quaver = 124 (example 4.21). This is the dramatic climax of the work, marked sempre ff, and features rapid cluster chords. Gesturally, it would be fair to say that the tempo mark is crucial to this passage and any slowing down of the tempo would compromise the climactic effect. However, in maintaining this tempo, the potential for pitch inaccuracy is made greater. The notation of the clusters is very precise, giving both the lower and upper pitches. The intervals of the clusters constantly change, moving from diminished fourths through to major ninths, necessitating continual adjustment of the hand position to achieve accuracy.

Furthermore, Berio indicates whether or not a cluster should be rolled, and in which direction. In the revised edition he suggests that these should be executed by "rotating the flat of the hand very quickly". However, in a succession of clusters, all spanning different intervals, the palm of the hand is singularly inadequate if an accurate performance is to be achieved. An alternative method is to roll the fingers in, as if clenching a stick, and propel the roll with the wrist. Thus the white notes are played with the base of the palm, and the black notes are caught with the bend in the fingers.

The first priority at 8/ii – 8/iii (in actual performance) is the tempo. The rhythmic idea here consists of short bursts of rapid activity which are cut short by either silence or a repeated figure. The problem arises of how to achieve pitch accuracy, when attention is focused on so much other detail.
Chapter Four

Analysis reveals that the cluster pitches are compositionally significant at this point, and not randomly ordained to reflect the gesture. However, with the fast tempo, the resonances created by both pedals, and the blurred effect of the rolled clusters (which are likely to distort the rhythmic accuracy to some degree), the exact pitches are unlikely to be perceived at each moment and are thus at this point subservient to the gesture.

One further notational ambiguity concerning clusters is the degree to which they are rolled. The black line joining the upper and lower notes of clusters slants to varying degrees in the notation. This could be a printing irregularity, or could be an intentional addition to the notational detail. Given the absence of a performance note, and the variation in execution from one pianist to another of the rolled cluster, I suggest the former explanation is the most probable. This irregularity could be reflected in performance by varying the speed at which rolls are executed, thus adding to the range of detail and subtlety available to the interpreter.

Analysis: Additional Insights for Performance

In listening to Berio's music the listener need not chase tone rows, intervals, durational patterns, or otherwise discover and keep track of precompositional production plans. Such denotative activity can only damage the listener's primary, poetic responsibility to the music.¹

It would be true to say that almost all of the issues discussed thus far constitute some form of analysis. Analysis of the notation, analysis of the compositional priorities, and analysis of the tensions between different types of material have all been considered. Structural delineations have been detected - and possibly invented - based upon gestural indicators (pauses, rests, sustained chords, etc.), pedal notes, and contrasts of activity and material

¹. G.W.Flynn, op.cit. p.393
types. Consideration has thus generally focused on the usage of material rather than the material itself.

According to G.W. Flynn's argument as outlined in the quotation above, interpretation need not pursue the significance of the actual material in relation to a pre-compositional plan, but can instead rely on the considerations already discussed. Tracing "precompositional production plans" alone would indeed be to miss much of the dramatic and expressive powers of the material – in any music, not just Sequenza IV. Though not a prerequisite to performance, analysis of compositional procedures adds another level of understanding, opening new possibilities for interpretation. The following is a brief discussion of the generative aspect of the material of Sequenza IV in as far as it might affect interpretation.

My first encounter with a compositional pitch strategy in Sequenza IV was accidental. Whilst attempting to memorise the work, I noticed that I frequently and inadvertently missed out chunks of material whilst otherwise maintaining continuity in my playing. This mostly occurred some way through page 5, at which point I would find myself skipping to the second line of page 8 onwards. When these two passages are studied it can be seen that they are very similar (see examples 4.22 and 4.21). Indeed the pitches are identical in their succession, but the rhythmic and gestural characteristics differ. There are certain gestural similarities, however, and it was at these points that I crossed between the two. If the comparison is continued, it can be seen that the passage between 4/iii/4 and 5/iii/1 exactly corresponds pitch-wise with that between 8/ii/1 and 8/iii/4. Clusters remain as clusters, occasionally extended or compressed slightly, and repeated figures such as the F-D and E flat-B flat alternations, are retained.

