Portfolio of Compositions

(and accompanying commentary)

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Thesis submitted to the University of Nottingham

for the degree of Doctor of Philosophy

July 2015

Abstract

The first half of this commentary/thesis will explore changing perceptions of the musical work and the creative process. Ultimately, it will seek to identify and expose the myth of what we might call the 'tyrannical composer'. That is to say, a suspicion of what is implied hierarchically by the figure of the composer and the consequences this has on critical thought, scholarship, performance and the public perception of music, new and old.

By drawing upon recent research in, among other things, semiotics and mediation theory, I seek to reimagine the traditional composer-performer-audience relationship as something far more democratic and linear than is often given credit. Discussions typically reserved for overtly challenging and 'experimental' genres of music can here be reframed and proposed as a defence of related but contrasting styles of acoustic avant-garde composition.

The above argument will be supported in the second chapter by a selection of case studies drawing upon my own portfolio of compositions. Analysis of some of these works will ask questions about composer authority and agency and draw upon my practical experience as composer of the works in question. The composer will ultimately be understood not as a dictator-like figure and privileged arbiter of the 'musical work', but as a democratically motivated creative agent, dialectically and collaboratively involved in the mediation and reception of the performed work.

Acknowledgements

First of all, I would like to thank my principal supervisor Nick Sackman for his practical insight and guidance, as well as his enthusiastic involvement with my music; our supervision sessions have been a constant source of motivation for me. I would also like to thank Robert Adlington, whose help writing the written portion of this submission (and also my undergraduate dissertation) has had an immense influence on me. The music department here at the University of Nottingham has put up with me for seven years, and I could not think of a better faculty to work with and learn from. A special thanks to Philip Weller for his time, conversation and French accent.

It has been a particular pleasure to be part of the postgraduate community in the music department. Though I could not fit everyone's name into this, I would like to thank Charlotte Bentley, Jonathan Herrick, James Cook, Matthew Lewis, Adam Whittaker and Angela Slater for the inspiration they have given me, the patience they have shown, and the drafts they have read through. A very special thank you to the Radcliffe Trust for the Bursary that has sustained me over the years; this made everything possible. Last, but not least, an enormous thank you to my parents, for their unwavering love and support, financial assistance, Skype conversations and for always being there if I ever needed to escape.

Contents

Chapter 1

The Myth of the Tyrannical Composer: Rehabilitating and Democratising the 'Work Concept'

Recent changes in government arts funding policy and the dramatic merging of various contemporary music organisations into the ACE-affiliated 'Sound & Music' (2008) prompted outrage from many of the country's most prominent composers. An open letter written early in 2012 by Colin Matthews and Nicola LeFanu, and endorsed by a further 250 artists, accused Sound & Music of abandoning 'virtually all of the long-established constructive activities of its constituent parts'.[1] In the four years that this organisation had been responsible for the promotion of New Music the focus had shifted, Matthews and LeFanu suggest, towards 'a bland and unfocused endorsement of "sound art" and the promotion of relatively fringe activities'. The signatories of the original letter included, according to Norman Lebrecht (on his ArtsJournal blog), the 'grand old knights of English music'[2] and as such it is hard not to read antagonisms between different types of contemporary composition here. A response, signed by an arguably more 'diverse' range of composers, practitioners and academics, attacked the implied assertion that 'notated contemporary composition should receive a specially privileged status'. This response goes on to suggest instead, that it is 'notated contemporary composition' that is itself the 'fringe activity' and that musical practice today, less inclusive and often overtly collaborative, often seeks directly to 'defy simplistic categorisation'.[3]

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[1] The open letter can be found here: http://www.holstfoundation.org/media/Open-Letter-SAM-ACE.pdf <accessed 20/06/2014> .

[2] Regrettably, the blog has since been removed from the Internet.

[3] As above, the source for this has also since been removed from the internet.

There is, proposes M. J. Grant, in a paper that develops its argument using the sign theory of Charles Sanders Peirce, a 'constitutive difference between what is commonly known as "experimental music" and other types of contemporary composition'.[4] The difference seems subtle, and concerns Peirce's concept of *symbol* and *index*. In short, experimental music 'doesn't represent something, it presents something…'; it does not, Grant claims, '*tell* us something' but rather it '*shows* us something'.[5] This distinction, which concerns semiotic intention, helps to explain the Sound & Music 'dispute' (for want of a better term). If there is indeed a turn towards favouring an 'experimental' music— which I am intentionally conflating with 'sound art', LeFanu and Matthew's derided 'fringe activity'—it is unsurprising. This shift from the representative to the presentative semiotic mode mirrors, I would suggest, the Lyotardian commentary that characterises the postmodern as possessing a 'praxis based on the refusal of any metanarrative which claims to subtend and explain phenomena'.[6] The 'sound artist', unlike the authoritarian figure of the 'composer', *shows* rather than *tells*, while the traditional means by which music is mediated is deemed historically top-down, Euro-centric and rightly viewed with some scepticism. Where the act of *showing* is here comparable to an invitation that factors in the creative and interpretative agency of all participants, *telling* is didactic and privileges the message of a single creator, or composer. It is at this point, though, that theory risks losing touch with reality. Ideologically loaded critique of this kind overlooks what is truly radical, or at least meaningful in any 'musicking'.[7] My defence of the 'composer' will be a defence of the role as it is understood in so-called 'notated

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[4] Morag Josephine Grant, 'Experimental Music Semiotics', *International Review of the Aesthetics and Sociology of Music,* 34/ 2 (2003), 174.
[5] Grant, 'Experimental Music Semiotics', 183.
[6] Cecile Lindsay, 'Experiments in Postmodern Dialogue', *Diacritics*, 14/3 (1984), 52.
[7] To borrow from the late Christopher Small.

contemporary composition'. It will start with an examination of a number of positions which view the figure of the composer in a critical light.

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Georgina Born has described the following nightmare scenario:

> The ontology of the musical work envisions a hierarchical assemblage: the composer-hero stands over the interpreter, conductor over instrumentalist, interpreter over listener, just as the work ideal authorizes and supervises the score, which supervises performance, which supervises reception.[8]

I am reminded of Frederico Fellini's *Prova d'orchestra* (1978), in which the setting of an orchestral rehearsal becomes the scene for a revolutionary metaphor.[9] With literally apocalyptic results, the beleaguered orchestral musicians rise up and go on strike against the dictatorial figure of the conductor (the composer is strangely absent from the drama). Similar sentiments are found expressed from a Marxist perspective in Cornelius Cardew's denunciation of Stockhausen as part of the 'cultural super-structure of imperialism'.[10] This was a criticism rooted in Stockhausen's mystical and singular persona, and the result of Cardew's own reinvention as Maoist and political activist. Cardew lamented the need, inherent in Stockhausen's style, for a specially trained genre of player capable of delivering this music for an audience. This performer is expected to concentrate and contemplate 'sounds for their own sake'.[11] By promoting a 'mystical

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[8] Georgina Born, 'On Musical Mediation: Ontology, Technology and Creativity', *Twentieth-Century Music,* 2/1 (2005), 26.

