The creative application of extended techniques for double bass in improvisation and composition

Presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy (Music)

Volume Number 1 of 2

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Abstract

This submission contains a thesis, a portfolio of compositions and recorded improvisation, and a website which details extended techniques for the double bass. Exploring extended technique led me to consider the extent to which a set of techniques begins to form a progressive praxis (and thus an idiom) and how this is reflected within a composition. The thesis explores this question by exploring past examples of such idioms and my own approaches to such concerns within my own work. My own praxis is represented by recordings which demonstrate my approaches to technique and musical language and a series of composed works which explore them in a different context. The website is intended for use as a resource for performers and composers who wish to explore the specifics of extended technique within their own work.

I similarly examine how such facets within my own work present problems for a performer which must be solved empirically. The process of scrutinising my own performance traits led me to consider how the study of certain works that present significant innovations in technique and expressive devices can act as a means of developing technique heuristically. Such works require a set of procedures which invite the performer to conclude the musical argument and thus instigate a creative response. The double bassist and composer Barry Guy’s solo bass work *Statements II* is such a piece, and within this thesis I assess the extent to which the work is representative of a core set of musical choices on behalf of a performer/composer, and how the piece functions as a systemisation of his working practices in improvisation within a composition. The piece is examined alongside a work by another composer, Bernard Rands, which demonstrates a continuity of language both in terms of its technical resources and in its wider musical concerns.
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I would also like to thank those from my time as an undergraduate at the Royal Welsh College of Music and Drama who provided much of the impetus for this research. In particular: Timothy Raymond, Paula Gardiner, Dominic Seldis and Peter Reynolds (1958–2016).

There have been many colleagues both academic and professional who have shown an interest in the project, helped me with research materials and provided much food for thought. This list includes (but is not limited to): Daniel Bickerton, Tom Jackson, Clair Rowden, Mike Collins, Roger Marsh, Dave Jones, Lynne Gornall, Paul Dunmall, Richard McReynolds, Maja Palser, Adam Flynn, Andrew Mabey, Trevor Taylor, Ben Davis and Lyndon Owen.

Special mention must also go to Barry Guy and Maya Homburger for their generosity with scores and recordings, (to say nothing of years of wonderful music) and to the late Keith Tippett (1947–2020), who was responsible for awakening my interest in improvised music.
Introduction

As a performer who has specialised in new music for the past 14 years, I have been fortunate to have engaged regularly with works that seek to expand the boundaries of instrumental technique. However, I have also been confronted with numerous scores for double bass in which errors, misprints or sheer impracticality render the piece sadly unplayable. This may seem an unusual situation to be faced with in 2019 but following conversations with other instrumentalists, notably harpists and players of other instruments which have particular idiomatic practices, I began to realise that the situation is not especially unusual. The double bass is a curious instrument, unusual in that it has two distinctly different schools of bowing and its common tuning (and one of its typical shapes) owe more to the historical gamba family than that of the violin. Add to that its sheer size and a paucity of readily available literature that specifically addresses contemporary technique and its practicalities and it soon becomes clear why these problems arise.

I have sought to try and rectify at least a part of this problem during the course of my research. Initially, I had intended to write a document in which all contemporary techniques would be discussed in their historical contexts, such as they are. The ultimate result of this was the creation of the website The Modern Double Bass,¹ which seeks to disseminate this research by making it freely available as an internet resource designed for composers and curious performers. Exploration of the relevant literature surrounding extended techniques quickly led me to the conclusion that many of the existent texts tended to reflect the individual approaches and predilections of the authors rather than providing a more holistic view of contemporary practices. There was also a palpable sense that the physical problems associated with certain techniques were not fully explained in a manner readily appreciable to non-performers and as the double bass has a specific set of technical problems, it is easy to understand why similar mistakes

appear in successive scores. The relative scarcity of some of these documents persuaded me to consider methods in which information on this subject could be presented in a manner that was:

1) Easily disseminated and freely available;
2) Accessible to both performers and composers.

A literature review of similar projects for other instruments, in addition to relevant scores, provided a wealth of ideas as to how the information could be presented, particularly the educational resources constructed by Carla Rees\(^2\) and Christopher Redgate\(^3\). Both feature video and audio presentations alongside text and charts which has the benefit of simultaneously imparting the relevant technical information whilst demonstrating not only the resulting sound, but also the physical actions required to produce it. My own website has been constructed in such a way that performers and composers will gain enough information to immediately understand the fundamentals of a technique and, where applicable, its limitations. Whilst many pedagogical methods include exercises or études for a performer to integrate new techniques into existing practice, the site is constructed in such a manner that individual exploration, where appropriate, is encouraged rather than offering a concrete methodology.

There are numerous historical examples of individual performers inspiring a wealth of works from various composers which incorporate either their specific technical innovations, or their stylistic traits into a piece. Such innovations often take the form of a refinement or extension of existing technical practices which are associated with a particular idiomatic practice, and the advances associated with the double bass demonstrated in its historical literature are no exception to this. However, the instrument's current ubiquity across many genres, and a noticeable tendency of many of its performers to actively participate in (or at least have had prior experience of participating in) more than one idiomatic

performance practice\textsuperscript{4} coupled with the wide range of possibilities offered by the instrument, has resulted in a profusion of new techniques and approaches.

When examining my own performance practice alongside the techniques that I had developed in the context of free improvisation, I began to reflect on the nature of a musical praxis and the extent to which certain performers have expanded the technical range of the instrument simply through the development of a distinctive style. Free improvisation offers the performer a situation in which a strong style could be considered to be the ultimate achievement, in comparison to the orchestral world where it can be something of a hindrance. In this context, improvisation and composition are often seen as distinctly different activities when they are essentially the same process taking place in different circumstances. Nicholas Wolterstorff would have a problem with such a view and asserts that (cited by Bruce Ellis Benson) ‘composition is not improvisation’.\textsuperscript{5} However, Benson argues that:

\begin{quote}
The process by which a work comes into existence is best described as improvisatory at its very core, not merely the act of composing but also the acts of performing and listening. On my view, improvisation is not something that precedes composition (pace Wolterstorff) or stands outside and opposed to composition. Instead, I think that the activities that we call “composing” and “performing” are essentially improvisatory in nature, even though improvisation takes many different forms in each activity.\textsuperscript{6}
\end{quote}

To my mind, this view is particularly persuasive, particularly when both mediums are linked by an instrument-specific praxis that demonstrates consistent traits across genres. In terms of my own work as an improvising performer and composer, I see an inextricable link between the two areas when the instrument acts as the common medium. The composed work for the instrument that results from this is also something distinctly different from the majority of my other compositional endeavours. Both my solo improvisations and composed work share a set of techniques (although the composed works

\textsuperscript{4} The work of such performers is discussed in the subsequent chapters.\textsuperscript{5} Bruce Ellis Benson, \textit{The Improvisation of Musical Dialogue: A Phenomenology of Music} (Cambridge: Cambridge University Press, 2003), p. 2.\textsuperscript{6} \textit{Ibid.}
generally reduce the number of techniques in comparison with improvised performances) and, crucially, an approach to sound production, in addition to a wider musical language. I consider, therefore, the process in this case to be the same one operating in different mediums. An oft-repeated quotation by Steve Lacy is:

In fifteen seconds the difference between composition and improvisation is that in composition you have all the time you want to decide what to say in fifteen seconds, while in improvisation you have fifteen seconds.7

Lacy draws attention to the point at which the practices diverge in terms of process: the ability to edit before performance. As such, the essential difference between composition and improvisation is that a notated work becomes what Prevost terms ‘a form of private property’,8 whilst improvisation, by its very nature, is transient. However, much in the same way that a composer might strive for the codification of a personal language in which distinctive elements are consistent between pieces and act as signifiers, an improviser will often undertake a similar journey with comparable results. Idiomatic uses of improvisation carry with them a set of musical practices which must be used in a certain manner (to a greater or lesser degree depending on the context) for them to be considered correct. There has been much investigation into the aesthetic arguments surrounding free improvisation9 but there is a salient feature common to its practitioners: the emergence an assertion of what Michael T. Bullock terms ‘self idiom’. Bullock defines the self-idiomatic improviser thus:

Rather than drawing on a written or memorized repertoire of discreet pieces, a self-idiomatic improviser develops a vocabulary of sounds rhythms and figures upon which he draws. This vocabulary can be enormously flexible and, for most practitioners, is constantly evolving, although a core set of attributes and

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9 See chapter 2.
preferences – such as choice and preparation of instruments or how to react to the musical actions of collaborators – remains constant.10

What Bullock defines here is essentially praxis: the manner in which (in this case musical) theory, technique and ideas are enacted. Whilst many improvisers make significant and highly personal advances on their instruments, few seek to codify them in the form of a composed piece. However, in the instance of an improviser composing a notated piece for their instrument, it may be logical to assume that there would exist a demonstrable commonality of language indicated by a unique set of technical and musical approaches specific to the instrument. This, in essence, amounts to the formation of an idiomatic approach; one, it will be argued, that is consistent across improvisation and composition. The extent to which an awareness and understanding of such an approach is required for another performer to learn a piece is discussed in further detail later.

The bassist and composer Barry Guy is a notable figure in contemporary music who has developed a highly idiomatic performance practice alongside working as a composer. Guy encapsulated many of his technical advances into a concert work, Statements II (1972),11 which is examined here in accordance with these questions, alongside a work for bass by Bernard Rands. I have found few bass-specific works that demonstrate a concept as holistic as Guy’s. Not only does Statements II detail his techniques, but it crucially demonstrates the specificity of their usage within a definable idiom. This idiom, in both cases, is one in which two distinctly different mediums which have objectively similar processes, composition and improvisation, are combined into a single work intended for interpretation. However, neither piece is a graphic or broadly indeterminate score, and any elements in which the performer is given a greater degree of freedom are strictly controlled. What emerges, however, is a construct which offers an insight into an instrument-specific praxis by detailing an idiomatic musical language12 in addition to some of its broader procedural concerns. As Guy is well-represented in terms of

12 Discussed in further detail later.
recorded documentation, a period of research was undertaken in which recordings from a six-year period\textsuperscript{13} were analysed to ascertain consistent musical traits, as well as examining its continuation in recordings post this period. These were then compared with the notated works discussed in chapters 3–5 in order to define the salient features which form an idiomatic approach which can be demonstrated both in composition and improvisation. Later recordings were then analysed in order to confirm the continuation of such an idiomatic approach.

Later in this document I also discuss the nature of Guy’s work as acting in a heuristic fashion by not overtly articulating his concept, but nonetheless educating the performer by introducing a wider musical vision than is notated on the score.

I have, therefore, sought to investigate the following questions:

1) To what extent does a set of techniques and predilections in improvised music begin to form a praxis?
2) How does this praxis manifest itself in composition?
3) How does such a work require empirical engagement from performers, particularly with regard to an awareness of such a praxis, as a result?

Empirical approaches are discussed in further detail later and form a core concern within my own compositions. In my composed pieces for double bass presented here, I introduce an unstable element in the form of a technique or sound which will have a variable result – one which causes problems that the performer is required to solve. As these devices vary in nature, the interpreter is invited to decide which elements should be brought to the fore and which should be considered a subsidiary concern.

To give an example, the following passage from my work *Polynya* (Ex 0.1) requires the performer to rapidly alternate between a series of two harmonic node points on the same string:

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\textsuperscript{13} 1972–1975.
Ex. 0.1: Polyna, letter A, opening phrase.

Whilst it is certainly possible to perform all pitches as pure harmonics, that is to say free of extraneous sound, the tempo marking and fingering required will produce a variety of results depending on a series of factors that will be unique to each performer. Firstly, if the tempo marking (MM=70) is observed then it becomes highly unlikely that the fingers will repeatedly strike the same node points consistently and with the same force. This results, in a series of timbral and textural multiphonics rather than a fundamentally pure harmonic sound. This is further compounded by the indicated poco sul ponticello bow placement which will increase the overtone spectrum within the resultant sound, in addition to the indication to constantly vary the dynamic level. The speed of the bow, bow pressure, the arm weight of the performer (not to mention which area of the string would be considered to be poco sul ponticello) all require a choice on behalf of the performer. The performer is thus faced with a series of unspecified questions: Does one aim for a consistent or variable sound? How often should the changes in dynamics occur and how dramatic should those change be? Should rubato be introduced to draw attention to timbral changes and, if so, how much would be appropriate in the context of an otherwise consistently flowing piece? These are just three examples of choices that exist in the above passage as a means of inviting creativity in performance by requiring the performer to actively engage with their own physical approach to performance (and the idiosyncrasies of their instrument) and make a decision as to what the eventual sound should consist of.

See: [http://www.themoderndoublebass.org.uk/variability.html]

See: [http://www.themoderndoublebass.org.uk/textural-multiphonics.html]

See: [http://www.themoderndoublebass.org.uk/te-multiphonics.html]
As my own approach and instrumental set-up is highly specific, questions arise as to how this can be replicated in notation (which would be highly complex) or, crucially, how a notation can be employed which identifies a specific action, but produces variable results between performers. In deciding what to notate I first am forced to consider the degree of specificity in what I wish to be consistently replicable between performances, and what can then be replicated by other performers. When discussing the composer Brian Ferneyhough’s notational decisions, Lois Fitch raises the notion of ‘fidelity to the score and exactitude in performance.’ As Ferneyhough’s work often contains a surfeit of information at any given point, a performer is constantly required to undertake a process in which:

the selection and prioritization procedures enacted by the performer in rehearsal – including omission where necessary – have a fundamental role in determining a sonic result that reflects on the performer him or herself as much as the composer.

Whilst the procedural concerns of my work and Ferneyhough’s are markedly different, the choices required of the performer are essentially the same. As such, the notation of the works presented as part of this thesis employ what Mieko Kanno terms a ‘prescriptive’, as opposed to ‘descriptive’, notation—essentially notation in which:

The composer specifies the method of making music. It includes action notation, as well as notations in which the outcome becomes known only by following process-orientated instructions.

The notated actions in each of my works are arrived at after a series of explorations in which the piece is tested on a series of instruments with different set ups to ascertain which elements will be consistent between instruments and, therefore, directly replicable in performance and to assess the degree of variability. Once a consistent method of production is established, a notation is arrived at which

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20 See: <http://www.themoderndoublebass.org.uk/variability.html> for a series of sound examples which demonstrate variable approaches to the passage shown above.
indicates the precise action and thereby ensuring fidelity, but with enough ambiguity as to avoid exactitude. Fidelity in each phrase is ensured by a specific action usually denoting the type of sound (harmonic, multiphonic etc) whereas the individual makeup of the sound must be governed by a performer's predilections due to the lack of further information. In discussing the notion of an ‘efficient’ notation, Amanda Bayley and Neil Heyde state that:

Different subsets of musicians have very different expectations of what notation should be able to tell them and very different skill sets for engaging with it, and in order to be both rich and clear a notation must be to some extent targeted at a specific audience.  

The notion of targeting a notation to a specific audience is important. My works are intended for classically-trained bassists who have an interest in contemporary music and, therefore, are more likely to have a creative response to the lack of information. When first approaching a new work as a performer, I generally undertake appropriate research so that I may understand the composer's intentions and articulate them effectively in performance. The performance of works by composer/performers, however, raises a different issue, one of emulation. How important is it to shape one's performance of such works to match or detract from those of the original composer/performer and how much flexibility is afforded by the notation for such variation? Is it, in fact, necessary to know these stylistic traits to effectively interpret the works in question at all?

I generally arrive at a solution to each of these questions through a series of value judgements based on empirical investigation and seek to perpetuate these procedures in my own work by employing the methods outlined above. How important, therefore, is it for a performer to be aware of my traits as an improvising bass player and how do these relate to the notation that is presented in my composed work and is it necessary to replicate them?

These questions are explored in further detail in the subsequent chapters but to return briefly to heuristic practices, Markus Schwainger summarises Stafford Beer’s\textsuperscript{22} more extensive definition of a heuristic process as those ‘which are used to search for subjects, whose contents are unknown or only partially known.’\textsuperscript{23} The notation of a definitive action indicates a known or partially known outcome but specifically allows another performer to explore a specific area of sound production, technique and problem solving; the pieces become almost a blueprint for exploration. I am not interested in presenting works in which another performer is required simply to replicate what they perceive to be my own performance-related traits; I am interested in their creative response to a notation and how they may alter either their usual approach or how they may deviate from what I have written.

Performers and composers who may be unfamiliar with the techniques in question have a resource to draw from in the form of my website, and a set of pieces in which to explore them. A bassist interested in my work as improviser can then further explore the possibilities inherent in my composed pieces, by understanding my own approaches to similar materials and deciding whether or not to incorporate them into their own realisations. This, of course, has the potential to alter my own approaches to these pieces as another performer may, by undertaking appropriate exploration, discover elements within the piece that I had never previously considered. It also has the potential for further development of new techniques going forward. Each of the composed pieces in question explores an area of technique which I routinely use as part of my practice within improvisation; contextual examples of these techniques (in the form of recorded solo improvisations\textsuperscript{24}) also form part of this submission and the interrelationships between the mediums are discussed in further detail later. The recordings function both as stand-alone documents and as supplements to the notated works presented in this thesis. In the example shown above, I have discussed the variables that exist within a phrase. Distinctly similar phrases occur during the discourse of the accompanying improvisations but do not, however, display a consistent

\textsuperscript{24} Ashley John Long, \textit{PSI}, CD, FMRCD434-0217 (2017)
approach, thus continuing the ambiguity as to what may be correct. That both the improvisations and compositions are linked by being representative of a specific idiomatic approach is discussed further in the subsequent chapters, but the methodology I have described above also has pedagogical implications: by providing a series of pieces and two reference points, a performer can thus undertake a heuristic approach to developing technique which encourages the assertion of individuality by demonstrating an array of possibilities.

**Chapters 1** and **2** chart a brief history of the instrument in classical music and jazz respectively and give instances where there have been historical examples of a definable idiom and, where applicable, its representation in composed works.

**Chapters 3** to **5** analyse the bass music of Barry Guy, outline the elements which define his praxis, and explore how his music for double bass is not only a reflection of his techniques, but also embodies the processes that necessitated their creation. With this established, Rands’s work is analysed in the same manner to demonstrate how a performer’s distinct style is reflected in the work of another composer.

**Chapters 6** and **7** investigate my own processes within composition and improvisation and explore way in which I seek to provoke an investigative and creative response from the performer within each of my works for double bass, and the extent to which empirical research is required in each case.

I conclude by assessing the extent to which a performer’s idiomatic approach displays consistent traits in improvisation and composition, and how engagement with both areas from another performer's perspective can advance the technical boundaries of the instrument in classical performance. This is considered within Benson's view that 'the activities that we call “composing” and “performing” are essentially improvisatory in nature'\(^{25}\) and by extending Derek Bailey's assertion that improvisation involves the 'development of a common stock of material – a vocabulary,'\(^{26}\) which results in the formation

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of what Bullock terms 'self-idiom'. I also discuss the extent to which my scores, in which purposely variable elements within the music will require empirical investigation, can act as a means of developing technique heuristically by additionally providing suitable reference materials for consultation and interpretation. The pedagogical implications of employing such an approach are also examined, as are the potential implications that arise from other performers approaching my composed pieces. In addition to reflecting on the decision-making processes that led toward exploring such approaches in composition and their relationship to my wider practice as an improviser and composer. I also consider the impact that another performer interpreting my work may have upon my own practice.
Chapter 1

Historical Precedents: Classical Virtuosi and the Viennese Bass

The development of a virtuoso technique in solo double bass repertoire comparable to the rest of the orchestral string family had been a seemingly protracted process prior to the twentieth century. A handful of virtuosi alongside a myriad of advances have, however, been documented over the past few centuries. The unique characteristics of the double bass, due partially to its unusually varied historical forms in terms of construction and function, resulted in several idiomatic performance styles distinct to several musical periods and regions. Much of the initial reportorial, and, as such technical, expansion of the instrument’s vocabulary took place in the period which Paul Brun terms ‘The Golden Age of Virtuosity.’ These works form much of the core solo requirements of the standard orchestral audition repertoire in use today.

Prior to the mid eighteenth century, concertante music for the direct historical precursors of the double bass had been virtually non-existent. Recent research into the widespread use of the G violone as a continuo and solo instrument has shown it to have an had an increasingly varied role, more than previously thought, and indicates steadily increasing demands for instruments in the 8’ register. This is demonstrable within ensemble writing but the advent of particularly adept performers such as Giovanni Vitali also yielded some solo literature. However, a consensus for an effective solo technique for the rarely used 16’ variant had yet to be established.

Part of the reason for a delay in technical advancement can be attributed to the problems inherent in the construction of the instrument itself. In recent centuries, the construction of stringed instruments and strings has followed a steady trajectory that allows for an increase of string tension

2 Typically, the solo requirements of an orchestral audition for a double bassist will include movements from concerti by Johann Baptist Vanhal (1739–1813), Carl Ditters von Dittersdorf (1739–99) and, from later periods, Giovanni Bottesini (1821–89) and Serge Koussevitzky (1874–1951).
3 Typically a double bass Gamba in G tuning (G₁–C₂–F₂–A₂–D₃–G₃, low to high).
4 Joelle Morton has collected and published much research on this subject, much of which can be found here: <https://www.greatbassviol.com/treatises.html>
5 See, for instance, Giovanni Battista Vitali, Partite sopra diverse sonate (ca.1680).
6 The 16-foot instrument, it seems, was used scarcely, with Francis Baines citing only four documented examples of its use.
which, in turn, leads to an increase in projection and a greater brilliance of tonal qualities. The advent of a method of wrapping metal over a gut core\textsuperscript{7} – a technique by which string mass is reduced whilst increasing tension and projection – was a significant advancement. Prior to this, methods of gut string manufacture (particularly for bass instruments) were relatively primitive, and for a string to be able to speak effectively in such a low octave a high tensile winding of gut is required, a process which can only be effected by mechanical means. It can be assumed, therefore, that the projective capabilities of the double bass/violone were greatly reduced in comparison with the rest of the string family prior to this innovation.

The absence in the internal construction of a bass bar and neck block also further reduces tension in comparison with later instruments. This, inevitably, results in a lack of finesse in solo passages, as the strings speak slowly and have a reduced capacity to be heard with any clarity over an accompanying ensemble. Projection and volume can be increased by tuning systems which allow for sympathetic resonance, such as those of the gamba family, but also in the use of sympathetic strings, a process which reached its peak in instruments such as the baryton and viola d’amore. However, there was little regional consensus, and a large number of tuning variations for the violone are known to have existed.\textsuperscript{8} Tuning systems of the later three- and four-stringed instruments typically follow the practice of tuning in fourths as a derivation of the tuning of the violone. As fourths-patterned tunings also reduce sympathetic resonance (as there are fewer sympathetic partials shared by the harmonic series of each string), solo passages in ensemble literature from this period are predictably rare.

However, towards the middle of the eighteenth century an increasingly standardised instrumental construction began to emerge in Austro-German countries, which allowed for the gradual emergence of a definable solo technique that was enabled by the advances of instrument construction and its tuning systems. The emergence of the Viennese bass tradition represents the first example of an observed idiomatic practice in which solo performance forms a major part, coupled with a


\textsuperscript{8} Peter McCarthy extensively detailed such tunings in a 2009 lecture at the ISB conference entitled ‘Tuning Trends in Large String Bass Instruments’. His notes may be found at \textless http://www.petermccarthy-violone.co.uk/lectures/4580936596\textgreater [accessed 12 October 2016].
relatively consistent instrument build type. Its associated schools of playing have been the subject of much investigation in recent years, and a resurgence in the historical performance practice of its associated solo literature is becoming well established.

Alfred Planyavsky notes that:

In Vienna, the five-string double bass was not abolished, but instead developed an unprecedented amount of solo literature. Quantz and Mozart confirm the use of various sizes of violoni, [sic] independent of the violoncello. A violone can be distinguished from a violone grosso just as easily as a double bass from a large double bass.\(^9\)

The examination of works from this region composed during this period clearly demonstrate a distinctive, highly stylised performance practice in which the double bass is given a prominent role. It also becomes clear that the Viennese double bass tradition was something of an offshoot with regard to both contemporaneous usages of a comparable 16’ register instrument elsewhere, and in the specifics of construction. Between 1730 and 1800, a more consistent build type, set-up and tuning emerged. These instruments were smaller than many earlier examples by luthiers such as Gasparo da Salo or Maggini, which were originally constructed with six strings\(^10\) and then later modified\(^11\) and typically follow a viol, rather than violin,\(^12\) outline.

The standard historical tuning for a five-stringed Viennese instrument outlines a D major triad in the upper strings with an F\(^a\) as the lowest string: (low to high) F\(^a\)–A\(^a\)–D\(^a\)–F\(^\#\)–A\(^\#\). Four-stringed instruments that follow this pattern, but on which the lowest string is absent, are also known to have existed concurrently. One notable example of such an instrument was to be found in the orchestra of the Esterházy court, as is clear from the survival of a receipt for the purchase of strings

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\(^10\) More than one example of these maker’s instruments show blocked up peg holes in the peg box.


\(^12\) Referring to the historical gamba shape.
for the instrument. It was for players of this instrument that Haydn composed several solo passages, notably those found in Symphony no. 31 in D (1765).

Closer examination of the repertoire for the Viennese bass also suggests an early use of solo scordatura, as several solo works exist for an E♭ variant in which the regular tuning is raised by a semitone. Such a variant gives rise to the inconsistency found in modern editions of historical concerti, with common variations of the concerto by Johann Baptist Vanhal being found in D, E♭ and E major. As the Vanhal concerto contains passages that are performed entirely as natural harmonics (a salient feature of Viennese bass writing), it could be assumed that these versions refer to scordatura variants. The triadic nature of Viennese tuning allows for a greater ease in performing musical material of an arpeggiated nature without the need to shift to a new hand position. The tuning also affords a lightness of tone that does much to soften the throaty timbre of bowed gut strings at this pitch, whilst increased sympathetic resonance enhances the projective capabilities of the instrument. The inclusion of frets also gives a distinct clarity of timbre in addition to a greater security in intonation, particularly when considering the reliance on barring (in which one finger is placed across two or more strings in the same position) and bariolage as a method of producing broken chords in the distinctive motivic shapes that can be found in many works of this period.

It is clear that a consensus in performance practice gradually established itself in solo and orchestral contexts and advanced the role of the double bass player beyond what was previously required. In addition to Haydn, many composers of the period had written features for the instrument which carefully exploit its possibilities, including Mozart in his concert aria *Per questa bella mano*, K. 612, of 1791.

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14 Several symphonies by Haydn contain brief solo passages for the instrument which require a highly skilled performer. Although the solo parts in the early symphonies (notably 6, 7 and 8) could have been written for Johann Dietzl (1754–1806), performer in the employ of the Esterházy court at the time, Playvansky considers them beyond Dietzl’s ability. He also suggests that Joseph Kämpfer (1735–96) may have been travelling to the area at the time and speculates the solo parts had been composed especially for him to perform. He bases this on a reference in a letter, although this interpretation has been disputed in some quarters. Perhaps most tragically, there was also a double bass concerto by Haydn which has seemingly been lost, with only two bars of the first subject remaining in the composer’s own catalogue.
15 The majority of Viennese bass works of this period contain passages which are played entirely as harmonics.
That the Viennese bass practices became a definable idiom is given credence by the number of works by instrumentalists and composers of the period which demonstrate a conspicuous similarity in their technical remit. Perhaps the most famous virtuoso of this period is Johann Matthias Sperger (1750–1812), although there were others, notably Friedrich Pischelberger (1741–1813), who is considered by some scholars to have inspired the concerti of Vanhal and Dittersdorf, and Joseph Kämpfer (1735–96) who is reputed to have played in the Esterházy court. However, as evidenced in his surviving works, Sperger elevated the technical possibilities of the instrument far beyond what would have been generally considered possible at the time. Interestingly, Sperger’s own works are played relatively infrequently today in comparison with the Vanhal and Dittersdorf concerti. Perhaps one reason for this neglect is that Sperger’s own works are particularly idiomatic, containing numerous chords and other features that do not easily translate onto a modern instrument tuned in fourths, whilst the musical material of the Vanhal and Dittersdorf concerti can be more readily adapted to suit such a tuning. Indeed, one major hindrance of the tuning system is that it limits the performer’s ability to perform easily in keys that are remote from the open strings, and the system fell into disuse by around 1820 in favour of instruments which more closely resemble those in current use. Happily, a current surge of interest from performers and academics in this specific area of historical performance practice is rescuing much of Sperger’s work from an unjustified obscurity.

The advanced nature of the Viennese bass idiom can be assessed more generally when compared to the performance practices found in other countries during the same period in the relevant bass parts of ensemble works. It had been commonplace for the double bass to effectively double and/or simplify the violoncello line in ensemble performance. The widespread use of simplification is indicative of a lack of instrumental specialism in relation to double bass performance during this period to the extent that, as late as 1855, Berlioz was moved to write that:

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16 Mary Térey-Smith, ‘Joseph Kämpfer, a Contrabass Virtuoso from Pozsony (Bratislava)’, *Studia Musicologica Academiae Scientiarum Hungaricae*, 25 (1983), 183–89.
Double-Bass players who are lazy or who really cannot cope with such difficult parts immediately give up and concentrate on simplifying the passage.\textsuperscript{17}

From such an observation, it can be asserted that the idiosyncratic nature of Viennese bass performance practice as a refined idiom separates it from the schools of playing that had simultaneously developed elsewhere. Indeed, a distinctly different virtuosity was manifest in the works of Domenico Dragonetti (1763–1846), whose widespread travels as a soloist enabled a greater exposure to the possibilities of double bass solo and ensemble performance than those offered by the relatively isolated practices of the Viennese School.

Dragonetti’s virtuosity demonstrably manifested itself in a distinctly different way to that of the contemporaneous bassists working in Vienna. It has been widely documented that Dragonetti performed on a three-string instrument tuned in fourths,\textsuperscript{18} and it can be assumed that works written by him were intended for performance on such an instrument. The absence of frets, combined with the shifting required by the tuning system, necessarily imparts a more vocal quality in performance, and the musical material within the concerto is emblematic of this. Indeed, Dragonetti’s control of the melodic line is rumoured to have inspired Beethoven to score the famous recitatives for the basses and cellos found at the opening of the fourth movement of his Ninth Symphony.\textsuperscript{19} Considering Dragonetti’s widespread reputation, such a postulation is not unreasonable and his widespread travels are well-documented and would have alerted many composers and performers to the expressive potential of the instrument. The core musical ideas of Dragonetti’s early works nonetheless often focus on arpeggiated passages and changes of register, which tend to follow the points of the harmonic series. Additionally, key changes that closely relate to the open strings are sometimes used in much the same manner as in works for the Viennese bass. However, these works also use a much wider range of keys, a number of which would be difficult to perform in on a D-major oriented


\textsuperscript{18} An instrument (by Gasparo Da Salò c. 1590) preserved in the condition that it was in when originally donated by Dragonetti is currently on display at the Museum of the Basilica of San Marco, Venice. There is also photographic evidence in the form of an early lithograph showing Dragonetti performing with cellists Robert Lindley and Charles Lucas (c. 1843).

Viennese bass. The wide tessitura of the scalic passages that feature in many of his works (as shown in Ex. 1.1) nonetheless reflects approaches to string writing more generally during this period:

![Ex. 1.1: Dragonetti, Twelve Waltzes No. 1 (bb. 31–39)](image)

As such, Dragonetti’s work could be, in some ways, considered something of a bridge between Viennese double bass performance practice and a technique derived from other orchestral stringed instruments.

However, the application of an extended lyrical line as an expressive device became a more generalised trend throughout the Romantic period and would feature more in the solo bass repertoire with the advent of the next major virtuoso, Giovani Bottesini (1821–1889). Bottesini’s work is a product of the Italian bel canto tradition, and he himself held positions as a performer in opera orchestras in Brescia and Verona, as well as the post of musical director in Havana. His works for the solo instrument reflect such a background, employing dramatic contrasts of register, dynamics and mood. They are works that reflect the technical prowess of the composer and provide numerous, significant challenges to today’s performer. Perhaps the most frequently performed of these works is his Concerto. From the work’s opening bars (Ex. 1.2), the left hand is almost perpetually in motion, the solo line almost constantly present, accompanied by a small orchestra in which small melodic fragments are continually developed with little direct recapitulation. This discourse is very different

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20 Initially a vocal tradition but one which subsequently affected instrumental writing.
22 Generally referred to as Concerto No. 2 in B Minor.
from that of earlier concerti for the string bass and is much more in line with contemporaneous concerti for other instruments.

Ex. 1.2: Bottesini, Concerto No.2 (bb. 1–8, 1st subject)

Abrupt changes of register are employed to great dramatic effect, while the constant left-hand shifting imparts a distinctively vocal quality to the resultant line, which is devoid of the gruffness of timbre for which Dragonetti was sometimes chastised in his performances.23 The double bass as a potential candidate for lyrical writing gained some acceptance amongst other composers of the period with whom Bottesini had contact, as evidenced by the famous double bass passage in Verdi’s *Otello*, shown in Ex. 1.3.24

Ex. 1.3: Verdi, *Otello* (Act 4, opening, double bass)

23 Many contemporary press reports attest to the mellifluous qualities of Bottesini’s tone production. The Belgian citric and musicologist François Fétis wrote that ‘[he] surpassed by a long way what all other double bass concert performers have managed up until today. The heavenly sound he drew from his instrument, the incredible surety with which he overcame any arduous difficulty, his sentimental, sensitive way of singing, all made him a great performer and demonstrate in him the most complete talent one could ever imagine. Thanks to the skill with which he could draw out his harmonics in all positions, Bottesini could compete, without losing, with the most able violinists’; *Biographie universelle des musiciens et bibliographie générale de la musique* (Brussels, 1833–44)

24 Verdi in fact, had sought advice from Bottesini on how this passage should be played in an unpublished letter which recently came up for auction at Sotheby’s (20/05/2014 lot.220).
However, even considering the efforts of these few performers, their relative isolation meant that by the mid-nineteenth century a definitive school of performance practice which required a level of ability commensurate with other instruments had yet to establish itself. Perhaps the most obvious example of this isolationism is in evidence in the current widespread use of two distinct styles of bowing and bow construction: the German bow and the French bow. The former is clearly derived from earlier gamba bow construction25 and is held underhand. The latter follows the overhand pattern perfected by Tourte26 which is used by the rest of the orchestral string family. Two such established approaches to a fundamental technique is unusual in modern instrumental practice, although the fingering systems of woodwind instruments is an analogous situation, and is clearly the result of continuing stylistic preference determined by location.

Regardless of instrument, the contextual awareness of a core repertoire allows for a gradual shift in the baseline technical requirements of a performance community towards increasing refinement. Several instruments’ core repertoires are predominantly the product of performers of that instrument, notably the harp, classical guitar and organ. The double bass also belongs within this group, and perhaps the reluctance of leading composers to write extensively for these instruments is partly born of the specificity of the technique required to play them. However, the gradual development of a core technical practice became more prevalent with the advent of the publication of methods by performers and pedagogues such as Franz Simandl (1840–1912)27 and Édouard Nanny (1872–1942).28 Their appointment to conservatoire posts did much to further these developments alongside their treatises, which are still in use today. However, if one is to regard Bottesini’s development of a solo practice as the culmination of a few hundred years’ developments, then there is something of a generalised plateau in technical advancement between the periods in which he was active and the early 1960s. The first half of the twentieth century did, however, see the publication of

26 François Xavier Tourte (1747–1835), an archetier widely regarded as a crucial figure in the development of the modern bow.
several new methods for the instrument that enjoyed wider circulation than their predecessors, including those by Bille\textsuperscript{29} and Findeisen\textsuperscript{30} as well as the ones previously mentioned.

Efforts in this period by exceptional performers (notably Serge Koussevitzky and, later, Gary Karr) did little to further technical advancement per se, but instead set about refining an existing practice. Whilst Karr has commissioned and premiered several concerti by notable contemporary composers,\textsuperscript{31} these have displayed little in the way of technique creation, with much reliance on the melodic line as a core musical concern. Karr has also made several transcriptions of pieces originally intended for other instruments, and are usually somewhat \textit{cantabile} in nature. This is hardly surprising, as Karr has spoken often of the instrument as being his singing voice: ‘The instrument’s range extended three octaves lower than that of my own boyish soprano, but I came to think of it as my voice’.\textsuperscript{32} Of particular note is his transcription of Saint-Saëns \textit{The Swan}, which he performed in his 1962 televised Young Person’s Concert with Leonard Bernstein\textsuperscript{33} – but such pieces have done little to establish an idiom.