Further exploration of this process reveals the same passage in another reworked repetition, between 12/iii/3 and 13/i/3 (example 4.23), compressing the original eight bars into three and a half. The chord that opens 12/iii/3 is a
vertical transcription of the first beat plus a note of 4/iii/4; likewise the regular note chords which follow are transformations of linear writing from page 5. However, cluster chords and repeated patterns retain their identity. Following this, Berio continues to transcribe in similar manner the sequence of events leading on from page 8. Thus all the music from 12/iii/3 to 16/iii/4 is a reworking of 8/ii/1 to 12/iii/2, keeping the pitch sequence intact but reworking the gestural application considerably so that, for example, the grace-note material of page 12 is transformed into staccato chords on page 16 (example 4.24a). Similarly, the whole of 10/iii/4 to 11/i/2 is compressed into a single grace-note group in 14/iii/4 (example 4.24b).

The above discoveries suggest that one of the processes at work is an exploration of memory. In an interview in 1981, Berio expressed a need "to organically continue a variety of musical experiences, and thus to incorporate within the musical development different degrees of familiarity, and to expand its expressive design and the levels on which it can be perceived."¹ The multifarious transformations of material in these reworkings do indeed imply "different degrees of familiarity", ranging from almost exact successions of, say, cluster groups, to the condensation of a bar's melody into a single chord. The issue for the interpreter is whether or not to focus attention, through articulation, on the parallels between two passages related in this way.

Should the contours of a line reflect the formal intent or the expressive content? Prioritisation at each moment is a contest between highlighting shared points of reference and articulating the contextual expressive function of the gesture or idea. It could be said that any element of familiarity should be left 'untouched' as purely a function of the expressive design.

G.W.Flynn suggests that "detecting this elaborate repetition is hardly a meaningful listening goal, although one will probably sense a general continuity within the context of what otherwise might be aimless and disconnected figural

1. Two Interviews, op.cit. p.66
and chordal passages.\textsuperscript{1} Though it may not be a "listening goal" it is a feature of the piece, and one which, in places, could easily be perceived if the similarities were to be articulated. In discussing the relationship of composer and audience, Berio states his opinion: "everyone understands music in their own fashion. I don't think that there's a right and a wrong way of listening to it: just more simple and complex ones."\textsuperscript{2} He goes on to imply the narrowness, and even redundancy, of an analytical mode of listening that "picks out from the complex strategy of relationships [in a Beethoven symphony] only the most obvious elements like the melody (when there are any)".

This does not suggest that a performance which makes clear, say, pitch relationships, is at fault, only that one which focuses exclusively on this element diminishes the complexity of a piece. The reworking of pitches in \textit{Sequenza IV} is not merely a means of generating pitches, but is a representation of the compositional concern in this piece with memory and familiarity.

There is, then, a range of possibilities open to the pianist. The extremes of this range are i) to ignore completely the relational properties between gestures, focusing instead on the immediate contextual potential, and ii) to attempt to elucidate every pitch connection between two parallel passages. Between these extremes lies the potential to reveal, or not to reveal, connections to greater or lesser degrees, ambiguously creating different levels of familiarity. This might vary with each interpretation or performance, dependent on the moment, creating a degree of flexibility which is based upon both compositional and intuitive choice.

Attempting to reveal relationships between the same pitches through performance is perhaps unrealistic if in one passage these notes combine to form a chord and in another they are expanded into a linear presentation. However, consideration of the shared contexts might prompt a connection of

\begin{itemize}
  \item \textsuperscript{1} G.W.Flynn, \textit{op.cit.} p.418
  \item \textsuperscript{2} \textit{Two Interviews}, \textit{op.cit.} pp.25–26
\end{itemize}
some kind. Shared articulation between contrasting but not entirely disparate gestures consisting of the same pitches is often possible. This may be achieved by shaping particular intervals in a similar way. For example, the parallel gestures of 10/i/3 – 10/ii/3 and 14/i/4 – 14/ii/3 both feature an inclination towards the note G and its relationship with F and F sharp (example 4.25). These features could be highlighted in both passages by giving space and prominence to the G, and emphasising its ambivalent relationship with the F and F sharp.