[9] *Orchestral Rehearsal* (prova d'orchestra), Frederico Fellini (dir.) (Infinity Media, 2006), DVD.

[10] Cornelius Cardew, *Stockhausen Serves Imperialism* (London: Latimer New Dimensions Limited, 1974), 47.

[11] Ibid., 49.

world outlook'—with himself at the centre—Stockhausen is becomes an 'ally of imperialism and an enemy of the working and oppressed people of the world'.[12]

Georgina Born's sophisticated criticism of musical modernism and the work concept is instantiated within her own ethnographic study of the *Institut de Recherche et Coordination Acoustique/Musique* (IRCAM) in Paris. Born claims that IRCAM propagates a kind of aesthetic/philosophical inertia, which results from a number of false universalisms regarding progress in art and technology. Headed by its charismatic and iconic 'leader' Pierre Boulez, IRCAM has come to near-monopolise the idea of 'modernism' in music (at least in France). By hi-jacking the musical 'avant-garde' IRCAM effectively became synonymous with the primarily European 'work-' and 'composer-' centric musical vanguardism that has dominated New Music discourse for much of the twentieth century.[13] IRCAM 'legitimises' itself, and in so doing legitimises its own concept of the hierarchically mediated musical 'work', as arbitrated by the 'reified individual author' or *composer*.[14]

This postmodern cynicism toward a progress-orientated avant-garde is not uncommon today. It is widely felt in the United States, for example, that during the 1960s and 70s, the institutionally elitist post-Schoenbergian serial music was disseminated through a 'kind of force-feeding in which a reluctant public, strung along by a cast of academic composers, [was] made to digest what would otherwise have been set aside'.[15] This position is regularly reinforced through recourse to Milton Babbitt's 'Who Cares if You Listen', an article that is, in fact, not quite as unyielding as it is often assumed to be. In the

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[12] Ibid., 54.
[13] Born, 'On Musical Mediation: Ontology, Technology and Creativity', 15.
[14] Born, *Rationalizing Culture…* 315.
[15] Pieter C. van den Toorn, 'Will Stravinsky Survive Postmodernism?', *Music Theory Spectrum,* 22/1 (2000), 104.

recent BBC documentary *The Sound and the Fury* (aimed to coincide with a yearlong celebration of twentieth-century music at the Southbank Centre, 2013), the obligatory IRCAM segment (apparently conflating the entirety of the post-war European avant-garde) felt comparatively dismissive. In an episode that celebrated the narrative of a minimalism which ushered in a 'return of tonality'—and following a segment discussing the 'sacred minimalism' of Arvo Pärt—the narrator began:

> …Modern classical music had finally ceased to alienate its audience, but that didn't mean the avant-garde was left for dead. Back in Paris, the city where Claude Debussy first threw open the floodgates for a century of musical reinvention, an underground bunker had been forged. A scientific laboratory equipped to blast music from the end of the 20th century to the 21st. [16]

Here, the music in question is seemingly robbed of its 'musicality'. Where other 'genres' are celebrated for their capacity to reach normatively conceived (and ostensibly mainstream) audiences, the post-war avant-garde is literally buried 'underground' because of its commitment to an unpopular aesthetic. It may seem a well-intentioned critique to accuse the kinds of composers that come from IRCAM of an overreliance on essentially 'arbitrary intertextual references to science, computing[…] biology, maths, physics, and structural linguistics' etc. but criticisms of this kind, and those which—as with Georgina Born's—observe an excessive over-reliance on the pseudo-scientific metalanguages spoken by composers *to other* composers, really only tell half the story. [17] I would suggest that it may be unfair to deny pre-emptively the possibility of a music, mathematical in presentation though it may be, to communicate to an audience on an emotional level. The New Musicology has reminded us that it is in the 'irreversible

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[16] 'Easy Listening?', *Sound and the Fury*, BBC Four, Ian MacMillan (dir.), aired 26th February, 2013.

[17] Born, *Rationalising Culture…* 223.

experience of playing, singing, or listening that any meanings summoned by music come into being'.[18] Here, I have sympathy with Susan McClary who, while criticising the 'terminal prestige' of the very vanguards of new music under scrutiny here, is able to show a not inconsiderable sensitivity to the affective capacities of this type of music. Without drawing upon the quasi-mathematical jargon, which may 'require little more than a specialist's grasp of combinatorial techniques', it should, she claims, be possible to discuss the music in broader more meaningful, experiential and cultural terms.[19]

On the back of her criticism of IRCAM-formalism, Born has sought to develop an all-encompassing ontological framework for the broader, and diverse, cultural practices that constitutes music. Such a model should see the art-work (or cultural object), not as a disinterested and abstract object of aesthetic inquiry, but as a culturally mediated index of social relations and the cumulative result of its manifold transmissions, exchanges and mediations. To do this, Born draws upon the work of anthropologist Alfred Gell to reconceive of the musical art-work as 'an invisible skein of relations, fanning out into social space and time'.[20] She is rightly sceptical of overly reductive binarisms that regard 'active' and co-creational types of listening against other passive and disengaged modes of engagement.[21] Such reductions, Born contends, presuppose the composer-centric 'reifying paradigm' of the "music itself", which, we are told, automatically endangers any broader understanding of a social and mediated music. Her solution—a sociologically influenced one—thus focusses on 'relations between musical sounds, human and other

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[18] Carolyn Abbate, 'Music – Drastic or Gnostic?', *Critical Inquiry,* 30/3 (2004), 505.
[19] Susan McClary, 'Terminal Prestige: The Case of Avant-Garde Music Composition', *Cultural Critique,* 12 (1989), 65.
[20] Born, 'On Musical Mediation: Ontology, Technology and Creativity', 17.
[21] Georgina Born, 'Listening, Mediation, Event: Anthropological and Sociological Perspectives', *Journal of the Royal Musical Association,* 135/1 (2010), 81.

subjects, practices, performances, cosmologies, discourses and representations, technologies, spaces, and social relations'.[22]

Jean-Jacques Nattiez draws similarly from another anthropologist, Marcel Mauss, and describes music as a 'total social fact', whose 'definition varies according to era and culture.[23] Nattiez's position is not wholly dissimilar to Born's and likewise concerns all traits and phenomena associated with said musical fact (from, he says, the conductor's gesticulations, to the space of the concert hall).[24] Nattiez unifies his theory through a model (or process) of tripartition, which forms the crux of his semiology of music. For Nattiez, the work is unthinkable without both a complex *process* of creation (the *poietic* process) and a likewise complex process of reception (the *esthesic* process) that converges on a central point, or trace; this is a process that *reconstructs*, and is creative.[25] By engaging with a 'total musical fact' and examining separately music's processes of 'production (poietics), its immanent structures (the neutral level), and the ways in which it is received (esthesics)' Antony Pryer has noted that Nattiez's approach makes a 'serious attempt to place analytic and aesthetic beliefs in a cultural, or at any rate a communal, context'.[26] In short, what I suggest might be missing from Born's model is precisely this *esthesic* process; the properly experiential mode that will help to afford both the listener and performer their due, as creative agents in the music's creation and mediation. Ultimately, a full and equal consideration of the *esthesic* would allow us to reconceive of the composer (and of the 'work concept' that sustains him/her) not as a dictatorial

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[22] Ibid., 88.

