Part 1

Chapter One

Introduction to New Complexity

1.1 Research questions

This thesis is an investigation into the role of rhythmic accuracy in new complexity music. While some performers and composers have written about this, much is contradictory so a survey of what useful information there is for performers new to the repertoire is needed. A critical analysis of the practicability and effectiveness of the various strategies and methods performers use for achieving rhythmic accuracy should similarly prove useful. The main research question is therefore:

What role does rhythmic accuracy play in the performance practice of new complexity music?

In order to answer this the following questions must be answered:

i) What is new complexity? What are the aesthetic issues involved in defining it as a distinct genre?
ii) What methods do performers use to achieve rhythmic accuracy?
iii) How can the results of such methods be analysed and assessed?

Once these preliminary questions have been answered the main question can be more thoroughly considered.
1.2 Preliminary discussion of research questions

1. The idea of new complexity emerged during the 1980s. Several composers became strongly identified with the putative genre even though it was clear their aesthetics, compositional methods and resulting music were markedly different. The musicologist Richard Toop’s seminal paper *Four Facets of ‘The New Complexity’* (Toop 1988) helped to cement the notion whilst further provoking a wide spectrum of composers and musicologists to propose their own ideas of the nature of complexity (new and old) in music. From the diversity of views and opinions expressed in their writings it became clear, over time, that new complexity could not be defined as a compositional method in the way that, for example, serialism could be. Now that several decades have elapsed since Toop’s paper there is a need to re-evaluate the arguments for the benefit of the current generation of performers to see if there are any unifying features that enable new complexity to be defined in some way. That is: is it possible to provide a definition that establishes its validity as a genre encompassing the diverse compositions that fall under its rubric? What aesthetic issues are raised in the proposition of such a genre?

2. Most performers meeting new complexity scores for the first time will be dismayed by the incredible complexity of the notation. An accurate performance (in the sense that a competent score reader following the performance would be convinced of its veracity) seems impossible. Some performers have written of their methods of working on the pieces and these may well be of use for other performers. There is as yet no performance practice of this music so performers cannot refer to a canon of writings to form their own views. Many performers have stated that they make a huge effort to understand the intricacies of the score and claim they are able to reproduce the notational complexities in their performances. A few have candidly admitted they approximate the more difficult rhythms. Does the meticulous approach guarantee a more aesthetically acceptable performance? Will the less scrupulous performer necessarily give an inadequate performance? Technological aids to learning complex rhythms are now available but are they widely used or even particularly useful when some would argue that the resulting
performance should also bear the trace of the performer's efforts to learn it? It is therefore important to investigate the various methods by which performers approach the preparation of new complexity pieces and evaluate them for the benefit of future performers.

3. The nature of the musical work has long been a subject for investigation (see for example, Goehr 2007). Whilst it is widely accepted that a performance can never be an exact representation of the score, one might expect that the more specific the composer’s requirements, the more accuracy should be required from the performer. Given the specificity and notational density of new complexity compositions, there would appear to be even more significance to this identification of score with performance. An objective measure of this is possible but what information can be adduced from the interpretation of the data and can performers use this information to validate their own performances? An investigation into this must necessarily rely on information gleaned from recordings. These might be live recordings or studio recordings that will almost certainly have been edited. Edited versions have the advantage of having been assessed for aesthetic quality by the performer thus implicitly acknowledging their own assessment, and approval, of their own learning strategies.

4. Roger Marsh was one of the first to consider this correspondence of score and performance (Marsh 1994) but computer programs can now improve on his methods. The interpretation of data obtained this way can be problematic. Marsh’s work has been widely criticised (see, for example, Duncan 2010b) but are his conclusions incorrect? How should a performer accommodate the ideological position (see Cox 2002) that the only valid interpretation is one that is completely accurate in every particular?

1.3 Research boundaries

1. This research has been limited to the exploration of solo new complexity works for the obvious reason that the performer is solely responsible for the learning and
performance of the pieces. Ensemble issues are not addressed (with one exception) and there is scope for further research in this area. Depending on the size of the ensemble, preparation of small ensemble works is probably mostly collaborative and consultative. For larger works, the probability is that the conductor would take the responsibility of shaping the work.

2. The most contentious issue in working on these pieces seems to be rhythm. Other issues, for example microtones, articulation, dynamics, and specific instrumental effects, might be equally problematic and more research could be done on these aspects. This thesis will mostly, though not exclusively, look at the rhythmic problems in the music. One view is that privileging rhythmic accuracy might well impact on any or all of these parameters (and vice versa). The opposite view is also held, in particular by those who take the high modernist position, i.e. that the aesthetics of the music is only achieved when there is absolute accuracy in all the particulars of the score. This issue will be addressed at several points in this thesis.