Frequently in a reworking of the same group of pitches, a note might be presented at a different octave level; in such cases, the relationships are obscured. For example, the B flat/C sharp alternation in 11/ii/3 is reworked in 15/ii/1 by transposing the C sharp three octaves higher (example 4.26). However, the same sense of stasis before a release of rapid linear activity is shared, and, despite the differences (in octave level and rhythmic detail), the tension between the two notes can be instilled in both examples. (The later example is made of grace-notes, which actually offers a degree of license to shape the gesture accordingly.)

The above analysis reveals one method by which Berio generates pitches, through repetition and reworking, a method which is shared with other Sequenzas. This strategy accounts for about two-thirds of the piece, if the original passages which are then reworked are included. The generating of the remaining pitches appears to be less methodical in their ordering, though it adheres to more general notions of cohesion and familiarity. It is clear that many of the opening chords reappear throughout the piece, albeit in ever-changing densities. Many chords retain their basic shape, but the actual pitch detail is subjected to subtle inflections. In addition, chords may be transposed to other registers and subjected to inversion and partial representation.

Approximately five or six main chordal shapes can be detected in the
opening two lines, which are frequently referred to in the course of the work (see example 4.5). If one traces the instances of each chord's recurrence, it becomes clear that some sections are concerned only with certain chords, and that some chords reappear only in one or two sections. This is again a reflection of Berio's preoccupation in this piece with functions of memory and familiarity.

Structural delineations are suggested by passages which favour one or two particular chords, some of which coincide with gestural indications. The final two pages of the score feature chords many of which have only recurred once or twice since the opening section (example 4.27). This emphasises the sense of return, and of having come full circle. Any tension between different material types is only momentary in these closing pages, and the global effect is one of return and, if not actual resolution, of closure.

The very first chord of the piece, after being elaborated upon in the first section, returns at 5/iii/4, an event which marks a new beginning and the first reference to the opening thus far (example 4.28a). Like most of the opening chords, it is referred to once only in the grace-note section on page 12 (12/ii/1, see example 4.17), which by its mood and structural significance (it is the end of a section which is then reworked starting at 12/iii/3), signals a (false) sense of closure, anticipating the final section (which itself is a reworking of this passage). The chord which interrupts the two-part section based around alternations of F-D (7/i/2) is derived from the opening chord (example 4.28b), and the chord which later separates the end of this section (8/i/5, example 4.28c)) from the beginning of the climactic section (and the first of the reworkings of previous pitch material) is also derived from the opening page (1/i/5). These two chords are not only gestural interruptions, but interrupt the progression of new musical material by making momentary references to original material.

One method of articulating the first two chords, mentioned earlier, was
to group them as a pair: dissonance followed by consonance. John MacKay cites Berio as stating that "all of the tonal materials for the piece are derived from the opening two chords and this can be verified in comparing the basic aggregate materials".¹ MacKay illustrates this by labelling each chord of the opening page in relation to the first two chords (example 4.29). The fifth chord he defines as a new chord, though conceding that it "can in fact be derived from [the previous chord] via inversion and chromatic alteration."² These derivations become so distorted through chromatic alteration, both on the first page and in the continuation of the piece, that illustrating these derivations in performance is unrealistic.

If dissonant and consonant chords were to be differentiated in performance, their articulation would probably contradict the process of chord derivation as laid out by MacKay. This is because the perpetual changes within chords create greater or lesser dissonance, blurring the distinction between the opening chords. For example, the chord MacKay labels 'a3' (1/i/3) could also be related to 'b' by its tonal properties (D major and C sharp minor). Likewise, the chord labelled 'b3' (1/i/4) is labelled so because of the extension of its shape, an extended and filled-in B minor–A flat major triad; yet it could be related to 'a' through its chromatic nature (it shares more notes with a1 and a2 than it does with b1 or b2).

However, the mixing of consonance and dissonance might also reflect the overlapping of other elements in the piece – such as linear with chordal material, or degrees of resonance through use of the pedal. It is certainly true that many chords throughout the work have a tonal 'flavour', in contrast to overtly chromatic chords. Still other chords have elements of tonality within a chromatic framework, and vice versa. The expansive dolce chord which appears a number of times in the piece (example 4.30) is a combination of chords from both 'a' and 'b', having a quiet, affirmative character.