[23] Jean-Jacqes Nattiez, *Music and Discourse: Toward a Semiology of Music*, Carolyn Abbate (trans.) (Princeton: Princeton University Press, 1987), 42.

[24] Ibid.

[25] Ibid., 133.

[26] Antony Pryer, 'Nattiez's 'Music and Discourse': Situating the Philosophy', *Music Analysis* 15/1 (1996), 102.

presence but as a significant figure, and collaborator, in the broader mode of cultural practice that is music. Before I proceed with this argument we must first establish a philosophical and historical basis for reconceiving of the musical 'work', that is, the 'thing' that the composer is presumed to produce.

Music, the 'work concept' and the process of creation and mediation

    (1) the problem of ontology and music

There has been much debate recently from within the discipline of analytic philosophy about what 'music', or the 'musical work' is, or should be. Much of this discussion has remained distinct from, or perhaps parallel to, similar strands in musicology. Analytic philosophy offers (broadly speaking) two positions for an ontology of the musical work. Firstly, the nominalist theory necessarily attempts to reduce music to particulars, objects or instances (concrete particulars). Abstract objects—the causally inert—and universals (as opposed to particulars) are not included. This line of argument tends to come to rest on the conclusion that works are 'the exactly specified products of composers', the 'score' being necessarily the product of a composer's labour.[27] Admittedly, it is possible from this perspective, to consider instances of performances (and *possible* performances) as particulars, though this is nevertheless contingent on there having been a composer's 'work' to reproduce in the first place. Put simply, it is very hard indeed to account for context and experience here, as these things are considered too contingent for any nominalist ontology.

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[27] Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon Press, 1992), 42.

Second, the Platonist (or idealist) theory is, for many, a more attractive option and contends that music consists of 'Platonic' objects: that is to say, 'types, 'kinds', universals and all the abstractions snubbed by an abovementioned nominalism. Peter Kivy, himself a leading exponent of the idea (and in his response to the rather more nuanced hybrid theory of Jerrold Levinson) has claimed that the primary opposition to a Platonist theory of musical ontology arises from the fact that accordingly, a musical work is 'discovered' rather than 'created'.[28] I would argue that there is a much greater potential here, but the theory grows in complexity as it attempts to account precisely for which abstract objects (themselves notoriously difficult to define) musical 'works' actually are.[29] Levinson's own modified Platonism illustrates this and suggests that musical works can 'exist as abstract entities apart from their performances and scores, and that the identity and individuation of performances involve intentional and recognitional components' as well.[30] Despite the impressive scope of this debate, it makes little effort to account for music not composed in the western art tradition. One cannot help but wonder why there is such a significant effort dedicated to the attempt to determine where the *thingness* of a *specific music* resides, when that *music* represents just a small fraction of musical practice, not just in the entirety of history but in the world as it is today. Kivy has summarised, in somewhat poetical terms, the two viewpoints thus, and makes apparent the utterly composer-centric position that the discussion has taken up until this point:

> [Nominalists] of our day [have] concluded that composers and scientists, contrary to the general view, are *both* of them engaged in the same endeavour, creating, or "worldmaking"[...] Platonism, at the opposite (and to

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[28] Peter Kivy, 'Platonism in Music: Another Kind of Defence', *American Philosophical Quarterly,* 24/3 (1987), 248.

[29] Kivy notes that this view has a reputation as 'being starry-eyed metaphysics', ibid., 245.

[30] Goehr, *The Imaginary Museum of Musical Works,* 44.

him detested) end of the metaphysical spectrum, implies that composers and scientists, contrary to the general view, are *both* of them engaged in the *same* endeavour, "discovery".[31]

Philosopher Aaron Ridley has criticised the assumed value that a comprehensive ontology of music might have on the appreciation, understanding and practice of music as a whole. In fact, he goes so far as to suggest that such a 'serious philosophical engagement with music is orthogonal to, and may well in fact be impeded by, the pursuit of ontological issues'. Such an attempt may, he claims, be 'absolutely worthless'.[32] He puts the blame firmly on Nelson Goodman, who, in his *Languages of Art* (1968), made the ontological link between a musical work and a written score explicit. 'The score "defines" the musical work',[33] and it is this assertion that seems to inform much of the music and ontology debate that continues today. As the basis for a philosophy of music this view is troublesome, and Goodman is ultimately forced to make, against his own better judgement, the absurd conclusion that 'the most miserable performance without actual mistakes [counts] as such an instance, while the most brilliant performance with one wrong note does not'.[34] In a world full of performers and listeners there is a great deal to disagree with here.

In what could be viewed as a response to the above—that is to say, the abject dismissal of performance as a constituent part of the music itself—Christopher Small has forcefully (and controversially) stated the following: that 'performance does not exist in order to present musical works, but rather, musical works exist in order to give

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[31] Kivy, 'Platonism in Music: Another Kind of Defense', 251.
[32] Aaron Ridley, 'Against Musical Ontology', *The Journal of Philosophy,* 100/4 (2003), 203.
[33] Ibid.
[34] Quoted in Ibid, 203.

performers something to perform'.[35] By historicising this impulse towards concretised musical 'works' (and by extension the privileging of the written score) as part of a general historical tendency of abstraction typical of the western intellectual tradition, Small effectively claims a kind of category error. The word *music* has been conflated with 'works of music in the western tradition' and the 'question "what is the meaning of music?" becomes the more manageable "What is the meaning of this work (or works) of music?"', which Small claims 'is not the same question at all'.[36] Music is hereby reimagined as a sort of paralanguage that is constituted in ritual, wherein relationships are enacted and 'meaning'—the 'stuff' that philosophy is searching for—is instead experienced and constructed socially.[37] The work (as it is represented in the score and written by the composer) is indeed capable of instilling in differing performances a certain residue, but this is not what the ontology of music should prioritise. A philosophical understanding of music then, should both make room for performer and listener, and aim to relativise (rather than prioritise) the very real contribution, material and immaterial, made by the composer figure.