3. The scope of the rhythmic analyses will be restricted to short passages from each piece to be considered. It is unreasonable to expect metronomic accuracy from the start of the piece to the end, or even over a section, but given the complexity of the rhythmic notation it is reasonable to isolate some suitable parts for analysis. These extracts should be long enough that the rhythmic detail within is perceptible and that inferences can be made about performer's intentions or strategies i.e. about the decisions they faced when learning and preparing the piece for performance. This issue will be discussed fully in Chapter Five.

4. There is some anecdotal evidence cited that could be considered useful from a pragmatic point of view. It cannot easily be referenced and can be ignored if the reader is opposed to the argument at that point. It is given as an indication of the range of pragmatic approaches to the performance of this repertoire.

5. This research is focused on the period 1980–2010. New complexity did not spring fully formed in 1980 and most of the composers were active well before
then. Their individual developmental paths cannot be given in any great detail and certain areas, for example modernism, serialism, philosophical views of the score and notation, will be mentioned and only occasionally explored in more detail.

1.4 Historical context

New complexity can be considered as a part of the modernist movement in late 20th century music. The relevant background can be found in Griffiths (Griffiths 1981), Taruskin (Taruskin 2010) and Botstein (Botstein, online – no date), and will not be discussed here. The more popular account, The Rest is Noise by Alex Ross (Ross 2008) and the subsequent eponymous festival at the Southbank Centre (London) stands as evidence of the general interest in the area.

Composers are often grouped together for journalistic purposes. Examples of this are the minimalist composers: Glass, Reich, Riley and Adams and the New York school of Feldman, Wolff, Cage and Brown. These groupings are seldom useful for any analytic reasons and a composer’s own compositions are often so radically different that identifying them with one genre is unhelpful. In a similar manner, the new complexity composers are grouped together despite their enormous individual differences of style, philosophical standpoints and subsequent individual developments.

1.5 Complexity, new complexity, performability and virtuosity

While it is obvious that all music is complex to some degree, the present notion of complexity in music is usually associated with, on the one hand, structural procedures (such as mathematical or statistical methods) of composition, and on the other, performability (the technical abilities needed by performers to meet the challenges of the composition). Virtuosity is not a new phenomenon and composers have always given their performers technical and musical challenges. These usually become routine for later generations and performers often invite
composers to produce works that will both stretch and develop the technical repertoire of their instrument for themselves and future performers.

Some composers have explored the potentials of rhythmic, processural and timbral complexity mediated by a view of the score as a dynamic contributor to its performance. Their music came to be seen as representing a challenge to the limits of performability, the limits of perception and discrimination, and questioning the nature of the work of music itself. As a label, the notion of new complexity became current during the 1980s to describe such works, the label adhering principally to Brian Ferneyhough (1943-) and the younger composers James Dillon (1950-), Michael Finnissy (1946-), Chris Dench (1953-) and Richard Barrett (1959-). The term new complexity seems to have been coined by Nigel Osborne and, while the composers mentioned disapprove of, and actively discourage, its use the term has stuck and become, if nothing else, a journalistic convenience. The paper Four Facets of ‘The New Complexity’ by Richard Toop (Toop 1988) cemented the notion amongst academics and the putative genre has attracted many composers who may be more sympathetic to its aesthetics than its original referents. Toop does indeed seem to have identified a new strand of musical progress unnoticed by other writers at the time; for example none of the composers mentioned above appear in the index of Paul Griffith’s Modern Music, The avant garde since 1945, published in 1981 (Griffiths 1981). Ferneyhough has a chapter and Finnissy is mentioned in his subsequent New Sounds, New Personalities: British Composers of the 1980s published in 1985 (Griffiths 1985). Remarkably, Griffiths does not use the word complexity at all in his conversation with Ferneyhough, being content to limit his questioning to simple pragmatic questions. Dominic Muldowney does use the words ‘new complexity’ in his interview where he has clearly noted the trend subsequently elaborated by Toop:

Composers have tended to hide themselves from the political situation in one of two ways: through mythologies, or through complexity. I really think the new complexity of composers like Ferneyhough and Finnissy is a desperate kind of intellectual game, not unlike the music of
the late fourteenth century in France: very decadent. (Griffiths 1985, 183)

Complexity is not usually seen as a virtue; mathematicians and scientists usually refine the often tortuous logical strands that lead to the original proof of a theorem or conjecture to reveal a deeper structure in a simpler, more direct, and ultimately more illuminating form. Sometimes complexity is generated by the simplest of formulae, as for example in fractals, but again the complexity is in the representation rather than its mode of generation. So the question for the composer is: what possible aesthetic can justify a necessity for an irreducible complexity of formal musical construction that will probably be unrealisable in performance, imperceptible in its reception by an audience and quite possibly by the composer as well? There is an opportunity for the critical charge of deception (or self deception at the very least) and of pseudo intellectualism that needs to be addressed. The writings of some of the composers are not always models of apodeictic clarity.