1. MacKay, op.cit. p.227
2. ibid. p.228
In addition to the derivation of chords from previous chords, much of the linear material can be related in some way to these chords. This has already been demonstrated in the reworked passages, where a chord in one section is transformed later into linear material. However, in the earlier presentations of linear material it is more difficult to ascertain whether individual chords are being presented melodically. Instead, it can be seen that many of the defining intervals of the chordal material – the sevenths and the ninths which are prominent in the 'a' chords, and the thirds which are particularly associated with the 'b' chords – feature prominently in the linear material. Articulation of these intervals has already been discussed in relation to notions of stylistic appropriateness. Their derivation from the chordal material through specific intervallic properties emphasises the importance of ensuring clarity in the linear material which features these intervals.

Cohesion in *Sequenza IV* is ascertained predominantly through pitch relations. If the above principles are traced throughout the piece, it can be seen that *Sequenza IV* is remarkably systematic in its pitch usage. Yet the *order* of chordal material and related linear material appears to be intuitive, submitting to the compositional procedures of tension and relaxation, stasis and activity. Likewise, there appears to be no rhythmic system at work to compare with the pitch ordering, though many gestures are relatable in some way, adding to the memory games at work in other dimensions.

The above is by no means an exhaustive portrayal of all the procedures at work in *Sequenza IV*. It is often necessary to prioritise one or two processes in a single performance to achieve clarity. One cannot hope to convey every insight simultaneously. Perhaps this need to make choices is itself reflective of the pluralistic nature of the work. The seemingly inexhaustible wealth of connections in *Sequenza IV* ensures continued stimulus for the performer to return repeatedly to it and explore it anew.
Summary

Uniting all aspects of discussion in this study is the theme of diversity. The pluralistic nature of contemporary music demands a pluralistic response – the contemporary music performer must respond to the wide variety of demands made by each composer, each work, and the diverse elements that make up that work. This thesis has attempted to address the last of these, in the context of the former two. Differences in approaches to different composers have been demonstrated by separating, examining and comparing the various components of the learning process.

The concern throughout this thesis has been to discuss these interpretative approaches in order to achieve an individualised interpretation which is sensitive also to the compositional concerns. Notation is a vehicle to that end. However, the first chapter revealed that both common notational signs and complex rhythmic notation can be similarly ambiguous and that choices have continually to be made concerning the interpretation of notational detail. Where the notational detail is great, points of similarity and contrast can be found in the wealth of information given. Where the notation is sparse choices will more likely be based upon intuitive or analytical responses to the harmony, texture, gesture, etc. (factors which also govern interpretation of notationally detailed music). An informed interpretation, based upon knowledge obtained outside of the score, can only enhance understanding of a particular notation. When possible, an understanding of the composer’s priorities helps to ascertain why a piece is notated so in order to reflect the composer’s concerns, not just the expression of that concern.

The diversity of intentions and priorities in contemporary music means
that the relevance of traditional methods of analysis to interpretation varies considerably. Formal analysis (analysis in its traditional mould) has been revealed (in Chapter Two) to be just one means by which comprehension is attained. Indeed, such analysis is shown to be of very little relevance in some music. The application of analysis to performance has been shown to be a selective process. A single, definitive approach to interpretation is deliberately not advocated, and an attitude which allows for many diverse interpretations of the same work has been adopted throughout this thesis.

One of the main obstacles preventing many performers from learning contemporary music, I suggest, is a fear of misunderstanding the composer's intention. The third chapter discussed ways in which an interpretation may be informed through research and wider listening, leading to the establishment of a set of priorities which reflect those of the composer in some way. The extreme diversity of contemporary composition renders the notion of a particular performance style for a particular group of composers almost meaningless. With exceptions, composers forge their own style from diverse musical and aesthetic sources.

Berio's Sequenza IV was used as a case-study because of its notational, analytical, and stylistic interest. Chapter Four has demonstrated how these three aspects of interpretation combine and inform each other to create a coherent interpretation - or rather, many coherent interpretations. It was shown how analytical and stylistic considerations inform interpretation of the notation; how notational properties give structure to analysis and stylistic priorities guide analysis; and how notational detail and analytical insights inform stylistic considerations. It was argued that, at each moment in the work, one or more of these aspects informs interpretation, giving a range of expressive potential to the execution of the moment.