(2) the creative contributions of performers then listeners

Jonathan Harvey understood the creative contribution afforded the act of composition by performer and audience and suggested that a composer's music is 'written to be heard, and the processes of performing and reception that this entails are themselves

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[35] Christopher Small, *Musicking: The Meanings of Performing and Listening* (Connecticut: Wesleyan University Press, 1998), 7.
[36] Ibid., 3.
[37] Ibid., 133.

influences on composition'.[38] In fact—and given the composer-centric ideology that permeates music education—it is something of a paradox that composers, more than performers, are shown on occasion, to appreciate better divergent readings of their own seemingly fixed scores.[39] What I would like to suggest then, is that the acts of performance and listening are creative practices that participate alongside, and contribute to, the composer in the creation of music.

Acknowledging the limitations of an understanding of the musical work as residing in the score (and created by the composer), Robert L. Martin, both a philosopher and musician, has mused:

> I think there is no such object: that what Beethoven created (namely, instructions to performers) is not the same thing as the musical work that plays a role in the musical practice of knowledgeable listeners. Put most provocatively, musical works, as they are known to listeners, are not created by composers.[40]

Martin is undoubtedly right to conclude that 'performances of musical works, rather than scores, are at the heart of the listener's world'.[41] This is directly comparable to Small's argument that the act of musicking—which refers to all participating parties in any musical endeavour (with an emphasis on performance)—establishes in the place where it is happening a set of relationships. It is in 'those relationships that the meaning of the act lies'.[42] The locus of meaning therefore, resides in the moment of performance itself.

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[38] Jonathan Harvey, *Music and Inspiration* (London: Faber and Faber Limited, 1999), 181.

[39] Daniel Leech-Wilkinson, 'Compositions, Scores, Performances, Meanings', *Music Theory Online*, 18/1 (2012), 2.

[40] Robert L. Martin, 'Musical Works in the Worlds of Performers and Listeners', *The Interpretation of Music: Philosophical Essays*, Michael Krausz (ed.) (Oxford: Clarendon Press, 1993), 120.

[41] Ibid., 121.

[42] Small, *Musicking*, 13.

Martin goes on to note how we tend to 'credit the composer with features of the work that are not properties of the instructions': that is to say, the score. He cites a particular passage from towards the end of the fugue movement in Beethoven's *String Quartet Op. 59 No. 3* in which certain interpretive practices have since emerged and become dogma. These practices are now understood to be necessary in any 'correct' performance today. We do this so that we can 'credit the composer with having produced instructions that will in turn produce performances with these properties'.[43] This example illustrates the essentially immaterial nature of composer as primary musical arbiter, and this revelation should seem particularly striking when the discussion regards the music of Beethoven, the composer genius *par excellence*. The composer here is basically a fiction, an externalisation of a group consensus that has been reached through performer-audience collaboration. The Beethoven to which Martin's hypothetical performers remain faithful is no more the actual individual who died in 1827 than the note shaped ink spots on a page constitute 'music'. This in no way lessens, however, the significance of Beethoven's 'instructions'. In fact, by relativising his role in the cultural transmission of these works—attributed in name only to Beethoven—we get a better sense of what it is exactly that the composer contributes.

Composition has never actually been a one-way street and one need not refer exclusively to the experimental music tradition to see how collaboration and group consensus may play a role in the realisation of a musical work. Composers have consistently responded to performer (and other institutional) demands and insights from the past, present and (pre-emptively, at least) the future. Even an artist as single-minded as Brian Ferneyhough about the preservation of compositional integrity ('I never

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[43] Martin, 'Musical Works in the Worlds of Performers and Listeners', 125.

collaborate with a given performer in the sense of having him give me his particular 'box of tricks'[44]), has expectations of performers that incorporate far more than a simple reproduction of the written page. The Arditti Quartet, in their rehearsals for performance of his *String Quartet no. 6* are known to have, for example, gone to considerable lengths to rewrite (and in the case of meter and rhythm, recalculate) much of the score, so as to make performance possible in the rehearsal period prior to the first performance.[45] Peter Johnson notes that performance as an interpretation is already 'an element *within* the intentionality of the work itself',[46] and quotes Gadamer—whose thought necessarily demands an understanding of hermeneutics (or interpretation) as central to aesthetic experience—who defined the art-work as 'the creation of something exemplary which is not simply produced by following rules'.[47] This sentiment rings true especially in any inherently collaborative art.

There is, in fact, a growing body of interdisciplinary, and empirical, research that explores some of these points. On the back of this, Daniel Leech-Wilkinson has emphasised the very real extent to which performance and performance practice inform the collective musical imagination. He suggests that it is, more often than not, new and creative performances (performer interpretations), more than it is scholarship that are ultimately responsible for radically new impressions of music experienced by listeners. He

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[44] Brian Ferneyhough, *Collected Writings*, James Boros and Richard Toop (ed.) (Amsterdam: Harwood Academic Publishers, 1995), 370.

[45] *Brian Ferneyhough: Sixth String Quartet*, Colin Still (dir.) (London: Optic Nerve, 2011), DVD.

[46] Peter Johnson, 'Performance and the Listening Experience: Bach's "Erbarme Dich"', *Theory Into Practice: Composition, Performance and the Listening Experience*, Nicholas Cook (ed.) (Leuven: Leuven University Press, 1999), 56.

[47] Quoted in Ibid., 58.

outlines the following scenario, one that details a highly relevant, and creative, performer-audience relationship:

> Performance, then, is not simply a reproduction, a performance *of* something, but a *process*, experienced in a particular cultural context, created by performers (using the notation) and mentally constructed (uniquely and temporarily) by each listener. Meaning is generated from moment to moment during performances, and traces of meaning remain in the memory of the listener (or score reader), inflecting their sense of the nature of the piece.[48]

This quotation also illustrates the extent to which the listener is a collaborative participant in the mediation of music: for it is through the act of hearing that music is *reconstructed* so as to be deciphered and/or appreciated. According to Gadamer 'the mere on-looker who indulges in aesthetic or cultural enjoyment from a safe distance, whether in the theatre, the concert hall, or the seclusion of solitary reading, simply does not exist'.[49] Interpretation at the level of appreciation is engaged, profoundly and dialectically, with the work of art (whatever that may be) and it is through this relationship that meaning comes to exist at all.