Whilst this observation may read as a criticism, it is certainly not intended as such, especially as Karr alerted contemporaneous composers to the expressive potential of the double bass and has been an invaluable part of the instrument’s progress in the twentieth century. His influence has been immeasurable, both with his founding (in 1967) of the International Society of Bassists,\textsuperscript{34} an important forum for the instrument, and in his philanthropic work with the Karr Double Bass Foundation.\textsuperscript{35} The efforts of Karr, as well as a handful of other performers, alongside the gradual establishment of a conservatoire consensus, have done much to raise the required standard for double bassists engaged in classical performance far beyond what would have been required for an audition

\textsuperscript{29} Isaia Bille, \textit{New Method for Double-Bass} (Milan: Ricordi, 1922).
\textsuperscript{31} Including concerti by Hans Werner Henze, John Downey and Gunther Schuller, among others.
\textsuperscript{33} Broadcast on CBS from Lincoln Centre on 14 April 1962.
\textsuperscript{34} Originally the International Institute for String Bass.
\textsuperscript{35} Founded in 1984 to provide instruments to those unable to afford them.
at the time of his concert debut. However, this period is also one in which significant advances in technique were made for the instrument in a different genre altogether: jazz.
Chapter 2

Jazz Bass and the Development of Pizzicato

i) Jazz

If one were to suggest that the ensemble role of a bassist in classical performance tends towards homogeneity in a section, then jazz offers a performer an arena in which to construct a definable personal sound that contributes to a group aesthetic.

Jazz has enabled the development of a virtuosic pizzicato technique to mirror the arco technique in classical performance. In jazz, particularly in its early, more mainstream idioms, the bass has a dual function: it provides a rhythmic and harmonic foundation, outlining the harmonic structure of the song form whilst generating forward momentum much in the same way that bass lines are constructed in Baroque music. In its earliest days, the bass line was generally provided by tuba, although some early pioneers such as Wellman Braud (1891–1966) and Pops Foster (1892–1969), initially doubled on tuba and double bass before moving over to the latter on a full-time basis. Branford Marsalis has asserted that Braud was one of the first to develop the walking bass line, which has since become a ubiquitous feature of the idiom, moving it away from the two-beat feel of the New Orleans style. Prior to the development of the walking line, another technique was common in addition to the two beat style, that of ‘slap’ playing. David Chevan has defined the style thus:

‘Slap’ bass, also known as ‘picked’ or ‘plucked’ bass, is a highly percussive pizzicato technique. The bassist pulls the string in such a way that it sharply snaps back on the fingerboard on the beat. This alternates with a percussive slap on the strings. The more technically adept slap-bassists can slap eighth notes, triplets, and sixteenth notes at remarkably fast tempos.

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Gradually, however, the style fell out of favour as the walking bass gained prominence as a rhythmic and harmonic device and subsequent approaches demonstrate a general trend throughout jazz’s first seventy or so years towards a greater harmonic and melodic sophistication.

Although Jimmy Blanton (1918–42) is generally considered the first major bass soloist in jazz, there were some predecessors which have also been commented on extensively by Chevan.\(^4\) Indeed, Slam Stewart (1914–87) was another important figure active in the same period as Blanton, although at this point he had yet to develop the technical fluency and harmonic inventiveness that would come to characterise his later work. However, Blanton was the first bassist to be heavily featured as a soloist, and his duo recordings\(^5\) with Duke Ellington (1899–1974) were the first commercially available piano and bass duets on record.

Duke Ellington first heard Blanton at a St Louis club in 1939 and immediately engaged him to work with his band, initially alongside the incumbent bassist Billy Taylor who allegedly quit the group in the mid-performance stating ‘I’m not going to stand up here next to that young boy playing all that bass and be embarrassed’.\(^6\) Blanton’s work was featured heavily by Ellington, particularly in a small group context. Of particular note is the recording of ‘Pitter Patter Panther’,\(^7\) which displays what is for the period an astonishing technique, one that affords an unprecedented clarity to rapid, harmonically intricate lines. Blanton was also an accomplished arco performer, the recording of ‘Body and Soul’, for example, demonstrating a remarkable fluency within the idiom. Indeed, Robert Nash notes that it displays:

\[a\] vocabulary which reflects a constant awareness of idiomatic effect: his choice of pitch, register, and articulation is always directed toward achieving maximum projection of a clear, sustained tone quality and a flexible, swinging rhythmic flow.\(^8\)

\(^4\) Ibid.
\(^7\) Ibid.
Such solo lines had never before been performed so fluently by a bassist, and his innovations are all the more remarkable considering that he died from tuberculosis at the tragically young age of 23. Blanton was to influence a generation of performers who would build on his advances, notably Ray Brown (1926–2002), who would become a central figure in many rhythm sections through the next few decades. The advent of Bebop saw further increases in harmonic and melodic complexity, resulting in the birth of a new kind of virtuosity as typified by the work of Charlie Parker (1920–55). It also saw the rise of two influential bassist-bandleaders, Oscar Pettiford (1920–60) and Charles Mingus (1922–79), who composed heavily in addition to performing. Pettiford composed several pieces which have subsequently entered the standard repertoire. His recording of ‘Tricotism’ in particular demonstrates his pizzicato fluency and security of intonation in the head (highly chromatic but centred in in D♭ major), whilst other tunes such as ‘Bohemia After Dark’ provide numerous challenges even to today’s bassists.

Although many of Mingus’s small-group pieces are considered part of the standard jazz repertoire, he is widely regarded as one of the most important figures to refine composition for larger forces within jazz, which would reach something of a culmination in the vast composition Epitaph. His bass playing, however, was considered particularly adept, and albums such as Mingus Ah Um demonstrate an advanced harmonic knowledge and ensemble awareness in addition to a strong compositional identity. There were, of course, many other figures from this period who contributed a great deal to the instrument’s development, including the aforementioned Ray Brown, Milt Hinton (1910–2000), Percy Heath (1923–2005) and George Duvivier (1920–85), to name a few.

Paul Chambers (1935–69) is another performer whose work as a soloist is widely considered as important as his ensemble playing. He, the pianist Red Garland (1923–84) and the drummer Philly Joe Jones (1923–85) became dubbed simply ‘The Rhythm Section’, on the basis of being in constant demand to serve as such for many front-line performers. Whilst Chambers’ pizzicato work is fluid

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10 Performed for the first time posthumously at Alice Tully Hall on 3 June 1989, conducted by Gunther Schuller.
and inventive, it is his arco playing, as demonstrated on albums such as *Whims of Chambers*\(^{12}\) and *Bass on Top*,\(^ {13}\) that is particularly important and represents the work of a performer with a distinctive voice. Chambers was not, of course, the first to perform arco solos – the aforementioned Slam Stewart would become a master of the style, doubling the lines by scat singing an octave above to create a distinctive timbre – but Chambers employed the technique to an advanced degree within the bop idiom.

Red Mitchell (1927–92) also performed solos with the bow, notably on *Hear Ye!*\(^{14}\) with Harold Land, but it was to be his approach to pizzicato which would prove to be influential. Mitchell has been credited with developing a highly vocal approach to his solo lines, adding inflections such as sound produced with the nails to add further colour. Mitchell was a highly respected performer not only on the jazz scene but also on the orchestral scene, particularly as a session player. He joined the MGM studio orchestra as principal bassist in 1959 and remained there until 1968.

An encounter with a Henry Mancini film score led him to explore tuning his bass in fifths, which he began doing in 1966\(^ {15}\) to enable him to reach a low C\(_1\) without the aid of an extension or a five-stringed instrument (the latter of which he had used previously). The change also demonstrated ‘the superior resonance of the bass when tuned in fifths and the improved intonation with other string instruments’.\(^ {16}\) This innovation has inspired several performers, notably Joel Quarrington and Dennis Masuzzo, to explore the tuning, and a method by Masuzzo\(^ {17}\) specifically for the tuning has since been published. Mitchell had also developed a pizzicato technique in which the index and middle finger alternate plucking the string which increases velocity and accuracy when compared to the use of either the index finger alone, or index and middle combined, as in earlier playing styles. His effect on one of his students, Scott LaFaro (1936–61), would also prove particularly important and provide a


\(^{13}\) Paul Chambers, *Bass on Top*, rec. 1957, CD, Blue Note 0946 3 93182 2 3 (2007).


catalyst which would be the source of much subsequent technical development. LaFaro took up the
double bass after stints as a clarinettist and saxophonist. He quickly progressed on the instrument and
was soon much in demand, performing and recording with such luminaries as Stan Getz and Ornette
Coleman. That he recorded with saxophonists whose approaches were very different is a testament
to LaFaro’s versatility in a supporting role as well as his imagination as a soloist.

Clark has noted that ‘LaFaro’s speed and dexterity was, at that time, unique amongst bass
players’; and the following extracts demonstrate not only his advancing technique, but also his
increasing harmonic inventiveness. The first (Ex. 2.1) is transcribed from the opening eight bars of
his solo on Pat Moran’s recording of ‘In Your Own Sweet Way’ and is atypical of LaFaro’s
approach, which later reached its peak in his work with the Bill Evans Trio. The second (Ex. 2.2) is
an extract from LaFaro’s own composition ‘Gloria’s Step’, and demonstrates a remarkably fluent
approach to phrasing and a sophisticated harmonic sense, making use of the higher registers to impart
a vocal quality to his lines.

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(2003).
20 Rowan Clark, An Analysis of the Bass Playing of Scott LaFaro as Part of the Bill Evans Trio 1959–1961
21 Pat Moran Trio, This Is Pat Moran, LP, AFLP 1875 (1958), track 2.
22 Bill Evans Trio, Sunday at the Village Vanguard, rec. 1961, CD, Original Jazz Classics OJC20 140-2 (2003),
track 1.
Ex. 2.1: Scott LaFaro, ‘In Your Own Sweet Way’ (02:32–02:47)

Ex. 2.2: Scott LaFaro, ‘Gloria’s Step’ (03.01–03.15)
Over the course of three albums recorded in the space of two years (1959–61), LaFaro revolutionised the role of the bass in jazz. His innovations are not limited to his approach to soloing, which at this point could rival that of a horn player, but in the contrapuntal methods developed by the group, which took the bass role away from strict metric performance and allowed it to engage with the piano especially in passages of counter melody. When discussing his ideas for the trio, Evans said at the time: ‘I’m hoping the trio will grow in the direction of simultaneous improvising’. It was this notion of collective interplay and responsibility that gave the trio its unique identity. Although the interconnectivity of the performers was perhaps its most distinctive feature, there was also considerable space for personal expression in more standard soloing spots. Indeed Alyn Shipton notes that:

He [LaFaro] launches into a clearly articulated solo that marks out new territory in jazz bass playing, both in terms of the high register he uses and the speed of his execution. His accuracy and his attack are both spell binding.

The fluency of his playing was in due, in part, to his approach to instrument set-up, which was atypical for the period. Red Mitchell had found the now-famous Prescott bass which would become the instrument on which LaFaro recorded his most famous work. Smaller than most examples by the maker, the low shoulders enable easy access into thumb position which is a salient feature of LaFaro’s work. The set-up itself, refined with luthier Samuel Kolstein, would enable him to expand what was possible and practical in performance. Referring to Portrait in Jazz, Pettinger observes:

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he can be heard trying out chording, a procedure made easier by the way his bass was strung; by lowering the height of the bridge, he brought the strings closer to the fingerboard than was the norm, making possible a more guitar like technique.  

Several passages on later albums feature this type of playing, notably on recordings of ‘Jade Visions’, a LaFaro composition in 9/8 (also an unusual meter for the period), in which the bass sets up a chordal ostinato as the basis of the piece. The impact of LaFaro’s work on the jazz double bass community can perhaps be assessed from Ray Brown’s observations in an interview given shortly after his death:

He wasn’t really a power bassist. He had something different going, something of his own. I got a chance to hear him at Newport only a few days before and I was really amazed by his facility, his intonation, and his ideas ... It’s going to set the instrument back 10 years. It will be that long before anyone catches up with what he was doing.

Direct comparisons to his work can be drawn in the subsequent work of the pioneer free jazz bassists including Gary Peacock (b. 1935), David Izenzon (1932–79) and Henry Grimes (1935–2020) who further developed his virtuoso pizzicato technique. Izenzon, a classically-trained bassist who had performed with the Pittsburgh Symphony Orchestra, was an exception to this rule, relying mainly on arco performance in his work with Coleman, but the contrapuntal elements associated with LaFaro’s approach are still present. However, early free jazz was still identifiably jazz in the sense that there was often a sense of metric time (albeit at times abstract, but certainly a sense of propulsion) throughout and that the main mode of performance for the bass was generally pizzicato. The next genre to be discussed has often sought to remove these elements and seek to create a music that is non-idiomatic.

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ii) Free improvisation

Whilst the constituent elements of performer style can be easily ascertained by the analysis of the performances of composed works including the wider parameters offered by jazz, how do stylistic traits manifest themselves in a genre which seeks to be non-idiomatic and devoid of trends outside of its sub-genres? Free improvisation, which for the purposes of this investigation is defined in practice as solo or group improvisation occurring in a context that has no preconceived forms or stylistic adherences, is such a context in which performer style is, in contrast to the wide-ranging and spontaneous nature of the music itself, easily identifiable. Free improvisation seeks to be a truly collective music, the course of which is guided by the collective personalities of each ensemble and the instigative and reactive tendencies of the individual within a continually evolving dialogue over the duration of each piece. As the 1960s drew to a close, a group of ‘professionally-oriented British musicians initiated an approach to playing outside the framework of the jazz and entertainment scene in London’. This gradually formed into a practice which is generally termed free improvisation. Whilst the core ideal of this practice is to seek a truly spontaneous and unrepeatable performance in each scenario in which the development of musical tropes is seen as anathema to this process, stylistic traits do nevertheless occur in each performer’s manifestations of the creative process.

Performance style in an interpretive context is relatively easy, at least superficially, to define. To give a broad example, a certain performer may display a particular flair when approaching passages of great virtuosity in a work, regardless of composer, which is exhibited with remarkable consistency. Such traits are easily identified as they relate to a traditional concept of virtuosity, hitherto defined according to the relative technical mastery required to play the works of a specific genre. However, if no structure or pre-established musical language exists and a genre is defined by a process alone, how then can virtuosity be demonstrated when a concept of repertoire cannot exist outside of recorded documentation?

When confronting the question of performer virtuosity, however, it seems prudent to examine how stylistic traits manifest themselves in situations in which improvisation forms a major part, or indeed the entirety, of the musical discourse. Whilst jazz, classical music, and many other genres have incorporated improvisation to a greater or lesser degree, the relationship to pre-established formal considerations is relatively concrete; each member of the ensemble has a pre-defined role, however fluid this may be in performance. In free improvisation, the role of the performer is not defined by their instrument’s place within historical hierarchies. The established strictures of traditional harmonic progression, linear melodic and rhythmic development, and standard formal procedures are also removed. The result is, as Derek Bailey states, that ‘the material is never fixed and its historical and systematic associations can be ignored’.35 How, then, can a style be demonstrated in a situation in which the typically pre-conceived elements of musical performance (harmony, rhythm, structure et al.) are created spontaneously then developed throughout the performance? Indeed, a music ‘where there would be no pre-structures, no self-contained and duplicable pieces, no stable meaning in the conventional sense’.36

Free improvisation depends on the construction of a personal language, the parameters of which are performer-defined. It is also, as Wright has observed, particularly difficult to quantify as a definitive entity as a result. Language or vocabulary, as Bailey asserts, is a central concept which is frequently applied to discussions concerning this genre:

The analogy with language, often used by improvising musicians in discussing their work, has a certain usefulness in illustrating the development of a common stock of material – a vocabulary.37

If one is to take Bailey’s point to mean that vocabulary in this context takes on a wider meaning than previously used, then it relates not only to a set of techniques, but to spontaneous expressive devices. Thus the nature of the vocabulary itself becomes transitory and relates to the group aesthetic as well as the individual approach. In terms of musical hermeneutics, improvisation offers a context in which

37 Bailey, Improvisation, p. 106.
a performer can be wholly individual, if it is assumed that any structural pretexts are absent. In a paper on the subject of musical semiotics, Worthen states in his abstract that:

most performers spend more time learning their instrument than in seeking an understanding of the music they play. Interpretation is often based more on what the student’s teacher dictates than in analysing different and contrasting options for performance.38

Such an observation gives credence to an easy definition of the constituent elements of style within an interpretive context in which musical character traits are definable within the boundaries of the relevant performance idiom. The construction of a language which encompasses pitch choice, rhythm, sonority and technical devices and yet seeks to create its own idiom remains broadly more difficult to define.

This concept, however, forms the end-game of the improvising musician: a personalised performance language which is clearly definable to external perception, but which offers enough flexibility to be genuinely reactive and spontaneous within any given situation. As such, the nature of an improviser’s language is essentially progressive and continually in flux but usually embodies a core set of traits which remain more or less consistent. The formation of a personal style, therefore, is an intrinsic part of the wider aesthetic concerns of improvised music which develops what George Lewis terms ‘personality’ in a musical context. This allows the specific predilections of each performer to coexist within a framework which becomes transiently idiomatic over the course of its existence. Lewis goes on to define an essential concern for the improvising musician thus:

Part of telling your own story is developing your own ‘sound’. An Afrological notion of an improviser’s ‘sound’ may be seen as analogous to the Eurological concept of compositional ‘style’, especially in a musically semiotic sense. Moreover, for an improviser working in Afrological forms, ‘sound’, sensibility, personality, and intelligence cannot be separated from an improviser’s phenomenal (as distinct from formal) definition of music.39

Jazz and improvisation, therefore, offer a situation in which an individualistic approach to an instrument can be integrated with others to form a cohesive group identity. This is particularly true of free improvisation in which there are no pre-established roles. This has resulted in some performers developing a highly specific performance rhetoric, but one that is usually adaptable enough to genuinely engage with other participants. Regardless of the group context, the individual musical personality of each performer will alter the reactive trends of the other players and, therefore, the overall discourse of the resulting music. Bailey, when observing the nature of language within the group situation stipulates that:

With a successful improvising group the bulk of their material will initially be provided by the styles, techniques and habits of the musicians involved. This vocabulary will then be developed by the musicians individually, in work and research away from the group, and collectively in performance.\(^{40}\)

The scope of some of these developments has been vast, in some cases, and many of free improvisation’s early pioneers have, or went on to, become some of the leading virtuosi of their respective instruments and have constructed a set of technical parameters far beyond the reach of many of their contemporaries and, indeed, of subsequent performers. The creation of an expanded technical palette is due in part to the need to solve the inherent problems of collective spontaneous musical communication, in combination with the desire to expand the communicative boundaries beyond familiar formal musical structures and gestures.

However, in spite of the open landscape that these circumstances afford, it is interesting to note that whilst a performer’s style may be assumed to be more changeable depending on the situation according to a revolving succession of personnel, the stylistic traits of the performer remain remarkably consistent. Indeed, David Borgo has noted that ‘for some, one’s approach to energy, virtuosity, and stylistic inclusion or exclusion can define quite clearly one’s idiomatic allegiances’.\(^{41}\) In other genres, the perceived nature of virtuosity has also undergone much revision as the technical demands placed on performers have increased alongside the continued expansion of performance and

\(^{40}\) Bailey, *Improvisation*, p. 106.

compositional doctrine, and its definition within the broadening scope of contemporary music has altered somewhat.

Håkon Thelin has examined the changing nature of virtuosity and defines it within a contemporary context thus:

It is within the communication of values and meaning, in the presentation of musical sound, that the modern musician articulates his ‘virtuosity of knowledge’. The composer Luciano Berio used this extended concept of virtuosity to summarize his view on musician and instrument.42

Central to this concept is the expansion of the scope not only of technical possibilities but of the entire register of musical expression through a kind of intellectual virtuosity that constantly reflects and challenges the idiom of the individual instruments, their technical capacity, and the historical roots of that idiom. There are numerous examples of extra-musical concepts being central to the compositional methodology of certain pieces where even a basic understanding of such principles is required by the performer for an effective performance. I am sympathetic to this perception of virtuosity, particularly as it refers to an expansion of scope, although I also have some reservations which will be discussed in further detail later.

In essence, virtuosity and style can, traditionally, be easily defined in a context in which the interpretive process is delineated according to the formal procedures of a specific composed work. However, this is still closely linked with a notion of repertoire and its defined areas of expression. Borgo asks the question ‘do our standard conservatory conceptions of virtuosity provide an accurate measure of a musician’s improvisational skills?’43 As free improvisation is drawn from an incredibly wide and theoretically endless set of musical heritages, the question is a potentially thorny one. Edwin Prévost has stated that ‘the instrumental techniques of the western classical musician are of as little use to those improvising within a collective framework as western classic philosophy’.44 Such a

view is markedly different to the working practices of improvisers of the same generation, such as Bailey, Evan Parker, Paul Rutherford, Tony Oxley and Barry Guy (to name a few),\(^45\) whose vast instrumental developments are based on a traditional training which has been retained and built upon, rather than discarded.

Simon Fell has noted that discussions surrounding free improvisation tend to delineate its approaches into two primary categories which Evan Parker termed ‘laminar’ and ‘atomistic’.\(^46\) Fell goes on to propose two additional terms for further categorisation: ‘somatic’ and associative’.\(^47\) Fell defines improvisers concerned with the somatic approach as displaying:

> [an] inextricable connection with the exploration of instrumental technique. Somatic improvisers (especially of the earlier generations) are usually highly accomplished technicians on their instrument (or voice) and may have extensive experience of high-level music-making in more conventional idiomatic situations; they often remain associated with only one instrument (or instrumental family) and derive a great deal of their inspiration and motivation from the physical act of playing their instrument.\(^48\)

He goes on to define associative approaches in line with those posited by David Toop as ‘deconditioning: forget musicality and training’,\(^49\) and notes its links with experimental composition. What does link these two very different practices (as noted by both Bailey and Prévost),\(^50\) however, is that the approach to technique is governed and developed by context. Borgo also notes that:

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\(^{45}\) Often referred to as members of the ‘first generation’ of British improvisers.

\(^{46}\) This terminology was first proposed by Parker in a lecture given in 1980 at the Actual Music Festival, ICA, London. Clive Bell has reproduced a section of that lecture here: <https://www.variant.org.uk/8texts/Clive_Bell.html> [accessed 21/02/2019]


\(^{48}\) Ibid.


\(^{50}\) Prévost, *No Sound Is Innocent*, p. 19.
even if most overt idiomatic qualities are consciously avoided by the performers, free improvisers still incorporate and experiment with the accepted tools of artistic expression: stability, interruption, repetition, contrast and so on.\(^{51}\)

Regarding an extended definition of virtuosity in relation to improvisation, Nick Couldry has suggested the notions of ‘a virtuosity in finding’ and an ‘intensity of application’.\(^{52}\) These are particularly useful terms, as improvisation is concerned more generally with the expansion of musical devices so that a ‘virtuosity in finding’ and its related sounds and techniques are of equal importance to (or, where appropriate, replace altogether) more conventional technical concerns. Virtuosity in improvisation, therefore, becomes a more fluid concept than would be appropriate for more traditional idiomatic approaches or reportorial interpretation; it becomes defined by performer and context in context.

As this thesis explores technique and the formation of idiom within the aesthetic notions of virtuosity in the context of improvisation that broadly uses the somatic approach as termed by Fell, then virtuosity relates to the velocity, diversity and articulation of instigation and response within a group context, as well as traditional concepts of technical mastery. Within these parameters, the question of technique not only becomes an instrument-specific concern but is informed and governed by the interactive environment and extends to the nature of a performer’s preferences within each context. These interactive processes rely on the entirety of a performer’s musical personality in all its facets (rather than mere technical prowess) to provide coherence to an unstable musical environment.

When discussing four performers within Bailey’s immediate circle of musicians, John Litweiler notes that, although they were highly accomplished, virtuoso instrumentalists, this in itself ‘is not really necessary for free improvisation.’\(^{53}\) Litweiler goes on to make an extremely important point: ‘What is important is their sense of musical freedom.’\(^{54}\) It is this element that links the somatic and associative

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\(^{54}\) Ibid.
approaches as defined by Fell; in a somatic approach, technical mastery and an expanded vocabulary serve as methods for enhancing communicative fluency. Were this to be considered within Thelin’s perception of scope, as well as Couldry’s assertions, the communicative process itself, and the manner in which it is revealed in the performance of free improvisation, forms the basis of a more holistic notion of virtuosity.

To briefly return to Lewis’s point, the concept of your own sound is, of course, vast and can include reactionary as well as progressive trends. In the following chapter, I shall examine the work of a performer who has forged a strong, highly idiomatic progressive musical identity by using improvisation and composition to present an expanded technical palette as a central facet of a musical language, and the circumstances in which such an identity has influenced and altered the compositional procedures of a composer contemporaneous with him.
Chapter 3

Barry Guy

i) Introduction

Barry Guy (b. 1947) is a double bassist and composer who has worked simultaneously within the mediums of free improvisation, composition, period performance and contemporary classical music, whilst making significant technical advances in each of these areas.

Born in Blackheath, London, Guy initially played a variety of brass instruments before switching to double bass as a teenager, with his initial performance experience being predominantly with Dixieland groups before progressing to more advanced jazz styles.1 After a period spent working in an architect’s office whilst attending evening classes in composition at Goldsmiths College, Guy enrolled at the Guildhall School of Music to study double bass formally, under the tutelage of James Merrett. Encountering scores such as Penderecki’s *Threnody to the Victims of Hiroshima* (1960) had already alerted Guy to the possibilities of extended instrumental notation, and resulted in a composition, *Perceptions*, for nonet. The piece had ‘a cadenza for alto saxophone and trombone’2 and the sourcing of suitable performers for which led to his meeting trombonist Paul Rutherford and saxophonist Trevor Watts, the starting point for his initial forays into the fledgling British free improvisation scene.

Guy soon found himself playing with groups that sought to move the improvisational aesthetic of their music away from the protocols of jazz’s harmonic and rhythmic formulae. Guy himself notes that:

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I became aware that the ‘senior’ British musicians … were very much relating to the American Bebop/Modern Jazz model. My observations and criticisms resided in the unimaginative way that the material was based upon what I thought were very simple song form structures.\(^3\)

However, his concurrent involvement as a performer in the rapidly developing early music scene\(^4\) also provided a firm grounding in the performance practice of its relevant styles. The harmonic language of the Renaissance and Baroque periods is also an influence which can be felt in many of his composed works and will be discussed in further detail later. He was also involved to a lesser degree in more standard orchestral contexts, including taking part in a performance of Messiaen’s *Chronochromie* (1960) at the BBC Proms.\(^5\) His early experiences with symphonic groups were somewhat negative: he was even ‘told off for showing too much enthusiasm’\(^6\) at a rehearsal with the BBC Symphony Orchestra. Subsequently, much of Guy’s work in the classical world would focus on early and contemporary chamber music and situations in which creativity would be a central facet, and he rose to become a highly in-demand performer.\(^8\) These activities continued until 1992, at which point a move to Cambridge from London was prompted by Guy’s perceived commercialization of early music\(^9\) and a desire to increase his focus on composition. Such training and professional experience imparted a solid technical grounding which, combined with an enquiring mind, proved to be an effective vehicle to explore more experimental forms of music making.

One of the distinctive features of early British free improvisation was the expansion of wider musical and instrument-specific technical concerns within a context that sought to defy idiom and collectively rationalize the diverse musical backgrounds of each performer. Guy’s experiences with other improvisers who had done much to expand the technical boundaries of their respective

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\(^4\) His earliest recording with such a group dates from 1974 (see below).

\(^5\) Royal Albert Hall, 3 September 1968, BBC Symphony Orchestra, cond. Boulez


\(^7\) Guy also had much involvement in this period with the activities of the SPNM.

\(^8\) Guy’s website lists 28 recordings with the Academy of Ancient Music alone. When one considers that these include symphony cycles of Mozart (complete) and Haydn (roughly two-thirds complete), and the fact he held principal bass positions with at least four other groups, this is impressive indeed. Barry Guy discography: <http://www.mayarecordings.com/disco/mgory/barry_disc/index.html> [accessed 7 March 2019]

instruments (such as Rutherford and saxophonist Evan Parker) had been influential in provoking his desire to further his own development as an instrumentalist:

When you have no notes in front of you, and you are trying to answer what someone else has played on a different instrument, you are led to try something you might never have thought of, without the impulsion and excitement of the moment.¹⁰

Thus, in groups such as John Stevens’s Spontaneous Music Ensemble (a group which employed a range of performers in a constantly fluctuating line up), the Howard Riley Trio and Iskra 1903, Guy began to expand the technical parameters of his instrument within the context of solo and ensemble performances.

His initial forays into more open forms of improvisation with groups such as the Bob Downs Open Music Ensemble¹¹ took place within an idiom that remained identifiably jazz, or, at least, a multi-referential music whose primary influence was jazz. However, his subsequent work with the Howard Riley Trio¹² and Iskra 1903¹³ (with Rutherford and guitarist Derek Bailey – later replaced by violinist Philipp Wachsmann) demonstrates an advanced technical command which is integrated into a group concept of interplay.

Riley’s trio in particular demonstrated a rapid change in aesthetics throughout its existence, moving from an idiom which, in its early incarnation, bore many of the trademarks of established jazz performance albeit extremely advanced. This quickly progressed towards a more oblique musical language which Roger Sutherland describes as displaying ‘a more convincing fusion of jazz and avant-garde perspectives.’ Guy’s conception of the double bass’s role within the group was central to its collective development which led to ‘a more abstract style characterized by long silences and subtle tone-colour contrasts ... through Guy’s use of amplification and pedal, the group was able to exploit an increasingly varied sound spectrum.’¹⁴

Guy’s recordings with Iskra 1903 (particularly when compared to his later work more generally) show what could be termed a pointillist\(^{15}\) approach to his role within the group, coaxing a wide range of sounds from the bass with a relatively orthodox set of techniques. His methods of spontaneously preparing the instrument (which have since become an integral part of his performance language) seem not to have featured as a major facet of his technical arsenal at this point. Such an approach may have been due to his involvement with the various groups organised by John Stevens, such as the SME.\(^{16}\) Trevor Watts noted that what Stevens ‘wanted us to attempt was that very pointillist style, not linear, but still rhythmic in its own way, and still very much a music of response and space’.\(^{17}\) Save for isolated outbursts, Guy is also seemingly not concerned with velocity or other traditional notions of virtuosity as a salient stylistic feature in the context of this group’s improvisations. Statements II,\(^{18}\) Guy’s 1972 composition for solo bass, does require considerable virtuosity in its execution, however, so it was certainly a wider musical concern. Reviewing a concert by the Howard Riley Trio given at the Purcell Room, London on June 11th 1972, Martin Davidson observed that:

> The first thing one notices about Barry Guy is his phenomenal technique – both conventional and unconventional – but one soon comes to realize that it is used to create music (rather than vice versa).\(^{19}\)

This observation would suggest that Guy’s myriad developments were already progressing towards a composite form in line with Thelin’s definition of contemporary virtuosity.\(^{20}\) As Guy’s first solo recording, Statements V–XI for Double Bass and Violone (1976)\(^{21}\) presents a situation in which traditional virtuosic technique displays a broadly linear progression combined with a much expanded palette of sound production methods, this would appear to be the case. Technique, then, and the


\(^{16}\) The SME, or Spontaneous Music Ensemble, was a group organised by Stevens which featured a widely fluctuating group of performers. Much recorded documentation of the group exists on labels such as Emanem.

\(^{17}\) Barre, *Beyond Jazz*, p. 95.


situations in which it is applied, does appear to be a core concern, and his improvised recordings from this period (1966–72) demonstrate a language which is flexible enough to be adaptable, but nonetheless easily identifiable. His continuity of musical language in performance is also mirrored in his compositional approach when it directly concerns the double bass. Early innovations, such as the use of foot-controlled amplification as a method to give greater definition to quieter sounds, or to selectively amplify elements within a particularly dense texture, is here refined to a point where its use is fully integrated as part of Guy’s improvised language (discussed in further detail later). This process is mirrored in the development of composed works for the instrument and reaches something of a summation in the double bass concerto *Eos* (1977),

This combination of traditional and extended concepts of virtuosity acting as a core musical concern would be developed further and clearly demonstrated in the later solo recording *Assist* (1986),


The recording also demonstrates a greater incidence of melodic content and traditional harmonic structure than were present in earlier recordings. After *Fizzles*, there is a marked shift towards an increasingly abstract language in Guy’s double bass performance, which is concurrent with his decision to withdraw from regular orchestral performance and focus solely on creative projects.

Although Guy’s accomplishments as performer and composer are extensive and still ongoing, it is within this early period (1966–72) that his rate of development was particularly rapid. This resulted in the formation of a set of technical parameters and operational objectives that remain the basis of his praxis to this day. Closer examination of Guy’s work reveals the clear emergence of a consistent and distinctive musical language which betrays a remarkable stylistic consistency in various contexts. Whilst defining a musical personality according to a list of observed and highly subjective traits is, perhaps, an over-simplified method of demonstrating the nature and manifestation of style, it is nonetheless effective in offering an insight into a more generalised perception of such

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stylistic traits as they appear to others; particularly in Guy’s approach to double bass performance and its dissemination within composed works.

Guy’s style is perhaps best observed as the result of a process in which an expansive, progressive musical vision, in combination with a keen historical awareness, is distilled into an aphoristic musical discourse in performance and composition. A multiplicity of stylistic references cumulatively transcend their initial contexts and develop into a singular expressive voice, in which typically conflicting musical materials can coexist and retain a communicative immediacy. These stylistic elements are discussed below.

ii) Instrumental technique

Virtuosity

Whilst virtuosity may not necessarily be defined as a stylistic element when applied to solely interpretative contexts, the obviation of pre-conceived structural devices and other traditional musical features within free improvisation does present a strong argument for the consideration of virtuosity as a definable stylistic trait in its performers. As such, virtuosity when discussed subsequently will refer not only to its traditional usage in referring to technical mastery but also to Thelin’s notion of extended scope in an extra musical sense.25

Guy’s technical command on a purely objective level is continually evident in performance, demonstrating a rapidity of exchange not only between performers in a dialogue, but within the sheer diversity of techniques that are used to convey a single musical idea. The range of techniques he often includes in any improvised performance is vast, and he will often utilize the entire expressive range of the instrument. This distinctive feature is central, in fact, to the formation of his performance rhetoric as an instrumentalist.

Many of these techniques are not unique to, or created by, Guy, but his use of an extended technical palette as a primary facet of instrumental language is a distinctive trait. A single phrase may

encompass several techniques interchangeably or in combination in order to further a musical argument. The notion of extended scope is of particular interest here, as Guy makes a vast range of musical choices in performance, ranging from gentle, lyrical content to extremely violent and abstract sonorities devised through a range of unconventional means. The range of techniques which Guy frequently employs in improvisation include:

**Arco**

**Standard**

All forms, including a wide range of *sul tastosul ponticello* and behind the bridge placements and bow pressures.

**Extended**


**Col legno**

**Standard**

All forms, including a wide range of *tastopont* and behind the bridge placements and attacks and articulations.

**Extended**

*Battuto* with bow tip, bow screw pizzicato, bow screw glissando, bow wood glissando, bow screw rattling, bow wood buzzing, *battuto* with bow screw (all parts of the instrument).

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26 In each case the list is not exhaustive but demonstrative of the most commonly used techniques.
**Pizzicato**

**Standard**

All forms (orchestral, jazz, Bartók, left hand) over the entire instrument.

**Extended**

Pizzicato harmonics, multiple finger pizzicato, *mandolino* pizzicato, slap pizzicato, pizzicato with other objects (i.e. various plectra), pizzicato bitones, nail pizzicato, nail scrape, *sul ponticello* pizzicato, guitar style pizzicato, palm mute pizzicato, thumb pizzicato, rubbed sounds, behind the bridge, above the nut, flicked pizzicato, simultaneous bitone/natural pitch production, pizzicato of various instrument body parts.