The practical working out in Sequenza IV of principles outlined
throughout this thesis serves to demonstrate methods of interpretation that may be applied to all contemporary music. Priorities are different with every performer and every piece - for some performers an analytical understanding will be the primary route through a work, whilst another work may prove analysis to be unfruitful in either comprehending a work or its practical application. This study has also emphasised the pluralistic and selective nature of interpretation. It is unlikely that every insight revealed in Chapter Four would be conveyed in a single performance of *Sequenza IV*. However, comprehension of the multiple aspects of a work serves to deepen and widen interpretation, and *open*, rather than restrict, possibilities for performance.

**Intention and Result**

At the opening of this study 'The De-Mystification of the Contemporary Music Learning Process' was suggested as a subtitle. Throughout, the intention has been to discuss the *practical* issues of interpreting new music, informed always by consideration of the wider musical and aesthetic compositional concerns. The processes that combine to create an end-interpretation have been isolated in order to clarify (or de-mystify) with a practical bias towards the problems they pose. The artificiality of this approach (in that interpretation is a combined and organic process, not one which systematically analyses its individual components) has been compensated for by the examples used, which are generally informed by other issues, even if chosen to demonstrate one particular issue.

Though it is necessary in a study of this kind to compartmentalise the various interpretative aspects, a holistic approach to interpretation has been advocated throughout. This accepts the composer's concerns as being of primary importance in guiding interpretation whilst favouring an individualised
performance that serves to share and illuminate those concerns. This thesis has argued that differences in interpretation between performers and performances should be the result of differences in critical response to the composer's concerns and in methods of illuminating them in performance.

All interpretative decisions outlined in this study have benefited from some degree of background information. This has guided decisions to varying degrees, from the simple decision to adopt an intuitive response to, for example, dynamics in Feldman, to the decision to articulate tritones in Saxton's Piano Sonata in a particular way. Interpretative decisions have been attained by critically evaluating both background information and the information presented in the score. Established performing traditions, I believe, must be questioned and never accepted without consideration of other sources that may more accurately portray the composer's concerns.

An important objective of this thesis has been to illuminate means of comprehension other than by formal analysis. The interviews with other pianists prove to be revealing in this way. Each pianist approaches new works in different ways and with different priorities: for some, analysis is high as a priority, whilst for others analysis is less of an imperative. Likewise, reflecting the composer's priorities is for some an important issue, requiring research and listening experience external to study of the score, whilst for others the composer's priorities equate with a deeper appreciation of the musical and notational qualities of the particular work being studied. The varied responses of these pianists have been commented upon in the course of this study, and the appropriateness of some approaches have been questioned. Performers who favoured the analytical approach were quick to dismiss other approaches, whilst other pianists admitted analysis to be a useful tool but one which was by no means a necessary component of interpretation. The diversity of their responses serves to illustrate the wider methods of comprehension available to all performers.
Problems and Difficulties

The very plurality of approaches discussed above creates difficulties in attempting a critical evaluation of interpretative possibilities. Objectivity – accepting varied and contrasting approaches to interpretation as being acceptable (and desirable) – is the aim, but it is compromised when rejecting an interpretation as 'bad' performance practice. A critical response to an interpretational stance is necessarily subjective. Justification of such a response, and a more suitable alternative, must, then, comply with some criteria. Throughout, my view has been that any interpretation should reflect in some way, to a greater or lesser extent, the composer's priorities, whether they be found in the notation or elsewhere. How these are reflected is the domain of performers within which to express their individuality and artistry. The thesis has set out to suggest methods of comprehension, rather than to define a single method of articulating these.

As mentioned above, the focus of this study has been on the performance of contemporary piano music, not on all aspects of the music chosen. This requires a selective approach to repertoire, choosing works and composers which I believe to raise important issues for the performer. With exceptions, the choice of repertoire largely reflects my own tastes. For the benefit of the reader I have tried to select works that are relatively easy to obtain, though this is not the case for a small number of works (see Appendix B for details). However, the diversity of composers represented ensures a wide variety of problems and issues, and interpretative possibilities, that covers the spectrum of compositional approaches. In this way, methods outlined with respect to particular works may be applied to other works, if not literally. Examples given illustrate the means of comprehension and interpretation.