Jeanne Bamberger understands music apprehension as a process of 'perceptual problem solving' and that the mind has necessarily to create 'meaning' (via the organisation of sensory material) in real time. Thus, she argues, '*a hearing is a performance*' where 'what the hearer seems simply to find in the music is actually a process of instant perceptual problem solving – and [an] active process of sense

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[48] Daniel Leech-Wilkinson, 'Compositions, Scores, Performances', 7.
[49] Hans-Georg Gadamer, *The Relevance of the Beautiful and Other Essays*, Nicholas Walker (trans.) (Cambridge: Cambridge University Press, 1986), 130.

making'.[50] Moreover, the result, like that of a performance, with all the interpretive and acoustic minutiae that condition it, is always different. Bamberger acknowledges the lack of real evidence for another's hearing, and that the best evidence we have tends to be subjectively mediated, i.e. verbal descriptions, visual representations drawn by the listener (etc.). Hearing is 'by its nature a necessarily private, internal experience' and therefore 'an external description in whatever mode can provide only impoverished clues to a subject's momentary organising of a melody or rhythm'.[51] The phenomenological sub discipline of Enactivism suggests that 'the organism's world is 'enacted' or 'brought forth' by that organism's sensorimotor activity; with world and organism mutually co-determining one another'.[52] The suggestion is that consciousness is experienced creatively and dynamically in an environment indivisible from the body experiencing it; what then are the implications of this on the experience of art and, more specifically, music?

To demonstrate, what we could call an enactive listener, Bamberger asks a number of subjects (in this case, a class of children) to illustrate, through a drawing, a short rhythmic passage. The subjects were, as the experiment unfoldedm forced to 'invent' a number of unique notations and these reflected an array of individual interpretive strategies and understandings. Broadly speaking, the drawings fell into two categories, namely, what Bamberger calls 'figural' and 'metric'. The 'metric' drawings were comparable to our own traditional notational strategy of relative duration, while the 'figural' tended to conceive of the passage as consisting of gestural groups and

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[50] Jeanne Bamberger, 'Coming to Hear in a New Way', *Musical Perceptions*, Rita Aiello (ed.) (Oxford: Oxford University Press, 1994), 133-4.
[51] Ibid., 133.
[52] Steve Torrance, 'In Search of the Enactive: Introduction to the special issue on Enactive Experience', *Phenomenology and the Cognitive Sciences*, 4/4 (2005), 358.

phrases.[53] The experiment is developed yet further through a dialogue between two MIT students (one a musician and the other not), in which irreconcilable differences regarding the interpretation of the rhythmic passage mentioned above are resolved without one 'hearing' necessarily eclipsing the other. The experiment renders palatable the possibility of 'multiple hearings': a desirable mode of listening that is varied and creative. She concludes—and indeed these experiments hope to illustrate—that 'to make a new hearing we must confront those intimate, silent conversations back and forth through which we make and shape the meaning and form we seem simply and immutably to find in the musical phenomena "out there"'.[54] Aesthetic appreciation becomes a dialectical process of people discussing with others (as in, within a community) and/or themselves (a *working out*), understanding and ultimately coming to an agreement over what they heard, *creating* in this process, the work that they ultimately remember experiencing.

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The view of a composer as a kind of scientist—bound to largely unattractive and hierarchical models of musical mediation—appears (in semblance, at least) to pervade new music ideology. Brian Ferneyhough has reinforced the image of the somewhat lamentable figure writing only for himself by suggesting that:

> There is little use in imagining some 'ideal listener' when composing, since the sort of mass audience that makes any generalisation of that sort useful is hardly a characteristic of any species of contemporary music[…] in the last analysis every composer works for himself.[55]

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[53] Bamberger, 'Coming to Hear in a New Way', 135.
[54] Ibid.
[55] Brian Ferneyhough, *Collected Writings*, 243.

However, I would suggest that this type of sentiment be taken lightly. Ferneyhough imagines an 'ideal listener', even if that listener is just himself and/or the many groups of musicians with whom he has highly productive collaborative relationships, all of whom can function, structurally and otherwise, as listeners. They all, moreover, exert a type of influence back into his compositional practice. The literature regarding *complex* music seems, likewise, to mobilise forces *against* any understanding of this music that does not invest absolute authority into a score full of the composer's abstract intentions. Claus-Steffen Mahnkopf, though, a complexity composer and one of the more vocal figures here, paints a more intricate picture. His definition of *complexism* speaks regularly of abundance ('of[...] morphology'), ('apperceptive') surplus and uses terms like 'multi-perspectivity and multidimensionality'.[56] This music is not meant to be heard in the same way by everyone (and this includes the composer) and seeks to engage performers and listeners in quite radical, but ultimately creative, ways. Mahnkopf's suggests that a 'dialectic [can] arise between not being able to grasp everything and the sense that one *must* understand everything'becomes the listener's equivalent of that direct *frisson* experienced by a performer as they struggle, and ultimately fail, to recreate what they read on the page of one of Brian Ferneyhough's scores.[57] Somewhat ironically perhaps (when viewed like this) it is the high modernist composer of an avowed complexity that cares least for the concretised musical score and its privileged role as carrier of meaning: a meaning that it supplies, far in excess of itself.

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[56] Claus-Steffan Mahnkopf, 'Complex Music: an Attempt at a Definition', *Polyphony & Complexity: New Music and Aesthetics in the 21st Century (Vol. 1)*, Mahnkopf et al. (eds.) (Hofheum: Wolke, 2002), 56.
[57] Ibid., 60.

To return to the start of this chapter, Georgina Born's approach to theories of music's mediation suggests that it is 'unhelpful to divide the study of music itself from the study of its social, technological and temporal forms' (and indeed, historical forms too).[58] Against the backdrop of a poststructuralist concern with the role of authorship (and the oft-cited, so-called 'death of the author') and a seeming incredulity towards composer (or institutional) authority, Born makes her argument with a number of contemporary case studies. She examines the supposedly hierarchy-less 'dialogic' of jazz and the radical 'diplomacy' of South Asian digitised music across a youthful diaspora. She is also interested in the fluidity with which transmission and collaboration is aided by emerging digital technologies and examines a conceptual installation/composition which knowingly inverts 'the stimulus-response model of human-machine interaction' (this is not an exhaustive summary).[59] Her project is commendable in its inclusivity and important, no doubt, in a diverse world characterised by an impossible multiplicity of hard-to-define musical practices. It is its generalisations, though, that may prove to be its biggest weakness, and her final conclusion, that music 'is revealed as the exemplary locus of diverse modes of creativity' can only, in the end, favour musical practices which outwardly and openly emphasise the qualities and technologies in which she is interested. By way of comparison, it is of no surprise that the composer-centric narratives of IRCAM fall short of her expectations. Those movements which she claims 'clothe themselves in rhetoric of invention, but which—for all this—result in a form of aesthetic stasis', are not well served by her model.[60] It seems that Born has a tendency to treat 'modernist' music entirely on its own terms, when her own argument should have

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[58] Georgina Born, 'On Musical Mediation: Ontology, Technology and Creativity', 33.
[59] Ibid., 31.
[60] Born, 'On Musical Mediation…' 24.

rendered these terms fictitious. Could it not be possible, in light of her criticism and method, to circumnavigate the imaginary discourse of modernist composers themselves, and analyse the repertoire they provide from her larger and collaborationist standpoint?