**Miscellaneous**

**Left hand**

In addition to frequent left-hand pizzicato, a variety of left hand finger pressures are also used.

**Percussive techniques involving**

Hammer-ons (both hands), pull-offs, striking strings (all parts of hand)

**Sounds produced on instrument body**

All forms of percussive and legato (with bow hair/wood sounds) including use of: main body, neck, tailpiece, bridge, spike and scroll.

**External percussive generators**

Typically percussion beaters including: standard drum sticks, timpani beaters of various weights, and brushes. (Some sticks have striations carved in them to produce a variety of *col legno tratto* effects.)
There are also certain techniques employed by Guy that have entered into more or less standard practice in contemporary performance but are not defined as such within his own work. Most commonly these are multiphonics, which are often produced as a side effect of varying finger and bow pressures, or by using non-standard\textsuperscript{27} harmonic node points in pizzicato or arco performance and whose sound quality is defined\textsuperscript{28} but not as rigorously as one would find in the work of Jean Pierre Robert\textsuperscript{29} or Mark Dresser,\textsuperscript{30} to give two examples.

**Amplification**

Amplification is not used by Guy simply as a method of increasing volume but, rather, selectively to enhance certain sonorities. This selective use is highly refined and central to his expansion both of technique and development of the instrument’s role in a solo and ensemble context. It affords greater clarity to some extended techniques by increasing their volume but also amplifies sympathetic resonances so that they may act as a focal point in a musical argument. Occasionally, however, the amplifier is also used in other ways, mainly to: colour already sustaining sounds (such as in the opening of *Statements II*); increase the sustaining potential of vibrating pitches; intensify harsher sounds and to provide a rhythmic emphasis to sustaining pitches. The amplifier and volume pedal function within Guy’s set-up as a perfectly integrated primary element and not as a secondary concern could be viewed in conjunction as an early form of hyper-instrument,\textsuperscript{31} such is the nature of its usage.

Guy’s approach to these techniques will discussed in further detail in the subsequent chapter which details Guy’s works for solo bass.

\textsuperscript{27} Namely nodes found on quarter tones and smaller intervals.
\textsuperscript{28} See section on *Anna*, chapter 4.
\textsuperscript{30} Mark Dresser, *Guts*, CD/DVD, Kadima Collective KCR Triptych 1 (2010).
iii) Musical choices

Tessitura

Guy utilises the entire available range of the instrument with remarkable fluency. Natural harmonics are often played in a variety of ways and used as *lascia vibrare* textural device to enable contrapuntal lines. Artificial harmonics are also used extensively to extend the range further upwards. His use of scordatura to lower the pitch of (mainly) the E string also provides an expansion of range, though such scordatura is rarely documented on recordings. His use of the upper registers of the bass in particular offers a ‘singing’ timbre and gives textural clarity to melodic lines which lower octaves preclude. This preoccupation with expanding the tessitura upwards has been a general concern within double bass performance practice[^32]; Guy’s later use of a chamber bass[^33] takes it much further.

Linear tendencies

Certain predilections occur in the construction of melodic material:

- Extremely fast phrases which cover the entire range of the instrument;
- Expressive *sostenuto* pizzicato (particularly as a melodic device);
- Violent outbursts of percussive textures using either the bow, hands or external generators;
- Rapid changes of dynamic, timbre and texture which will often favour the extremes in many cases;
- Rapid interchange between elongated lines and single, often violently articulated statements;
- Dissonance (often extreme) is starkly contrasted with consonant melodic content[^34].

[^32]: Compare, for example, the nature and extent of thumb position writing in Dragonetti’s work versus those of Bottesini. Much of this has to do with the potential offered by developments in instrument and string construction, as discussed earlier.

[^33]: Essentially a half-sized double bass tuned a fourth higher. Guy’s main instrument for this purpose was a G. F Lott chamber bass (1846) now owned by Wilbert De Joode.

[^34]: The closing sections of *Anna* (1974) and the melodic content of pieces such as *Flagwalk* (1974) and *After the Rain* (1992) are strong examples of this tendency.
Harmonic language

A consistent harmonic language is a common feature in all of Guy’s works which are written for himself and in improvised performances. Within the harmonic language that Guy utilises as an instrumentalist there is a strong preference for intervallic relationships which are primarily dissonant in nature: minor seconds, tritones and major sevenths being the most common. Microtones are also a recurring feature of his bass writing, as are the aforementioned use of natural harmonics to give a wider span within chords, particularly those that utilise dissonant intervals, notably the minor second. Other pitches and textures often arise as a side effect of Guy’s preparation techniques and are subject to a greater degree of indeterminacy than found elsewhere. Chords constructed of natural harmonics (chords of perfect fourths in particular) are frequently used and other common chords include trichords played in thumb position, whose intervallic relationship to the lowest pitch (0) are: \{0,6,7\}, \{0,6,11\} and \{0,7,11\}. Specific keys are occasionally referenced, and throughout Fizzles there are several pieces which have a general key centre of G minor.

Polyphony

Perhaps the strongest feature of Guy’s work as a bassist is his expansion of the polyphonic range of the instrument. There is often a tendency towards dense polyphonic playing, which may include more than one musical subject in one or both hands. When such material is played by the left hand in conjunction with other techniques such as bow screw rattling, an extraordinarily dense texture of interwoven lines can be achieved. Other methods of producing a polyphonic texture include the commencement of a new phrase underneath an already sustaining pitch or pitches, such as in the previously discussed use of harmonics.

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35 This is a common feature of the bass music which Guy composes for himself. The absence, or least the reduced frequency, of such material when Guy writes for other performers is discussed below.
36 The bass piece Still (a semi-improvised work which appears on disc and in various concerts as evidenced by recital programmes and video recordings) is a notable example, with a recurring phrase centred in G minor which is found in several of the pizzicato improvisations on the disc. A recording of the piece can be found on Fizzles (track 8), whilst the motif features in several other pizzicato improvisations on the album, notably Hili-bili Meets...The Brush (track 3).
37 See Statements II, Letter O.
On a purely visual level, Guy is an extremely theatrical performer. This is in evidence in his interpretation of composed works, but perhaps even more so in improvised performance. When in recital, Guy himself has noted that he often ‘tend(s) to build up the theatrical situation more than other players, requesting lighting and props’, whilst improvised performances reveal Guy to be an extremely energetic, almost aggressive performer. Theatricality in a purely musical (rather than musical theatre) sense can have many connotations and manifestations in the performance of the music of others, but typically refers to the physical and gestural elements associated with instrumental performance. ‘High-energy’ is a term often applied to musical performances, and the visual aspect of Guy’s performances would certainly fall within this categorisation. It could be argued that the energy Guy manages to create as a performer is central to his style and also key to the execution of some of his more elaborate extended techniques. Guy has spoken about how the perceived limitations of the instrument are often due to its physical characteristics, and that such problems can be at least partially alleviated if ‘you could imagine the cumbersome double bass as tiny as a grain of sand’. This psychological perception of the altered physical dimensions of the instrument does make sense when one considers not only the level of activity Guy generates when traversing the instrument at high speed but the often unexpected means by which Guy elicits abstract textures and sounds.

The sense of musical inclusivity that such a broad technical and musical language suggests is not solely a feature of his performance, but is also manifest in his composed works in all genres. Guy’s diverse training, both formal and non-formal, is perhaps the most obvious source of such a musical persona. Each of his composed works is governed by its own mandate and will often make use of traditional musical forms alongside much more contemporary ones whilst constantly seeking a generalised progressivity. Guy has often discussed his intuitive rather than doctrinaire qualities as a

40 Here I refer to not only Guy’s concert works (published predominantly by Novello) but the series of pieces he has composed for the London Jazz Composers Orchestra, which include a wide range of stylistic references. Ode (1972), for example, is certainly polystylistic in its remit. See: Barry Guy, The London Jazz Composers [sic] Orchestra, Ode, rec. 1972, CD, Intakt CD 041 (1996).
composer and has mentioned on more than one occasion that ‘each piece feels like reinventing the wheel’. Guy’s methods of approaching these circumstances, as demonstrated by his formation of a strongly individual style as a performer, has produced a catalogue of strikingly original music by including some of these facets within his composed work.

iv) Compositional Technique

Guy’s earliest works betray a fascination with the inclusion, or at least coexistence, of improvisation within a composed form or forms, which allows for varying degrees of freedom in interpretation and in performance. His use of established and more evolutionary contemporary performance practices would, perhaps, lead one to assume that his compositional doctrine would be placed firmly in the modernist camp. However, his preoccupation with Baroque music has been a significant influence, and its features can be observed in many of his works. Whilst the assumption drawn from this observation might be that his work would follow a more established postmodern approach, Guy’s music is rarely explicitly referential, tending instead to be more allusive, rarely making use of direct quotation.

When such references are used, however, they always coexist within a much more contemporary sound-world, are fully integrated into the overarching musical identity of the works and seek to expand technical possibilities, even when writing for period instruments. The inclusion of older forms and overtly melodic material alongside more contemporary and abstract ideas provides an

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42 I make a distinction here between inclusion and coexistence. In earlier works such as *Statements II* (1972) and *Anna* (1974) the material is predominantly composed but includes passages that are essentially improvised. In works such as *Folio* (2002) and *Time Passing* (2012) there is little specifically notated material for the soloist, who predominantly improvises throughout the proceedings and coexists with the formal constructs of the work rather than becoming specifically integrated within them.
43 *Perceptions*, 1966 (withdrawn).
44 *After The Rain* (1992), for example, uses older forms, the antiphon, chanson, motet and chorale specifically.
45 There are examples of direct quotation however, notably in the closing passage of *Voyages of the Moon*, which quotes material from Purcell’s *Dido and Aeneas*, and *Folio*, which uses a quotation from Diego Ortiz.
aural situation which is familiar but manages to remain ambiguous. Indeed, a quality inherent in much of Guy’s music is that it avoids obvious platitudes and seems to express a desire to communicate on an emotional level. It is interesting to note that Guy considered the sense of discovery he found in early music to be as interesting and diverse as improvised music or contemporary composition. Referring to that period (the early 1970s), he stated that:

New ideas were flowering, the music had a completely different feel to it. It was mind-boggling, a bit like being a detective: buying old instruments, finding out how to get the best out of them, trying different bows, different ways of articulation. I was as excited about that as about working with contemporary music.  

Such a comment marks out a unifying element within in an extremely diverse career. This diversity feeds not only into the resultant musical landscape of any given work but also into the range of its starting points, musical or otherwise, as sources of inspiration. Guy has frequently turned to visuals as a source of inspiration, notably Max Ernst (1891–1976) and Alan Davie (1920–2014), for works such as Flagwalk (1974), Voyages of the Moon (1983), The Eye of Silence (1988) and After the Rain (1992). Architecture is also, perhaps, a more obvious point of inspiration when considering his early training, but the mathematical processes associated with previous combinations of the two disciplines by composers such as Xenakis are, for the most part, absent. Fallingwater (1996) takes its inspiration from the house designed in 1935 by Frank Lloyd Wright, as well as including musical material based on ratios derived from the golden section. The work never uses these elements strictly as structural components and the music is predominantly reflective of these inspirations. Indeed, in the case of Fallingwater, Guy’s primary desire was to

present a kaleidoscopic piece articulating the solidity of the unified ensemble (concrete and wood) with a calculated freedom in the manner in which some of the music is executed (water and trees).

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48 Guy’s The Eye of Silence (1988) and After the Rain (1992) take their titles from paintings by Ernst.
49 Flagwalk (1974) and Bird Gong Game (1991) take their titles from paintings by Davie.
50 From a painting by Paul Nash (1889–1946).
Guy seems not, then, to be a predominantly conceptual composer. The taking of primary inspiration from visual images or literature serves to enhance his music’s communicative powers, allowing it to elicit a direct emotional response from the listener who possesses no prior education in the subject matter. Compare how strongly such an approach contrasts with the processes of a composer such as Ferneyhough, in whose music compositional procedure can be as important a part of the entire musical concept as the aural result. In essence, Guy’s approach as a composer appears to have remained much as he described it in 1978: as ‘emotional and intuitive’. Thus, the resultant music displays a flair for dramatic devices which aim to further a sense of inclusivity.

When discussing Anna (1974), Miller observed the salient features of Guy’s compositional aesthetic as it related to his practices within improvisation:

The theatrical gesture, as also the interactions of the later works, displays the tendency towards dramatic interplay with textures, a predilection which stems from intense experience of jazz ensembles, and the challenge of combining improvisatory solos within a strict form.

The element of theatre and the freedom offered by controlled improvisational elements in the above work bears a remarkable, if inevitable, similarity between the (admittedly sometimes oblique) linearity displayed in Guy’s improvised music and the structural devices he uses to advance musical progress within a composed work. Development is often centred on the gradual expansion of motifs, which are subjected to various degrees of transformative processes before establishing themselves as a new musical area which is then, in turn, subjected to the same processes. Occasionally, Guy will employ a more established historical idiom (such as the Baroque dance forms found in After The Rain and the frequent use of canons in various works), but the primary formal construct in the majority of his works uses a transformative process as the main technique for developing musical ideas. Such a process gives the work a simultaneous sense of being organic and communicative to the listener.

52 MacSweeney, ‘Barry Guy’, p. 315.
53 Barry Guy, Anna (London: Novello, 1974).
54 Miller, ‘Barry Guy’, p. 111.
Guy has composed primarily for performers with whom he has a direct connection, often assimilating aspects of their style into the compositional fabric of works written for them. However, his overall compositional style, as with his performance language, remains consistent from one work to the next. This is a salient feature of his work with the London Jazz Composers’ Orchestra, a group for whom he has described the act of composition as the construction of a ‘social framework’, and for whom he continues to act as artistic director and primary composer. An approach to composition in this way has produced a series of extended works which finely balance structure and strictly notated material with the use of improvisation as a primary structural element in which the traits of particular players are used to advance the work’s structural and musical ideas. These elements are to be found in all of his works for the group, but most extensively in Portraits (1993), a suite in which Guy attempts to set sections of music which reflect the interests of each individual within the ensemble whilst remaining cohesive as a whole.

The inclusion of performer proclivities are also present in many of his concert works, including Circular (1984) for oboe solo, written for the oboist Robin Canter, who ‘wanted something different from the work of Heinz Holliger, with whom he had studied’, and the piece is strongly indicative of the compositional methodology which Guy clearly prefers.

Guy’s distinctive voice as a composer prevails in all of his works. Each displays a consistency of musical language that mirrors his activities as a performer; in particular, his notion of an expanded technical repertoire as the central feature of an inclusive musical rhetoric. However, whilst extended technique does feature to greater or lesser degrees in all of his composed works, his own expanded instrumental vocabulary has featured less in works that include a part for double bass which is not intended for himself as the performer. Inclusivity and communication remain the

primary musical concerns, exemplified by the manner in which he orders the parameters of his musical material for the ensemble in question.

Whilst there is a strong stylistic continuity in the material from which Guy derives the double bass music composed for himself, there is never a sense that Guy’s instrument-specific philosophy is in any way doctrinaire.60 This point is further strengthened when one examines Guy’s bass music which when written for himself, displays consistent musical choices; double bass music for other performers tends to be much more traditional in its scope. Eos (1977),61 for example, uses an expanded technical palette for the soloist which shows a linear progression of techniques included in the earlier solo or concertante works, in addition to the inclusion of a new electronic device.62 However, the ensemble bass parts are relatively traditional and employ no more than a mere handful of extended techniques that were relatively standard practice in contemporary music at the time. It is perhaps Guy’s extensive involvement in the performance world which has allowed him to accurately gauge the reticence of performers in more traditional ensembles towards the inclusion of extended techniques and advanced notations within pieces. As such, orchestral works written for more traditionally oriented ensembles display a marked tendency to be more traditional in their ambit, at least on a purely technical level, than works written specifically for new music specialists.63

However, it is the works that are composed for himself as performer which will be examined here, in order to determine the extent to which his musical personality dominates or alters the composition, and the rationale by which his performance language forms the basis of the resultant discourse. Interestingly, whilst Guy has composed, to date, four concerti for double bass and orchestra in which the solo part is notated,64 the bulk of Guy’s technical advances can be found in the solo piece Statements II (1972). The soloist’s material from Anna (1974) and Eos (1977) draws from,

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60 This anti-dogmatic flexibility continues to almost the present day. Anaklasis (2003), written for himself and the late virtuoso Stefano Scodanibbio, seeks to encapsulate their very different styles within a graphic score.
63 Statements II-EX (London: Novello, 1979), written for the London Sinfonietta, for example, uses a greatly extended technical palette for the entire ensemble.
64 Folio (2002) is discounted for the purposes of this chapter, as the solo bass part is predominantly improvised.
and expands, an almost identical technical and thematic palette, whilst *Voyages of The Moon* (1983) and *Statements II-EX* (1979) simply use *Statements II* as the material of the solo part and compose the ensemble material around it.65

It seems prudent therefore to examine the soloist’s material in both of these early concerti alongside the analysis of *Statements II* so that a clearer sense of Guy’s musical style, and therefore praxis, can be established. Three composed works from a six-year period will be examined: *Statements II* (1972) for solo double bass, *Anna* (1974) for solo double bass and orchestra and *Eos* (1977) for solo double bass and orchestra. The analysis of these works will focus on the identification of the observed stylistic traits as discussed above as:

- Expanded technical repertoire as a central feature of performance language;
- Harmonic language: dissonant intervals as the primary harmonic material alongside more traditionally oriented melodic/harmonic content;
- Virtuosity: polyphony, velocity and density;
- Compositional technique: devices used to advance development and freedom of interpretation/inclusivity/communicative aspects.

65 In both works, the solo part is, quite literally, *Statements II*. Structurally, the solo work remains intact but periods of orchestral material are included between certain sections.
Chapter 4

Barry Guy: Bass Music

i) Statements II – Introduction

The solo bass work *Statements II* (1972)\(^1\) can be viewed, in many ways, as something of a manifesto or treatise, and it is, to date, Guy’s only fully notated solo work for the instrument.\(^2\) Not only is the work representative of a highly specific practice, it also presents numerous advances in its structural devices and interpretive challenges. It also utilises a set of extended techniques which form the majority of the technical developments for the instrument up to that point. Guy’s work is not alone in its aim to present an entirely new concept of what can be considered musically valid and technically achievable in double bass performance, but the extent to which he manages to encapsulate and distil facets of an entire musical personality is remarkable.

Jacob Druckman’s *Valentine* (1969),\(^3\) for example, presents many challenges in performance and interpretation, particularly in its use of percussion beaters, space-time notation, and the integration of vocal techniques into a solo performance. However, *Statements II* represents an entire musical concept, a praxis, which is demonstrative of a wide range of interests. The sense of a highly personalised perspective can be demonstrated in all aspects of the work, including its structural devices and other compositional concerns in addition to the obvious choices of specific instrumental techniques.

The work itself is highly stylised and presents a wide array of unorthodox techniques (often with great velocity in their individual utilisation, interchange or combination), in addition to highly personalised methods of notation to achieve the intended result. It thus presents a substantial challenge to a performer who is unfamiliar with Guy’s style of performance in improvised music. The piece is strongly reminiscent of the kind of vocabulary used by Guy in improvised performances.

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\(^2\) *Anaklasis* (2003) for two double basses is a graphic score.

at the time, not only in terms of its techniques but also in terms of the work’s structural concerns and the methods used for motivic development. Even a superficial familiarity with this style will enable a greater level of success when first approaching the work and in rationalising what it is trying to achieve and how best to proceed.

The use of the terms manifesto or treatise do have a specific connotation in this context. Many performers who have sought to expand the technical boundaries of their respective instruments have often subsequently published treatises which expound and clarify their approach, or have established a teaching practice in which these ideas can be furthered in a pedagogical setting. For the double bass, Turetzky’s slightly later work The Contemporary Contrabass and Jean Pierre Roberts’ Modes of Playing the Double Bass are two pedagogical works which document specific technical advances relevant to their periods. Mark Dresser has also assiduously documented his own research in ‘A Personal Pedagogy’ and the more recent Guts, which examine these innovations closely and seek to perpetuate, or make more accessible, his highly personalised performance language. Guy has never adopted a regular teaching practice or collected his innovations into a pedagogical document. The sheer volume of technical innovations presented in Statements II, however, mean that it can therefore be viewed as a substitute in lieu of a treatise which directly concerns his archetypal personal performance language at the time.

Guy’s technical developments have continued to evolve throughout the subsequent decades whilst also refining his existing practices. However, Statements II can clearly be viewed as embodying the primary facets of a language of musical discourse which have remained constant. This is particularly true when one considers the tangible stylistic continuity demonstrated in his improvised performances between the composition of this work and his 1993 recording Fizzles. However, the

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5 Bertram Turetzky, The Contemporary Contrabass (Berkeley: University of California Press, 1974).
8 Mark Dresser, Guts, CD/DVD, Kadima Collective KCR Triptych 1 (2010).
9 However, in 2016 he was appointed Honorary Professor at the Rhythmic Music Conservatory (RMC), Copenhagen, Denmark.
bulk of Guy’s continued instrumental advances between these dates seems more concerned with the application of electronics and further extensions of methods of instrumental preparation than expanding standard extended technique.\textsuperscript{10} Thus \textit{Statements II} represents the core set of techniques and expressive devices which have acted as a primary facet in the formation of Guy’s style. Post \textit{Fizzles}, there is a dramatic shift in Guy’s style, towards further abstraction and a significant change to his core sound, aided by a custom-made five-string instrument equipped with a high C string. This enables the expansion of the tessitura upwards, offering a timbre radically different from that of the 1890 French bass that Guy had used for the majority of his work up to this point.\textsuperscript{11}

\textbf{ii) \textit{Statements II} – Interpretation}

Miller noted that \textit{Statements II} is ‘a serious work … hardly ever performed in public and most often used for study. Only a few people can play it, since students are seldom taught the rapid multi-finger pizzicato technique necessary.’\textsuperscript{12} Such an observation highlights a situation which is not much changed to this day. The idiom that \textit{Statements II} presents is itself highly representative of the diversity not only of the training he had previously undertaken, but also of developments in the performance settings in which he had been involved. This work provides numerous challenges for the classically trained performer, particularly those who have had little or no prior exposure to improvisation or jazz, in which pizzicato forms the primary technical requirement. Aside from its obvious technical challenges, the work is stylistically very different from much of the double bass repertoire of the time and, indeed, of subsequent periods. Whilst space-time notation and situations that include improvisation to a greater or lesser degree have become relatively commonplace in

\textsuperscript{10} Standard in the sense of an extended technique that is achieved with a standard instrument and its relevant accessories as opposed to using preparation, specially constructed devices or electronic enhancement.

\textsuperscript{11} Until 1997, Guy used a full-size French instrument (Riviere & Hawkes 1890) for performances which required a modern (A=440 Hz) pitch. He later used this bass in conjunction with a chamber bass (Lott 1840) tuned a fourth higher for improvised performances/recordings. Guy commissioned a five-stringed instrument from the London-based luthier Roger Dawson with the intention of combining the qualities of the two instruments as well as the resonance of an earlier violone built by Dawson and used by Guy. It was on this instrument (completed in 1997) that Guy performed the solo double bass part in John Tavener’s \textit{The Last Discourse}, the first performance in which the instrument was used. Whilst the core elements of Guy’s playing remain, the solo recording \textit{Symmetries} (2002) among others, demonstrates a quicker response from the instrument (particularly in the higher register) and, as a result, Guy’s playing has necessarily changed in response to the new possibilities offered by such a development.

contemporary music, the musical events in *Statements II* make extensive use of them in a context which intends to convey varying degrees of spontaneity in performance whilst remaining rigorously structured.

The first challenge a performer encounters is perhaps a visual one, which is compounded by having to assimilate a range of unfamiliar extended techniques and their notations, many of which are devised by Guy. The second arises from the former and relates to the presentation of the musical material itself, which variously encompasses standard notation, notation that allows for various degrees of interpretation in its execution, and passages that are essentially improvised, albeit within strict guidelines. Other unfamiliar aspects include a method of ordering the musical events which uses, for the most part, an analogue notation that places events visually within a time frame rather than using a strict metre. There is also an orchestral scope to the material of *Statements II*, in which a progressive density of musical ideas is achieved by both hands simultaneously performing different materials in conjunction with amplification, the level of which is controlled by a foot-operated volume pedal. The use of such material is unique in its rigour and fluency at this point in the repertoire, and whilst Guy has acknowledged that the work was written for himself as performer, part of his concern was that ‘the notation rationalised some of the more esoteric sound areas I had in mind also, that by clarifying the presentation of the music, other players could perform the piece’.

Even when taking this point into consideration, I would argue that for a successful performance of the work to occur, the performer *must* be aware of Guy’s stylistic traits in improvised music. Such familiarity serves not only as a way of further understanding Guy’s structural concerns as to how the music progresses through the manipulation of musical cells (melodic, rhythmic and textural), but in understanding the more esoteric aspects which concern the energy that Guy manages to convey in performance. When approaching the work, the performer is allowed to establish their own stylistic preferences to a certain degree; predominantly through gestures and the pitch choices within them. There is also a degree of flexibility in the interpretation of velocity, although Guy’s own

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14 The concept of energy in performance is discussed further in chapter 5.
performances demonstrate the upper ends of that spectrum to be extremely fast, particularly in the pizzicato material, which requires an advanced knowledge of the relevant articulations. As such, any potential performer unfamiliar with Guy’s own performance style is faced with the prospect of fundamentally misinterpreting the intentions of its composer. This is, perhaps, a problem inherent in many works that contain interpretative notation but is compounded in this case by the specificity of Guy’s performance language.

iii) Statements II – A brief analysis

a) Structure

The notion of duality is a central theme within Statements II. The work is simultaneously rigorously structured, following a strict internal logic, whilst allowing for spontaneity and flexibility in its performance. This dichotomy also extends to the musical material itself, which constantly veers between the declamatory and the meditative, as does much of Guy’s music. The musical material generally falls into two distinct categories and is ordered as follows:

1) Distinct phrases that occur in isolation and exhibit a kind of call and response structure, often at an almost frenzied pace;
2) A sustained pitch which acts as an axis point over which various materials are interspersed.

These types of phrases frequently occur in various guises throughout the work giving a sense of continuity and structural cohesion by providing an aural sense of recall without recourse to more obvious traditional forms.

Progress is achieved in Statements II by the development of small cells of musical material. These are developed to a point where a new textural, melodic or technical area is arrived at and which is then, in turn, developed further. Guy likens the end result of this process to ‘a statue which can be viewed from every angle’.\(^\text{15}\) Indeed, the analogy of a corporeal form is an apt one and reveals a

\(^{15}\) Statements II, programme note
concern for form and structure even in freer scenarios. This organic musical process is also crucial to the ongoing formation of a structure which only becomes concrete at the work’s conclusion.

In essence, *Statements II* displays an evolutionary structure in which *all* musical parameters (melody, harmony, rhythm, timbre, texture and technique) are collectively subjected to a continual process of development. This egalitarian approach to musical concerns is a salient feature of improvised music in which nothing is obviated according to a predetermined plan. However, the work is not alone in Guy’s oeuvre in using these techniques; Leslie East, when discussing Guy’s contemporaneous work *D* (1972), noted:

Guy has likened *D* to a garden in which plants are growing all the year round and yet flower only at certain times. Certain melodic cells may appear to be insignificant at first but after expand into prominent ideas. The work achieves its momentum through the contrast and overlapping of blocks of sound which may contain either synchronised or unsynchronised activity for two or more instruments.16

The conceptual premise of a work which is constructed through the evolutionary progress of cells is a prominent feature of his work at this time, and Guy himself wrote in *D*’s programme note that:

Within a work I feel the need to link various aspects that all have a common goal. Areas eventually manifest themselves after small beginnings, so we find seemingly insignificant ideas expanding to become a major element within the composition.17

This notion of expansion or contraction can be directly linked to the cellular development of thematic material throughout the work, meaning that certain ideas act as an axis to which the musical discourse returns whilst other areas are more extensively developed. The total structure thus manages to further the sense of continuing duality whilst managing to avoid a conflict that could arise within the fixed versus free elements of the score. A sense of pluralism also extends to the nature of the musical

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material itself, in which bursts of extreme activity are often juxtaposed with single pitches or brief silences.

In spite of the looser structural elements found throughout, at no point is the work in any sense ‘free’, even in events such as those given in Ex. 4.1.

![Ex. 4.1: Barry Guy, Statements II (Letter G)](image)

During such sections, the nature of the improvisation is carefully controlled by a compositional rationale which explicitly states the techniques and pitch material to be used in conjunction with specific instructions as to their usage and intended progression. Thus any aspect of indeterminacy is heavily reliant on gestures in which individual pitches remain a subsidiary concern to the general direction of tessitura within a phrase. Rather than using looser graphic scoring in which the performer is invited to react to a visual stimulus, these actions within an almost fully notated work manage to convey a sense of a spontaneously evolving structure.

The basic structure of Statements II falls broadly into seventeen sections of motivic development, each of which displays a distinct set of melodic, rhythmic, technical and timbral concerns and fall broadly (in their entirety) into a traditional sonata-type form of exposition, development, recapitulation and develops accordingly.
In the analysis which follows (Table 4.2, with key to symbols in Table 4.1), I have used the following approach:

1) Primary motifs and pitch material are identified and the manner in which they are developed is demonstrated;

2) The analysis also identifies in each section the transformative element that enables the material to develop further, the nature of which is defined thus:

   a) Motivic development: either traditionally developed, subject to alternation or combinative processes;

   b) Techniques: subject to alternation or combinative processes;

   c) Transformative element: a new area, previously unexplored, the presence of which alters the progression of the developing material and is subsequently subsumed by the next area.
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<tr>
<th>Symbol/Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Minor (intervallic relationship/chordal quality) as they relate to the lowest pitch</td>
</tr>
<tr>
<td>Δ</td>
<td>Major (intervallic relationship/chordal quality) as they relate to the lowest pitch</td>
</tr>
<tr>
<td>◦</td>
<td>Diminished (intervallic relationship/chordal quality) as they relate to the lowest pitch</td>
</tr>
<tr>
<td>Ø</td>
<td>Half-diminished (chordal only)</td>
</tr>
<tr>
<td>~</td>
<td>Development (motivic)</td>
</tr>
<tr>
<td>+</td>
<td>Combinative (motivic and technique)</td>
</tr>
<tr>
<td>‡</td>
<td>Alternating (motivic and technique)</td>
</tr>
<tr>
<td>→</td>
<td>Becoming/moving to</td>
</tr>
<tr>
<td>Σ</td>
<td>(A) New area achieved through transformation</td>
</tr>
<tr>
<td>M</td>
<td>Motif</td>
</tr>
<tr>
<td>T</td>
<td>Technique(s)</td>
</tr>
<tr>
<td>R</td>
<td>Recapitulation</td>
</tr>
<tr>
<td>(%)</td>
<td>Quarter-tonal</td>
</tr>
</tbody>
</table>

**Table 4.1**: Explanation of symbols
<table>
<thead>
<tr>
<th>Rehearsal Mark</th>
<th>Principal Motif</th>
<th>Principal Technique(s)</th>
<th>Progress Type</th>
<th>Transformative Element</th>
<th>Predominant Pitch Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening – B</td>
<td>Harmonics in $4^{\text{ths}}$ – $1^{\text{st}}$ subject</td>
<td>Pizzicato between left hand and nut, nail pizzicato</td>
<td>M:~ T: ‡</td>
<td>Dissonant interval (bar 2)</td>
<td>4th -2nds</td>
</tr>
<tr>
<td>B–C</td>
<td>Dissonant Intervals – $2^{\text{nd}}$ subject</td>
<td>Pizzicato</td>
<td>M: +</td>
<td>Percussive techniques</td>
<td>-2, $\Delta 7$, $^05$</td>
</tr>
<tr>
<td>C–E</td>
<td>Recapitulation of $1^{\text{st}}$ subject</td>
<td>Pizzicato between left hand and nut, nail pizzicato</td>
<td>M: r ~ T:↓→∑</td>
<td>Bitones</td>
<td>4ths, -2</td>
</tr>
<tr>
<td>E–H</td>
<td>Development of $1^{\text{st}}$ subject combined with $2^{\text{nd}}$ subject.</td>
<td>Arco, <em>Col legno</em></td>
<td>M: ~ + T: ‡</td>
<td>Fast arco articulations, minor 2nds as isolated chords.</td>
<td>-2, $\Delta 7$, $^05$</td>
</tr>
<tr>
<td>H–J</td>
<td>Development of fast arco/legno phrases and $2^{\text{nd}}$ subject.</td>
<td>Arco, <em>legno</em>, percussive techniques</td>
<td>M: ~ + T:↓→∑</td>
<td>Sustained C♯ ($3^{\text{rd}}$ subject as extension of $2^{\text{nd}}$ subject) †</td>
<td>-2</td>
</tr>
<tr>
<td>J–K</td>
<td>Development of $3^{\text{rd}}$ subject, brief recapitulation of $1^{\text{st}}$ subject.</td>
<td>Arco, <em>legno</em></td>
<td>M:↓→∑ T: ‡</td>
<td>Tremolo</td>
<td>$\Delta 7$</td>
</tr>
<tr>
<td>K–L</td>
<td>Development of $2^{\text{nd}}$ subject</td>
<td>Arco tremolo</td>
<td>M:~</td>
<td>Artificial harmonics</td>
<td>-2</td>
</tr>
<tr>
<td>L–N</td>
<td>Development of all previous subjects</td>
<td>Arco, <em>legno</em>, artificial harmonics.</td>
<td>M:↑ T: ‡</td>
<td>Emergence of $4^{\text{th}}$ motif.</td>
<td>4, -2, -3(¼)</td>
</tr>
<tr>
<td>N–P</td>
<td>New area arrived at from the development of $2^{\text{nd}}$, $3^{\text{rd}}$ and $4^{\text{th}}$ subjects into a single entity</td>
<td>Arco, <em>legno</em>, percussive</td>
<td>M:↑→∑ T: ‡ +</td>
<td>Emergence of sustained G♯ as recurring feature ($3^{\text{rd}}$ subject development)</td>
<td>$\Delta 7$, -2</td>
</tr>
<tr>
<td>P–Q</td>
<td>Development of 3rd subject</td>
<td>Arco, left hand percussive techniques</td>
<td>M: ~ T: ‾ +</td>
<td>Percussive techniques</td>
<td>Δ7, -7(¼)</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------</td>
<td>----------------------------------</td>
<td>----------</td>
<td>----------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Q–T</td>
<td>Final development of 2nd subject into extended form</td>
<td>Arco</td>
<td>M:~→Σ</td>
<td>Extensive major 7th use.</td>
<td>-2, Δ7</td>
</tr>
<tr>
<td>T–U</td>
<td>Restating of all previous percussive textures and techniques</td>
<td>Arco, hammer-ons, bow screw rattling.</td>
<td>M: ‾ ~ T: ‾ +</td>
<td>Left-hand pizzicato</td>
<td>-2, ø5, Δ7</td>
</tr>
<tr>
<td>U–V</td>
<td>Restatement and extension of all previous pizzicato material</td>
<td>Pizzicato, hammer-ons</td>
<td>M:chsel→Σ T: ‾</td>
<td>Bitones</td>
<td>Ø7 Δ7(¼) Ø7(¼)</td>
</tr>
<tr>
<td>Y–Z</td>
<td>Final statement of 2nd subject in original form</td>
<td>Pizzicato</td>
<td>M: r</td>
<td>Nail buzz</td>
<td>-2, Δ7</td>
</tr>
<tr>
<td>Z–Aa</td>
<td>Final development of 3rd subject.</td>
<td>Arco</td>
<td>M:chsel→Σ T: +</td>
<td>Désacorda</td>
<td>N.A</td>
</tr>
<tr>
<td>Aa</td>
<td>Recapitulation of 1st subject</td>
<td>Pizzicato between left hand and nut</td>
<td>M: r T: +</td>
<td>Désacorda</td>
<td>-2, 4</td>
</tr>
</tbody>
</table>

† The subject is totally transformed into a sustained major 7th. Extensive sustain defines this as a distinctly different motif.