Many of the composers represented in this thesis are established enough
for there to be some available source material about them and their works. Insights into Finnissy's music have greatly benefited from my discussions with him. Additionally, discussion of a few works (in particular, Tippett's Sonatas, Feldman's piano music, Sequenza IV) are the result of familiarity with them as a performer over a number of years. Problems arise when playing music by lesser known composers, or about whom little is written. Failing contact with them, the performer can refer only to such aspects as are considered in the chapters on notation and analysis.

Consequences

As the precedents for a study of this nature are few (and narrower than this one in scope), the subject area is less clearly defined than would be for a thesis that lies within a particular musicological discipline. Firstly, and most importantly, this study addresses practical issues of interpretation. For the performer unfamiliar with contemporary music, the unique problems of learning new works have been addressed practically and in detail. The fantastical element of notation, though sometimes inspiring, can instil a sense of awe in the performer which detracts from the more mundane, practical aspects of interpretation. The ambiguities of notation have not been resolved by the discussion in Chapter One – perhaps they have been amplified – but the variety of interpretative possibilities presented illuminates the contextual and stylistic priorities that inform interpretation of notation.

For performers who are more familiar with contemporary music, it is hoped this thesis challenges accepted methods of comprehension. Greater familiarity with contemporary music does not necessarily equate with greater comprehension of any given work. It is hoped the performer will be provoked by the pluralistic attitudes adopted in this thesis to consider alternative routes to interpretation.
The two musicological areas which this study affects are those of contemporary music analysis and performance practice. It is suggested that the study of contemporary music would benefit greatly from the types of approach, outlined in Chapters Two and Three, favoured by performers. The diversity of perceptions performers bring to contemporary music - grounded in aural familiarity, gestural and textural appreciation, as well as imposed stylistic considerations applied to means of articulation - reflects a wider understanding of compositional processes than many theoretical works based upon worn-out analytical systems. However, there is also a need for analytical works that illuminate the compositional processes of some composers - particularly those that adhere to what Ian Pace defines as "a bottom-up" methodology - without alienating the performer. For whilst an interpretation can be formed without procedural analytical knowledge, interpretational comprehension is broadened if such information is available.

This thesis attempts to redress the neglect of contemporary music within the field of performance practice studies. It overrides notions of 'analytically correct' interpretations, addressing in a realistic and practical manner the collective interpretative processes. It is my view, and my experience, that the approaches outlined in this thesis also have bearing upon interpretation of traditional music, encouraging a critical evaluation of notational, analytical and stylistic assumptions. Similarly, the study of performance practice generally may benefit from the pluralistic approach adopted here, by advocating diversity in interpretations instead of exclusivity.

Conclusion

Over the period during which research for this study has taken place, my personal views on the subject matter, and consequently my choice of

1. Ian Pace, 'The Panorama of Michael Finnissy' Tempo No.196, 1996 p.25
repertoire, have altered. At first, I favoured an analytical approach and the intention was to show ways formal analysis may be applied to create a superior interpretation. Through consideration of the vastly different approaches adopted by the pianists interviewed, and of the diversity of contemporary compositional methods, my understanding of what constitutes comprehension (as applied to performance) has broadened considerably. I have argued that the priority now is to reflect the composer's concerns, rather than the composer's processes.

Each chapter has demonstrated how interpretative choices are largely conditioned by the composer's concerns, from the interpretation of small notational details to more abstract notions of character. The reflection of these concerns in performance is aimed at creating points of contrast and similarity, colour, direction, and character. The importance of individuality and creativity is paramount to all discussion of interpretation. These two priorities - performer individuality and reflecting the composer's concerns - are not seen as contradictory. Instead, individualised responses to the composer's concerns are reflected in the choices made at each moment, and a critical approach to these concerns heightens creativity, suggesting alternative and contrary ideas. In this way, interpretation is seen as an open-ended process, continually deepening in experience.
APPENDIX A

QUESTIONNAIRE FOR INTERVIEWEES

The following questions were used as a basis for the interviews with all nine pianists. These were sent to each interviewee in advance of the interview to give each pianist time to formulate ideas and responses. In the interviews themselves, discussion deviated from the exact sequence of questions below; however, each question was responded to at some point in the interview.