I hope, so far, to have revealed that the distinctions between composer-performer-audience—as well as the various assumptions about the nature of the 'work' around which they operate—are necessarily blurred and capricious (even arbitrary). And that the most anodyne of concert hall performances might be understood as radically de-centred, lateral and diplomatic; occurring as they do in a kind of collaborative flux in which, as I have shown, performer and listener create and contribute, rather than passively receive, the work that is performed and heard.

Concluding thoughts, Bakhtin and the author

It is possible to read in the work of Russian philosopher Mikhail Bakhtin a strong defence of the figure of the author, at just the point in history when the role began to be scrutinised. For Bakhtin, though, the author is not the unchallenged arbiter of the work. Indeed, he/she is one of multiple voices in a 'shared territory', itself the site of 'social and psychic contradictions among competing voices and conflicting discourses and ideologies':[61] Bakhtin dubs this 'polyphony'. Dostoevsky, whom Bakhtin identifies as the exemplary author of the polyphonic novel, creates not 'voiceless slaves... but free people, capable of standing alongside their creator'.[62]

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[61] Michael Chanan, *Musica Practica: the Social Practice of Western Music from Gregorian Chant to Postmodernism* (London: Verso, 1994), 39.
[62] M.M. Bakhtin, *Problems of Dostoevsky's Poetics*, Caryl Emerson (ed.) (trans.) (Minneapolis: University of Minnesota Press, 1984), 6.

It is worth considering Bakhtin's insight alongside those of the poststructuralist thinkers who, about 40 years ago, declared authoritatively that the author had died. Roland Barthes (to whom the phrase 'death of the author' is attributed) suggested that the removal of this figure could 'utterly transform the modern text'; that the positivistic focus on author-biography was ultimately detrimental to the study of the arts and that the 'birth of the reader must be at the cost of the death of the Author'.[63] Michel Foucault, likewise, addressed the category of the author with some scepticism, understanding that it served a kind of undesirable, hierarchical and largely structural role, situated, he claims at 'the breach... which gives rise to new groups of discourse and their singular mode of existence'.[64] Bakhtin (though some decades earlier) observed a similar crisis of authorship, arising namely from a formalistic ambiguity that modernist art came to express by the 1920s. As the narrative world traditionally controlled by the author embraced a degree of interpretive ambiguity, modernistic literature had come to shake the assumption of author 'outsideness'; he/she risked becoming non-essential.[65] In an early essay—*Art and Answerability* (1919)—Bakhtin criticised what he termed an 'impressive' aesthetics; a typically Kantian (disinterested and formalist) aesthetics that conceives of the artist's act of creation as a 'one-sided act confronted not by another subiectum, but only by an object, only by material to be worked.'[66] Ilya Kliger suggests that Bakhtin's response was to stage 'a kind of traumatic, disorientating liberation of the

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[63] Roland Barthes, 'Death of the Author', *Image Music Text* (London: Fontana Paperbacks, 1977), 145, 148.
[64] Michel Foucault, 'What is an Author?', *Language, Counter-Memory, Practice*, Donald F. Bouchard (ed.), Donald F. Bouchard and Sherry Simon (trans.) (Ithaca: Cornell University Press, 1977), 123.
[65] M.M. Bakhtin, *Art and Answerability* (Austin: University of Texas Press, 1990), 203.
[66] Ibid., 92.

category of the hero from authorial constraints'. [67] Bakhtin posits a quasi-phenomenological account of experience in which all is mediated by the transcendental poles of *self* and *other*.[68] Through the figure of the hero, and as in real life, the reader experiences him/herself as radically open and free; this radical freedom is tempered by the authorial form which presupposes a fixed position from outside the hero's conscious progress.[69] From what at first sounds like a criticism of the authorial mode as stifling the radical freedom of the untempered aesthetic experience, Bakhtin is instead situating the author as one voice among many in a dialogue. Bakhtin's concept of the author is constructed precisely in opposition to the 'univocity of epic monologism'; the view that the author is to his text what God is to the world.[70] This sense of a dialogue, in which the author is one voice among many, is developed fully in Bakhtin's theory of dialogism, wherein the novel becomes the channel for a dialogue between character types and tropes, literary traditions and voices, both of the author and the reader, as well as in their respective eras, and contexts. For Seán Burke:

> The author in this mode of writing was not to be conceived as a transcendent, annunciative being, but rather as that voice amongst the many which holds together the polyphonic strands of the text's composition.[71]

There is, no doubt, a great deal of work to be done in applying the authorship debate fully to music; not least because the processes involved in music's mediation, seem, superficially at least, altogether more ephemeral and temporal and, indeed, layered. Does

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[67] Ilya Kliger, 'Heroic Aesthetics and Modernist Critique: Extrapolations from Bakhtin's *Author and Hero in Aesthetic Activity*', *Slavic Review*, 67/3 (2008), 557.

[68] Ibid., 555.

[69] Ibid., 556.

[70] Seán Burke, *The Death and Return of the Author* (Edinburgh: Edinburgh University Press, 1992), 25.

[71] Ibid., 48.

this not, however, enhance the potential for a Bakhtinian type of polyphony in the musical text at the moment of performance?

<p style="text-align:center">*   *   *</p>

Adorno criticised the idea among some hard-core proponents of serialism that composers could simply succumb 'to the illusion that [they] can roll up [their] sleeves and labour away at the material to hand'.[72] Musicking can occur even in a silent room and Adorno, in the same article, refutes the popular assumption that the composer was able to 'imagine every last detail in advance'. For him, it is the 'tension between what is imagined and what cannot be foreseen' that ought to be a 'vital component of the new music'.[73] Composition, which is in its own way spontaneous and inspired, can and should be understood as a type of performance too. In the following chapter I hope, in part, to illuminate how this logic has been at work in the creation of my composition portfolio, and to demonstrate and dissect my own role as both author and collaborator in the composition of the works featured in my accompanying portfolio.

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[72] Theodor W. Adorno, 'Vers une musique informelle', *Quasi una Fantasia: Essays on Modern Music*, Rodney Livingstone (trans.) (London: Verso, 1998), 278.
[73] Ibid., 303.