Table 4.2: Statements II, structural analysis
b) Melodic and Rhythmic Material

Fixed Material

As Statements II mostly dispenses with any traditional melodic content and harmonic progression, harmonic material, and its subsequent progression, is reliant on the development of specific intervallic relationships. The main intervallic relationships of the melodic material are primarily concerned with dissonant intervals: minor seconds, the tritone, and major sevenths. Sustaining of these intervals also provides a rhythmic device by using amplification to intensify acoustical beating, though this is not notated as such. The result is a complex web of subtly shifting dissonances which remain the primary harmonic feature in static textures. Pitch sets for these intervals are often governed by pitches that can be dissonantly combined with an open string. The pitches that emerge most clearly throughout the work as sustained events (C♯ – D♭ – E♭ – F♯ – G♭ – A♭) reflect this and are also subject to microtonal variations.

<table>
<thead>
<tr>
<th>Open String</th>
<th>Dissonant Pitch(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G♯</td>
<td>A♭ (sul d, e)</td>
</tr>
<tr>
<td></td>
<td>F♯ (sul d)</td>
</tr>
<tr>
<td>D♯</td>
<td>E♭ (sul d, a)</td>
</tr>
<tr>
<td></td>
<td>C♯ (sul a, g)</td>
</tr>
<tr>
<td></td>
<td>A♭ (sul g, e)</td>
</tr>
<tr>
<td>A♭</td>
<td>B♭ (sul a, e)</td>
</tr>
<tr>
<td></td>
<td>A♭ (sul e)</td>
</tr>
<tr>
<td>E♭</td>
<td>E♭ (sul g, d, a)</td>
</tr>
<tr>
<td></td>
<td>B♭ (sul a)</td>
</tr>
</tbody>
</table>

Table 4.3: List of dissonant intervals
The first use of a minor second/major seventh and tritone is to be found in the second bar in which a chord including D♭ and A♭ harmonics is combined with a low A♭ (Ex. 4.2). The dissonant qualities are then further intensified by an increase in amplification, which provides the first rhythmic use of acoustical beating as a subsidiary textural device and which is subsequently developed throughout.

Following this, the interval of a minor second or major seventh occurs as an isolated event (with the exception of direct repetitions of the same pitches) two hundred and sixty-four times with one hundred and one events occurring on a single page. However, the first subject itself (save for the aforementioned dissonant pitch – the A♭ – providing a tritone and minor second/major seventh) is relatively consonant and is built on a series of perfect fourths using the natural harmonic series of the relevant strings. This material forms the basis of the introduction and is recapitulated as a distinct melodic idea at two other points in the work.

Ex. 4.2: Barry Guy, Statements II (opening)

The initial chord of harmonics is repeated three times in isolation, with the amplifier providing a counterpoint as an echo effect which utilises their sustain. After these three chords, the finger position shifts and a standard (i.e. fingered) low A♭ is added before returning to the initial presentation. Following a brief recapitulation with the added A♭ (but also an additional sul-g B♭ harmonic\(^\text{18}\)), the work moves into a brief period of standard, metric rhythm, which further develops the harmonic chord material in conjunction with the amplifier acting as a constant rhythmic

\(^{18}\) Sounds as an F ¼ flat.
counterpoint. The second subject enters at Letter B and further develops the motive of the sustained Ab. Save for a brief *col legno* articulation at Letters E and H, the parallel fourth motif does not reappear again until the recapitulation at W and the coda at Aa. The second subject establishes a motif built on a series of minor seconds as the primary intervallic relationship (Ex. 4.3).

![Ex. 4.3: Barry Guy, Statements II (second subject)](image)

This melodic cell is repeated seven times on the first page acting as an axis point between various pizzicato flourishes. This melodic device of semitonally fluctuating around a sustained pitch is developed further throughout the work and used as a recurring melodic cell, as can be seen at Letter F (Ex. 4.4).

![Ex. 4.4: Barry Guy Statements II (Letter F)](image)
This motif is later expanded as an extended melodic line (Ex. 4.5).

Ex. 4.5: Barry Guy, Statements II (Letter R)

This idea is developed further until it arrives at its final form at Letter Q (Ex. 4.6), where it incorporates natural harmonics as a method of simultaneously altering tessitura and timbre within a sustained phrase.

Ex. 4.6: Barry Guy, Statements II (Letter Q)

Other uses of the semitone are more aleatoric in nature rather than explicitly notated and are discussed in further detail below. Save for a few isolated examples, the minor seconds and perfect fourths which dominate the first and second subjects remain a core concern of the work and also form the basis of the third and fourth subjects.

Freer pitch material

In addition to the material outlined above, areas that are more indeterminate in pitch and rhythm are also used as distinct musical ideas and are subsequently developed throughout the work. Pitch in these areas is generally indicative rather than prescriptive, and relates to relative register positions that follow the traditional usage of clef and stave. The development of such material through the work is
primarily concerned with elongation of phrases and not concerned to any major degree with the expansion of specific harmonic material. It serves instead as a structural counterbalance to motifs that are developed in a more linear fashion.

In general, indeterminate pitch is demonstrated by the placing of noteheads centrally on the stem of staccato figurations (Ex. 4.7).

![Ex. 4.7: Barry Guy, Statements II (staccato articulations)](image)

Similarly, a line demonstrating pitch progress is used for legato figures (Ex. 4.8).

![Ex. 4.8: Barry Guy, Statements II (legato notation)](image)

Occasionally isolated pitches or chords are given a relative register position in conjunction with an indication of the desired approximate interval (Ex. 4.9).

![Ex. 4.9: Barry Guy, Statements II (intervallic notations)](image)
Rhythm

While manipulations of specific rhythmic figures are present, they appear not to be a primary concern. Instead, varying degrees of velocity are applied to isolated materials, identifiable phrases, or occasionally entire passages, and take the place of more typical rhythmic development. Velocity is demonstrated in a similar fashion to established notational systems as shown in Ex. 4.10.

Ex. 4.10: Barry Guy, Statements II (durations)

These notations are flexible enough to remain demonstrative rather than absolute and a variety of velocities can be achieved without recourse to strict meter as can be seen in Ex. 4.11.
Material, when used in this context, is often employed in a more spontaneous fashion than in other sections of the work and remains predominantly gestural in character. Whilst these events do not occur at random, their development is not as rigorous as the fixed-pitched material found elsewhere in the piece and they are occasionally employed in a way that allows for improvisation within strict parameters, as demonstrated in Ex. 4.12:

However, there are certain events which often occur in specific rhythmic groupings of: 1, 2, 3, 5, 7, which all of the discussed motifs are subject at various points. Isolated motifs, or groups of motives which are the transformative element within a section of development are often grouped into sets of 2, 3, 5 and 7:
Page 3, all strictly notated material is grouped in threes and fives or as an isolated event;¹⁹

Page 4, bb. 6–7: Sustained C♯ (5);

Page 4, b. 8 – page 5, bb. 1–2: Left hand pizzicato A♯ (7);

Page 6, b. 1: Artificial harmonics (7);

Page 10, b. 5: Col legno figure (5);

Page 12, b. 1: Minor second harmonics (7);

Page 14, letter Y: nail buzz (3).

Apart from these events, however, there are no mathematical procedures inherent in the work as a structural device that I have been able to define.

c) Technical Advances

1) Pizzicato

The most obvious revolutionary facet of the work is its extensive use of an expressive pizzicato in a classical idiom. The technique itself is deployed at a highly virtuosic level and applied to a wide variety of musical ideas. If one is to take the standard (that is to say single-finger) pizzicato as a technique, Statements II presents no fewer than eight additional techniques which appear in the following order:

1. Pizzicato harmonics between the left hand and nut (raked pizzicato with the thumb);

2. Nail pizzicato;

3. Rapid multiple finger pizzicato;

4. Flicked pizzicato with the nail;

¹⁹ Interaction with the amplifier is not classified as a separate event when applied to a sustaining texture.
5. Bitone pizzicato;

6. Pizzicato *chitarra*;

7. Pizzicato *mandolino*;

8. Left-hand pizzicato.

The first five of these appear on the first page throughout passages of increasing density and velocity and require considerable virtuosity, digital strength and stamina for an effective performance.

2) Arco

The entirety of the bow is used in various ways throughout the work, and whilst the various *col legno* techniques and bow placements were fairly commonplace in contemporary works of this period, the use of staves to visually depict the trajectory of the bow is a conspicuously new development; its use in Ex. 4.11 aptly demonstrates its flexibility. The following graphics are also used to denote tip or heel of the bow (Ex. 4.13), and a typical example of their utilisation can be seen in Ex. 4.4.

![Diagram of bow angles](image)

**Ex. 4.13**: Barry Guy, *Statements II* (bow area notation)

New arco techniques are used extensively in subsequent works by Guy, for example at Letter T, bar 2, shown in Ex. 4.14.

![Diagram of arco technique](image)

**Ex. 4.14**: Barry Guy, *Statements II* (Letter T, b. 2)
In addition to the above example in which the bow screw is rapidly rattled between the D and A strings, there is also a variety of novel percussive articulations:

1. *Col legno battuto* with bow tip;
2. *Col legno battuto* on the tailpiece;
3. *Col legno battuto* in combination with the left hand pulling the string off the fingerboard.

**Other Technical Advances**

The nature of the material itself presents numerous technical challenges, in particular:

1. Extensive use of hammer-ons with both hands;
2. Extensive chordal writing, often combined with polyphony;
3. Extensive use of bitones, often combined with left hand articulations;
4. Polyrhythmic independence of the hands;
5. Use of the chin to mute strings.

**4) Amplification**

The performer is required to incorporate a highly developed command of a foot-operated pedal to control the various levels of amplitude used throughout the work. On occasions (such as at the opening), the varying amplification levels are also used to form specific rhythmic groupings which act as a counterpoint by using existing *lascia vibrare* textures. As this application of foot-controlled amplification is a technique which is central to Guy’s accomplishments as a performer, a context is established in which amplification serves not only to bring forward innovative sonorities that would be otherwise too quiet to be effective in performance, but gives rise to a whole new area of timbral possibilities by colouring more traditional sounds.
Notational Advances

The space-time notation that Guy employs was not by this point particularly new, although Guy’s use of it is remarkably clear in its presentation of the intended result. However, of particular note is Guy’s use of staves to denote the areas of bow travel and varying level of amplification (Exx. 4.15 and 4.16).

Ex. 4.15: Barry Guy, Statements II (bow positions)

Ex. 4.16: Barry Guy, Statements II (amplification stave)

The use of such a system for the former means that the changing of bow position can be applied to an extended line to give it fairly specific degrees of timbral variation as demonstrated in Ex. 4.11.
In addition to the means of ordering velocity as described above, Guy also uses a variety of noteheads and symbols to denote the technique used for specific phrases (Ex. 4.17).

Ex. 4.17: Barry Guy, *Statements II* (symbols, i)

There are also visual methods employed to demonstrate the continuation of material, the degree, or changing degrees of vibrato and variations of finger pressure (Ex. 4.18).

Ex. 4.18: Barry Guy, *Statements II* (symbols, ii)
The visual challenges presented by such an array of graphic representations, whilst initially confusing, quickly become very easy to negotiate. What is clear is that Guy’s methods are arrived at through the necessity of communication and seek to invite the performer into a dialogue in which the score acts as an interlocutor between composer and performer. As such, Statements II can be seen to act as a heuristic document in a pedagogical sense, inviting the performer to develop the set of techniques required to perform the work accurately as well as including guided improvisation as a procedural device. I previously mentioned that Guy does not seek to be doctrinaire in his approach, and this is certainly true in this work. It presents problems and invites the performer to solve them, offering a variety of possible routes which usually have a similar, if not the same, outcome rather than acting as an edict. Whilst possibly not a consideration during its composition, the result of the work is that it acts as a catalyst to the curious performer, such is the diversity of its advances. These instrument-specific and compositional techniques form the basis of a wider language which is further developed in the next two works to include a solo double bass part.

iv) Anna

Anna (1974) is Guy’s first concerto for double bass, and demonstrates a clear continuity of musical expression in addition to the structural devices and technical parameters already discussed. It is not Guy’s first large-scale work: the cello concerto Incontri (1970) and the work for string orchestra D (1972) both go some way in establishing the musical parameters that would form the stylistic basis of subsequent works. Anna, however, is much more ambitious in its scope.

Whilst earlier compositions and performance settings had suggested the notion of pluralism as a primary facet in Guy’s modus operandi, this work, which traverses a bewildering range of musical styles in the orchestral writing, places it firmly at the centre of its concerns. Overtly theatrical elements are also a distinctive feature and used in the later compositions Hold Hands and Sing
programme intended the great required performers is of College years, elements from Rutherford. (1978)

Miller, Udo Kurt (1978), and Bitz! (1979), both of which include texts by his colleague in improvisation, Paul Rutherford. The theatrical aspect of Guy’s playing had regularly been mentioned in concert reviews but, in contrast to the work of Fernando Grillo, whose use of theatre and gesture formed a central part of his musical doctrine, the theatre inherent in Guy’s playing is derived from a sense of spectacle, and is a subsequent concern rather than a considered choice. However, Guy’s early interest in Dadaism and surrealist art forms a central part of the concerto’s musical discourse, which incorporates text from Kurt Schwitters’ poem An Anna Blume, and even includes a quotation from Udo Ruckser in the programme note.

Miller noted that Anna was ‘considered too daring for performance,’ and the Dadaist elements present in the work were certainly partly responsible for the work’s neglect, as indeed was the choreography intended for the orchestra. The piece remained unperformed for nearly twenty years, finally receiving its premiere in 1991 in a performance given by the orchestra of the Royal College of Music, conducted by Edwin Roxburgh, with the composer as soloist. Miller’s observation is not, perhaps, an unreasonable one, as the soloist is pitted against a vast orchestra of over eighty performers which encompasses two string sections (one amplified) as well as the pianist doubling on celeste and Hammond organ.

The complexity of the work is not limited to the orchestration; the fact that performers are required to speak, move and shout at various points during the work would have undoubtedly caused a great deal of consternation amongst the more established symphony orchestras of the period. In fact, the subsequent concerto, Eos, was composed specifically because the players of the Südwestfunk of Baden-Baden had refused to join in the theatrical aspects of Anna, and Eos thus replaced it as the intended piece in the programme. In addition to the orchestral forces specified, the work requires

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22 There are several references to surrealism and Dadaism in many interviews with Guy and within various programme notes including those for Anna (1974), Bitz! (1976) and Hold Hands and Sing (1979).
26 Barry Guy, letter to the author dated 8 February 2009.
sound technicians to control the level of amplification for a separate group of strings and specific lighting cues are detailed throughout. Whereas amplification for the string section of D was desirable rather than essential, here it forms part of the theatrical rationale, in addition to providing a means of increasing the clarity of extended techniques.

The amplified string section I saw as an outer-world, the subconscious state, another being. The acoustic orchestra I saw as the reality of that world, the conscious state, and the flesh. The bass is the mediator. I saw also the amplified strings as a unified society, always working together and as a commentator on the world below, while the acoustic orchestra as a society in eternal conflict, with the inevitable decline into chaos.27

As such, it is here in the construction of a theatrical work for orchestra that the elements of pluralism are at their strongest. In the programme note, Guy also states that

In Anna, I have tried to bring the two together – not just jazz and ‘straight’ music, but the formal and informal aspects of the opposing cultures with the disciplines behind each.28

This sense of multiplicity is a central premise and extends to the quasi-theatrical roles assigned to certain instrumental groups as defined above. As such, the musical material and instrumental relationships are always carefully delineated. The amplified strings are always unified in their musical material whilst the acoustic ensemble is more chaotic and the soloist encompasses both areas. In contrast to the solo work, in which a sense of conflict is often transiently present, here it is continually present, culminating with the soloist physically and verbally halting the orchestral proceedings.

In addition to the conflicting roles that the orchestra are required to collectively undertake, the pluralistic elements are extended to the musical material itself, which encompasses all of the textural areas found in Statements II and D, alongside more traditional harmonic and melodic material.29 The

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28 Ibid.
29 The work commences with the pianist playing the ‘Anna theme’, a simple, wilfully sentimental melody rooted in a D Major tonality. This arises at various points in the work.
material given to the soloist is firmly rooted in the performance rhetoric of the earlier solo work and encompasses all of the techniques used in Statements II whilst simultaneously expanding the existent vocabulary.

The new techniques include:

- Harmonic glissando;
- The use of a timpani stick to provide percussive articulations over the entire range of the instrument;
- An early use of what would clearly later become defined as a multiphonic, described here as a ‘split-tone’ (Ex. 4.19).

![Image of Ex. 4.19]

Ex. 4.19: Barry Guy, Anna (Fig. 4g, b. 9)

*Anna* also includes an expanded expressive vocabulary, using much more established traditional terminology than had been in evidence in the solo work to suggest how the material should be played (*marcato*, *furioso*, *sostenuto*, *tenuto*, etc.), as well as numerous advances in notation, which will be discussed in further detail later. However, whilst the inclusion of new techniques and freer musical areas offer greater freedom than in the previous work, and the extensive use of theatrical direction for the soloist is a distinctly new element, the musical material presented is fundamentally similar in its resultant language to the earlier solo piece.
1) Melodic material

As in *Statements II*, the primary method of developing musical ideas in *Anna* concerns itself with the gradual transformation of cells of material which subsequently lead to a new area which, in turn, is subject to the same processes. Many of these motives develop melodic ideas similar to those found in the solo work. However, there is increased use of polyphony, a greater frequency of chordal material and of specified quarter tones in the solo part.

The first double bass cadenza, which follows a lengthy guided improvisation using a timpani stick, outlines many of the motives that are developed throughout the rest of the piece. The first motif, which can be directly related to the material of *Statements II*, is a combinative chord of a lower pitch and a higher pitch played as an artificial harmonic (Ex. 4.20).

Ex. 4.20: Barry Guy, *Anna* (Fig. 4g, bb. 5–8)

In *Statements II*, the use of these chords provide the basis for the first passage of polyphonic writing (Ex. 4.21), and their usage throughout the work is extensive as a developed motif, contrasting with their use in *Anna* (Ex. 4.22), in which they remain as a static event contrasted with periods of often extreme activity.

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30 There is earlier polyphonic material but its presentation is used as a basis for a predominantly improvised discourse.
However, the use of the motif (which leads into an area of more rapid writing) is objectively the same in both works, although the subsequent passage in *Anna* (Ex. 4.23) also introduces a chromatic motif reminiscent of the second subject of *Statements II*. 

Ex. 4.21: Barry Guy, *Statements II* (Letter K) 

Ex. 4.22: Barry Guy, *Anna* (Fig. 4g, bb. 12–14) 

Ex. 4.23: Barry Guy, *Anna* (Fig. 4g, bb.18–20)
The motif is developed in much the same manner in both works: gradually expanding its pitch material whilst simultaneously increasing in velocity. There are several other motifs found in Anna that are fundamentally similar to the dominant motives of Statements II (Table 4.4).

<table>
<thead>
<tr>
<th>ANNA</th>
<th>STATEMENTS II</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Motif Example" /></td>
<td><img src="image2" alt="Motif Example" /></td>
</tr>
<tr>
<td><img src="image3" alt="Motif Example" /></td>
<td><img src="image4" alt="Motif Example" /></td>
</tr>
</tbody>
</table>

**Table 4.4: Anna/Statements II, motivic similarities**

Such motives occur at various points throughout both works and are in each instance gradually expanded within a general trajectory towards an area of greater velocity and density. Whilst these examples are sometimes treated in a musically different manner in each piece, they nonetheless demonstrate a continuity of musical thought and instrumental praxis, particularly in their use of polyphony. The pervasiveness of such material throughout the concerto again gives rise to the notion of Guy’s specific conception of the instrument, and melodic line and textural areas bear a striking resemblance to the writing found in Statements II. A virtuoso pizzicato technique, which encompasses percussive articulations by both hands, is used extensively throughout Anna (Ex. 4.24).
Passages such as **Ex. 4.24** (from *Anna*) are demonstrably similar in their use of pizzicato to many others, such as **Ex. 4.25** from *Statements II*:

![Ex. 4.25: Barry Guy, *Statements II* (Letter U)](image)

In each case, such passages form the summation of a gradual progression of activity, which culminates in a form of coda. In addition to these examples, there emerges throughout a distinct method of constructing melodic devices which become greatly expanded not only in terms of duration but also in the nature of the transformative processes.

2) Harmonic Language

As in *Statements II*, the primary intervallic relationships found in *Anna* are concerned with dissonant intervals, predominantly minor seconds, the tritone and major sevenths, which occur frequently throughout.\(^{31}\) The concerto, however, expands upon these relationships by including a greater number of quarter-tones based around these intervals than in the previous work. These intervallic relationships and, in particular, the left hand position required for their performance begin to suggest a predilection for particular chord voicings which may be dictated by a physical preference for the left hand.

\(^{31}\) Indeed, repetitions of these intervals occurs nearly a hundred times on pages 5 and 6 of the solo part alone.
hand. Such chord voicings can also often be demonstrated in Guy’s improvised performances. The first definitively notated material for the soloist is the chord at Fig. 4 (Ex. 4.26).

Ex. 4.26: Barry Guy, *Anna* (Fig. 4)

Prior to this, the soloist is engaged in a lengthy, guided improvisation which culminates with this chord. The specific spread hand position required for this chord in thumb position (low to high: T, 2,3) is not one found in the earlier work, but chords such as that in Ex. 4.27 commonly occur in both works.

Ex. 4.27: Barry Guy, *Statements II* (Letter W, b. 14)

Both pieces also contain a distinctive polyphonic event which consists of a chord, subsequent articulation of its bitones and the simultaneous left hand re-articulation of the highest pitch. The chord in question is instructed to be played *normale* and left to sustain whilst the corresponding bitones are played by the right hand. On top of this, the free third finger of the left plucks *normale*, forming a distinct texture that occurs at several points in both works (*Exx. 4.28 and 4.29*).
Anna also continues the wider thematic practice of alternating cells of material which are drawn from a narrow span of pitches and are predominantly chromatic in their relationship to each other, with outbursts of more aleatoric, gestural material that traverse the entire range of the instrument within a single phrase. Other shared traits include phrases which begin with explicit pitch and gradually accelerate whilst becoming more indeterminate (often the reverse if decelerating).

3) Notation

In its notation, Anna shares the purely visual methods used in Statements II to demonstrate how certain musical phrases should be interpreted. These include the various ways in which the relevant velocities of phrases are to be determined as well as methods to suggest pitch in less specific terms. All are used consistently but are also developed further. There is also further continuity in the various
noteheads used to indicate specific techniques rather than verbal instructions. However, in addition to
the continued use and development of space-time notation, Anna expands upon Guy’s use of purely
graphic notation, which is employed extensively throughout the solo part and is applied not solely to
musical material but also occasionally as a means of conveying theatrical instruction. The charming
graphic in Ex. 4.30 may serve to demonstrate this.

Ex. 4.30: Barry Guy, Anna (Fig. 27)

However, the most extensive use of graphic notation is used to suggest more expansive areas
of improvisation. These again occur, save for one example,\(^{32}\) according to strict guidelines both in
duration and the sonic palette from which it is to be drawn. Its use, however, differs crucially in terms
of its scope and in the strictures that are imposed. The soloist’s material in Anna is simultaneously
more rigorously structured whilst offering a greater number of semi-improvised passages than
Statements II. These sections rely on verbal instructions rather than explicit notation and tend to be
much more extensive in duration. The opening improvisation, for example, takes place over a time
span of nearly two minutes (Ex. 4.31).

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\(^{32}\) The examples are to be found between figures 11 and 13.
Ex. 4.31: Barry Guy, *Anna* (Fig. 3–4)

The specificity applied to such material, however, remains a distinctive feature throughout with the exception of the improvised passage in Ex. 4.32, which uses purely graphic indications as the only means of notational instruction for the only time in the work.

Ex. 4.32: Barry Guy, *Anna* (Fig. 12)
Save for the totally improvised cadenza which opens *Eos*, the relative freedom offered by this scenario is in itself unusual. However, save for this example, the material in *Anna* which manifests a greater degree of freedom generally operates as a structural pretext to allow the more theatrical elements in the work to come to the fore. Whilst operating according to their own mandate, the soloist simultaneously has an almost schizophrenic relationship to the various subsets within the ensemble. As a result, most of the sections in which guided improvisation forms a central part are often concerned with the alternation and combination of various sets of material. These are generally developed to such a point that it is no longer possible to define their constituent parts as individual elements. The most overt usage of this technique is found towards the ending of the work (between figures 22 and 27), which outlines a set of natural harmonics in combination with a variety of bow articulations and placements, velocities and amplification levels, with the instruction: ‘with the given material relate to the orchestra, sometimes with, sometimes against. Begin quietly, getting more agitated.’

However, other similar areas are structured in essentially the same manner as found in *Statements II*, and the above example represents the most extreme use of the technique. In addition to Guy’s now established use of graphics in conjunction with more traditional forms of notation, *Anna* contains a section in which he develops a method of notation in which individual events occur within a specific time frame that encompasses two simultaneous tempi. Whilst the resultant notation is reminiscent of the notational practices of composers of the new complexity (*Ex. 4.33*), a greater degree of freedom is applied to the placement of events than is found in works typical of such a style.

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33 The opening of the score is completely blank (save for the word *cadenza*) and offers no indication for the soloist.
35 Figures 19–22 demonstrates their most extensive use.
Ex. 4.33: Barry Guy, Anna (Fig. 8, bb. 17–19)

Again, this is commensurate with the notions of dichotomy and conflict that pervade the piece, and is notable for constituting a style of notation that Guy had not previously (or since) employed in his works for double bass. Its usage is indicative of the pluralistic qualities of Guy’s music, in which compositional procedures are governed by the work’s intentions, not according to a predetermined musical bias.

4) Structural Analysis (solo bass)

The various motifs and subjects are defined in Table 4.5 according to their relative velocities, densities or sets of technical parameters:

1st subject: static artificial harmonics, often in double stops;
2nd subject: chromatic motifs – usually around a single pitch;
3rd subject: fast, aleatoric gestural phrases;
4th subject: pizzicato harmonic chords in 4ths.
<table>
<thead>
<tr>
<th>Rehearsal Mark</th>
<th>Principal Motif</th>
<th>Principal Technique(s)</th>
<th>Progress Type</th>
<th>Transformative Element</th>
<th>Predominant Pitch Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>3–4</td>
<td>None established</td>
<td>Various percussive articulations</td>
<td>T: ‡</td>
<td>Pizz harmonics†</td>
<td>Δ triads (harmonics only)</td>
</tr>
<tr>
<td>4–4g</td>
<td>None established</td>
<td>Percussive</td>
<td>T: ‡</td>
<td>Arco</td>
<td>4(^{th}) (¼)</td>
</tr>
<tr>
<td>4g–5</td>
<td>1(^{st}) Subject (artificial harmonics) 2(^{nd}) Subject (chromatic theme)</td>
<td>Arco, artificial harmonics</td>
<td>M: ~ → ∑ T: ‡ → ∑</td>
<td>Alternating figure pressures</td>
<td>-2(¼), 0(^{5}(¼))</td>
</tr>
<tr>
<td>5–8</td>
<td>Development of 1(^{st}) subject combined with 2(^{nd}) subject.</td>
<td>Arco, pizz mandolino</td>
<td>M: ~ → ∑ T: ‡ → ∑+</td>
<td>Percussive arco techniques</td>
<td>-2(¼)</td>
</tr>
<tr>
<td>8–11</td>
<td>Emergence of 3(^{rd}) Subject</td>
<td>Arco, legno, percussive techniques</td>
<td>M: ‡ → ∑ T: ‡ → ∑</td>
<td>Trills</td>
<td>-2, 0(^{5}), Δ7</td>
</tr>
<tr>
<td>12–14</td>
<td>Development of 2(^{nd}) and 3(^{rd}) subjects</td>
<td>Pizz, percussive</td>
<td>M: ‡ → ∑ T: ‡</td>
<td>Bitones</td>
<td>Δ7</td>
</tr>
<tr>
<td>14–15</td>
<td>Development of 3(^{rd}) Subject</td>
<td>Percussive, bitones</td>
<td>M: r ~ T: ‡ → ‡+</td>
<td>String pulling</td>
<td>0(^{7}(¼))</td>
</tr>
<tr>
<td>15–19</td>
<td>Development of 2(^{nd}) and 3(^{rd}) motives into a single entity.</td>
<td>All previous arco/legno.</td>
<td>M: ~ ‡ → ∑ T: ‡+</td>
<td>Espressivo material, Bartok pizzicato</td>
<td>-2, 0(^{5}), Δ7 All with (¼) variations</td>
</tr>
<tr>
<td>19–20</td>
<td>Development of 3(^{rd}) subject</td>
<td>Arco, legno,</td>
<td>M: ‡ → ∑ T: ‡ → ∑</td>
<td>Staccato phrases, percussive techniques</td>
<td>Δ7, -2</td>
</tr>
<tr>
<td>20–21</td>
<td>Development of new area (still 3(^{rd}) subject)</td>
<td>Percussive, all arco</td>
<td>M: ~ T: ‡+</td>
<td>Muting</td>
<td>Unspecified</td>
</tr>
</tbody>
</table>
Sudden emergence and development of 4th Subject†

Pizz, nail pizz, harmonics

$M: \cdashrightarrow \Sigma$ $T: \dagger +$

Extensive major 7th use.

4ths, -2nd

<table>
<thead>
<tr>
<th>21–27</th>
<th>27–28</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Anna’ Theme</td>
<td>Final ‘outburst’ (3rd subject-type)</td>
<td></td>
</tr>
<tr>
<td>Arco normale</td>
<td>Arco</td>
<td></td>
</tr>
<tr>
<td>N.A</td>
<td>M: r</td>
<td>N.A</td>
</tr>
<tr>
<td>N.A</td>
<td></td>
<td>Unspecified</td>
</tr>
</tbody>
</table>

† The fourth subject’s harmonic material is given in the opening section but not developed until figure 21.

Table 4.5: Anna, structural analysis

v) Eos

Eos was written at the request of the Donaueschingen festival in 1977, receiving its premiere in October of that year by the Orchestra of the Südwestfunk of Baden-Baden, conducted by Ernest Bour, with Guy as soloist. Although superficially similar to Anna in its use of texture as its primary preoccupation, Eos is a much more focused piece in terms of its gradual expansion of a comparatively reduced set of thematic materials whilst the absence of theatrical elements allows for a more fluid, measured progression of events.

The work’s reductive qualities when compared to the musically inclusive nature of the earlier concerto quickly become apparent when examining the solo part, which presents noticeably fewer technical challenges than either of the earlier pieces. Comparatively few of the extended techniques with which the earlier works are concerned are, in fact, specified, leaving instead these techniques to manifest themselves in the various points of improvised dialogue that occur throughout. Indeed, the subsequent improvisations displayed in the recorded performance of Eos demonstrate that the extended technical repertoire outlined above was still very much in use by Guy, and is particularly

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36 A copy (not commercially available) was made available to the author by Guy.
apparent during the opening cadenza; this reinforces the assertion that an expanded technical palette here operates contextually as a primary facet of a musical language rather than a subsidiary concern.

Commensurate with a reduced specified technical repertoire is a greater frequency of overtly melodic material than is in evidence in either of the previous works, save for the melody found at the conclusion of Anna. However, structurally and harmonically, the work exhibits the same procedural devices as the earlier two pieces, and employs many of the same notational methods. Save for isolated examples, the work again dispenses with traditional metre and, much in the same manner as Statements II and Anna, uses space-time notation to present musical events in a way that allows a degree of freedom in their placement within barlines representing (predominantly) five-second intervals, alongside passages that are explicitly improvised. These innovations are extended to the entire orchestra rather than just the solo part, although the methods themselves are presented in such a way that any extensive experience of improvisation is not required for an effective interpretation. The principal parameters found in these sections are a series of pitch choices in combination with a small group of techniques which the performers must continually alternate in order to create a dense texture.

Perhaps the most obvious difference to be found in the solo bass writing is a preoccupation with sustained textures whose timbral qualities are gradually transformed rather than existing mainly as an axis point. Whilst the previous pieces had included passages of sustained material, they were always alternated with periods of activity. Here, save for isolated examples until the closing passages,37 the main textural concern is a sustained pitch or pitches that are subjected to various forms of electronic manipulation. The solo part of Eos is heavily reliant on the integration of a specially designed synthesiser known as the Synthian38 into Guy’s established amplification set-up. Specific

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37 Figure W in the full score onwards.
38 The Synthian was a device which was the culmination of a collaboration between Guy and Ian Macintosh. Eos was not the only work in which the Synthian was used. According to the programme note for Hold Hands and Sing (London: Novello, 1978) the device was combined with a sonic transducer which ‘registers the energy of movement which can be converted into sound via a voltage controlled generator. That in turn is passed through the Synthian, a type of synthesiser that I have been developing with the designer for use with the Double Bass. The two together produce a treated backdrop to the Hulsenbeck reading and the ‘dances’ as noted previously. The dances also had to have their purpose so they in turn fulfil the function of taking the singers from point A to point B – the source of some Rutherford poems which are read in a somewhat assorted manner. In this way there is a direct link between movement and sound.’
instructions detailing its intended settings are included in a notational system similar to those previously used for amplitude and bow positioning. The poor quality of the audio recording does little to clarify the exact nature of these transformations, but audible examples seem to suggest an updated version of ring modulation, chorus processing and a primitive form of pitch shifting which seems more evident on Electric Phoenix’s recording of *Hold Hands and Sing*.  

1) **Structural Analysis (solo bass)**

*Eos* has been subject to the same analytical procedures as the previous two pieces (*Table 4.6*). However, due to the increased melodic content of the work in combination with greater areas of improvisation, the subjects are divided more clearly into ideas and motifs:

1\(^{st}\) idea: a four-note phrase over a sustained ostinato played as natural harmonics;
2\(^{nd}\) idea: quarter-tone inflections around a sustained pitch;
3\(^{rd}\) idea: a combinative chord of a natural pitch and an artificial harmonic.

1\(^{st}\) motif: a sustained melodic line with quarter tone inflections (similar to those found in *Anna*);
2\(^{nd}\) motif: Bursts of extreme activity.