1.6 Notation and the score

Whilst most of the composers associated with new complexity employ idiosyncratic, non-standard notation to some degree, Ferneyhough’s ideas about how notation can be used to generate compositional material are fundamental to an understanding of his contribution to the genesis of this genre.

Ferneyhough’s preoccupation during the 1980s seems to have been the use of rhythmic notation to produce figurative effects that, whilst they might be submerged in the density of the formal structures, contribute to the overall meaning of the work. Ferneyhough quotes Richard Strauss: ‘Was it Richard Strauss who once, when told that a certain instrument couldn’t be heard, replied “Maybe, but I’d notice if it were not there”?’ (Ferneyhough 1995, 388)
In conversation with James Boros in 1990, Ferneyhough identified three general levels of compositional activity: textural, gestural and figurative (Ferneyhough 1995, 384). It is the latter that most immediately concerns performers wishing to get an insight into the rhythmic problems encountered in new complexity.

For Ferneyhough the potential of such rhythmic figures as those shown in Example 1.1, to generate ‘lines of force’ and ‘directional energies’ simultaneously at several layers of the work, is one of the ways in which musical material becomes imbued with meaning:

> We, as composers, do not only manipulate material; it signals to us – by means of the ordered freeing-up and redisposing of figural energies – what it itself desires. If this concept seems unduly metaphorical: what is musical meaning, if not the revelation of new perspectives according to constantly mutating sets of (musically immanent) rules of play? (Ferneyhough 1995, 41)

**Example 1.1** Ferneyhough’s rhythmic examples. (included as a data file)

![Example 1.1](image)

(Ferneyhough 1995, 38)

For Ferneyhough, these rhythms can be used, re-used, transformed and modified at several compositional levels simultaneously over both the long and short term in a composition. He sees them as ‘ordering models, as opposed to concretely present sonic entities’ (Ferneyhough 1995, 38)

Ferneyhough then demonstrates in Example 1.2 some possibilities inherent in the material.
Example 1.2 Ferneyhough’s inherent rhythmic potentials.

(a) ![Notation Example](image)

(b) ![Notation Example](image)

(c) ![Notation Example](image)

(Ferneyhough 1995, 39)

Ferneyhough explains the effect each of these examples might have in terms of generating lines of force and it is clear that for him figurative possibilities such as these are some of the compositional resources to be deployed to create texture/gesture and ultimately the musical material for his works. The question is therefore: to what extent is a successful performance of the musical work dependent on an accurate reproduction by the performer(s)? Ferneyhough was undoubtedly preoccupied with the compositional possibilities at that time as many of his essays show. Do performers need to aim for absolute accuracy as a prerequisite for their performances to be judged successful?

There is another aspect of new complexity notation that has been inspired by a more experimental view of notation. Several composers have written to the effect that they use notation to provoke the performer to avoid the predictable. Their intention is to inspire the performer to transcend the mundane, or routine, interpretation in the hope of realising some transcendent musical experience.

The book *Notation in New Music* by Erhard Karkoshka (Karkoshka 1965/1972) contains many examples of anfractuous scores, both graphic and otherwise, which were intriguing to the eye as well as ear. It is possible that abstract expressionism in art was an influence on many of these composers. It is clear from most of the
examples in the book that the need to experiment with the score was not an attempt to make more precise instructions for the realisation of their musical intentions but to give a constrained freedom to the performer. These scores represent the exploitation of extra musical notation to enrich the compositional, and hence performative palette.

Morton Feldman argues that ‘notation can have an aspect of “role playing”’ (Feldman 2000, 145) and observes that while it is clear that, historically, new music demands new notational solutions, the reverse can also be the case; the recognition of new notational potentials may stimulate the creativity of composers (Feldman 2000, 144).

Feldman’s intent is to avoid associations with ‘antecedent/consequent building blocks’ of earlier music – including early modernist compositions (Feldman 2000, 136). He makes an important point about notation that is relevant for new complexity:

the patterns that interest me are both concrete and ephemeral, making notation difficult. If notated exactly they are too stiff; if given the slightest notational leeway, they are too loose. (Feldman 2000, 143)

Feldman found inspiration in rug weaving and this and similar metaphors of braiding and the loom shuttle is common among new complexity composers, in particular James Dillon.

Two distinct lines of compositional intent can now be detected. Feldman uses musical patterns within a more static envelope to confuse, confound memory and avoid a predictable sense of ictus3. The other direction – the post-Webern – utilises such figurative devices to produce more global effects – music in which a sense of direction or purpose is perceptible.