Chapter 2 (i)

Much of what follows is an attempt on my part to take seriously a question posed by my supervisor, Nicholas Sackman, during the interview prior to acceptance on the PhD composition programme at the University of Nottingham. Boasting as I did of the lofty philosophical insights offered by challenging, ostensibly 'modernist' music, Dr Sackman asked how I could expect to reconcile my ambitions with an audience not entirely sympathetic to my aesthetic concerns. The peculiarities—crucial, and indeed necessary as they are—inherent to negotiating a music that is both consistent with my artistic 'principles' but also likely to be *listened to*, have been something of a sticking point in my regular supervision sessions with Dr Sackman. The resultant discussion, especially significant when one attempts to consider the future of contemporary music—a conundrum which has both limited me and spurred me on—ought, likewise, to be approached in light of the conclusions drawn in the previous chapter. It is my hope that the commentary that follows, in its focus on the experience (in the broadest of senses) of my music, alongside the theoretical and thematic excursus that runs throughout, illuminates, meaningfully, the first chapter in a very real and practical manner.

The first part of this chapter, a discussion of just *(Los espejos) a mute theatre*, will seek to elucidate, quite personally, some of my own methodological concerns, creative intentions and influences. It should serve to contextualise some of the broader and wider ranging discussions and analyses of my portfolio found in the second half of this chapter; works which predate the piece that will be discussed presently, and which could be understood as, in some sense, leading up to it. Additionally, *A mute theatre*, with its own set of obsessions (melodic, harmonic and rhythmic symmetries, for instance),

juxtapositions and tensions (tonality/atonality, metered/unmetered rhythm) is, I hope to demonstrate, a compelling musical argument analogous to the literary world-view that I will explain below.

(Los espejos) a mute theatre: personal methodology and creative intentions

The piece takes as its starting point three selected passages from three different poems by Jorge Luis Borges (1899-1986). The poems are *La Recoleta*, *Los Espejos* and *Ars Poetica*. All three fragments of text make reference to mirrors, a theme to which Borges regularly returned in both his fiction and poetry. For Borges, the mirror was both a source of inspiration and anxiety; he is said to have, as a child, feared that reflected images might remain on his mirror's surface overnight.[74] In his writing, mirrors are said to refer to that 'illusory reality' which became 'a profound mirror of our own universe'.[75] This is a productive tension that no doubt animated much of his work and contributed to its mystery (fantasy and otherwise), its spiritual and philosophical insight, and its profound sense of structure and organisation. Borges' polyvocal style of metafiction replete with reference, allusion, reflection and humour, is encased (and is perhaps encased by) a highly articulate, cogent—occasionally beautiful—prose, which depicts and relishes in both the magical and the realistic. As a model for music and composition then, his work, often direct and typically very short, and with its own internal network of pre-occupations, references and literary motifs, is a strikingly effective one.

Mirror-like symmetries were, as they were for Borges, a major pre-occupation in the composition of this piece. Indeed, I composed *a mute theatre* in such a way as to allow

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[74] Jamie Alazraki, *Borges and the Kabbalah: And other essays on his fiction and poetry* (Cambridge: Cambridge University Press 1988), 109.
[75] Ibid.

the basic premise of a mirror—and its abstract and musical implications regarding symmetry, arch shape (etc.)—to permeate and motivate the composition as a whole: in much the same way that the mirror motif (in its literary sense) is understood to have permeated Borges' own oeuvre. **Figure 1** contains a recurrent symmetrical sequence which characterises the strophic structure of the middle, and most substantial, section of the piece (first appearing, in fragmented form, at rehearsal mark **B**). This sequence sets two verses *Los Espejos* (Mirrors) to music. The passage makes use of overlapping rhythmic palindromes; the note values represented and measured in crotchets go {3, 2, 1, ½, ½, 1, 2, [3,} 2, 1, ½, ½, 1, 2, {3,]… (see figure below)

**Figure 1,** compound symmetrical sequence.
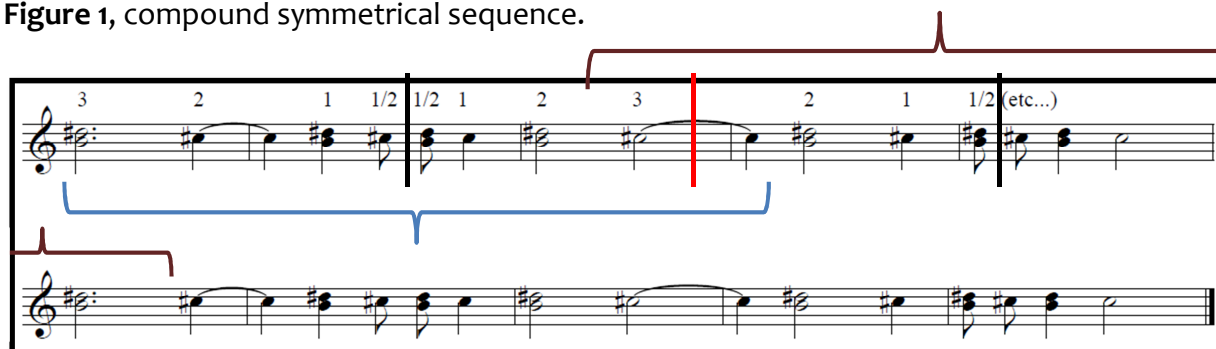
There are two symmetries at work here, combining to form a kind of compound palindrome: one with a dotted minim at its symmetrical centre (b. 2.5 in the figure), and one in which the point of symmetry effectively falls between two notes, in this instance, two quavers (see coloured vertical lines in **figure 1** above). Additionally, an oscillating 2 note melodic figure (B/D#-C#) is superimposed over the compound rhythmic palindrome.[76] Consisting of an odd numbered 15 notes, the rhythmic figure combined with the 2 part melodic motif forms a passage which has no 'natural' end (not without, at least, starting a new sequence). This is to say nothing of the further internal, and

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[76] The melodic figure forms part of an oscillating chord sequence that will be discussed alongside **figure 5** later in the chapter.

endlessly recursive (if allowed to repeated indefinitely), symmetries that might be observed (2, 1, ½, ½, 1, 2 and 1, 2, 3, 2, 1 can all be isolated in this sequence) and which arise because of the sequential nature of the passage.