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<table>
<thead>
<tr>
<th>Rehearsal Mark</th>
<th>Principal Motif</th>
<th>Principal Technique(s)</th>
<th>Progress Type</th>
<th>Transformative Element</th>
<th>Predominant Pitch Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadenza</td>
<td>None established</td>
<td>Arco, Trem</td>
<td>M: ~</td>
<td>Variable finger pressures, electronics</td>
<td>-2</td>
</tr>
<tr>
<td>A–D</td>
<td>Emergence of 1st Idea</td>
<td>Arco, Harmonics</td>
<td>M: ~</td>
<td>Variable finger pressures, electronics</td>
<td>-2, Δ2</td>
</tr>
<tr>
<td>D–F</td>
<td>Emergence of 2nd idea</td>
<td>Arco, Harmonics</td>
<td>M:r ~→+</td>
<td>Glissandi</td>
<td>-2(¼)</td>
</tr>
<tr>
<td>F–H</td>
<td>Development of 1st and 2nd idea plus 1st motif.</td>
<td>Arco, Harmonics</td>
<td>M: →∑</td>
<td>Artificial Harmonics</td>
<td>-2(¼)</td>
</tr>
<tr>
<td>H–K</td>
<td>Combination of all previous material with pitch variation on 1st motif</td>
<td>Arco, artificial harmonics</td>
<td>M:+~ →∑</td>
<td>Trills, electronics</td>
<td>-2, Δ7(¼), 05</td>
</tr>
<tr>
<td>K–L</td>
<td>All previous material combined</td>
<td>All previous</td>
<td>M:+~→∑</td>
<td>Trem</td>
<td>-2, Δ7, 05 (¼) of all</td>
</tr>
<tr>
<td>L–O</td>
<td>Sudden emergence of 2nd motif</td>
<td>Arco</td>
<td>M: ↑→∑</td>
<td>3rd Motif</td>
<td>05, -2</td>
</tr>
<tr>
<td>O–S</td>
<td>Development of 2nd motif and 3rd idea into a single entity.</td>
<td>Arco</td>
<td>M:~↑→∑</td>
<td>Bowed E string at tailpiece</td>
<td>-2, 05, Δ7 All with (¼) variations</td>
</tr>
<tr>
<td>S–T</td>
<td>Brief recapitulation of staccato idea from 2nd motif leading to new textural area.</td>
<td>Arco, E string bowed at tailpiece</td>
<td>M:↑ T: ↓</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>T–V</td>
<td>Extensive development of 1st motif.</td>
<td>Arco</td>
<td>M: ~</td>
<td>Pizz</td>
<td>-2(¼), 05</td>
</tr>
<tr>
<td>V–W</td>
<td>Extensive (but free) development of 3rd idea</td>
<td>Artificial harmonics</td>
<td>M:~</td>
<td>Multiphonics*</td>
<td>Defined as ‘most dissonant areas’</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------</td>
<td>----------------------</td>
<td>------</td>
<td>--------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>V–Bb</td>
<td>Continued development of 3rd idea† alongside development of 2nd motif.‡</td>
<td>Arco, Legno, Pizz: All areas</td>
<td>M:~→∑ T: †+</td>
<td>Long glissando chord</td>
<td>Defined as ‘most dissonant areas’</td>
</tr>
<tr>
<td>Bb–Ff</td>
<td>Recapitulation of 1st motif combined with trills and artificial harmonics</td>
<td>Arco</td>
<td>M: r~+ T: †</td>
<td>Area of improvisation</td>
<td>-2(¼),05</td>
</tr>
<tr>
<td>Ff–Gg</td>
<td>Improvisation encompassing areas 1 and 2</td>
<td>All previous</td>
<td>M: ~+ T: †</td>
<td>Gradual acceleration</td>
<td>None specified</td>
</tr>
<tr>
<td>Gg–end</td>
<td>Brief recapitulation of 2nd motif ending in sustained pitch.</td>
<td>Arco</td>
<td>M: ~ T: †</td>
<td>Electronics</td>
<td>None specified</td>
</tr>
</tbody>
</table>

* Defined as ‘split tones’

† Defined as ‘area 1’

‡ Defined as ‘area 2’

**Table 4.6: Eos, structural analysis**

The analysis of these three works clearly demonstrates a continually evolving language in which a core set of musical choices that relate specifically to instrumental technique as well as to wider concerns are always present. The evolutionary nature of this language is aptly demonstrated by the various sets of parameters from which each work takes its starting point, emanating from the
composite qualities offered by a wide but nonetheless specific set of techniques and musical choices. In conjunction with a unique notational system that offers a flexible approach to the interpretation of notated events, there emerges a distinct, readily identifiable style present in these works that is mirrored in contemporaneous improvisations.

It is perhaps inevitable that, as a completely solo work, *Statements II* would present the widest range of innovations and serves to crystallise an original, instrument-specific concept in print. Within this concept, it has to be noted that it is itself drawn from a linear progression that strongly exhibits a familiarity and engagement with historical and emerging schools of performance practice. The integration of this language into works whose basic compositional doctrines are strongly divergent is emblematic of this process and is at its most obvious when one considers the repeated use of *Statements II* as the solo material in subsequent concerti.\(^{40}\) However, the three works examined do display an expansive musical vision that clearly continued to evolve whilst exhibiting consistent traits.

Perhaps the most obvious signifier of this trend is the inclusion of a specially constructed synthesiser in *Eos*. Whilst this in itself does present a new facet within an established practice, its inclusion also gives credence to the premise that there is a more generalised preoccupation with the expansion of the possibilities of instrumental technique in Guy’s playing. However, in stark contrast to the pluralistic nature of Guy’s compositions, the nature of his performance practice is fiercely individualistic, and its specifics have remained difficult to replicate from an interpreter’s perspective.

Guy himself has noted that his various sound extensions are, or were, often seen as ‘questionable’ in academia,\(^ {41}\) and that he has occasionally met with resistance from conductors and performers engaged in the performance of his works; *Eos* was disliked by Bour and the SWR orchestra and Boulez considered *D* to be ‘not rigorous enough’.\(^ {42}\)

It is apparent that Guy’s playing has evolved concurrently with, but also in isolation from, other developing schools of contemporary performance practice and has remained, as such, a

\(^{40}\) In *Voyages of the Moon* (1983) and *Statements II-EX* (1989) Guy simply uses *Statements II* as the solo part and writes orchestral material around it.

\(^{41}\) Barry Guy, letter to the author dated 2 June 2007.

\(^{42}\) Barry Guy, letter to the author dated 14 April 2015.
distinctive idiom. It seems of particular interest here to draw a parallel with the contemporaneous work of Fernando Grillo (1945–2013). Grillo similarly exhibited a preoccupation with the fundamentals of sound production on the instrument, and his wider profile (at the time) in the new music community was certainly influential amongst composers, with such a figure as Stockhausen calling him ‘the Buddha of the double bass’. However, Grillo’s advances were very much a natural extension of an essentially traditional methodology, much as they served to expand the timbral possibilities of the instrument. In addition, Grillo had undertaken a more rigorous examination of harmonics (of all kinds) and multiphonics than Guy, as well as categorising a huge range of bowing techniques in his piece Suite I. Whilst Grillo adopted a teaching practice which sought to perpetuate his own concept of expanded instrumental technique within a methodology that was firmly rooted in tradition, Guy has not sought to further his bass-specific conceptions as an educator.

The influence of Grillo’s teaching can be detected in the subsequent work of his pupil Stefano Scodanibbio (1956–2012). Scodanibbio also taught and is widely recorded, which has resulted in the idiomatic nature of his own double bass performance practice becoming more widely established through an increasing level of engagement from performers, notably Thelin and Daniele Roccato. However, as Scodanibbio’s various works tend to explore one or two technical or musical ideas throughout the course of a piece, no single work can be seen to function as a manifesto in the sense of Guy’s work and remain as examples of an incremental expansion of established or novel practices. Thelin has termed Scodanibbio’s work ‘the final step in the evolution of the double bass’. As Scodanibbio’s virtuosity is essentially an extension and refinement of well-established modes of performance, as opposed to encompassing an entirely new concept, this now presents a dilemma as it obviates a wide range of instrumental advances drawn from less traditional practices. I would re-evaluate this assertion within Thelin’s own reference to Berio’s notion of expanse of scope, by which

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44 Fernando Grillo, Suite I (Mainz: Schott, 2005).
the use of the term ‘final step’ itself becomes parochial and ignores technical advances that are wholly original or combinative in their origins.

As Guy’s performance practice is based on the strong command of a number of traditions in combination with a much extended technical arsenal, virtuosity in this context becomes a wider concept: a rapid interchange of technique and musical language forms an amalgam devoid of a school but becomes transiently referential. In this context, Thelin’s definition of expansion of scope becomes decidedly limited in its application. Guy’s bass music does require a familiarity with not only a wide range of technique but also musical styles and the subsequent nature of their combinative procedures. In this context Miller’s earlier observation is particularly telling, and it is interesting to note that each of Guy’s bass concerti have received only one performance, and only then by Guy. Also, with the exception of performances by Guy, Statements II has only been performed a handful of times in recent years.

Guy’s bass music, then, is the manifestation of a process which incorporates a highly schooled fundamental technique whilst remaining simultaneously divorced from the formalised strictures of conservatoire training. This process is symptomatic of an assimilative musical persona in which wide-ranging influences are disseminated into a singular idiom which transcends its initial formulae but requires the performer to be at least conversant with its practices.

The challenge, therefore, of effective replication and interpretation becomes particularly apparent when one considers the subsequent neglect of these works by soloists specialising in contemporary music. It is also readily perceptible in the comparison of performances of works written for Guy, and which seek to integrate his stylistic traits into the musical fabric of the piece, when performed by bassists other than Guy. It is in these works that the limitations of a solely conservatoire-trained musician become conspicuous.

For example, if Statements II is performed by a performer lacking a highly developed pizzicato technique then the piece can effectively fail in its intent. As Guy himself has noted ‘without
an advanced knowledge of pizz articulation the piece can sound dull’. However, the complexity of Guy’s technical and structural devices do not pertain to exclusivity, but are born of the need to rationalise the problems of communication that are found in improvisation within a fully notated fixed structure. The works that result are the distillation of diverse working practices which, as a result, place huge demands on performers for an effective interpretation. This approach, involving for the composer an extraordinarily wide range of techniques which allows each individual work to become something of a tabula rasa, is consistent in the presentation of a continually evolving, yet concrete language. However, the challenges of interpretation inherent in these works are not intended at the outset; rather they arise as the unavoidable side-effect of an inclusive musical language, and it is in this sense that the framework that they offer becomes, for the performer, essentially heuristic.

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Chapter 5

Bernard Rands: Memo I

Guy’s own solo double bass writing identifies the composer as a strikingly original instrumentalist with a preoccupation with exploring and assimilating new instrumental techniques alongside the formal procedures in which they could be employed. However, when one examines Guy’s influence on contemporaneous composers, the extent to which his advances were influential in altering the working methods of such composers can be also assessed. Composers altering their musical material to suit a specific performer is nothing new, but the extent to which Bernard Rands captures the core aesthetics of Guy’s playing in his work Memo I is particularly noteworthy.

Memo I was commissioned by the English Bach Festival, with funds provided by the English Bach Festival Trust, to be performed by Barry Guy in a recital in the 1972 festival. The piece was the first in what was to be a series of works by Rands which predominantly explore instrumental technique and timbre rather than focusing on conventional musical parameters. Rands’s work is directly inspired by Guy’s involvement in improvisation and is reflective of the stylistic trends that Guy was establishing for himself in improvised performances and manages to capture many of the musical concerns that Guy was exploring with his colleagues in improvisation. As Memo I was written specifically for Guy, many of his specific technical advances are present in the work. Roger Marsh has noted that it ‘uses a catalogue of techniques already devised and used by Barry – and it formalises them into a carefully structured piece.’

Few works of this period by non-bass players explore such a specific set of extended techniques on such an expansive level. Indeed, the scarcity of scores for the double bass which detail such idiomatic innovations suggests that collaboration with a performer is almost a necessity for a composer who wishes to compose a work which explored such concerns. However, it was Rands’s interest in improvised music and his familiarity with the specificity of Guy’s technique which

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provided the impetus out of which *Memo I grew*.³

One of Guy’s most regularly performing improvising groups in this period was the trio Iskra 1903, whose other members comprised guitarist Derek Bailey and trombonist Paul Rutherford (who would also occasionally double on piano). The group developed a distinctive, ascetic approach to improvisation which was devoid of any perceivable strictures relating to traditional harmonic, melodic or rhythmic progression, relying instead on developing ideas through using texture as the predominant feature. The liberation of each instrument from any historically orientated hierarchy was also a notable aspect of the group’s performances, and a collegiate atmosphere pervades the aural result. The recordings by the group are remarkably concise, almost terse, and are clearly the product of three musicians who are finely attuned to the nuances of each other’s playing. Discussing the group in a recent article Raul da Gama writes: ‘the three epitomise the man’s [sic] relationship between musician and society, something that appears as both haunting and fascinating in their music.’⁴

Although audiences for the music were small, however, it was not simply a loyal group of listeners who showed an interest. There was also growing interest from record labels, some of them well established, as in the case of Deutsche Grammophon, for whom the group recorded.⁵ Although the audience for improvisation has remained relatively small this suggests, for a while at least, a desire from the musical establishment to try and rationalise these new developments. Even today these pieces sound strikingly fresh, the sound worlds they occupy resulting from the complete consideration of every gesture while maintaining momentum and rarely succumbing to stagnation.

During this period, however, Guy’s vocabulary in solo and ensemble performance seems to be flexible. If his work with Iskra 1903 can be viewed as representing one aspect of his language, then the other side is represented in his contemporaneous work with the Howard Riley Trio, which

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³ In a recent joint video interview with Guy in Dublin, Evan Parker compares the situation between Rands and Guy with that which arose when ‘a composer in New York … asked [Barre Phillips] to make some recordings that he [the composer] would then edit into a piece; which of course has great parallels with [to Guy] your relationship with Bernard Rands who was basically asking the same thing of you; show my your stuff and I’ll organise it for you’ (37:53–38:28); ‘Evan Parker & Barry Guy in Dublin (2017)’ <https://www.youtube.com/watch?v=mSeZD54A20I> [accessed 7 March 2019].


explores areas that remain identifiably within the jazz idiom, albeit very advanced. Similarly, if one were to take *Statements II* as an early example of Guy’s stylistic tendencies, one could be forgiven for expecting to hear a barrage of virtuosic improvisation, fast and deeply textured even in group performance. However, the opposite is almost true within Iskra 1903. Whilst the technique required to perform some of Guy’s contributions to these recordings is certainly virtuosic and requires considerable accuracy as well as physical endurance, his performances are somewhat measured in comparison than those with other groups, and use fewer technical advances in a combinative manner. This is particularly true in the field of prepared technique. Live performances using preparation techniques are mentioned in concurrent writings but appear to be undocumented on recordings.  

As previously mentioned, the predominant genre through which Guy’s technical advances would function as a primary means of musical communication was freely improvised music. It is clear that throughout this early period Guy is rapidly establishing a definable idiom/praxis, the salient features of which would manifest themselves in *Statements II*. Within the wider new music community, various notations had been used to explore extended string technique in semi-aleatoric settings such as Penderecki’s *Threnody*. However, a rigorous set of notations used to define newer, more esoteric sound areas had yet to be established. Prior to the composition of *Memo I*, Guy and Rands had spent a period of time cataloguing Guy’s techniques with a view to eventually developing a notation which could be employed in regular compositional practice; a process Guy had also undertaken with Keith Winter and David Lumsdaine. Marsh writes that ‘Barry went through every aspect of his innovative technical repertoire so that Bernard could understand them and devise ways to notate them.’

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6 It is difficult to ascertain if Iskra 1903 recordings, for example, feature Guy using drumsticks as a method of preparing the strings either in terms of changing their pitch or allowing them to oscillate as a rhythmic generator. However, Marsh recalls that an impromptu evening performance at an SPNM composer weekend involved Guy using such techniques, so it suggests that these were either at a prototype stage or that Guy was uncomfortable using them in a setting where he had to be reactive.


9 Marsh, ‘Barry Guy’.
As such, *Memo I* is strikingly idiomatic in the sense that it functions perfectly as an unaccompanied work for double bass from a technical perspective, whilst also being a clear example of Guy’s specific praxis. Each technique used in the piece is grounded in an awareness of its wider relationships and physical constraints and, therefore, demonstrates a practicality in their notated setting. Whilst the piece uses a range of extended techniques, they are never superfluous or used merely for effect; rather they function as distinct instigators within the musical argument. A desire to avoid superfluity has been a particular concern within Guy’s rationale for technical expansion,\(^\text{10}\) and the manner in which techniques are utilised (which includes their use for dramatic effect) would suggest that such a preoccupation was an early one and is mirrored in Rands’s work.

With the technical parameters of the work established, Rands devised a structural pretext that would allow his musical ideas to be developed in a manner which would convey a sense of spontaneous invention whilst retaining a definable compositional imprint. Much of this is achieved through the use of a notation which not only offers a degree of freedom within the performer’s enacting of events, but simultaneously provides a concrete structure in which they are presented. What emerges therefore is a work that is simultaneously definitive yet highly variable in performance. This notion is given some credibility by Rands’s use of *Memo I* as the solo part in the concertante work *étendre* (1973) for double bass and ensemble, in which the material is expanded upon to produce a remarkably different work: ‘literally a case of stretching the material to sometimes very different ends’.\(^\text{11}\)

The result is a score in which part-graphic passages of strictly notated material coexist alongside freer gestures, a strategy which allows for an enormous range of technical and musical ideas to be condensed onto a three-stave system. Although as the piece progresses there is a gradual trend towards increasingly dense textures, the overarching sense is one of concision and clarity of musical line. Commensurate with this is the sense of spontaneous creation, which is inherent not only in the

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\(^{10}\) Guy has repeatedly spoken of the need to assimilate technical advances into an existing musical repertoire so that the techniques themselves are never the focus of the music but should seek to enhance them; each extended technique should have a rationale as to its usage.

resultant music but in the very nature of the compositional process. Indeed, Marsh noted, that the score was written ‘in one night’\textsuperscript{12} which in itself is an approach more akin to the methods of the improviser than the composer. As such, \textit{Memo I} is a perfect example of performer/composer interaction, the resulting work expressing the combined ideologies of both parties.

However, when compared with \textit{Statements II}, Rands’s work reduces the specificity of its exploration of combinative technical procedures, whilst simultaneously offering a greater degree of freedom in interpretive possibilities than that found in Guy’s score. However, the exchange of information is a reciprocal procedure, requiring the performer to fully engage with the composer’s intentions in order to produce a successful performance. These constraints are also a method of establishing a compositional identity in a work which is clearly tailored to include a specific performer’s musical traits. The freer aspects of pitch control must, therefore, correspond to the specific pitch relationships outlined explicitly elsewhere. As Marsh notes

\begin{quote}
It matters therefore that the performer is ‘in tune’ with the composer’s preferred harmonic devices: a major arpeggio would rather undermine the framework established by the otherwise tritone and semitone-based musical fabric, and a performer needs to understand this.\textsuperscript{13}
\end{quote}

The same is true when one considers the treatment of indeterminate pitch in \textit{Statements II}: the performer must observe the preferential nature of certain pitch relationships which are established early on in explicitly notated areas when executing the passages in which gesture is the primary concern. As such, phrases that are too overtly diatonic and/or consonant would be emblematic of a clearly incorrect choice, as they would present a definite conflict with the composer’s intentions. This

\begin{footnotes}
\end{footnotes}
becomes explicit when one examines performances of the work by Guy in which his executions of the freer material are explicitly referential to the predominant pitch relationships previously discussed.14

i) Memo I/Statements II – Shared traits

a) Notation

Pitch-based material

Both works use a form of proportional notation as their primary means of ordering musical events and exhibit a remarkable similarity. However, the degree of freedom offered by their visual qualities is markedly different. The illustrative notations found in Rands’s work are of a much simpler design than those of Guy, and the fully notated material is much sparser in nature than that of Statements II. Events are ordered within barlines, which demarcate five-second durations and remain a fixed structural element throughout the work, although, as certain passages allow for flexibility in the duration of bars, especially when the musical material is of a particularly dense or rapid nature, they function as a somewhat arbitrary parameter.15

Pitch is subject to a greater degree of freedom in its notation in Rands’s work, which uses three different staves to outline its intentions:

- A standard, five-line stave;

- A three-line stave in which the lines serve as a means of delineating the following relative registers: high–middle–low;

- A single-line stave denotes the central register, with pitches having a sonic relationship to their visual placement.

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14 Although no commercial recording of Statements II is available, Guy has sent me several recorded versions, each of which informs this postulation.

Pitch duration is also subject to flexibility in performance and uses a system in which sustained pitches are placed centrally on a vertical stem whilst a horizontal line denotes its relative length in relation to the barline (Ex. 5.1). The duration of these events is ‘determined by the mode of attack’.¹⁶

![Diagram of long and short notes]

**Ex. 5.1:** Bernard Rands, *Memo I* (pitch duration)

As such, events that are performed arco have a proportionally greater sustain than a single event performed pizzicato. This method, in which the specifics of the employed technique denote the characteristics of its sustaining qualities, is a fundamentally different approach to that favoured by Guy, in which all aspects of duration are rigorously controlled regardless of the techniques in question.

However, whilst Guy’s notation uses various gradients of velocity and visual representations of accelerations and decelerations, Rands’s notation for groups of pitches does not provide any means of varying their velocity within a phrase; rather it indicates that any material which is not sustained (or constitutes an isolated event) is to be played as fast as possible (Ex. 5.2).

![Diagram of velocity notation]

**Ex. 5.2:** Bernard Rands, *Memo I* (velocity notation)

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He also makes use of pitch boxes in a manner similar to Guy to explore the possibilities offered by improvising using a strict set of pitches, but allows for the nature of the discourse to be freer in its treatment, as his instructions are less specific as to the intended outcome. This would appear to be a compositional decision relating to the type of material Rands chooses and, as such, differentiates it from Guy’s approach.

**ii) Shared Techniques**

Both works share a similar technical palette, particularly in the wide range of pizzicato and percussive articulations in addition to a variety of bow placements which serve both as a primary technical device and as a means of colouring sustained sounds. These are:

**Pizzicato:**

- Left-hand pizzicato;
- Hammer-on pizzicato;
- Pizzicato *tremolo*;
- Pizzicato *alla chittara*;
- Fingernail pizzicato;
- Bitone pizzicato.

**Arco:**

- Wide variation of bow placements;
- *Col legno getato*;
- Arco on the instrument bridge.
The other obvious similarity is found within the specified instrumental set-up required for both works, which requires the double bass to be amplified by means of a contact pick-up, and its amplitude level to be controlled by a foot-operated volume pedal. Whilst the use of amplification as a contrapuntal device found in *Statements II* is absent in *Memo I*, shared rhythmic characteristics are present in both works. The use of amplification in general is, perhaps inevitably, much less refined in Rands’s work. Here it is used in order to clarify certain textures and to intensify the acoustical beating produced by the use of dissonant intervals whilst offering a degree of timbral variation as a side effect, or simply as a means to increase the dynamic level. Both works are intended for a stereo set-up in which a speaker is placed on either side of the performer and the level of amplitude is indicated in much the same way, save for Rands using a two-line stave in which a fluctuating line set between demonstrates the relative volume. Other direct similarities include:

- The notation of varying degrees of vibrato is the same with the addition of a solid, straight line indicating *senza vibrato* in Rands’s work, which is absent in Guy’s;
- The use of a bow position clef to indicate the relative position of the bow between the extremes of *molto sul tasto* and *molto sul ponticello*;
- A dotted line in the above stave to represent feathered bowing;
- A visual graphic to indicate pizzicato with the nail;
- Articulated glissandi;
- Bi-directional glissandi.

There are several techniques and notational methods used by Rands which do not feature in *Statements II*. These are:

- A number system of 1–7 to denote dynamic level (1 the quietest, 7 the loudest) rather than traditional notation;
• Extensive use of harmonic glissandi;\textsuperscript{17}

• Percussive articulations on the instrument body;

• Use of the performer’s voice as an imitative effect;

• Fingernail tapping.

\textsuperscript{17} Whilst not used in \textit{Statements II}, numerous examples can be found throughout many of Guy’s early recordings.
iii) Shared Notation of Techniques

Both works share a superficial similarity in presentation but with striking differences in the intended actions that they convey. Although many of the noteheads used to denote a specific technique are different, the method of using graphics rather than a verbal instruction to visually indicate how the music is to be played is a shared characteristic. However, a few direct comparisons can be drawn.

The works share percussive articulations (hammer-ons) provided by the hands and are notated in different ways, as shown in Ex. 5.3.

![Ex. 5.3: Bernard Rands, Barry Guy: percussive articulation notation](image)

Interestingly, there appears to be a mistake in the score for Statements II, in which a single percussive articulation shares the notation used by Rands (Ex. 5.4).

![Ex. 5.4: Barry Guy, Statements II (percussive attack plus pizzicato, b. 10)](image)

As the commercially available score of Statements II currently available was recopied by Guy in 1984, I had assumed that the earlier version of the solo work featured this notation which had been re-rationalised by the time that Anna was composed. However, it was later confirmed to be a pizzicato combined with a hammer-on.\(^\text{18}\)

Throughout the work Rands, in contrast to Guy, alternates between specific instructions as to the set of techniques to be employed at a given point, and much freer scenarios in which these

\(^{18}\) Confirmed in an email to the author dated 9 July 2006.
techniques can be implemented. Towards the end of the work, five bars of notated material are accompanied by the instruction:

Using the groups of attacks given, the next 5 measures should be a complex mixture of arco (norm, legno bat., pont., tail, trem., tasto, etc.) & pizz (gliss., [Bartok pizz], molto vib., Etc.) plus slapping body, fast tapping with fingernails, percussive attacks on strings at end of fingerboard.\textsuperscript{19}

Rands’s use of ‘etc.’ suggests an apparent willingness to relinquish a certain amount of control on a technical level, although not on a structural level, as the events themselves are clearly defined. This presents a scenario which differs radically from the freedoms offered by Guy’s work, in which the most common variables are to be found in pitch or in gradients of velocity. This reinforces the possibility of viewing Statements II as exemplifying a methodology in which advanced technique is used as a central facet of musical expressivity alongside a carefully controlled representation of a specific idiomatic praxis.

\textbf{iv) Structure}

Structurally, Rands’s work develops musical material in a similar manner to Guy’s: small cells of melodic, textural or harmonic material are subjected to a multiplicity of procedures and gradually transformed until the music arrives at a new area. Rands’s work similarly relies heavily on the juxtaposition of sustained textures (which are often subject to various timbral variations by such techniques as varying vibrato characteristics or finger pressures) with periods of intense activity which build throughout towards an eventual climax.

\textbf{Harmonic Structure}

Both works share a harmonic language which is constructed around the overtone series of the open strings. However, Rands’s work takes each open string as a starting point and gradually expands upon its sustaining qualities by adding specific dissonant intervals in conjunction with less rigorously

notated events. These intervals are used either as a means to colour a sustained pitch (acting as a dissonant interval) or as a sustained pitch in isolation. The most prevalent specific pitches throughout the work are again those that can be used in dissonant combination with an open string.\(^{20}\)

The work commences with a G♯ (sul d) which is almost immediately coloured by a G♮ (open string) then further expanded upon by the inclusion of an A♯. The first melodic idea in bar 3 is a partial tone row derived from these dissonant intervals: (in order) D♭, D♯, A♯, G♭, F♯, G♭.

Imitation of the first three bars then occurs combining a D♯ (sul a) with the dissonant pitches D♭, A♯ and E♭. The note-row idea is recalled in the sixth bar but is this time represented by notation in which relative pitch is suggested, rather than explicitly identified, whilst following a similar melodic shape. Bars 8–9 recall the first idea but expand the intervallic relationship to a major second (sustained A♯ – open G string).

This sustained motif occurs throughout the work and displays a preference for the following pitches: G♯–D♯–A♯–E♭

This tritone/major seventh relationship is also extended semitonally to include:

1) Pitch boxes:

   box 1 (b. 12): F♯, G♭, G♮, Ab, A♯

   box 2 (b. 17): C♯, D♭, D♯, E♭, Ab, A♭, B♭

2) Sustained melodic phrases:

   b. 28: E♭, E♯, G♭, A♭

   b. 31: G♭, G♯

   b. 33: G♭, F♯, D♭, D♯

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\(^{20}\) See: chapter 4, Table 4.3.
3) Sequences of repeated pitches in which each subsequent motif gradually expands on the previous example:

   bb. 60–61: G♯, F♯, D♯, A♭, D♭, D♯, A♯
   bb. 70–71: E♭, A♭, A♭, B♭, E♭, A♭, G♭, B♭
   bb. 92–93: B♭, B♭, D♭, D♯, E♭, F♯, F♯

Although pitch centres gradually expand outward throughout the work, there is a consistent tendency to favour dissonant intervallic relationships. Other pitch-based material in the work is more suggestive and uses either the one- or three-line stave.

v) Motivic Similarities

Direct comparisons can be drawn from the nature of the motivic structures and the manner of their development in Exx. 5.5 to 5.10.

Ex. 5.5: Alternation of rapid pizzicato phrases and greater number of sustained pitches
Ex. 5.6: Expansion of chordal material combined with rapid, linear single-note phrases

Ex. 5.7: As in Ex. 5.6, but culminating in a tremolo pizzicato chord (natural and bitone pitches)
Ex. 5.8: *Spiccato* phrases in a suggested register alternating with more sustained material encompassing (but not exclusively) defined pitch

Ex. 5.9: Various examples in which a variety of techniques are alternated to create passages of increasing density
Ex. 5.10: A sustained arco pitch coloured by left hand percussive articulations, usually of a dissonantly related pitch

There are also various smaller motifs or specific passages which combine certain techniques and which are common to both works (Table 5.1).

<table>
<thead>
<tr>
<th>Motivic similarity or texture/technique combination</th>
<th>Rands</th>
<th>Guy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustained pitch coloured with dissonant intervals. (Arco)</td>
<td>bb. 1–2&lt;br&gt;bb. 3–4</td>
<td>Letters P–R (many variations)</td>
</tr>
<tr>
<td>Glissando of Major 7&lt;sup&gt;th&lt;/sup&gt;</td>
<td>b. 31&lt;br&gt;b. 60</td>
<td>Letters N–O (primary motif)</td>
</tr>
<tr>
<td>Sustained arco pitch with repeated left-hand pizzicato</td>
<td>bb. 26–27</td>
<td>Letter J</td>
</tr>
</tbody>
</table>
### Table 5.1: Memo I/Statements II, comparative features

<table>
<thead>
<tr>
<th>Gesture Description</th>
<th>BBs</th>
<th>Letters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gestures which alternate extremely fast pizzicato material with a sustained pitch</td>
<td>bb. 38–39, bb. 45–47, b. 51, b. 57, b. 63</td>
<td>Letters B–D (extensive)</td>
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<tr>
<td>coloured by vibrato or trills</td>
<td></td>
<td>Letters U–V (extensive)</td>
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<tr>
<td>Spiccato groupings with short pauses between</td>
<td>bb. 17–19, bb. 74–76‡</td>
<td>Letters F–I (extensive)</td>
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<tr>
<td></td>
<td></td>
<td>Letters I–J</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Sustained arco pitch with left hand percussive articulation</td>
<td>bb. 8–9</td>
<td>Letter P (bb. 9–10)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Combination of bitone pizz and <em>normale</em> chord</td>
<td>bb. 58–59, b. 72</td>
<td>Extensive</td>
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<tr>
<td></td>
<td></td>
<td>Letters D–E</td>
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<tr>
<td></td>
<td></td>
<td>Letters T–V</td>
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<td></td>
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<tr>
<td>Hammer on pitches combined with glissandi in alternating directions</td>
<td>bb. 64–65, bb. 91–92</td>
<td>Letter B (b. 9)</td>
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<tr>
<td></td>
<td></td>
<td>Letter B (bb. 12–13†)</td>
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<td></td>
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<tr>
<td>Tremolo pizzicato chord with glissando</td>
<td>b. 45, b. 57, b. 75</td>
<td>Letter T–U</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extensive use of tremolando articulations – arco and pizzicato</td>
<td>Throughout</td>
<td>Throughout</td>
</tr>
</tbody>
</table>

† forms parts of improvised discourse  ‡ motif with technique offered as a possibility

**vi) Wider concerns**

The reduced information in Rands’s score requires a great deal of input on the part of the performer, whilst Guy’s piece is rarely willing to relinquish control and does so only in situations which are extensively notated. If one is to return to the postulation of Guy’s score acting as a manifesto for his technical and aesthetic preferences (and when motivic and harmonic predilections can be demonstrated as a salient feature in his subsequent bass works), then Rands succeeds in encapsulating many of these qualities in his score. The close integration of composition and improvisation in particular is effective in creating an overall structure in which two seemingly conflicting ideologies can function concurrently. The inclusion of improvisation or aleatoric elements within composed
works was not a particularly novel device at this point, but Rands, like Guy, goes much further and weaves spontaneity into the very fabric of every musical element whilst retaining a simultaneous rigour. Neither is Memo I a crossover or ‘third-stream’ composition, as its rhetoric is too grounded in the modernist musical conventions of the period to be such.

The extent of these dichotomous relationships, however, presents numerous problems to the performer in obtaining the desired results, unless a potential performer has an, at least passing, acquaintance with the conventions of Guy’s performance practice. This has been observed by Marsh when discussing the origins of Memo I with his students and Guy’s involvement in it. A frequently raised concern appears to be

the one of ownership. For some reason, if you introduce the notion that Barry is an improviser into a conversation about Memo I students are concerned that Barry is part owner of Bernard’s piece.22

This is a valid observation, but I would argue against the notion of joint ownership based on a set of technical and musical parameters alone. I would, however, venture to suggest that the notion of ownership is called into question on the subject of what constitutes an effective interpretation. As Memo I is composed exclusively with Guy in mind, it encompassed both his signature techniques and a variation of the musical structures in which they were routinely employed. How, then, can a performance in which Guy’s key stylistic traits are absent be valid? When discussing the work of Bruno Maderna, Berio was of the opinion that ‘Maderna’s scores should be interpreted and “fixed” by someone, using recordings of the composer’s performances to determine appropriate solutions.’23

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21 A term coined by Gunther Schuller to describe a hybrid music containing elements of classical music and jazz. The term seems to have first been used in his 1957 lecture at Brandeis University. Guy has refuted such a term, particularly in reference to his various extended works for the London Jazz Composers’ Orchestra, in which composed passages are integrated with improvised sections. Schuller subjected the term to subsequent revision as to its meaning, finally offering in 1981 a list of what is definably not third stream.

22 Marsh, ‘Barry Guy’.

This point raises the question of authenticity in relation to these works, particularly if the elements in question are disregarded by the performer either by choice or through ignorance. In the introduction to Soundweaving, Evan Parker has written that:

Social and historical context affects not only the interpretation of notated composition, but also how the instrumental techniques are extended and how new instruments are built.24

With this point in mind, the singular nature of Guy’s playing develops an idiom of its own which, considering its uniqueness within the solo bass repertoire, becomes explicit in the case of Statements II and, to a lesser degree, Memo I. In essence, the success of both works is directly informed by their musical material and techniques, but also, crucially, by the nature in which they are used in performance. In discussing the work of pianist Cecil Taylor, Lash speculates that:

Energy is not a euphemism for loud, fast and undifferentiated ecstatic improvisation. It refers very precisely to the convergence (or crystallisation, perhaps) of dynamic, register, rate and density of activity and more.25

In relation to the specifics of his praxis, energy is also a term often applied to Guy and is indicative of a wider perception of musical elements in which an emotive or physical response is as important as the cerebral. This is particularly true of improvisation, which demands a great deal of engagement from the audience due to the transient nature of the music itself. Therefore, when approaching works such as these, in which this ethos forms part of their wider concerns, it seems logical that a broader range of knowledge is required by the performer than would otherwise be deemed necessary elsewhere. Whilst a more comprehensive background knowledge can only serve to enhance any performance of any work, in these pieces it is essential for them to succeed. Heightened physical energy, both in virtuosity of execution and the theatrical aspects inherent in it, are crucial in realising

the works’ goals with the former, in particular acting as an element intrinsic to the communicative power of the extensive pizzicato passages found in both works.

These expressions of stylistic predilection become particularly apparent when one considers performances or recordings of the works by performers other than Guy. Corrado Canonici’s recording of Rands’s work\(^{26}\) is a case in point which, whilst perfectly valid and accurate in its replication of the notation, lacks the drama and velocity the work can portray, due predominantly to the absence of the kind of virtuoso pizzicato technique with which Guy is heavily associated. This problem is further compounded with the application of the bow (of which Canonici is unquestionably a master), at which point the work gains a sense of momentum and urgency in stark contrast to the pizzicato sections. Thus the nature of training, in particular classical pedagogy which predominantly favours the intense study of arco technique with little focus on pizzicato, can betray its limitations when approaching works whose origins are clearly influenced by the practices of other genres.

The lack of pizzicato schooling in established conservatoire training is an area which would result in an obvious deficit, but there is also the question of instrumental set-up. Guy’s set-up is much more of a hybrid affair than the instruments of many classical players, and string height, bridge setting and string choice are intended to offer a rapid response in both pizzicato and arco performance. This again raises the need for an awareness of the stylistic preferences inherent in Guy’s playing to be extended to the performance of works written specifically for him. Instrumental set-up is an important point here, as many of the technical innovations discussed are only possible to produce with any degree of accuracy on an instrument which has a relatively low string height, a brighter tone than average strings which enable pizzicato sustain, and a favourable bridge radius which enables equally favourable clearance for arco and pizzicato performance. Such a set-up is radically different to the typical orchestral instrument.