By 1981, Feldman had arrived at his own idiosyncratic use of some of these ideas through the imperfect, or what he calls ‘disproportionate’, symmetries in Anatolian
rug making. In his essay *Crippled Symmetry*, published in 1981, he recognises the quasi-symmetry of rhythmic or phrase organisation in twentieth century music citing examples of Webern and Stravinsky. He writes:

Rugs have prompted me in my recent music to think of a disproportionate symmetry in which a symmetrically staggered rhythmic series is used: 4:3, 6:5, 8:7, etc., as the point of departure. For my purposes, it “contains” my material more within the metric frame of the measure; while in post-Webern arhythmic language, lopsided acceleration results from the directional pull of one figure to another. (Feldman 2000, 135)

And:

Though these patterns exist in rhythmic shapes articulated by instrumental sounds, they are also in part *notational images* (author's italics) that do not make a direct impact on the ear as we listen. A tumbling of sorts happens in midair (sic) between their translation from the page and their execution. (Feldman 2000, 143)

1.7 Thesis outline

This thesis will take the following form:

Part 1

Chapter One: *Introduction to New Complexity*

Chapter Two: *Facets of Complexity*. A provisional definition of new complexity is given. This is followed by a résumé of Toop's seminal paper *Four Facets of ‘The New Complexity’*. References to the guitar are made where relevant to the case studies in Part 2.
Chapter Three: *Complexity after Toop’s Facets*. This consists of a review of the two most important publications immediately following Toop’s paper: the *Complexity?* booklet (Bons 1990) published to accompany the *Complexity in Music?* festival in Rotterdam in 1990 and the Complexity Forum and associated papers in the *Perspectives of New Music* volumes 31 and 32 published in 1993 and 1994. The focus here is on the views of composers and musicologists rather than performers though there is inevitably some overlap.

These two chapters therefore constitute, amongst many other things, a review of the early literature on new complexity.

Chapter Four: *Performance Practice in New Complexity Repertoire*. This details the various strategies that performers have used to learn the new complexity repertoire. The emphasis is on the solution to rhythmic problems. Examples from the guitar repertoire are given to support or illustrate the methods given by performers of other instruments. Part of this chapter is therefore a review of the relevant literature.

Chapter Five: *Attempting Objectivity*. Using Marsh’s paper (Marsh 1994) as a starting point, several analyses of recordings of new complexity repertoire by various performers (including myself) are given. A similar analysis of a Bach bourrée is analysed for comparative purposes. The interpretation of the data is crucial and seems not to have been commented on by previous writers.

Part 2

Chapter Six: *The Guitar and its use in 20th Century Composition*. The guitar repertoire is not widely known other than by its devotees. This is a brief introduction to the personalities and the repertoire up to the time of new complexity. Some general ideas are given on how unedited new complexity guitar works might be made playable.
Chapter Seven: *Case Study Number 1: A Performer's Guide to Severance by Chris Dench.*

Chapter Eight: *Case Study Number 2: A Performer's Guide to Nasiye by Michael Finnissy.*


Part 2 is therefore to be seen as a resource for the performer. Performers need details. These case studies contain a great deal of practical information together with my learning strategies, where appropriate. My model for these studies is Barrie Webb’s paper *Richard Barrett’s ‘Imaginary Trombone’* (Webb 2007). Webb gives a huge amount of detailed, almost bar-by-bar, information of immense value to another performer. Performers need this information.

Part 3

Chapter Ten: *Discussions and Conclusions.* The ideas presented in the previous chapters are re-evaluated by comparison and contrast to the views of recent researchers in the area, primarily Stuart Paul Duncan. The research questions are revisited and I give my conclusions.

This submission also comprises recordings of the three case studies and Finnissy’s *Song 17,* performed by myself, and files of the larger examples from the scores.
Notes

1. The term 'new complexity' will be assumed throughout. Its use is now a historical fact so no quotation marks or capitalisations are deemed necessary. It is helpful to regard it as a distinct genre for the purposes of this thesis.

2. See (Toop 2010)

3. The recent music of Bryn Harrison is an example of these mosaic-like figures producing music that is somehow both static but ever changing in some sort of kaleidoscopic fashion. In his programme note for a performance of his *surface forms (repeating)* given by ELISION at Kings Hall, London on 15th March 2010, Bryn Harrison wrote:

   Much of my recent music has been largely concerned with the exploration of musical time through the use of recursive musical forms which challenge our perceptions of time and space by viewing the same material from different angles and perspectives. Surface forms (repeating) uses circular patterns that regenerate themselves at each moment to present a rapidly moving musical continuum that operates largely outside the confines of a more goal-oriented approach to form and structure. Like the ripples in water or the falling of rain, the surface of the work seems at once both static and mobile. Here, near and exact repetition operate in close proximity, providing points of orientation and disorientation for the listener. Depth is intentionally reduced and detail emphasised to draw the listener into the surface in way (sic) similar to that of discovering an ever-increasing detail in a monochrome painting or of gazing up at the stars on a clear night. (Harrison 2010)