Pianists were interviewed on the following dates: Joanna MacGregor, 16.10.95; Michael Finnissy, 5.10.95 (and subsequently, 25.3.97); Andrew Ball, 11.12.95; Ian Pace, 13.12.95; Philip Mead, 21.2.96; Peter Lawson, 28.2.96; Nicolas Hodges, 29.5.96; Peter Hill, 11.6.96; John Tilbury, 2.5.97.

*Having decided to learn a piece of new music, what is your first stage of preparation?  
How does your learning process differ when learning new music compared with more traditional music?  
Do you spend more time away from the keyboard than with traditional/tonal (i.e. more easily sight-readable) music?

*Composers today write in very varied styles and traditions. Given that very little, if anything, is written about most contemporary piano music (or even about the composer), what methods might you use to assimilate the style and language of a new piece?  
How important is it to know the ideas behind and inspiration for a piece, and is it more necessary than for more traditional music?

*What are the advantages/disadvantages of the lack of a performing tradition
and recordings of new music?

*Do you prefer to work with the composer? In what ways may your interpretation be influenced by the composer and do you find this restrictive in any way?

*Concerning works written for you/for which you gave the premiere, how authoritative would you consider your performances/recording to be for future performers?

*To what extent should the performer of contemporary music be aware of other genres of music, such as jazz, pop, free improvisation, etc. as well as the 'classic' experimental and avant-garde music of Cage, Stockhausen, etc.?

*How influenced are you by well-known exponents of avant-garde piano music, such as Kontarsky or Tudor?

*How necessary do you feel and intellectual/analytical understanding of a modern work to be, given that formal/harmonic/thematic schemes are not likely to be as evident in traditional music?

*In serial music, do you consciously trace the row form in your performance? Do you feel the need to convey the composer's art as you might in, for example, a fugue, or a sonata-form development section?

*Does so-called 'complex' music require a new approach to aural coordination, i.e. a need to prioritise levels of material's importance? Is this an intuitive or a methodological process?

Michael Finnissy talks about a process of selection concerning his music.
What are the governing principles of such as process when learning complex music (e.g. Finnissy, Xenakis, Stockhausen, etc.)? When, if ever, do you consider it necessary/helpful to simplify a score?

* How do you tackle complex rhythmic problems, such as 'irrational' ratios (linear and superimposed), complex polyrhythms, etc.?

* When might you consider gesture to be more important than accuracy (concerning pitch and rhythm)?

* Due to the varied understandings of notation prevalent today, the same grouping of notes may be meant to be played accurately by one composer but to another it may be a notational gesture, such as a notated rubato. Also, often traditional notations have untraditional connotations, or retain their usual meaning but are used in unusual contexts. How is the performer to adequately judge the significance of these notations, e.g. the bar-line, grace notes, phrase markings, etc.?

* Often a performer is required to impose his/her interpretations on a work concerning lengths of notes, selections of pitches, dynamics, articulation, etc. (a concept unique to contemporary music). This also applies to much complex music (though it be fully notated) as to minimal or 'simple' music. In such instances, do you normally consider it advisable to prepare such choices or to be more spontaneous?

* Have you been forced to reconsider traditional notions of technique when applied to contemporary music, such as unusual fingering strategies, wrist action, etc.? What technical problems have you encountered that are unique to contemporary music?
## APPENDIX B

**SELECTED LIST OF REPERTOIRE**

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<thead>
<tr>
<th>Composer</th>
<th>Work</th>
<th>Publisher</th>
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<tr>
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<td><em>Piano Sonata</em> (1977-78)</td>
<td>Faber Music</td>
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<td>Amphiion Editions Musicales</td>
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<td></td>
<td>(in 'Collected Shorter Piano Pieces Volume 3')</td>
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Fast Dances, Slow Dances
(1978–79) composer

Folklore (1993–94) Oxford University Press

Gershwin Arrangements
(1975–88) Oxford University Press

Jazz (1976) composer

Lylyly Li (1988–89) Oxford University Press
(in 'Collected Shorter Piano Pieces Volume 1')


Short But... (1979) Oxford University Press
(in 'Collected Shorter Piano Pieces Volume 1')

Snowdrift (1972) Edition Modern

Sometimes I... (1990) Oxford University Press
(in 'Collected Shorter Piano Pieces Volume 2')

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