There emerges, then, a clear case that the multiplicity of stylistic influences in Guy’s formative years has resulted in a distinct performance idiom. Replication of – or, at least, an

understanding of – its salient features requires a considerable immersion in a wide variety of settings to enable effective replication of his composed work. Thus, they, along with Rands’s piece, become empirical works: they require the performer to draw on their training, and knowledge of Guy’s work as a performer, to develop and complete the musical structure. The notion of empiricism was raised in correspondence between Edgard Varèse (1883–1965) and Milton Babbitt (1916–2011), when discussing the idiophonic sounds in the former’s work, Ionisation (1929–1931). François, when discussing the same subject, writes that ‘timbre is a momentary, pragmatic, and empirical production that cannot be reduced to a system’.  

All three refer to a type of sound which itself is broadly defined as to its qualities, but crucially not in its specific characteristics. Events and sounds within the piece, therefore, will display certain consistent qualities but will also be subject to a degree of variation. As such, the performer has to draw their own conclusions from experience to realise the composer’s intentions. Whilst all musical interpretation is an essentially empirical act, much of this is essentially an awareness of historical contexts and their performance protocols. There exist within Guy’s and Rands’s works sections in which the performer has to complete the musical structure by employing guided improvisation. As these sections are framed by notated material in which the musical language in question is highly specific, the works essentially become empirical constructs as they require the performer to draw from their training and interpretive powers to effectively complete a musical argument in a stylistically appropriate manner and advance the progress of the piece.

François has applied the term empirical to the timbral variations that arise in Varèse’s Ionisation, but I here extend its meaning. I have previously stated that a performer approaching these works has to have an, at least superficial, acquaintance with Guy’s playing to effectively replicate the work’s core concerns in performance. This would have to extend to all of the areas which have been previously discussed, so that the freer areas which connect notated materials, as well as the variability within notated materials, become empirical constructs which the performer is required to solve. As mentioned previously, ‘energy’ is a frequently used term, and is a subjective concept which aims to articulate the intangible but remains crucial for a successful performance of these works. In this

context, an awareness of the social and musicological conventions of improvised music and, in particular, an awareness and understanding of the performance protocols favoured by Guy will also enhance the freer sections found within both pieces.

There is a sense that, between 1966 and 1972, Guy is exploring the possibilities of a compound musical language derived from the interaction of his catholic musical interests. From its codification in Statements II, however, there emerges a formalised set of musical parameters that operates as the basis of an established performance and compositional language with a focus on the combinative possibilities of extended technique as a predominant means of musical expression. If the main preoccupation of Guy’s first solo recording\(^{28}\) could be viewed as textural, following a line which had been established by the syntactical parameters of Statements II, then by the time of Fizzes (1993)\(^{29}\) Guy’s language displays a much more obvious integration of melody with more abrasive textures to establish a cohesive solo language – something that had been more in evidence in his composed work.

Guy has spoken of ‘musical pluralism’\(^{30}\) in the past and of the need to keep various parts of his diverse musical activities separate from each other. However, the core elements of his performer identity in contemporary music(s) became more established alongside his burgeoning involvement in period performance and feed directly into his ideologies as a composer, certainly for performers other than himself. The exclusivity of these diverse practices becomes particularly apparent when considering the nature of the musical material for the ensemble in Guy’s bass concertos,\(^{31}\) in contrast with the musical parameters of his contemporaneous works.

Flagwalk (1974) and After the Rain (1992) are two works for strings which feature highly expressive, often diatonic melodic content alongside areas of extreme dissonance and sections that are freer in nature. Guy’s solo language would move gradually to this stage over the next two decades, with the focus in earlier periods being, initially, the expansion of technique and its textural

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\(^{29}\) Barry Guy, Fizzes, CD, Maya MCD 9301 (1993).
\(^{30}\) Lloyd Peterson, Music and the Creative Spirit (Lanham, MD: Scarecrow Press, 2006), p. 122.
possibilities, followed by the application of electronics and prepared technique to his existing vocabulary.

As such, his solo language is a definable idiom which has remained somewhat isolationist and his bass works appear very infrequently on concert programmes. It is worth noting, however, that Guy has admitted that his sound extensions are not always viewed favourably by the musical establishment and, as late as 1996, Double Bassist magazine described two then-recent albums by Guy as ‘two and a half hours of musical gibberish’, proceeding with a damning indictment of his practices:

Why anyone would choose to listen to it is beyond me. Of possible interest only to psychologists and fans of Hans Christian Anderson whose Emperor’s New Clothes never seemed more relevant.

This becomes more curious when one considers that the previous issue had carried a five-page feature on Guy entitled ‘Brave New World – Barry Guy’s experiments in improvised jazz have created a new colour palette for the double bass’!

This notion of a new colour palette is in fact an established core language from which all of Guy’s subsequent work is drawn. More recent works, such as Folio (2002) and Time Passing (2006), feature very little composed material for the solo double bassist, who instead engages in a predominantly improvised commentary with the orchestral ensemble and other soloists. However, the core elements of Guy’s discourse throughout these proceedings can be directly related to the innovations put forward in the first solo work. As such, Guy’s recent trajectory displays a more cohesive and homogeneous approach to his diverse musical activities which was less perceptible in previous decades.

Central to his performance practice remains this kernel of integrated extended technique. The techniques themselves in all of these circumstances are teleological in their nature, existing only to serve a broadened scope of an aesthetic stance on musical objectives; never are they used simply for

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34 Ibid.
effect. In spite of the diverse array of instrument-specific advances inherent in his work, they remain as purely musical devices arrived at from a need to rationalise a communicative musical argument as part of an expansive musical vision. Guy’s own view of his work can be typified thus:

What I’ve tried to do is get the energy coming through my fingers. And following from this, I find that improvisation allows me to treat the bass as a voice, instead of an object to be bowed or plucked.35

It is a remarkable example of a performance rhetoric which manages to embrace often conflicting ideological and musical processes and one that has been crucial in formulating my own approach to the instrument and to wider musical concerns.

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Chapter 6

Contextual Approaches to Performance and Composition within My Own Practice

As a soloist, my core interests in an interpretative context have always strongly favoured the preparation and performance of contemporary works for solo double bass. I had always held a fascination with the possibilities of sound from my formative experiences as an instrumentalist. I had attended some contemporary music events as a school student and a performance of Pierrot Lunaire (1912), in particular, left an indelible mark. However, it was discovering a copy of Bertram Turetzky’s seminal work The Contemporary Contrabass¹ within the first few days of my conservatoire training that piqued my interest in contemporary performance practice. I am also interested in musical genres that demonstrate a collective responsibility and present instigative and reactive possibilities in some way. Situations, then, in which the music can be shaped spontaneously by the ensemble as a collective rather than following the whims of an individual seemed an obvious choice and, to that end, I have always sought performance opportunities that reflect this standpoint.

My own training has been particularly diverse, including courses of study in classical and jazz performance and composition concurrently at conservatoire level. My classical training closely followed the Simandl² method and gradually expanded to include the teachings of Franco Petracchi³ and Ludwig Streicher.⁴ During this period, whilst commencing study of Bottesini’s Concerto No.2, I began to research various recordings of the work including those by performers such as Streicher, Ovidiu Badila and Edgar Meyer. I found Meyer’s recording⁵ fascinating, as it displayed a curious irreverence in its deviation (at times) from the written part, but a lightness and fluency in his

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articulation and sound which was markedly different from other versions. This, in turn, led me to research further his approach, and I soon discovered that his technique is at once fairly unorthodox whilst clearly forged in the same tradition as my own. Meyer has discussed his approach in various interviews,\(^6\) in which he describes his use of extensions\(^7\) to enable a smooth transition between positions and his use of the thumb in lower positions to expand the intervalllic range without shifting. Meyer also uses a solo scordatura almost exclusively and thinks in terms of pitch rather than fingerboard positions.\(^8\) This was a crucial moment for me, as I began to conceptualise notes on the fingerboard outside of specific positions, which had the almost immediate effect of increasing left-hand fluency. Any psychological fears of thumb position in the higher register were also diminished by rationalising its use in the same way as one would use any other part of the fingerboard.

Meyer’s particularly light touch in terms of arm weight while bowing\(^9\) and, as a result, the increased range of articulations it gives him was also an important discovery and commensurate with my studies in period performance practice, which seemed to mirror these articulations. Thus, the nature of approach to my core sound began to change, and I quickly realised that my interests and strengths lay in solo and chamber music, to which end I began extensive study of the various contemporary schools of playing. In addition to the previously discussed work of Barry Guy, whose work I had serendipitously unearthed in the college library, and through my studies in improvisation with Keith Tippett (1947–2020), two practitioners became of particular interest: François Rabbath and Stefano Scodanibbio. With the former, I was fascinated not only by his ability to transcend genre as evidenced on the albums Bass Ball\(^10\) and The Sound of a Bass\(^11\) whilst placing the bass firmly at the forefront of a musical argument, but also by his truly staggering bow technique. Rabbath has developed a bow technique to match the range of articulations of the rest of the orchestral string.


\(^7\) Extending the hand or finger span to cover pitches outside of a standard position.

\(^8\) Typically, solo music written for double bass sounds a tone higher than written, so that the bassist reads and performs as if using orchestral tuning.

\(^9\) Jason Heath has recently discussed the nature of Meyer’s bowing style on his blog: <http://doublebassblog.org/2009/05/thoughts-about-edgar-meyers-bass-playing.html> [accessed 7 March 2019].


family and combines it with an unconventional left-hand technique to increase his fluency of expression. For some time, I studied his pedagogical work\(^\text{12}\) and thought the ‘crab’ technique\(^\text{13}\) to be an interesting innovation. However, I soon found that the technique has its limitations by being a little too capricious in its physical requirements, and that intonation would often suffer as a result. I thus discontinued using it save for occasional points in improvisation.

Scodanibbio’s work, of which Thelin’s extensive investigation\(^\text{14}\) views as the logical summation of broadly traditional practices, was to prove a more lasting influence. Scodanibbio’s solo recording *Geografia Amorosa*\(^\text{15}\) documents his works for bass and demonstrates a remarkable virtuoso technique, displaying a fascination with the various methods used to produce harmonics and other more unconventional techniques whilst being closely aligned to tradition. In Scodanibbio’s work, harmonics function not only as a method in which tessitura can be extended upward but also as a timbral device. This in itself is fascinating and was to be of considerable interest to contemporaneous composers. Indeed, Cage remarked on hearing Scodanibbio in recital that ‘in fact I haven't heard better double bass playing than Scodanibbio’s. I was just amazed! And I think everyone who heard him was amazed’.\(^\text{16}\) Cage was not alone in his reaction, and the number of pieces written for Scodanibbio, many of which detail his specific performance style, is considerable and include works by Iannis Xenakis, Luigi Nono, Salvatore Sciarrino, Brian Ferneyhough, Gérard Grisey, Giacinto Scelsi, Franco Donatoni and Sylvano Bussotti.

The first score of Scodanibbio’s that I obtained was *Alisei* (1986),\(^\text{17}\) a piece in which harmonics are a central feature as individual pitches, and as components of a textural multiphonic. I was already attuned to the multiple string sounds found in Guy’s *Statements II* and Jean-Pierre Robert’s *Modes of Playing the Double Bass*,\(^\text{18}\) but the manner in which *Alisei* uses them and the


\(^{13}\) A technique in which the left hand quite literally mirrors that of a crab in its movement. Rabath also divides the fingerboard into six positions, a method which I do not favour.


\(^{15}\) Stefano Scodanibbio, *Geografia Amorosa*, CD, Col Legno WWE 1CD 20063 (2000).


\(^{17}\) Stefano Scodanibbio, *Alisei* (1986), published by the composer.

beguiling softness in the resulting sound was entirely new to me. I thus set about exploring works written for Scodanibbio, including Sciarrino’s *Explorazione del bianco I* (1986), which explores harmonics extensively and further inspired me to explore Fernyhough’s *Trittico per G.S* (1989), which presents many challenges, too numerous to list here. As a consequence of my level of engagement with Guy’s solo work, the technical parameters involved in my improvisations began to alter to include a greater array of sonic possibilities in combination with an enhanced confidence in advanced performance settings. As all of these works were practised alongside the established core repertoire, I was able to assimilate new techniques and musical procedures at a rate which was rapid, but measured enough to enable me to carefully consider each as to its possibilities within my own musical language. Concurrently, through my interest in jazz I was deeply affected by the work of Scott LaFaro (1936–1961) and his work with the Bill Evans Trio, and the expressive possibilities that such a fluid pizzicato technique could offer. I simultaneously began to investigate the various innovations that had been developed by bassists working in the field of free improvisation. In particular, the muscularity of Peter Kowald’s (1944–2002) playing on *Was Da Ist* proved influential, as did the combination of physicality and refinement in Guy’s playing on *Fizzles* and *Symmetries*, and galvanised my own efforts in this area.

Much of my technical repertoire as an improviser has developed as a result of my physical relationship with the instrument in combination with a desire to make the reactive latency between thought and gesture as short as possible. After attending a solo concert by harpist Rhodri Davies (b. 1971) in 2004, I also became fascinated by the use of preparation in performance to extend the sonic range of the instrument and have since developed this extensively within my own vocabulary. Davies’s work in improvisation also alerted me to a movement within the British free improvisation

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scene often referred to as ‘The New London Silence’. The salient features of this sub-genre are a general trend towards an abolition of gesture alongside a diminution of dynamic level to the lowest end of the spectrum. Discussing the group IST, Mark Wastell described the collective aesthetic approach as being ‘concerned with a way of listening that required more attention to the microscopic level.’ The recording *Ghost Notes* aptly demonstrates this approach in focussing on textural and timbral variations, often at a very low dynamic level.

At the other end of the sonic spectrum, I was listening intently to the early work of German practitioners such as Peter Brötzmann (b. 1941), Alexander von Schlippenbach (b. 1938) and Kowald, as well as the contemporaneous efforts of Netherlands improvisers Fred Van Hove (b. 1937) and Maarten Altena (b. 1943) in particular. Each of these performers obviously display strong individual characteristics, but I found the general trend towards aggression and power in the Germanic school particularly, as evidenced in Brötzmann’s *Machine Gun* and *Fuck de boere*, to be simultaneously powerful and unnerving.

However, I began to become frustrated with the exclusivity inherent within such sub-genres, and my goal became to develop a coherent language in which these disparate modes of expression could function concurrently. My own playing tends towards a rapid interchange of musical ideas and technical parameters often contrasting with periods of stasis. It is only logical, therefore, that such a diverse range of performance interests would also reveal themselves within the technical remit of my composed work.

By investigating the work of Barry Guy and Bernard Rands I have discussed the possibility of their scores acting in an empirical and heuristic fashion for the performer, but the same can also be assumed if studying their innovations from a compositional perspective. When examining my own

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24 A term used to describe a number of groups and individuals whose work was explored in Clive Bell, ‘New London Silence’, *The Wire*, 260 (2005) 32–39. This group of improvisers is also sometimes termed ‘Third Generation’. ‘First generation improvisers’ is a term used to refer to performers such as Guy, Evan Parker, John Stevens, etc.; ‘Second generation’ applies to performers such as Paul Dunmall, John Butcher, John Edwards, etc. See: <http://www.efi.group.shef.ac.uk> [accessed 3 January 2018].
25 A trio consisting of harpist Rhodri Davies, cellist Mark Wastell and bassist Simon H. Fell.
work in this manner, I soon became aware of a seemingly dichotomous relationship within my own compositional practice. As my main areas of interest as a performer have always been contemporary music, early music, jazz and free improvisation, my work as a composer seeks to develop an approach in which the salient features of these genres can coexist.

Whilst my concert works do not contain any improvisation, many do feature sections in which the performer has more control than may be considered typical in developing the musical direction. Many of my works use a variety of compositional techniques and styles to arrive at their final version whilst aiming for a cohesive identity. Despite my intense engagement with improvisation in various genres, I have always had little interest in incorporating it within my composed works for double bass to advance a musical statement. I realised retrospectively that composing for my own instrument often involved a different set of processes to those of my other compositions. This seemingly dichotomous approach began to interest me further, as I had hitherto not rationalised it to any extent, and I began to investigate it more fully as part of this course of study. When initially considering this point, my initial response would be that my works for double bass had to be playable by other performers as my own performance praxis is highly specific and idiomatic. Simply replicating it in a composed medium is anathema to my wider musical concerns, as I am interested in the communicative potential of spontaneity when actively engaged in performance. What did emerge, however, was a notion that my compositions for double bass had to have a reason to exist. After all, if I wanted to express something with the double bass why could I not just simply improvise? This rationale had existed at least on a subconscious level for quite some time, although I did try to seek to codify my performance rhetoric into composed forms with what I consider to be mixed results. I completed just two brief solo works for solo double bass (each less than 4’) between 2004 and 2013, and one concerto in 2007, each of which explore aspects of my emerging performance language to varying degrees.

Many of my solo improvisations feature a wide range of extended and traditional techniques to present a musical idea. The impetus for developing these techniques has always been essentially intuitive and primarily concerned with finding the means to emulate specific sounds that I find particularly interesting. Each technique is explored in a variety of contexts (practice/performance –
solo/ensemble) and gradually assimilated into my wider practice, which itself has similarly been shaped by the gradual inclusion of a number of specific approaches that I have previously discussed. Comparatively, therefore, my composed works for the instrument, generally explore a reduced musical palette not only in terms of technical resources on an instrumental level, but also compositionally. As the majority of these works explore a single compositional idea and a handful of techniques, it is essential that each work must present some sort of advance to justify its existence in print as I consider my instrument-specific musical identity to be one that is predominantly concerned with communication within freer idioms.

My practice as an improviser is documented on the recording which accompanies this document and is reflective of my performance language at the time of recording. As the recording date approached, I began, in practice sessions, to formulate a rough idea of what I wanted to present and of a generalised plan for the album. The track order remains as it was recorded and is unedited, save for the removal of one track in which the rather noisy heating system of the concert hall proved too intrusive and had to be abandoned. When considering an outline for the pieces, I revisited solo bass recordings by other performers which I thought to be particularly successful, and observed that each had a common structure in which each track explored a specific technical and musical area, often alternating the primary techniques (i.e. arco, pizz, arco, etc) as well as varying duration. Initially, I had considered recording a long series of miniatures in the manner of Kowald’s *Was Da Ist* but found the time constraints too limiting and noticed a tendency to present techniques just for their own sake, rather than employing them in a more musically integrated manner.

The recording uses a modern, pear-shaped instrument in solo tuning, which is modified with a pickup embedded in the nut. The strings used were Thomastik Spirocore™ which are bright in character, produce harmonics very easily, and are equally responsive in arco and pizzicato performance. They are also particularly robust in construction and, therefore, suitable for a range of extended techniques.

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The bows used were:

3 German bows (2 pernambuco, 1 Ipe) of various weights;
1 Violin bow.

Extra ‘bows’ and preparations were as follows:

1 hairless bow with notches carved into the stick; 1 blackboard eraser;
1 bow stick wrapped with elastic; 1 crotale (C₈);
2 bow nuts with screws; 1 small finger cymbal;
2 timpani beaters, medium hard; 1 plastic clothes peg;
1 rubber headed glockenspiel beater; 1 wooden clothes peg;
1 medium weight drumstick; 2 door wedges;
2 plastic drum brushes; 2 champagne bottle corks;
2 dowelling rods of various weights with added padding at one end; 1 lint roller holder with serrated edges;
4 chopsticks (various materials and weights); 2 cardboard tubes;
2 knitting needles; 1 cello bridge;
1 rubber practice mute; 1 oversized plastic paper clip;
1 heavy ebony mute;космострел ¹See: <https://www.themoderndoublebass.org.uk/misc-mutes.html>
1 plastic lid from a coffee filter;¹² See: <https://www.themoderndoublebass.org.uk/prepared-technique---introduction.html>
1 hot-rod;

The microphone and amplification set up was as follows:

1 AKGᵀᴹ C214 positioned roughly 2 feet in front of the bass and slightly to the bass (e-string) side;
1 DPAᵀᴹ attached to the bass on the tailpiece;
2 ambient slung mics already in situ;

³¹ See: <https://www.themoderndoublebass.org.uk/misc-mutes.html>
³² See: <https://www.themoderndoublebass.org.uk/prepared-technique---introduction.html>
Nut pickup straight to an amplifier (12” speaker) controlled by a volume pedal;

An SM58™ placed directly in front of the amplifier speaker.

(For nut pickup detail see chapter 7, Fig 7.2)

Each of the following improvisations demonstrate examples of my archetypal usage of techniques which are explored in the accompanying composed pieces. In each case, a broad overview is given in relation to the musical progress, to the contextual usage of techniques, and where these could relate to the interpretative questions posed by the compositions. The composed works are discussed in further detail in the following chapter. Each technique has been integrated into my existing practice after a process of research and development which has included exploring them in performance contexts. Each technique is documented on my website alongside appropriate explanation and demonstration.33

**Azure Day**

This piece explores the alternation of various sets of musical materials which are continually expanded or contracted. This is the core structural device used in *Ariel*. Small melodic cells are hinted at throughout the opening and develop into a more overtly lyrical passage [02:10-02:40] before gradually breaking down (via textural multiphonics) into a gentle exploration of layered natural harmonics. A transitional motif of paired semitones [03:04-03:14] leads to a recapitulation of the earlier *tremolo* motif which is, this time, combined with left hand percussive articulations, before a brief return to the alternating musical materials of the opening brings the piece to a close. The harmonic language throughout is based around the harmonic series of the open strings and the primary intervalllic relationships are centred around semitones and tritones.

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33 See: [http://www.themoderndoublebass.org.uk/techniques.html]
Organon

This is the first of a series of lyrical pizzicato pieces. The character is, however, essentially active and explores a series of rapid lines over a wide tessitura alternating with briefly sustaining glissandi of individual notes, chords and harmonics [00:00-00:40]. Other techniques, including tremolandi, hammer-ons and palm rubbing, are also used but the core technique is multiple-finger pizzicato. A repeated glissando beginning on E♭ is gradually elongated each time it returns and serves as a brief transitional axis point [00:40-00:46]. The piece moves into presenting more measured statements of melodic material which nonetheless includes occasional outbursts of velocity incorporating the earlier material [00:46-end].

Polynya

Although sharing a title, this piece is an entirely different one to the composed work which accompanies this document. This improvisation explores the possibilities of the pickup system built into the nut of the instrument, which is also explored by the microphone placement in Lento(ii), allowing for the amplification of the bitone length of the string. An extend passage of rapidly tapped bitones is briefly interrupted by: a percussively articulated triple-stop glissando [00:32-00:34]; two pizzicato G♯s manipulated by reduced finger pressures; glissandi [00:50-00:56] and raked harmonics [01:03]. The tapped bitones then begin to alternate between fingertip and fingernail articulations, providing timbral variations in a passage in which small rhythmic fragments emerge, develop, and then are gradually broken down [01:04-02:53] with glissandi appearing with increasing frequency. The closing section alternates these parameters with simultaneous pizzicato articulations from the ‘regular’ side of the strings creating various textural layers. Although present only very briefly, the extent to which a gradual reduction in finger pressure is used to transform the sound of a sustaining pizzicato pitch is important, particularly the extreme to which it is taken. Various points in Lento(ii) employ this particular combination of techniques (bb.131, 174, 177, 179, 181-182) whilst

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34 See: <http://www.themoderndoublebass.org.uk/bitones-intro.html>
35 For further explanation of finger pressures and transitional possibilities see: <http://www.themoderndoublebass.org.uk/left-hand---finger-pressures.html>
a more generalised, but comparable, approach to percussive articulations is found extensively between b. 172-182.

Shell of Sky and Earth

The opening [00:00-03:29] takes in a variety of techniques that employ serrated objects\(^\text{36}\) (detailed above) as arco devices with *legato* and *tremolo* articulations. However, the closing section [03:30-end] is perhaps more important to an interpreter of my composed works, as it demonstrates my approach to layering sounds using sustaining pitches and sympathetic resonances on the instrument. Whilst the latter forms the main compositional idea in *Courant*, it is also of fundamental importance in the passages of harmonic interchange (and resulting multiphonics) of the composed *Polynya*. Although not specified, the notation in *Polynya* offers the bassist an opportunity to create various layers of musical material by allowing pitches to sustain after articulation.\(^\text{37}\) This allows the material to be taken to various extremes but my own approach can effectively be demonstrated here, as well as in brief sections of *Azure Day*.

Khnemu

*Khnemu* exclusively employs external percussive generators\(^\text{38}\) in a variety of ways which use the majority of the instrument. Save for the preparation of the bass in *Lento(i)* I have not, thus far, employed any of my extended technical language which utilises preparations in any of my composed works. One reason for this is that I wish to keep elements of my performance practice personal. Another is that these techniques have been arrived at over many years of experimentation and I am concerned that someone approaching such a potentially violent technique in notated form, might damage their instrument in the process by not understanding the specifics of the technique in question. However, the piece offers much as to how my extremes of velocity may be interpreted, particularly in regard to percussive techniques. Comparable representations exist in *Ariel*, most notably on p.3, 4\(^{\text{th}}\)

\(^{36}\) See: <http://www.themoderndoublebass.org.uk/arco-serrated-objects-other-than-the-bow.html>

\(^{37}\) See: <http://www.themoderndoublebass.org.uk/variability.html>

\(^{38}\) See: <https://www.themoderndoublebass.org.uk/percussive-external-generators.html>
and 5th systems, but also throughout the majority of Lento(ii) where rapid technical interchanges frequently occur.

**Ecclise**

*Ecclise* is another predominantly lyrical pizzicato piece, this time including the finger pressure variations and bitone articulations found in the improvised *Polynya*. The piece gradually increases in velocity building to a section in which various musical materials are constantly alternated [01:19-01:56] before being abruptly halted by a quadruple stop pizzicato chord followed by a downwards glissando. A short passage of isolated phrases over a wide tessitura is brought to a close by a harmonic glissando. [01:57-02:20].

**Marine**

This piece explores the manner in which I use scordatura 39 (typically lowering the pitch) to increase resonance by reducing pressure on the instrument's top, a key feature in the general approach to sound in *Courant*. Scordatura also offers new sympathetic resonances (which are utilised here) and otherwise unavailable combinations of natural harmonics. Various sets of musical materials are again altered throughout and the piece is again representative of methods used to layer harmonics and resonances. A brief passage [01:30-01:42] also demonstrates my archetypal approach to the passage of rapidly alternating harmonics found throughout the composed *Polynya*.

**For Peter Reynolds**

For this piece, the bass was lain on its back and prepared with a cello bridge (see: **Fig. 7.1**, p. 172). The AKG microphone was appropriately reconfigured and the nut pickup amplitude is varied throughout. The main focus of the improvisation is the interaction between two bows which are used to bow various parts of the cello bridge as well parts of the main instrument body. 40 As the piece progresses, a knitting needle is also inserted into the bridge and subjected to various degrees of

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39 See: <http://www.themoderndoublebass.org.uk/scordatura.html>
40 See: <http://www.themoderndoublebass.org.uk/body-part-sounds-intro.html>
pressure so that at the two extremes it can rattle against the bridge or alter its vibration pattern and change its fundamental pitch. The initial inspiration for using the bass in this manner came from Rhodri Davies, who I had seen using the harp in a similar way, as well as pieces by Fernando Grillo, Julio Estrada and John Cage, which are discussed in the subsequent chapter. The purely sonic inspiration for this approach originates from a recording by Grillo: *Fluvine Tre*. I had always enjoyed the sound Grillo produced in this recording, achieved by detuning the lowest string then using the thumb to alter the tension horizontally, but wished to find a method in which a similar sound could be produced at a reduced velocity and through preparation. Several years of experimentation finally yielded the result using this specific set of techniques. *Lento(i)* takes this approach as its core technique and further extends the amplification to areas of the instrument body via the use of contact microphones. The piece is dedicated to my former composition teacher, the late Peter Reynolds (1958–2016).

**Shard**

*Shard* is perhaps the closest to *Ariel* in terms of the way in which musical materials are utilised, as well as sharing certain harmonic and textural approaches and rhythmic characteristics. The opening passage [00:00-00:31] is an effective demonstration of the nervous energy and resulting timbral qualities that I wish to be present in the composed work. Both works also share motivic traits including: brief phrases built on pairs of semitones; short, rapid phrases followed by a sustained harmonic [00:48-00:52]; similar melodic fragments to those found on p. 3, particularly when alternating with other techniques [01:01-01:26]; a passage of changing, double stopped harmonics [01:37-02:10] which are also a motivic feature of *Lento (ii)*, b. 188-204. Both pieces also explore, more generally, extremes of tessitura although *Shard* extends the range found in the earlier composed work with the inclusion of subharmonics. The use of increased bow pressure in the closing section

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42 Pre-compositional notes for *Theraps* made by Iannis Xenakis in 1975 describes the technique (quoted by Braxton Sherouse) thus: 'detuning] a string –hold it with the finger [the thumb] that can change the tension'. <http://www.braxtech.com/media/sherouse-theraps-as-techne-tapestry.pdf> [accessed 20th January 2018].
43 See: <https://www.themoderndoublebass.org.uk/subharmonics.html>
[02:14-end], when applied to harmonics and fingered pitches, thus creates a range of transformative multiphonics:

- harmonic > bow pressure > textural/timbral multiphonics;
- fingered pitch > bow pressure > subharmonic.

**Varshan**

The opening [00:00=01:01] and closing [02:17-end] sections of *Varshan* share many of the musical concerns of the earlier arco pieces and alternate a variety of techniques and textural devices. However, the intervening passage [01:02-02:14] potentially offers the most effective demonstration as to how I would approach the musical material in the notated version of *Polynya*, particularly concerning the extremes to which I would take the various timbral elements subject to variation in that work. It also offers an indication as to how variations in velocity within phrases may be interpreted.

Whilst the outlines of each piece given above are admittedly brief, they demonstrate elements of a wider praxis which are explored in notated form in the following works. What the recording should demonstrate more generally, is that the use of an extended technical language in both my composed works and in improvisation is teleological in nature. The musical material of the following pieces is diverse, each exploring a specific musical perspective, technique and method of sound production. They are, however, unified in using a technical approach in which *integration* is a primary concern. Whilst the notation invites a degree of variability as a core composition concern, drawing too much attention to a specific technique and its resulting sound would, therefore, be an interpretive error. It will become clear that an instrumentalist approaching these works will have to undertake the necessary empirical research to develop, if required, the necessary techniques in order perform them accurately. The method of developing these techniques will, of course, vary but all

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44 See: <http://www.themoderndoublebass.org.uk/transformative-multiphonics.html>
performers will inevitably be confronted with the inherent sonic variance produced by the techniques and, thus, a heuristic investigation as to what is preferable will begin.

Performances of these works will also require a degree of improvisation on behalf of the performer. Much in the manner that I have previously discussed the relationships between composition and appropriate improvisation within an idiomatic approach in the context of Guy's and Rands' works, the improvisatory elements require fidelity to the score, but not exactitude. Benson describes eleven types of improvisation (with an additional five subcategories particularly pertinent to baroque music and jazz), three of which are directly relatable to these pieces: what he defines as 'improvisation_1', 'improvisation_2' and 'improvisation_11'.

What Benson terms 'improvisation_1' is essentially what Cage characterises as 'indeterminate' in performance, consisting of:

- filling in certain details that are not notated in the score. Such details include (but are not limited to) tempi, timbre, attack, dynamics and (to some degree) instrumentation.

He also correctly notes that improvisation of this nature is a fundamental part of musical performance and its obviation impossible. Benson's definition of 'improvisation_2' is also particularly apposite and characterised as 'the addition of notes to the score that the performer is expected (by the composer) to supply.' He gives two examples of such improvisation as trilling and the realisation of figured bass. In my work, such improvisation is directly relatable to the relative complexities of the multiphonics outlined above. As timbre is also shaped by acoustics, the resultant sound will necessarily vary between spaces and is something the performer will have to confront relatively spontaneously, as an empty room will be acoustically altered if an audience is present. However, it is the approach that Benson terms 'improvisation_11' that is particularly relevant here:

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48 Ibid.
Both composer and performer are part of a musical tradition...and they work within that tradition. But working within a tradition requires modifying that tradition by augmentation and transformation.49

This terminology can be extended to pieces which are demonstrative of an emerging praxis that builds upon an established tradition and is directly relatable to Guy’s and Rands' works, and the compositions that accompany this thesis.

The pieces that follow are reflective of an established idiomatic practice which is the result of the amalgamation of approaches already discussed in this thesis. The assimilated harmonic language of Guy’s work is expanded upon by the inclusion of references to specific tonalities or, more pervasively, modalities, in addition to the technical remit which includes more recent developments. Such developments include the application of multiphonics, subharmonics,\(^{50}\) and harmonic-specific flautando,\(^{51}\) which are a distinctive feature of Dresser’s approach, as well as the more generalised approach to melodic arco lines which are a direct influence of Rabbath and Meyer’s playing. Grillo’s detailed approach to timbre is also central to my concept and is a feature that is shared in my writing for other instruments.

However, whilst these works clearly belong within the western classical tradition, an important element of their musical materials is informed by another genre altogether and, much as I have argued for Guy’s and Rands' works, an awareness of such an approach will not only inform, but invite further exploration. This is, essentially, the function of the website; it is a tool for heuristic technical development in addition to functioning as a compendium. Whilst the above recordings offer, perhaps, an archetypal approach on my behalf, I hope too that they demonstrate a variety of wider possibilities so that a performer can decide their own preference in realising the scores’ less defined aspects whilst having suitable, more generalised reference points from which to draw their own conclusions.

\(^{49}\) Ibid, p. 29.
\(^{50}\) See: <http://www.themoderndoublebass.org.uk/subharmonics.html>
\(^{51}\) Also termed ‘falseto flautando’, see: <http://www.themoderndoublebass.org.uk/arco--falsetto-flautando.html>
A variable or unreliable sound requires the performer to engage in a form of dialogue with the instrument in an effort to make the sound more, or less, consistent; this is an *unspecified* choice in the composed works which are included in this portfolio. Knowing that the variable elements are to be solved empirically (and that they exist solely within definable parameters so that my compositional imprint remains intact), a performer drawing on experiences and training similar to my own\(^52\) will produce a result which exists within clearly defined boundaries whilst remaining distinct to each performer. For that reason, I have not, thus far, decided to commit any of these pieces (*save for Ariel*) to audio recording, so that an interpreter does not regard my version of a work as definitive in any way.

Much in the way the works I have discussed and analysed above have shaped my own development, the notated works seek to offer a scenario in which a performer is challenged, but not directly, by the composer. The nature of the concept in each case is that the performer is invited to complete the musical argument through personal preference and exploration, although these choices are not articulated as such. This forms the central conceit by suggesting a direction which frames the unstable elements clearly within a definable sonic realm, or by the use of variability as a prime musical directive.

\(^{52}\) As the pieces in question clearly belong to the Western classical tradition, such training is required for an effective realisation.
Chapter 7

A Portfolio of Compositions: A Commentary

Each of the compositions included in my portfolio explores a specific musical area which forms part of my much wider musical language as an improviser. None of these pieces seek to wholly codify my wider praxis, rather they focus on one or two areas which I consider worthy of exploration within a notated form. Generally these have been timbral areas which I have explored in improvisation and which I consider to be objectively interesting and/or absent from existing repertoire. I have spoken repeatedly of these pieces acting as an empirical construct for an interpreter. I have not, therefore, sought to set down any of these compositions (save the first) in recorded form in order to prevent my performed versions from coming to be considered definitive. Neither have I (much in the manner of Guy) sought to make an explicit statement as to what I consider my language as an improviser to be; rather, I present a facet of it that requires a performer to engage with the wider processes that lay behind it. In this chapter, I explore the compositional principles that lay behind each piece and the rationale for the techniques that I employ to create the resultant sound world. I also discuss the extent to which an empirical approach is required by the interpreter, as each piece contains sound areas that are either subject to a degree of instability which should be stabilised in some way by the performer, or produce a wide spectrum of what could be considered extraneous sound.

When considering the latter point, each performer will have different views as to what level of such sounds would be deemed incorrect, particularly if the sound in question comprises a timbral multiphonic. I am interested in how instrumentalists approach these works which present a degree of ambiguity, and feel that a detailed explanation of my improvisational praxis may result in too definite an answer as to what route an interpreter should take when approaching these qualities. As I have described my training and wider musical interests, I am curious regarding the extent to which a performer might consider this background to be important and to what extent engagement with this information may alter their interpretive process. The pieces by Guy and Rands discussed earlier have an auto-didactic quality in the nature of their discourse, which requires a familiarity of style through
assimilation. I hope these pieces embody a similar quality, and that hearing my practice as an improviser may indicate a direction or approach without making it explicit, while still allowing and inviting any interpreter to draw their own conclusions.

i) *Ariel*

**Compositional Aims**

Although initially composed prior to the start date of my research period, *Ariel* (2008) is nonetheless representative of many of my own musical concerns and is something of a catalyst for my subsequent development. It has since been revised. The score aims to rationalise some of the melodic and harmonic tendencies that I had observed concurrently in my own playing in improvised settings whilst seeking to develop an element of that praxis within a compositional form. My own melodic tendencies in performance were often concerned at this point with the continual deconstruction of a single phrase to its constituent parts. This could manifest itself either as a continual process, or one that I would return to through the course of an improvisation. The composed work seeks to rationalise some of these processes and is essentially an exploration of the nature of instability within certain phrase structures.

The procedural elements of these techniques are explored by setting some of them within a scenario in which contrast and instability form part of the core musical strategy. Shortly prior to writing this work I had toured with the French bassist Louis-Michel Marion, who had given me a score by Franco Donatoni entitled *Lem* (1983). I particularly enjoyed Donatoni’s methods of juxtaposing stasis with bursts of activity and, as the nature of my improvisation was concerned with many of the same preoccupations, decided that this would be a central feature of the composition.

**Structure**

The work is essentially a modified form, which occupies a space somewhere between a ritornello and a rondo. A core set of musical ideas are constantly transformed but nonetheless exhibit the same traits

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each time they appear and are placed alongside contrasting musical materials. Each area develops according to its own harmonic and melodic rules, subject to alteration if used as a returning musical idea but nonetheless displaying consistent characteristics. Each time a new section is introduced it is either slightly longer than the previous section or significantly truncated. This acts as a method of creating a further sense of instability as each time the returning phrase is deconstructed, it additionally occupies a different chronological space. The core harmonic content also acts as a structural device and centres on three specific intervallic relationships with a pitch centre of E♯ acting as an axis throughout the work. These intervals are: the minor second, the tritone and the major seventh. There are four broad types of musical material, each of which has a variety of intervallic subsets that are subject to different procedures. These are categorised as: A, B, C, D with the subsets (for example, a1) which contain elements from more than one area. Many of these sections also contain isolated events which act as a precursor to succeeding events.

These types of musical materials are juxtaposed and developed over fifteen sections. The total structure is given in Table 7.1:

<table>
<thead>
<tr>
<th>Main Area</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>C</th>
<th>A</th>
<th>C</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>D</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subset</td>
<td></td>
<td>a1</td>
<td>b1</td>
<td>b2</td>
<td>a3</td>
<td>a4</td>
<td>c1</td>
<td>a5</td>
<td>b3</td>
<td>a6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 7.1: Ariel, structure**

The motivic and harmonic devices of each section are as follows:

a) A Material

The opening phrase (Ex. 7.1) will be termed Phrase A and is constructed of three pairs of semitones.
Ex. 7.1: Ariel, opening phrase

These semitone relationships, in addition to the rhythmic elements in the phrase structure, form the basis for the material which is labelled area A. These relationships are present each time such a phrase returns but is often transposed or expanded upon, so that whilst the initial statement is always a single ascending or descending semitone, various other types of phrases can be incorporated. This material explores the same intervallic relationships as outlined above, and every significant melodic phrase contains some, if not all, of these intervals (minor seconds, tritones and major sevenths) as can be seen in the full opening phrase below (Ex. 7.2).

Ex. 7.2: Ariel, opening phrase (A)

Throughout, these intervallic relationships are continually expanded and contracted but often return to this type of phrase (as seen in Exs. 7.2 and 7.3) in which the opening gesture – a (Normally) rising semitone – is answered by a series of either ascending or descending ones which often increase in velocity.
Ex. 7.3: Ariel, second phrase (A2): broadly descending phrase with velocity increase

b) B Material

The predominant feature of the material found in these sections is concerned with more consistently legato execution which is scalar in nature, and continues to explore the intervallic relationships described above whilst gradually expanding the pitch range. Expansion applies to pitch range and to an increase in velocity by numerical values, particularly in tuplets. The relative groupings of pitches also expand alongside an increase in velocity. This can be demonstrated in Exx. 7.4, 7.5 and 7.6, which follow each other chronologically and expand thus – 6, 9, 14.

Ex. 7.4: Ariel (from b1) – group of 6

Ex. 7.5: Ariel (from b2) – group of 9

Ex. 7.6: Ariel (from b2) – group of 14 (2+6+6)
These sections usually form a direct response to the phrases offered by the various A sections and serve to advance the harmonic parameters already established.

c) C Material

These sections function as a departure from the more frenetic material of the previous sections and explore more extended linear phrase types that are hinted at in the A sections. There is a continuity of rhythmic material between A and C, but the latter develops it more extensively and in a more measured, and less fragmented, manner. Rhythmic fragments such as those shown above in Ex. 7.2 are established from the very opening of the piece, but the nature of their development in section C is altered by using the rhythmic cells as a continuous musical idea rather than an isolated event (Ex. 7.7).

![Ex. 7.7: Ariel, development of rhythmic cells in section C](https://via.placeholder.com/150)

Ex. 7.7: *Ariel*, development of rhythmic cells in section C

d) D Material

The material which forms D acts as a section of its own and serves as a complete musical contrast, by providing an extended period of relative stasis within the otherwise animated musical structure, and is the culmination of a period of intense activity in which the tessitura is gradually expanded upwards. The material consists of harmonics played as single pitches or as double stops. The pitches expand the established intervallic relationships by adding quarter-tonal variations in the form of naturally flattened partials within the harmonic series (Ex. 7.8).
Ex. 7.8: *Ariel*, section D (B♭ + C♯ – the latter sounds a ¼ flat)

**Notation**

I was keen that the notation used should directly inform the interpretation. Specifically, I wanted the piece to have an improvised character whilst maintaining a rigorous structure. My initial drafts were constructed using a form of proportional notation which placed events spatially within barlines representing durations of 5 seconds. This was soon abandoned as I discovered that even my own interpretations when reading the work displayed a tendency towards a more relaxed rhythmic approach. It also obviated the specific melodic shapes that I wished to include and thus proved unfit for purpose. My aim was to create a rhythmic sense which was at once free of meter whilst conveying a sense of constant momentum and a certain restlessness in the resulting music.

Prior to and concurrent with writing this work, I been engaged in preparing Ferneyhough’s *Trittico per G.S* (1989)² for performance alongside Xenakis’s *Theraps* (1976)³ and had become aware that the notation itself had a way of informing the resultant musical qualities during performance. In particular, the complexities in the former piece present numerous challenges which can impart an almost panicked quality in performance, such is the volume of information to be assimilated. As such, the notation itself can be seen to function as an instigative factor in performance psychology as well as being purely representational of a composer’s intentions. This is similarly true in the Xenakis work, in which glissandi are contrasted with extended periods visually reflected in the qualities of its notation.

Thus I began to explore ways in which notation could be used subconsciously to impart the unstable, nervous energy I wished to convey. Among the first decisions taken once the wider musical parameters had been established was to dispense with any form of consistent metric notation to denote specific events. This results in the piece having a concrete sense of structure whilst managing to seems capricious and spontaneous, an effect reinforced through the use of small note values and nested tuplets to create a sense of instability. The rationale for using smaller proportional note values is that they subconsciously create a nervous energy on the part of the performer. The work could easily be re-written in note values of a much greater duration with an increased tempo marking but I would argue that such a move would remove by inference much of the piece’s restless character. It is logical to assume that if a score looks superficially complicated on a purely visual level, then it will sound thus in its performance, due to the emotional inflections and cerebral activity inherent in the body language of the performer.

The sense of struggle is perceptible in performance when invoked by the challenges inherent in interpretation. I wanted the piece to sound as if it was being improvised and to impart some of the nervous energy that occurs in that situation. Of course, I could have simply used proportional notation and a performance instruction such as nervoso but I suspect that this would not have achieved the intended effect. Richard Toop quotes Chris Dench as saying:

I think that ‘complexity’, as most people understand it, is a kind of hyper-intellectual teasing-out of the skin of the music. O.K., that’s great, except that you’re not really offering complex music, you’re just offering a complex process of generating it.\(^4\)

I am sympathetic to this view; the resulting music of Ariel isn’t complex, but its timbral qualities as imparted by a more complex than necessary interpretative procedure are a key concern. The notation was constructed in such a manner as to allow for the restless qualities in the music to be constantly present, whilst not being so challenging that an effective realization would be beyond the reach of many performers. This allows a performer to go a little deeper into the music than the quotation from

Dench might suggest, but the end result is much the same: relatively straightforward music achieved through complex processes.

**Technique**

*Ariel* uses a relatively small group of techniques which are, for the most part, quite traditional in scope. The primary characteristics of each section are shown in Table 7.2.

<table>
<thead>
<tr>
<th>Material</th>
<th>Dominant technique(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>arco/pizzicato interchange</td>
</tr>
<tr>
<td>B</td>
<td>legato arco</td>
</tr>
<tr>
<td>C</td>
<td>arco/percussive interchange</td>
</tr>
<tr>
<td>D</td>
<td>harmonics/textural multiphonics</td>
</tr>
</tbody>
</table>

*Table 7.2: Ariel, table of techniques*

The technical interchanges are normally rapid with a pizzicato statement serving to disrupt an arco phrase.\(^5\) The C sections combine various percussive techniques employing the bow and the hands, and contrasts them with more overtly lyrical writing. Section D similarly uses a group of techniques that produce similar sonic results whilst providing a degree of timbral variation – in this case, methods of producing multiphonics: textural multiphonics (created by various bow placements), and first class multiphonics (as defined by Thelin).\(^6\)

As the focus of the work is centred on the nature of a process which deconstructs musical ideas, the interaction between arco and pizzicato functions predominantly as a disruptive element. The dominant technique (or combination of techniques) which serves to develop the core musical

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5 Whilst not a compositional concern within my own work as such, it is interesting to note that the element of disruption is a key concern in Ferneyhough’s solo bass piece, in which three strata of musical material interject each other.

ideas of each section, was decided simply through intuition and is not reflective of any structural
device.

ii) Courant

a) Introduction

Courant was composed for a project conceived by myself and the poet Peter Finch (b.1947), whose
work I had read and admired for some years prior to our first meeting. The project aimed to develop a
cohesive language in which Peter’s spoken words would be combined with loosely composed
structures for solo double bass which incorporated large amounts of improvisation and would
simultaneously complement the text whilst providing a non-linear discourse. In our initial
discussions, we had both expressed a dissatisfaction with many previous recorded examples of music
and poetry presented as a single entity, in particular, the tendency for the musical elements to closely
mirror the progression of the text in a very literal manner and vice versa. Our aim was to create a
more ambiguous but unified language in which text and music function in consort whilst still allowing
for individual expression within the overall framework. Although initial forays into this process used
previously published poems by Finch, it was soon decided that the texts should be taken from his (at
the time unpublished) collection Zen Cymru.⁷

Peter insisted that I be featured with a solo piece at the centre of the concert, and it was from
this impetus that Courant originated. I was particularly keen that the piece should complement
Peter’s work in some form, at least on a structural level, and I began to reread many of his earlier
poems in order to gain a deeper understanding of his structural devices. Among many others, I was
particularly struck by the extended poem From Five Hundred Cobbings,⁸ which was written as a
tribute to the late poet Bob Cobbing (1920–2002), whose innovations in the field of sound poetry had
been an early influence on Finch’s work. The poem is ‘derived from permuted findings, adaptations,

⁷ Peter Finch, Zen Cymru (Bridgend: Seren, 2010).
translations, listings and other structural procedures and has a broadly cyclic structure which gradually expands as the text progresses. The first verse structure returns repeatedly to the word ‘cobbing’, which itself is gradually deconstructed throughout the poem to a series of syllabic utterances whilst still acting as an axis point, gradually returning to the source material before slowly fading away. The poem has a peculiar rhythmic structure which is intensified by the combination of various styles and has a more generalised arch shape in terms of textural density (increasing then decreasing) which I sought to emulate. The poem also contains several monochrome graphics, which provided a less specific emotive response but would inform the harmonic content of Courant in a more ambiguous sense.

b) Compositional Aims

Having a loose structure in mind, I began to consider the various musical elements I wished to include in my work. The constant repetition found in the poem is such a defining characteristic that I elected to construct my piece around a series of ostinatos which develop gradually throughout.

I have always sought to be combinative in my composition language not only in the stylistic traits of its musical content, but also in its technical parameters. Thus many of the inherent problems in the composition of Courant were concerned with finding a procedure which would satisfy my wider musical concerns whilst focusing on very few elements. I had used various methods of triggering sympathetic resonances on the double bass in improvised contexts for a few years prior to composing this work, and had previously considered their practical applications within a composed framework, though I had yet to explore this fully. Gradually, the idea of writing in a manner that would allow sympathetic resonance to function as a separate voice rather than solely as a timbral device began to crystallize. My own concurrent involvement in performances of early music certainly had a direct influence, in particular the historical trends towards tunings in bass instruments that

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10 Most typically in my own work by activating a harmonic which is shared by another string and allowed to resonate. Dampening of the initial pitch allows for an interchange between the different textural qualities of the same pitch.
favour sympathetic resonance. Experiences with my own instruments (notably Viennese bass and G violone) led me to explore a number of scordature in order to provide an increased variety of shared harmonic partials.

I also became aware through conversations with the late bassist Dominique Duval (1944–2016) of the work of Carleen Hutchins (1911–2009) and her research in the acoustical properties of stringed instruments, and became interested in tap tones\(^{11}\) and ways in which these could be used to enhance resonance. Hutchins’ work remains fascinating, particularly her creation of the New Violin Octet\(^{12}\) in which a homogenous string ensemble sound is achieved through each instrument being acoustically matched via the use of plate tuning. Investigation of this, in turn, prompted curiosity regarding any subsequent research into plate modes\(^{13}\) and their acoustical properties specific to the double bass.\(^{14}\)

The idea of the instrument’s core resonances being used not only as a method of enhancing sonority but also to function as a distinct pitch was thus added to my pre-compositional exploration. Having decided on a scordatura in which the second and fourth strings would be tuned an octave apart\(^{15}\) to provide a matched set of harmonic series, I commenced a basic spectral analysis\(^{16}\) of the tap tones\(^{17}\) of my own solo instrument. Perhaps serendipitously, my instrument has a dominant resonance of around 155 Hz (an Eb) as its primary audible tap tone and much of the subsequent research was spent finding a scordatura which would enhance this with the aforementioned strings being tuned to Eb. The final tuning arrived at offers the harmonic series shown in Ex. 7.9.

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13 Plate modes are the patterns of vibration that occur within the instruments structure when it is being played.
15 I particularly enjoy the resonance offered by the Baroque tuning of (high to low) G–D–A–D, which was my initial starting point for exploration.
16 Using Spectrumview, a real-time spectrogram and spectral analyser developed by Oxford Wave Research Ltd. (© 2012–2017).
17 Tap-tones are resonant pitches produced by the instrument plates when tapped by the fingers. The tone is usually pitched around F# for violins, but this in itself is subject to variation.
This tuning was arrived at by exploring a number of permutations and, as one can observe from the above charts, there are many shared and quarter-tonally altered partials which, particularly as most strings are detuned save for the second (which is tuned a semitone higher), can resonate more freely than they would at standard pitch. The significantly decreased pressure on the instrument top also allows the wood of the instrument’s body to vibrate more freely, which allows the plate modes to increase in volume, producing (in combination with the shared partials outlined above) a strong fundamental of Eb.

The desire to create as much sympathetic resonance as possible also requires a certain degree of deviation from established orchestral and solo techniques used in modern practice. In particular, it requires a bow technique that allows the string to vibrate more freely than would otherwise be possible when using a typically weighted stroke. The most appropriate technique in this case generally entails a fast bow stroke with little arm weight, more akin to typical Baroque/early music articulations. To enhance the strings’ vibration potential, harmonics are played in lower positions\(^{18}\) for the majority of the work (save for when the material enters treble clef in the coda) rather than their

\(^{18}\) 2nd to 5th positions in Simandl’s and most other traditional terminology. Rabbath terms these positions 2nd and 3rd.
typical positions towards the end of the fingerboard. This also has the added benefit of being ergonomically desirable by simultaneously relieving pressure on the performer’s back whilst allowing the instrument to remain stable, as little shifting is required.

c) Structure

The musical material of Courant falls broadly into two categories:

1) The opening musical material and its rhythmic devices;

2) An ostinato over which various phrases are layered.

The first half of the piece explores both of these ideas whilst the second half (marked coda) deals exclusively with the latter. The initial rhythmic pattern was arrived at through an improvisation and is simply a phrase I kept returning to and decided should be used as the basis of the work’s musical material. As the work is in scordatura, the pitches heard (in order) outline an E♭ minor modality (Ex. 7.10).

\[
\begin{align*}
\text{Sounding: } & E♭_3, B♭_3, D♭_4, E♭_4 \quad \text{–} \quad E♭_3, B♭_3, D♭_3, G♭_4
\end{align*}
\]

**Ex. 7.10: Courant, opening phrase**

It was from this musical phrase that the title is derived which, although the piece is predominantly in a triple meter and thus could refer to the Baroque dance form, instead refers to the additional French meanings of ‘running’ and ‘stream’. The phrase is performed across the upper three strings and entirely in one position, so that the flowing quality I wished to achieve is easily attainable. In addition to small rhythmic variations, this phrase is gradually expanded by the inclusion

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19 In 2007 I had performed Magnus Lindberg’s 1992 work of the same name (though using the Italian cognate, Corrente) which may or may not have exerted a subconscious influence.
of other pitches in the harmonic series as single pitches or chords, glissandi, and excessive bow pressures.

As sympathetic resonance and acoustical beating function as a counterpoint to the articulated musical material in this piece, using harmonics almost exclusively means that shared pitches on the overtone series of different strings can be activated in a variety of ways. The amplitude of these resonances can similarly be varied in a number of ways, most typically by the duration for which the initial, or ‘source’, pitch is sustained in addition to its relative amplitude, for which the sympathetic pitch responds accordingly in each case. It is possible, therefore, to apply a crescendo and diminuendo to these pitches without directly articulating them; they are subject to control solely by the articulated pitch/pitches and can be left to decay naturally. These resonances can function as a definable, independent musical voice within the composite form. However, the nature of these resonances are somewhat capricious and dependent on the physical characteristics of the instrument and its set-up as to how clearly they will speak and for how long they will sustain. However, I have since explored the piece on a variety of instruments and concluded that there is enough consistency to allow them to form part of its structural basis. The variable nature of these pitches is the predominant reason for not notating them explicitly as a definitive goal in the score, but I am comfortable in allowing this part of the work’s musical devices to remain as such.

Courant, then, sets out to explore the possibilities offered by the contraction and expansion of various musical parameters which would normally be inconsequential or subsidiary concerns. I had concurrently been exploring the possibilities afforded by open string ostinati and the activation of various harmonics on the same string to create timbral multiphonics by using various bow speeds/pressures and other techniques.

Whilst composing the work, I was also heavily involved in the study of the solo bass music of Stefano Scodanibbio. Much of Scodanibbio’s later music displays a minimalist bent, tending to explore small rhythmic and harmonic patterns whilst simultaneously greatly expanding the technical possibilities of the instrument. Two works for solo bass exerted a particular influence: Geografia
amorosa (1994) and Voyage that Never Ends (1979–97).20 Perhaps more generally, I was interested in Scodanibbio’s tendency to focus on a few techniques as the basis for an entire work, characteristics that are quite different to much of the other music I was preparing for recital programmes at the time.21

Geografia amorosa is primarily concerned with the gradual expansion and contraction of a glissando by rhythmic means, played predominantly battuto with bow hair. The work gradually expands its technical resources to include pizzicato harmonics (both hands), more traditionally inclined arco phrasing and outbursts of col legno battuto, which increase in length and complexity and serve to disrupt the ostinato-type phraseology of the opening material whilst always returning to it. It was, however, a recording of Voyage that Never Ends22 that was to be particularly influential. The first movement of Scodanibbio’s piece is a c.20’ exploration of the textural possibilities offered by an ostinato performed on the open A string and contains a number of techniques which I had assimilated into my own repertoire and wished to develop further. The majority of the textural interest results from the manipulation of the open string using various bow techniques.23 However, it was the manner in which the textural changes are achieved (predominantly by a very gradual shift between inherently similar techniques) that instigated my exploration of the possibilities of transformative multiphonics24 for inclusion within my own work. Initially, this was applied solely to an open string ostinato which gradually became a multiphonic by means of variations in bow placement which allow partials in the harmonic series to be activated, thus forming a distinctly multiple sound.

Eventually, however, a method by which a form of instrument-wide multiphonic could function in a way that would produce a distinct second (or sometimes third) voice was arrived at by choosing harmonic double stops of a particularly dissonant nature. As the technique is applied to

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20 Neither work was commercially published in print, and the former had to be obtained direct from Scodanibbio. The later work was only available through direct study with the composer.
21 Most notably Brian Ferneyhough’s Tristico per G.S and Jacob Druckman’s Valentine, both works of formidable complexity and physicality.
23 In this case, a cello bow as noted by Håkon Thelin in his liner notes to: Håkon Thelin, Stefano Scodanibbio, A Scodanibbo, CD, Atterklang AKLANG309 (2014).
24 See <http://www.themoderndoublebass.org.uk/transformative-multiphonics.html>
Ostinati, it means not only that shared sympathetic resonances can be allowed to crescendo through repetition of the source pitch, but also that acoustical beating can be intensified in a similar manner. As such, three distinct layers of musical material can be varied according to which musical parameters are applied to the first. This is the preoccupation of the second category of musical materials found in this piece and is explored progressively throughout the arco (first) section of the coda, reaching its peak at the point shown in **Ex. 7.11**.

![Ex. 7.11: Courant, p. 2, 7th stave](image)

Here the re-articulated semitone of G₄ and F♯₄ (sounding pitch) produces not only the corresponding G♯ on the lowest string but also the acoustical beating activated on the G quarter flat harmonic on the open A♭ string, producing a complex web of sound that is intensified with further repetition.

Scodanibbio’s influence can also be felt in the closing material of the piece, in which two-handed pizzicato harp harmonics are employed to create a gently billowing texture to bring the work to a close. This technique was incorporated into the piece as a small tribute to Scodanibbio’s work in developing it.
iii) *Polynya*

**a) Introduction**

The impetus for *Polynya* gradually formed over several years of exploring and assimilating various techniques used to alter harmonics in terms of timbre or of tessitura, by employing such means as multi-nodal harmonics\(^{25}\) to a sustaining pitch.

*Polynya* are small spaces of running water in otherwise glacial formations, and I wanted to reflect on the visual beauty of these phenomena as well as creating a work in which the musical material would have an essentially flowing character. As harmonics both natural and artificial have a softer, more fragile quality in timbre than fingered pitches whilst being simultaneously robust in performance on the double bass, I decided that these would form the basis of the work. The final version of *Polynya* was arrived at over several years of experimentation with compositional forms and methods of harmonic production. An early version of the piece was performed at The Space, London on 14\(^{th}\) June 2010, the event for which the piece was composed, but it was subsequently much revised as I was dissatisfied with the general shape of the piece. The earlier forms of the piece explored harmonics solely, but it was more recently expanded to include several of my other interests in terms of the musical possibilities of new techniques.

**b) Compositional Aims**

*Polynya* explores the various sonic qualities offered by the application of techniques to harmonics which then produce timbral and textural multiphonics as a subsidiary rather than primary concern. That is not to say that the multiphonics themselves are a subsidiary concern; on the contrary, they form a major part of the compositional remit of this work. The subsidiary element is arrived at

\(^{25}\) Also referred to as compound artificial harmonics, a term used by Dresser. See: <http://www.themoderndoublebass.org.uk/artificial-harmonics-compound.html>
through my ongoing engagement with notions of empiricism within the compositional form and refers in this case to the specifics of each multiphonic.

My prior experience of multiphonics began through the study of Jean-Pierre Robert’s treatise,26 which was followed by a period of wider musical experimentation, predominantly through improvisation, in order to integrate these techniques into my performance language. I had also begun to explore works by composers such as Saariaho (both solo27 and ensemble28) and Scodanibbio,29 which made use of multiphonics. I had also become fascinated by Dresser’s use of them in improvisation and more loosely composed forms on albums such as Unveil,30 in which the pickup system that he designed is crucial in bringing a greater degree of clarity to multiphonic production than I have heard elsewhere.31 I have noted that Guy and Kowald had also made extensive use of such techniques in improvisation, but I had always been reluctant to use them within my own composed work prior to commencing work on this piece. Part of my reticence was informed by the variability inherent in node-specific string multiphonics themselves, which I had observed would vary considerably between instruments in accordance with the string type, length and speed of instrument response. Whilst I am generally willing to accept a certain degree of flexibility in the performance of my music, I found the degree of fluctuation between each instrument too wide to consider the exploration of node-specific multiphonics in a solely acoustic work.32

However, Scodanibbio’s Alisei (1986) persuaded me to examine the potential of writing a piece that would explore the use of timbral multiphonics as a technical device which could then be applied to natural and artificial harmonics as a method of extending their sonic possibilities. I had observed that many works which employed multiphonics for the instrument tended towards a static character. In contrast, I wished to create a piece which would have a rapid series of legato pitch

29 Stefano Scodanibbio, Alisei (1986), published by the composer.
30 Mark Dresser, Unveil, CD, Clean Feed CF043CD (2005)
32 The degree of clarity afforded by amplification to multiphonics has led me to explore this in various other works. (See Lento(vii).)
interchanges whilst still remaining gentle, even meditative. Save for occasional violent outbursts, 
Polynya dwells in a piano/mezzo forte dynamic range and utilises a sequential figure of 
demisemiquavers as its primary rhythmic basis. The violent outbursts are themselves referential and 
refer to a specific combination of techniques found in Berio’s Sequenza XIVb (2006)\(^{33}\) in which 
excessive bow pressure is combined with a glissando; I take my notation for this specific combination 
of techniques from this piece. I have, however, varied this technical combination in my work to 
produce a more complex multiphonic with the inclusion of a slightly reduced finger pressure to 
further distort the string’s vibration pattern. 

The desire to have a piece which flowed as much as possible necessitated the removal of barlines and 
strict meter, and the material is presented in a manner in which pitch duration is relative (conforming 
to the typical subdivisions of beat within a specific metronome marking rather than space-time 
notation) but open to a degree of variability, within reason. 

The harmonic material is constructed around the natural harmonic series of each string of a 
standard four-string instrument in regular tuning.\(^{34}\) Pitches within this series are expanded upon by 
the use of artificial harmonics of various intervallic partials (seconds, thirds and fourths) as well as 
multi-nodal/compound harmonics which either colour the pitch from a timbral perspective, or simply 
extend the tessitura upwards. 

The opening figure grew out of exploring the potential combinations of natural harmonics 
offered by using a specific hand position. The very nature of natural harmonics on stringed 
instruments means that, due to their existing only at specific points on the string, a limited number of 
possible pitch permutations exist at any one time according to possible hand positions. Having 
previously studied Rabbath and Meyer’s methods of extending thumb position to lower positions on 
the neck\(^{35}\) as a way of reducing (or eliminating altogether) the need for shifting, I began to explore 
ways in which this could be used to expand possible combinations of harmonics. As I wanted the 

\(^{33}\) Luciano Berio, Sequenza XIV – versione per contrabbasso di Stefano Scodanibbio (2004) (Vienna: Universal 

\(^{34}\) Either standard orchestra tuning or solo scordatura may be used but the tuning does not deviate from either of 
these possibilities.

piece to be as consistently legato as possible, the desire to eliminate shifting must mean that enough musical interest should be sustained for extended periods by utilising the full possibilities offered by a few hand positions.

This means that natural pitches (i.e. normal fingered pitches) are employed in such a way as to allow for their performance across strings horizontally rather than vertically (thereby eliminating the need for shifting) whilst following the general harmonic structure which favours pitches that can semi- or microtonally colour pitches within the natural harmonic series. The very first phrase (Ex. 7.12) has been a consistent presence throughout the various drafts of the piece and was arrived at serendipitously; it provides a broad pitch range of harmonics which simultaneously have a pleasing melodic shape when played across all four strings whilst being particularly comfortable for my hands.

![Ex. 7.12: Polynya (opening phrase)](image)

The fingering pattern for this phrase is: 2,1,3,+3,2,3,4 and is played across the following strings: iv,iii,ii,i,iii,ii,i. The pitches produced (E♭,E♭,F♯,G♭,B♭) provide the core harmonic relationships for the entire piece. The minor second interval which arises, and which is an easily performable double stop in harmonics offered by double bass tuning, is explored extensively in the piece, as is its microtonal variations (also made possible by standard bass tuning).

Essentially, the piece follows an arch structure, which is demonstrated through the level of activity in any given section. The primary compositional technique used is again one in which small melodic cells are continually developed and transformed. However, within this piece the rhythmic

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36 See: <http://www.themoderndoublebass.org.uk/harmonics---charts.html> for detailed charts of each harmonic series.
37 In this sequence of fingerings + = thumb.
elements are, for the most part, constant save for the few disruptive interjections previously mentioned. These interjections, however, always immediately revert back to the core rhythmic phrase structure which constantly alternates small cells which also expand and contract.

The piece opens with a few isolated phrases separated by small pauses, and which outline the primary harmonic material explored in the subsequent material. The level of activity and musical density gradually increases and builds to a climax at letter F, at which point the music gradually subsides until Letter N in which static pairs of harmonics are used exclusively until the piece’s close. Even these static intervals are designed to sustain a sense of movement, which is provided by acoustical beating which accelerates and decelerates depending on the pitch proximity of the specific intervallic relationship. My own performances of Xenakis’s Theraps,38 a piece in which rapid, microtonal glissandi are juxtaposed with static pairs of harmonics, no doubt provided the inspiration for this closing material as well as, perhaps more generally, the use of it to contrast with the general level of activity. However, whilst Theraps requires the performer to produce timbral multiphonics through the use of excessive bow pressure, requesting that the resulting sound be ‘full of overtones’,39 I was interested in aiming towards a predominantly pure core sound with the timbral inflections being produced by the string’s interaction with itself, depending on which techniques are being used.

The decision to allow the multiphonics to manifest in a way that was not overtly prescriptive was the primary instigation for the piece’s final form. My initial drafts had sought to categorise with a high degree of specificity the sonic makeup of each timbral multiphonic used according to the technique used to produce it. Predictably, the final result of this process was a score of formidable (and ultimately pointless) complexity which bore little relation to the gentle and flowing musical qualities I wished to impart. A section of Guy’s Statements II used a prototype timbral multiphonic as a pedal point,40 and I was struck by the simplicity of the verbal instruction used and the consistent result it produced in performance. I had also been working on a piece by Rebecca Saunders, Chroma

39 Xenakis, Theraps, programme note.
V (2006), which used timbral multiphonics,\textsuperscript{41} and decided to explore their use on a more expansive scale. The choice of timbral multiphonics was arrived at through the desire to create a piece that was rapid in character; the nature of multiphonic production generally means that they take time to activate fully, and, as such, would be negated by my own rationale.

The primary means through which timbral multiphonics are created in this work is a rapid interchange between two harmonics on a single string in combination with varying legato bow articulations within various areas in the sul ponticello region. For example, if one is to take the opening phrase of letter A: by alternating these two harmonics on a single string, the string will respond differently according to micro-variations in finger pressures, which will activate or dampen various harmonic partials within the string’s own series. Slight movements of the bow will similarly intensify these varying characteristics and allow certain elements to come to the fore whilst diminishing others. Subsequent sympathetic resonances will also retain a degree of variability. Although the above method is overwhelmingly the primary means of producing timbral and textural multiphonics, others are used which include:

1) A tremolando between an open string and a harmonic on the same string within a single bow stroke (p. 2, 4th line);

2) Multi-nodal artificial harmonics, which produce a complex sound as a by-product;

3) Helicopter bowing on an open string: a technique in which the bow is applied semi-vertically, and moved rhythmically up and down with variations of arm weight whilst also bowing in a regular direction (essentially imitating the sound of a helicopter);\textsuperscript{42}

\textsuperscript{41} Rebecca Saunders, Chroma V (Frankfurt: Edition Peters, 2006). Though not defined as such, instructions found in the performance notes such as ‘bring out overtones’, combined with the scordatura downwards of the strings, result in a very definite multiphonic. Saunders’s later double bass concerto Fury II (Frankfurt: Edition Peters, 2010) explores specific multiphonics in much greater detail.

\textsuperscript{42} For a visual/aural demonstration of this technique, please see: <http://www.themoderndoublebass.org.uk/arco--helicopter-bowing.html>
4) *Arco mobile* on an open string: a similar technique to the above but with a much lighter arm weight and wider range of bow travel, developed and used extensively by Scodanibbio and used by composers such as Nono and Sciarrino;

5) Excessive bow pressure in combination with reduced finger pressure and a glissando;

6) Bariolage exploring microtonal inflections of the same pitch but on different strings;

7) Vibrato applied to harmonics in which the string is slightly depressed.

Each of these methods produces a timbral multiphonic, the intensity of which generally correlates to the intensity of the specific action and is used in a way in which elements within the total resultant sound can be intensified or diminished at the performer’s discretion according to their own sensibilities. The performer is allowed a greater degree of freedom in manipulating the direction of the piece, most notably at letters C, D and F, where the performer must continue the musical direction that has been established by using various combinations of specified pitches but with a constant rhythmic figure. Other freedoms are to be found in the specifics of various accelerandi and rallentandi and within the length of spaces between isolated events, but the main areas of variability/empiricism are inherent within the microcosm of sounds produced by a specific combination of techniques and their interaction with the instrument and performer.

**iv) Lento (i)**

As part of my ongoing exploration of playing technique and its ability to alter the musical outcome, I have always been interested in means of altering my physical relationship to the instrument. I had seen several concerts given by Rhodri Davies in which the harp was lain on its side, as well as several

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concerts by other improvisers on the London scene in which conventional modes of playing were precluded.

I began to research examples in which the bass had been used in such a manner. I had previously encountered a work by Fernando Grillo\(^\text{45}\) as well as an arrangement of a Cage piece by French bassist Joelle Leandre,\(^\text{46}\) which both feature the bass being played in this way. I thought Grillo’s work particularly interesting, as it consisted predominantly of an exploration of the sounds that can be produced by two bows within this altered physical relationship as well as encompassing a theatrical element inherent in the production methods themselves. By removing the need to physically support the instrument, two bows can be used simultaneously as the left hand becomes free. This raises the possibility of the two bows interacting with each other and functioning as an additional sound source as an object rather than just as a sound generator.

A work for solo double bass by Julio Estrada\(^\text{47}\) also explores this instrumental disposition and use of the bows in this way. I considered my initial forays into using the instrument in such a manner unsatisfactory as I struggled to divorce myself from my usual performance practice, particularly the desire for velocity where appropriate. I had observed that a tendency would often emerge in which a specific gesture would dictate the sound produced rather than allowing the sound to guide the gesture required. However, whilst cataloguing the variety of possible sounds that can be produced in this manner, I gradually began to formulate a scenario in which I could explore these sounds in a more coherent and musical way.

The desire for cohesion began to lead me to explore means by which a single sound can be altered until it was completely transformed. I had observed several performances organised by Confront\(^\text{48}\) at Cafe Oto, in which participants often displayed a trend towards reductionist improvisation and would often frequently focus exclusively on a single sound for an extended period. I had performed with Wastell as part of a large ensemble consisting of five double bassists and five

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\(^{45}\) Fernando Grillo, *Gstuss* (1975), published by the composer.
laptop performers,\(^49\) as well as several ad hoc groupings over the years with various improvisers in which this sonic landscape would form the core musical discourse. Although I would often explore such procedures in solo and group performance, they would generally form a section within a larger piece, as I had considered any prior planning to be antithetical to my performance objectives.

I have for years altered the physical properties of my instrument by using preparations that can be quickly removed or modified during performance. However, by altering the physical relationship completely, the possibilities of applying any regular technique, or specific techniques I had developed myself, are greatly reduced, and the intensive exploration of a single sound source seemed to suggest itself. After several months of exploring this relationship in a private setting (I have, to date, not felt free enough in this scenario to present it in improvised performances) I gradually came to the conclusion that I wanted to completely alter the core sound of the instrument in this context. I began re-listening to recordings by groups exploring this, or ostensibly similar techniques, mainly recordings by the Confront group, of which I found Davies’s *Trem* particularly fascinating and commensurate with my own aspirations.\(^50\) I also found the effort of a wider circle of improvisers focused on reductionism, such as Radu Malfati and Axel Dörner, to be a great source of inspiration. Research into the work of the composer/bassist Mark Deutsch, in his creation of the Bazantar\(^51\) and the startling sonic effect it offers, was also of particular influence, as it led me to explore ways of increasing resonance without recourse to electronic manipulation. I had been using a cello bridge as a preparation device in improvisation for several years, which is typically used as indicated in Fig. 7.1.


As the bridge is in contact with all four strings simultaneously, any sound produced by the bridge is transmitted through the strings. I thus decided that the primary sound source would be the bridge itself, with the instrument’s strings and sound box serving as an amplifier. These experiments were carried out in conjunction with an investigation into the possibilities offered by a new pickup system that I had devised. Inspired by Dresser’s work in extending the possibilities of amplification, I had constructed a pickup system which would enable me to amplify the bi-tone length of the string, so that I could increase the volume of the results produced by specific techniques as well as bringing greater clarity to multiphonics and subharmonics. Dresser uses a system in which electromagnetic pickups are embedded into the instrument’s fingerboard, and, whilst this is effective indeed, it does negate the possibility of using anything other than metal-cored strings.

I also wished to have an amplification source that would directly amplify some of the percussive techniques that I apply to the scroll and tuning machines of the instrument. I therefore designed a nut which could house a piezo pickup whilst coping with the high level of string tension

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52 Typically double bass pick-ups only directly amplify the part of the string that is directly articulated, i.e. the part between the finger and the bridge. The string behind the finger (i.e. between the finger and the nut) also produces a pitch, a bi-tone, which exists within the general sound spectrum when not directly amplified.

53 Built by Kent McLagan and used on his various instruments. Dresser details this system on Guts.

54 A contact pickup in which a piezoelectric charge is created through the application of physical pressure.
(Fig. 7.2). The contact points achieved by positioning the pickup in this manner means that the string sounds and wood of the peg box are amplified equally. The final design used ebony, as well as strips of carbon fibre to provide enough tensile strength, and was constructed in such a way that the pickup can easily be removed if desired. As the level of amplitude in piezo pickups is affected by pressure, the levels of either side (strings/peg box) of the pickup can be increased by the insertion of a small wooden shim behind the opposite face. The use of a volume pedal means that sounds can be amplified selectively whilst increasing the length of sustain of certain resonances. By using this system in combination with the prepared technique described above, the possibilities of shaping a sound by allowing certain resonances to come to the fore are greatly increased.

![Fig 7.2: Nut pickup detail](image)

As the entire instrument vibrates in performance and would not be dampened by the body when on its back, I explored other areas which could be amplified by means of contact piezo pickups. The placements requested in the score were devised by simple trial and error and were deemed to offer the greatest variety of sonic contrast. They are controlled in performance with a simple volume control for each signal. As many of the sounds produced in Lento (i) are altered through manipulations in bow pressure or bow positioning, I had to devise a way in which this could

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55 In this case, generic piezo discs wired to a jack socket.
be represented in the simplest possible manner. I had found Estrada’s notation to be fairly useful, although at times I felt it needlessly complex when considering the result. However, a system which used a graph-type notation and a line to denote duration seemed to be the most efficient, and I thus, gradually arrived at my own notation (Ex. 7.13).

Ex. 7.13: Lento (i), opening (bb. 1–3, solo bass)

As amplification is used throughout, dictating bow pressures as a means of altering the volume or intensity of a sound seemed more sensible than recourse to traditional dynamic markings. As such, a numbered system is used to dictate the degree of bow pressure, with normal hairpin markings used to indicate a gradual increase or decrease between areas. My first recorded improvisation using this technique is For Peter Reynolds,56 which uses the techniques outlined above. As I felt particularly satisfied with this recording, I decided that I would use its material as the basis for the solo double bass part in Lento (i). I had previously composed only one work for solo double bass and ensemble,57 and decided to compose this work as a form of concerto. Having determined the material for the soloist, I then began to consider the accompaniment both in terms of forces and in the nature of the musical material they would perform. As many of the sounds produced by the double bass when used in this way are quite gentle even when amplified, it was imperative that the orchestral group would not overwhelm the soloist at any point. Ligeti’s Cello Concerto (1960)58 would exert a

lasting influence in its use of instrumental colour, as would his other works in which micropolyphony and clusters are used extensively.

Having decided on a reductionist approach for the soloist, I decided that I would apply a similar remit to the orchestral material. I settled on a sinfonietta-sized group which uses a traditional line-up but with single players. This provides enough variation in colour whilst being transparent enough to allow the soloist’s sounds to be fully audible. Aside from moments of polyphonic writing and some linear writing for percussion and piano, the orchestral material is confined to a series of clusters which gradually change in accordance with alteration of the sound produced by the soloist. Pitch choice was essentially intuitive and was decided by the sound qualities produced by my own instrument when using the preparation detailed above as to the cluster types used to accompany it. Were another instrumentalist to perform the piece, a different set of variables (instrument size, string length and different cello bridge) will all produce similar but markedly different sounds that will, in turn, produce different results when subjected to amplification. As a result, the piece will necessarily alter in its specific sound characteristics from performance to performance, particularly as the ensemble is strictly notated and provides the fixed element of the piece. As the piece is essentially an exploration of instrument as object, the notions of what is considered empirical in this case extend to the instrument itself, as the sonic qualities offered by the direct amplification of the wood will alter as the vibration patterns change according to atmospheric conditions. The piece, then, retains a core identity in the methods of sound production and the nature of the sounds themselves, subject as they are to a degree of variability in their exact constituent elements.

v) Lento (ii)

Following the completion of Lento (i) I decided that I wanted to extend the concerto to incorporate much of the praxis that I had been developing on a wider scale and which extended more traditional notions of technique. These included various forms of multiphonics and subharmonics, as well as a greater variety of technical interchange, something that has always been present in my improvisations, but much reduced in my composed work. I was particularly keen to avoid the traditional concerto
forms and wanted the second movement to be intrinsically linked to the first in its sound world whilst presenting a radically different facet of it.

I decided to use exactly the same orchestral material as the previous work, but to reverse it. As such, the sonic interrelationships outlined in the first piece remain but are developed further with much greater emphasis on velocity from the soloist. Initially, both pieces were to be played using the same instrument. However, I soon came to realise that the removal of the pickups to allow the bass to return to a normal playing position would produce an undesirable hiatus in performance and decided to use two instruments, the second of which is in solo tuning and embodies a very different sonic character as a result. Following on from the idea of instrument as object explored in the first movement, the ‘objectified’ instrument remains in position on the floor and acts as a method of amplifying the second instrument so that they effectively communicate with each other through sympathetic resonance.59 However, as performances of the complete work present certain logistical problems, there are two options for performance aside from the standard performance:

1) Lento (i) can be played as a stand-alone work;

2) Two performers can play each movement simultaneously with the ensemble using the orchestral material from Lento (ii). However, the second bass must still be in contact with the first.

The work follows many of the procedural concerns established in my previous works: small cells of material are continually developed before being transformed into another area. However, the material itself and the way that it is used is intentionally different and focuses much more on the rapid interchange of various techniques contrasted with periods of relative stasis. The technical palette employed is also much larger than in other works and, in addition to relatively established extended techniques, there are several less common ones included here. They were chosen as they have the greatest potential to produce sympathetic resonance from a proximate, similarly tuned instrument.

59 This is achieved by the instruments remaining in contact through their endpins.
The techniques themselves are:

1) Multiphonics – natural, artificial, timbral;
2) Subharmonics;
3) Compound/multi-nodal artificial harmonics;
4) Percussive techniques using the nails;
5) Sympathetic resonance as a primary, rather than secondary, concern.

As stated, the first double bass acts as a means of amplifying the second so that these techniques are clearly audible but also sonically altered by being amplified after passing through a second resonance chamber. This also creates the sympathetic resonance in the first instrument which the piece explores. The reason for this was partly inspired by my reading into intertextuality as an alternative to polystylism and post-modernism in music, during which I happened upon words from a character in Umberto Eco’s novel The Name of the Rose: ‘now I realised that not infrequently books speak of books: it is if they spoke among themselves.’\(^\text{60}\) This, in turn, led me to briefly consider the somewhat romantic idea that instruments could communicate through sound alone. Indeed, I have noticed when practicing that sympathetic resonance between instruments in the same room can be affected quite easily, but this is the first time I have actively explored it. The variability of resonances produced by different instruments means that the relationships between the orchestra and soloist will change from performance to performance. This will similarly be the case if the version is performed with two bassists performing simultaneously and, as such, Lento (i/ii) could be seen as something of a modular piece.

vi) Ontsindn

Ontsindn (2018) was composed at the request of David Heyes as part of a project to celebrate the 85th birthday of Bertram Turetzky. As Turetzky’s treatise The Contemporary Contrabass\(^\text{61}\) was partly responsible for awakening my interest in contemporary performance techniques and would form a


large part of my early performance career, I approached the composition of this work with much pleasure. Responsible as Turetzky was for the development and promulgation of many new techniques for the instrument, I was keen that my own work should explore only a few of these techniques in a musical manner, rather than resorting to using them solely as a means to explore technique. As harmonics have since become a method by which to expand the tessitura upwards on the instrument as well as a timbral device, I have explored in miniature a variety of ways of producing them as well as a range of left-hand articulations. Each of the more unusual sound areas will necessarily vary from performer to performer and instrument to instrument, as will the sustaining potential of individual sounds.

In essence, the work examines the interchange of a small group of extended techniques, which concern themselves predominantly with the production of harmonics and articulations provided by the left hand alone. This furthers my interest in approaches to reductionism, which was explored much more extensively in *Lento (i/ii)*, but here confines itself to the mining of small fragments of melodic content. I had recently heard a recording of another Rebecca Saunders work, *Traces* (2006, rev. 2009), in which a double bass plays a drawn out melody on an extremely detuned instrument, and was particularly drawn to the effect such a melodic phrase has on the listener. The notion of what is considered melody is explored in miniature in this work, in which brief periods of activity (albeit somewhat reductionist in nature) are contrasted with periods of stasis in which sounds sustain *lascia vibrare* after their articulation and are allowed to decay. I have again centred my pitch content on the harmonic series of the open strings, which allows for timbral variability between concurrent pitches as well as a degree of sympathetic resonance, which is used empirically as a means to colour a sustained note. I have also always held the music of Toru Takemitsu (1930–96) in very high regard for his attention to detail to timbre and colour in shaping a melodic line. His solo flute piece *Voice* (1971), particularly in its softer moments, was influential in shaping how the melodic line is timbrally

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63 The low B string of a five-stringed instrument is detuned to G♯!
developed in my work. This invites the performer to examine the nature and purpose of instrument-specific technique, as several techniques are used within any given phrase with the intention of producing a single musical line, but not as a means of introducing novel effects.

The dominant pitch throughout is B♭, which itself is a small nod to Turetzky, known with some affection in the wider double bass community as ‘Bert’. The opening phrase uses the same pitch (B♭4) as a harmonic at three locations on the same string, each connected by a brief glissando/portamento. The varying positions of the node point in relation to the bow (getting increasingly closer) mean that each pitch is timbrally altered, becoming gradually clearer in tonal quality. In addition, each glissando is preceded by a small change in finger pressure which similarly alters the pitch’s sound. The effect that follows in the next section blurs the same pitch in which a B♭ and D♭ harmonic are alternated rapidly with a progressive alteration of bow position in the sul ponticello region to further colour the sound by gradually increasing its harmonic content to become a timbral multiphonic. A brief recapitulation of the opening phrase leads into a section in which (as in Polynya) static pairs of harmonics (consonant and dissonant) are used in which the dominant pitch is again B♭ and whose pitch range is predominantly that of a sixth (D♭–B♭) but occasionally rising to an octave (from D♭). This concludes with a timbral multiphonic that alternates an A♭ with an A♭ + B♭ artificial harmonic tremolando producing a composite sound of those two pitches (the lower pitch more dominant), which in itself is a method of timbrally altering the chord of the preceding bar.

Also explored are means of altering the tonal qualities, or pitch, of an already sustaining note by technique. This is explored most extensively at Letter B (Ex. 7.14), in which a single phrase is created through the application of several techniques which should be seamless so as not to disrupt the flow of the phrase. Techniques in the score are denoted by specific noteheads rather than verbal instruction, partly to simplify the score but also to visually confirm that they form part of a distinct phrase. Silence, not just in terms of audibility but also to mean an absence of any gesture of physical
sustain, is also an integral part of the phrase structure and note stems are altered to include the rests themselves.

![Musical notation](image)

**Ex. 7.14**: *Onsindn*, Letter B, phrase structure with techniques (bb. 31–36).

All arco pitches are played *sul tasto* with a very fast bow speed (but with little bow pressure) and always sustained for the full length of the pitch. A *tasto* positioning allows for a purer, softer sound with fewer overtones and a greater emphasis on the fundamental. The bow must then immediately be taken off the string so it is allowed to vibrate as fully as possible. Next, hammered on pitches are applied to the already vibrating string, which will be less percussive as a result, but still have a slight multiphonic quality and whose pitch is then altered by glissandi to shape the melodic line.

The line itself is again confined to the intervallic range of a 6th (A♭–F♯) and is developed further in the next section by further extending the range of left-hand articulations used in addition to right-hand pizzicato for the harmonics.⁶⁵ This brief section soon gives way to an extended passage of harmonics (played as two-handed pizzicato) which are left to sustain for as long as possible. The left hand provides a pedal point which changes occasionally in pitch over the range of a third (G♯, A♯, B♯), while the right continues the investigation of extended melody which, again, is confined to the range of a sixth (D♯–B♯). The opening material is then recapitulated before the work closes on a variation of the earlier timbral multiphonic produced by *tremolando* in which the dominant pitch is again B♯.

Throughout the piece the performer is again invited to choose how much to colour the complexity of each particular combinative sound. *As lascia vibrare* string sustain will vary greatly between

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⁶⁵ As an individual event achieved by one hand alone. The thumb isolates the node point and the first or second finger plucks the string.
instruments, the performer must also negotiate how best to approach these qualities when shaping lines which contain multiple techniques, each of which possesses a distinct timbral quality.
Conclusion

In this thesis, I have sought to investigate how a set of techniques and predilections in improvised music forms a praxis, and the ways in which it can be reflected in a notated work. The extent to which empirical engagement from performers is required in relation to these works, and the potential for heuristic development that arises, has also been examined. It can be observed that the variable nature of improvisation and its transitory qualities lead to communicative challenges for the instrumentalist that must be solved spontaneously. Such situations have inevitably led to technique creation and their subsequent dissemination through composition. In the introduction, I remarked that I have encountered numerous pieces in which traditional and extended technique is utilised in an unsuitable manner which effectively makes sections, if not all of the work, impossible to realise. Perhaps one of the reasons that extended technique in particular remains so poorly understood is that it is rarely integrated into existent methodologies and is all too often used merely for effect. Whilst a common approach to technical development is the study of études which focus on a specific goal, the sheer breadth of techniques available to the double bass means that such pieces often function as a way of simply introducing the technique rather than integrating it into:

a) an existing practice, developing what Thelin terms ‘a folk music’ for the instrument by establishing an idiomatic approach;

or

b) pieces that are more than just technically-oriented exercises.

There are, of course, exceptions to this rule and the many works by Scodanibbio, Grillo and Jon Deak (b.1943) use extended technique in a manner which is central to articulating the core musical fabric of a composition and are inseparable from the overall design. Similarly, there are also many examples of non-bass players using extended techniques as part of an established musical language in their
works for the instrument; Saariaho, Saunders, Ferneyhough, and Beat Furrer (b.1954)\(^1\) are just a few examples who are particularly perceptive in their utilisation. However, out of all of the pieces that I have examined as part of this course of research, I have found the works by Guy to be unique in the breadth of their innovation and consolidation.

In conversation with Robert Craft, Igor Stravinsky raised a point which could be extended to the work of any composer, that:

Stylistic questions in my music are not conclusively indicated by the notation; my style requires interpretation. This is true and it is also why I regard my recordings as indispensable supplements to the printed music.\(^2\)

For Stravinsky, his recordings provide an accurate realisation of the composer’s intentions for an interpreter to consult. The same can be said for recordings of Guy’s improvisations when approaching *Statements II* as the demonstrable parity of language offers an archetypal mode of execution for the notated material – they fill in what the score doesn’t explicitly detail, particularly in regard to Couldry’s notion of ‘intensity of application’. In this context, Benson's stance that 'the process by which a work comes into existence is best described as improvisatory at its very core'\(^3\) when combined with Bailey's views on improvisational vocabulary\(^4\) demonstrates that a specific idiom can be broadly analogous across two approaches by its commonality of language (technical, harmonic, melodic, rhythmic) and the specificity of its praxis (the manner and 'intensity of application'). When considering the lack of expressive text in *Statements II* (*furioso* and *molto espessivo* being the only two such terms used) further investigation as to the composer’s intentions is almost a necessity, in spite of the specificity of other parameters. Thus, the score requires empirical research and educates in a heuristic manner as a result, as the performer gains a wider contextual

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\(^1\) In particular, pieces written with bassist Uli Fussenegger (b.1966) in mind, most recently the as yet unpublished *Kaleidoscopic Memories* (2016) and: Beat Furrer, *Lotófagos* (Kassel: Bärenreiter Verlag, 2007).


\(^4\) See chapter 2, p.
awareness by assimilation. This can, of course, also be extended to Rands’ work as the piece is genuinely reflective of an idiom and praxis that was established to suit the demands of an entirely different context. This is by no means a unique situation. In fact, this research has revealed that strong traits within performers’ praxes are often the result of a highly personal journey toward developing technique and such characteristics can be easily recognisable within the works of others.

Guy is not, of course, the only improviser to have composed. Joelle Leandre’s *Taxi,* for example, is very much a delightfully amusing representation of her praxis as an improviser, but nowhere near as innovative in scope as Guy’s work. Similarly, Scodannibio’s aforementioned work in performance and composition is very much a result of a relatively orthodox training in combination with an enquiring mind and, whilst presenting significant advances in technique and a distinctive style, does not present such a breadth of advancement within a single work. From a composer’s perspective, Roger Reynolds’ more recent collaborations with Mark Dresser have resulted in three pieces which tend to focus only on specific aspects of Dresser’s stylistic preferences and technical oeuvre, although the most recent two works *image/Contrabass* and *imAge/Contrabass* (both 2012), are particularly reflective of the manner in which Dresser employs techniques; the earlier *MARKed MUSIC* (2011) presents a more generalised overview.

Returning to the postulation that Guy’s *Statements II* is a heuristic document, it very quickly becomes clear that the work is representative of an instrument-specific idiom: an established practice in which the core language has remained relatively constant but has continued to develop its technical remit. It demonstrates the expansion of a tradition-informed technique taken to (almost) its logical conclusion following the specific ideology of a single performer. That it acts as a manifestation of praxis is further bolstered by the similar material and processes in Rands’s writing for the instrument, and indeed performer, coupled with Guy’s own subsequent writing for the instrument.

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6 Documented extensively on Dresser’s DVD *Guts,* which features an extended videoed conversation between the two men in which they discuss their individual work and collaboration.
The heuristic elements of Guy’s piece, the specificity of his technical practice and the practicalities of its representation crucially have one thing in common: the piece is practical, albeit very difficult to master. By aiming to do so, however, the performer learns more about the potential of the instrument and about approaches that are informed by idioms other than that of the composed piece. Compare the nature of the relationship of player and instrument in Guy’s work to that of Xenakis’ *Theraps*. Guy speculated that Xenakis ‘looked at the bass from the front’, and the problems inherent in the work are the result of that perceived physical relationship. In working towards performing *Theraps*, the performer is required to solve the issues that arise from impractical and extreme material ranging from ferocious, indented glissandi to fragile double-stopped harmonics, to say nothing of the score being written at sounding pitch! Whilst these elements are broadly idiomatic, there are moments which are at the limit of practicality and reliability. In contrast, as each technical facet has been derived from practical experience, the problems to be solved in Guy’s work are ones of virtuosity and comprehension of procedure. The same can be said for many works by bassist-composers such as Grillo and Scodanibbio, but also for composers who have worked directly with instrumentalists or who have themselves engaged in experimenting with the instrument, such as Jacob Druckman. That is not to say that works by other composers aren’t generally successful – quite the reverse – but more that the physical qualities of the double bass present many problems that are not always fully understood by non-players.

The process of learning *Statements II* fundamentally changed my playing and approach to the instrument. Not only did it introduce me to new techniques, it crucially demonstrated a way in which they could be employed in a more integrated manner than I had previously experienced to support a musical idea. It also, by further investigation, drew me to the conclusion that these were the

12 In particular, extensive passages of bi-directional glissandi which, at points, require unconventional finger positions that require great digital strength. For further details see: <http://www.themoderndoublebass.org.uk/left-hand--multiple-voice-glissando.html>
13 In an interview with Bruce Duffie, Druckman explains how he arrived at the considerable range of techniques presented in his work for solo bass *Valentine*, by renting an instrument and exploring its possibilities. <http://www.bruceduffie.com/drukman.html> [accessed 14 August 2018].
fundamental elements of a personal musical language which demonstrated consistent traits across composition and improvisation. The analysis of Guy’s technical deployment in improvisation allowed me to further explore the expressive potential within his composed music but also demonstrated how these elements come to form a praxis. Guy’s and Rands’ demonstrations of this praxis show a consistent approach which is self-idiomatic and replicable across genre and method.

Considering the breadth of innovation in his work as an instrumentalist and composer, Guy’s work has curiously received little scholarly attention and his music for bass remains somewhat neglected by instrumentalists. Perhaps the main reason is that the barrage of technical requirements combined with a visual complexity is initially off-putting, but when examined alongside his work as an improviser interpretation becomes much easier. The heuristic processes which resulted from learning Statements II helped to develop my technique more rapidly and cohesively than any other methodology with which I have engaged.

In the previous chapter, I expressed an interest in observing how a performer may alter their interpretive processes based on their level of engagement with what they perceive to be the stylistic performance traits of the composer, and return now to Worthen’s observation that:

most performers spend more time learning their instrument than in seeking an understanding of the music they play. Interpretation is often based more on what the student’s teacher dictates than in analysing different and contrasting options for performance.\footnote{Douglas Worthen, ‘Understanding Semiotics in Music’, Faculty papers, Southern Illinois University, Carbondale, 2010; <https://opensiuc.lib.siu.edu/safmusicpapers_faculty/1.> [accessed 15 June 2017].}

My pieces aim to actively avoid perpetuating this scenario and develop a situation in which different options must be examined and a choice be made, much in the way that Guy’s music helped me to develop my technique and see the instrument in an entirely new light, I hope in some small way these pieces may have a similar effect for other instrumentalists. Whilst this is by no means representative of a comprehensive method or detailed approach to heuristic pedagogy, there are elements here which I would consider worthy of further investigation.
Most instruments have specific idiomatic practices which, if applied incorrectly, can result in physical discomfort or even injury. My approach, therefore, has centred on elements in which it is assumed that a solid core of traditional training is already in place; I am certainly not advocating such an approach for less experienced individuals. However, the methodology of providing a point of reference, recorded evidence of performer style and compositions that reflect it (and require the learning of unfamiliar techniques which require investigation and subsequent decision making) is one that could logically be transferred to any instrument. What I am offering is a means of developing technique which is creative at its core and supplemental to more traditionally-oriented methods of study. This is, of course, a process that must be flexible as each individual will have different needs in terms of guidance and different views as to what would be considered appropriate creative input. For some performers, however, finding their own solution to technical problems with appropriate guidance can be an extremely illuminating and rewarding undertaking.

I mentioned earlier the personal journey of many musicians toward the eventual consolidation of their praxis. This has been a process which has been central to my development as an instrumentalist and as composer and, when examining my own working methods more generally during this research, I was surprised by the extent to which the manifestation of my own performance praxis on paper altered my typical compositional ambit specifically when composing for bass. Much of my other composed work incorporates what could loosely be termed a polystylistic approach (although I consider the use of various styles to be more allusive than explicit in their intended effect) within a broadly impressionist sound-world. The tendency to focus almost exclusively on a single idea or sound source for an entire piece is, therefore, unusual within the established margins of my own output and is something which has remained distinct to my bass writing. Whilst much of my music, in general, is written for specific performers (and I often try to incorporate some of their proclivities within a work), I always ensure that it can be easily interpreted by others whilst clearly retaining my compositional identity. As such, the arguments relating to ownership which surround

Rands’s piece cannot apply here, as I don’t seek to detail the specific traits of a performer to that extent. Once I sought to codify some of my practices as an improviser into a composed work for double bass, however, it soon became clear that I find this compositional process more difficult than for any other, which in itself produces a different kind of result and allows another facet of a specific instrumental approach to emerge. The recording that accompanies this document demonstrates that my technical remit as an instrumentalist is broad and is applied to a wide range of musical ideas. I regard much of this language as highly personal and currently have no desire to document it in its entirety in the form of a notated work. However, elements of my archetypal approach may be (by observation) applied to the notated works that form part of this thesis if a performer so desires. These two approaches, composition and improvisation, have a common mediator: the instrument. Much in the manner that Guy’s idiomatic approach is demonstrable across several contexts, these pieces take elements of my practice in improvisation and detail them in notation, whilst allowing for the predilections of another performer to be applied. They also contain elements which will vary during performance and require myself, and others, to make spontaneous creative decisions.

These composed works for the bass have focused on specific areas which I have considered to be absent in the bass repertoire whilst aiming to reflect on certain areas of my own work as an instrumentalist. These decisions have been arrived at after a period of experimentation with different instruments and set-ups so that the musical material will be broadly replicable whilst encompassing a wide range of factors. It would be pointless to write a piece for others to perform which takes as its sound source something only possible to produce within the specifics of my set up. Whilst Courant does make use of a pitch which is particular to my instrument, the period of exploration as previously detailed yielded broadly similar results, thus justifying the work’s composition. The decision to use a prescriptive notation was similarly informed by such processes. As I am able to go into, perhaps, too much detail as to the specifics of a certain sound and its related techniques, a problem arises as to how to make a score playable to those who do not share the specifics of my training. Another problem is that the creation of my own techniques has also been born of the need to solve the communicative problem in addition to simply wanting to emulate certain sounds that I have heard elsewhere. The
pieces that result demonstrate a definitive yet variable musical idea, whilst seeking to continue the
heuristic process that I so enjoyed when first developing a more extended technical repertoire.

In essence, I consider my instrument-specific language outside of interpretative contexts to be
one in which spontaneous communication is the primary concern. Each context has its own set of
musical and technical parameters and in replicating these techniques/sound areas in the composed
medium I try to impart an element that reflects the process in which they were created. The variable
nature of some of these sounds presents problems for the instrumentalist who is then required to
undertake empirical research in order to solve them and allows the performer to demonstrate their
personal preferences in establishing their own solution. The lack of specific detail as to the desired
sonic result may, through performer interpretation, yield a reciprocal heurism; I am interested in
observing the individual traits of performers when confronting these problems as they may reveal
elements within my own music of which I had not previously been aware. It may also, much in the
same way that Guy’s work acted for me, potentially lead to the creation of new techniques and sound
possibilities.

The opening phrase of Polynya\textsuperscript{16} is just one example in which potential variables exist that
allow other performers to creatively respond to the notated parameters and, potentially, expand upon
them. These elements admittedly amount contextually to relatively small gestures and can at no point
halt the work’s progress. They do, however, seek to maintain a dialogue between composer and
performer: a core concern of my work in general and one that I have been grateful to have had the
opportunity to examine more fully during this course of study. Perhaps the most exciting element is
that another performer may discover things in my music which I have never explored or even
considered and lead me to explore new areas within my own practice. It is, of course, difficult to
speculate as to what these advances could be but, when one considers the differences in approach of
the instrumentalists discussed in this thesis who have broadly similar core training (particularly Guy,
Scodanibbio, Grillo and Kowald), the possibilities are manifold. I have demonstrated that a

\textsuperscript{16} See: <http://www.themoderndoublebass.org.uk/variability.html>
personalised and creative approach to technical development in conjunction with more formalised training can lead to a distinctive praxis. Indeed, the assimilation of all of the idiomatic approaches discussed have resulted in the formation of my own idiom which is demonstrated here in notated form and in improvised recordings. Although not actively seeking to directly perpetuate my own performance traits for others, I am seeking to offer an approach to developing technique that I have found rewarding over so many years and have aimed to do so in a manner in which creative engagement is an essential requirement. Any development that may result will be the unique product of an individual's journey towards a preferred mode of expression and, as the breadth of innovation demonstrated by the four previously mentioned performers will show, the possibilities are vast. I am always keen to investigate novel techniques and, where appropriate, integrate them into my existing vocabulary. Perhaps the ultimate outcome of this research would be for another individual to discover something entirely new for the instrument, which I could then explore and assimilate and, in the spirit of reciprocity, continue the process.
Bibliography

(i) Articles and Books


Bright, Steven Thomas, *Red Mitchell Tuning in Fifths and the Walking Bass Line* (Masters dissertation, York University, Toronto, 2013)


———, *Extended Play: Sounding off from John Cage to Dr. Funkenstein* (Durham, NC: Duke University Press, 1994)


Fétis, François, *Biographie universelle des musiciens et bibliographie générale de la musique* (Brussels, 1833–1844)

Finch, Peter, *Zen Cymru* (Bridgend: Seren, 2010)

———, *Antibodies* (Exeter: Stride, 1997)

———, *Selected Later Poems* (Bridgend: Seren, 2007)

Fitch, Lois *Brian Ferneyhough* (Bristol: Intellect, 2013)

François, Jean-Charles, ‘Organization of Scattered Timbral Qualities: A Look at Edgard Varèse’s Ionisation’, *Perspectives of New Music*, 29/1 (1991), 48–79


Prinner, Johann Jakob, *Musicalischer Schlissl* (1677), autograph manuscript.


Schwitters, Kurt, ‘An Anna Blume’ *Der Sturm*, 10/5 (10 August 1919), 72


Térey-Smith, Mary, ‘Joseph Kämpfer, a Contrabass Virtuoso from Pozsony (Bratislava)’, *Studia Musicologica Academiae Scientiarum Hungaricae*, 25 (1983), 183–89


Webster, James, ‘Violoncello and Double Bass in the Chamber Music of Haydn and His Viennese Contemporaries, 1750–1780’, *Journal of the American Musicological Society*, 29/3 (1976), 413–38


Worthen, Douglas, ‘Understanding Semiotics in Music’, Faculty papers, Southern Illinois University, Carbondale, 2010; <https://opensiuc.lib.siu.edu/safmusicpapers_faculty/1>

(ii) Online Resources

An instrument made by Abraham Prescott, 1825, Concord, New Hampshire


Bell, Clive ‘History of the LMC’ <https://www.variant.org.uk/8texts/Clive_Bell.html> [accessed 21/02/2019]


Double Bass plate modes, Institut für musikalische Akustik – Wiener Klangstil


Duffie, Bruce, ‘An Interview with Jacob Druckman’ <http://www.bruceduffie.com/druckman.html>

[accessed 14 August 2018]

Dwyer, Benjamin, ‘A Conversation with Barry Guy’


[accessed 8 November 2018]

Electric Phoenix archive <http://www.electricphoenix.darylrunswick.net/audio> [accessed 21/06/2016]


Graph, ‘Hitting the Strings’ <http://www.mayarecordings.com/articlesofinterest/duos/index.html>

[accessed 4 May 2014]


<http://www.akutek.info/> [accessed 27 November 2015]


Henning, Duncan, ‘An Interview with Barry Guy in Three Parts’


Micheliov, Maxim, ‘Barry Guy: Striving for Absolute Spontaneity’


Parker, Evan, and Barry Guy in Dublin (2017) <https://www.youtube.com/watch?v=mSeZD54A20l> [accessed 7 March 2019]


<http://www.altoflute.co.uk/> [accessed 5 April 2015]

Sheffield Free Improvisation <http://www.efi.group.shef.ac.uk> [accessed 3 January 2018]


Thelin, Håkon, ‘Multiphonics on the Double Bass’

———, ‘Stefano Scodanibbio and the Final Step in the Technical Evolution of the Double Bass’
Wastell, Mark, ‘An Interview with Tomas Korber’


(iii) Scores

**Barry Guy**

*After the Rain* (London: Novello, 1992)

*Aglais* (2004), unpublished

*Anaklasis* (2003), unpublished

*Anna* (London: Novello, 1974)

*Bird Gong Game* (1991), unpublished

*Bitz!* (London: Novello, 1979)

*Bubblets* (London: Novello, 1998)

*Buzz* (London: Novello, 1994)

*Circular* (London: Novello, 1984)

*D* (London: Novello, 1972)

*Eos* (London: Novello, 1977)

*Fallingwater* (London: Novello, 1996)

*Flagwalk* (London: Novello, 1974)

*Folio* (2001), unpublished
Hold Hands and Sing (London: Novello, 1978)

Inachis (2002), unpublished

Lysandra (2005), unpublished

Statements II (London: Novello, 1988)

Statements II-EX (London: Novello, 1979)

String Quartet No.2 (London: Novello, 1979)

String Quartet No.3 Opus 112 (London: Novello, 1983)

Voyages of the Moon (London: Novello, 1983)

Other

Acker, Dieter, Orakel (Berlin: Bote & Bock, 1976)

Aperghis, Georges, La Signature, La Date, etc. (Paris: Editions Salabert, 1985)


Bauckholt, Carola, Treibstoff (Cologne: Thürmchen Verlag, 1995)

Bussotti, Sylvano, Max Deutsch in memoriam (Milan: Ricordi 1985)

———, Naked Angel Face (Milan: Ricordi, 1982)


Donatoni, Franco, Lem (Milan: Ricordi, 1983)

Druckman, Jacob, Valentine (New York: MCA Music, 1970)


Ferneyhough, Brian, Trittico per G.S (Frankfurt: Edition Peters, 1989)
Furrer, Beat *Lotófagos* (Kassel: Bärenreiter Verlag, 2007)


Grillo, Fernando *Gstuss* (1975), unpublished

———, *Suite I* (Mainz: Schott Music, 2005)


Ofenbauer, Christian, *Argonautenstudie (Studio per un Argonauta)* (Munich: Doblinger, 1996)


———, *Folia* (London: Novello, 1995)


Scodanibbio, Stefano, *Alisei* (1986), unpublished

———, *Due pezzi brillanti* (1985) unpublished

———, *e/statico* (1980) unpublished

———, *Geografia amorosa* (1994) unpublished


Stockhausen, Karlheinz, *Halt* (Kürten: Stockhausen-Verlag, 1978)


**(iv) Discography**


———, *Unveil*, CD, Clean Feed CF043CD (2005)


———, *Assist*, LP, Jazz & NOW 4 (1985)

———, *Fizzles*, CD, Maya MCD 9301 (1993)

———, *Folio*, CD, ECM 1931 (2005)


———, *Portrait*, Intakt CD 123 (2007)
Moran, Pat, *This Is Pat Moran*, LP, AFLP 1875 (1958)


Oxley, Tony, *Ichnos*, LP, RCA Victor SF 8215 (1971)


Parker, Evan, *50th Birthday Concert*, CD, Leo CD LR 212/213 (1994)

———, *Toward the Margins*, CD, ECM 1612 (1997)


———, *At The Vortex (1996)*, CD, Emanem 4022 (1996)

———, *Zafiro*, CD, Maya MCD0602 (2006)

Rabbath, François, *Bass Ball*, LP, Philips PHM-200-128 (1964)

———, *The Sound of a Bass*, LP, Philips 844 937 BY (1968)


———, *Oltracuidansa*, CD, Mode MODE225 (2010)