It is what Olivier Messiaen described as the 'charm of impossibilities' that I am attempting to dip my toes into here. His own predilection for rhythmic palindromes (non-retrogradeable rhythms) and scalic or structural symmetries proceeds out of the belief that such designs embed, in the music they produce, a type of coherence, attraction and/or even elemental communicative force. Messiaen's influence has been significant, and these preoccupations hold considerable currency in the present day. George Benjamin, a one time student of Messiaen, openly cites Messiaen's influence on his own work for instance, and small scale symmetries abound in his work; his duet for violas, *Viola Viola* expresses this clearly, and in the frantic interplay of the two instruments it is a symmetrical balancing act or interplay, wherein the violas exchange material, that seems to hold the piece together. Per Nørgård, a composer whose eccentric outlook and manipulation of numerically curious integer sequences has produced music of a precise, colourful and shimmering beauty and has taken this idea yet further. His *Symphony No. 2* (1970), which sets—in quite a literal way—an endlessly recursive but outwardly simple-looking integer sequence (he has named it the 'infinity series'), is a monolithic one movement orchestral work that sounds as though it might have existed forever: the listener simply dipping into an infinite process when the orchestra starts to play. Though perhaps more modest in scale, the symmetrical *Los espejos* stophes that characterise much of *a mute theatre* might likewise evoke the feeling of an endless, natural and ever-present process which the piece veers—along with its listener—into and out of.

**Figure 2**, rhythmic counter subject from rehearsal mark **B** onwards.
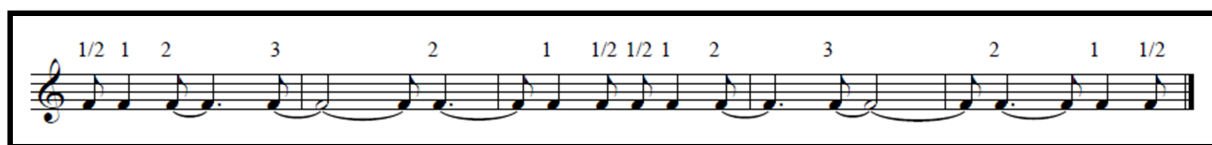
An additional rhythmic palindrome—a counter subject, if you like—in **figure 2** above, always appears against **figure 1.** However, it seldom occurs in full in the score, where it is typically presented in fragments (rehearsal mark **G** it appears in full across all instruments). The rhythmic structure of this palindrome is an inversion of the rhythmic sequence detailed in **figure 1,** beginning on the shortest note (1/2), progressing to the longest (3), and back again. This particular sequence is rounded off after 5 bars, and does not, as with **figure 1,** overlap into a new bar and palindrome. The passage, which while providing an interesting rhythmic counterpoint, grounds the main figure into a neat 5 bar refrain.
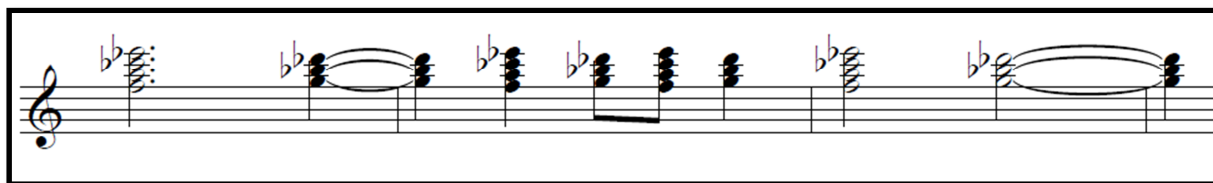
<p style="text-align:center">*   *   *</p>

Much of the harmonic material in this piece is derived from the two artificial scales detailed in **figures 3** & **4** below. The scales are based on an F and a Bb respectively and when superimposed, together they contain all 12 chromatic notes (with only the Bb repeated); F and Bb are likewise reinforced in repeated material, and act as the two quasi-tonal poles between which the piece moves. The scales were chosen for their symmetrical properties: the outer three note groups are sequential whole-tones while the middle consists of semitones (see **figure 3**). This type of alternation between tones and semitones was inspired by the octatonic scale—a scale long noted for its internal symmetries—which is also used in the piece (most notably the octatonic scale that includes C, D, Eb, F… this is most obvious at rehearsal mark **D**).

Figures 3 & **4**, Artificial scale 1 & 2.
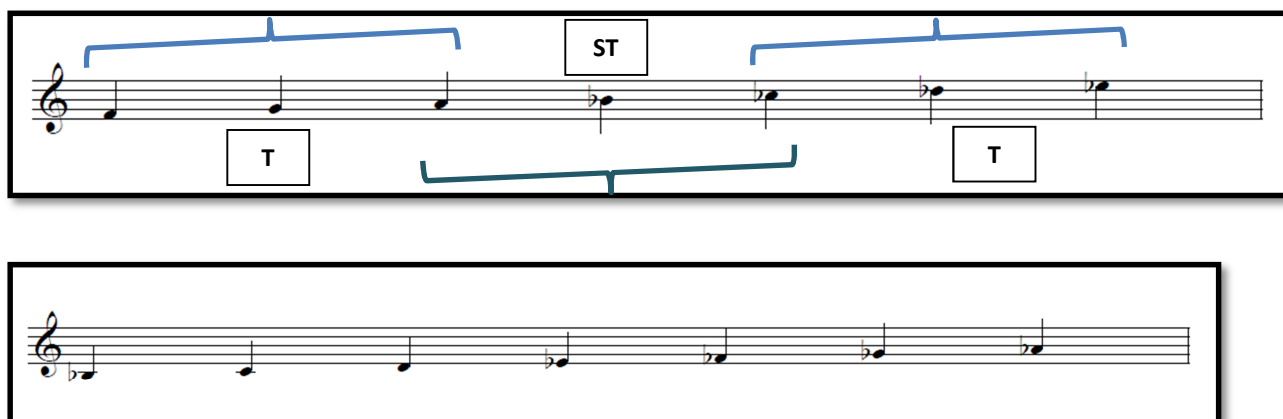
At the heart of my harmonic thinking lies—in the repeated and strophic verse passages that make up most of the piece—an oscillating chordal figure, itself subject to fragmentation and rarely revealed in full. It is coupled with the aforementioned symmetrical rhythm of **figure 1** and is illustrated, as I conceived it, by two chords that consist of stacked intervals of a third (**figure 5** below).

Figure 5, Implied oscillating harmony of recurring strophe (first entrance at figure **B**).

The figure is derived from the opening contrapuntal passage played by the harp which, along with the rest of the ensemble, establishes the usage of the first, of the two, artificial scales. At this stage, the harp, clarinet and double bass form a layered rhythmic and melodic counterpoint; the harp undulates in near straight semi-quavers highlighting the motivically significant interval of a third, while the clarinet and double bass do much the same, but faster (demisemiquavers) and slower (quavers), and with smaller and larger intervals (respectively). The flowing counterpoint of the introduction gives way,

first (rehearsal mark **A**) to a short introductory stanza scored in a near free rhythm, and then to the first instance of the *Los espejos* strophe at mark **B**.

The 7 discreet pitches employed in the oscillating **figure 5** above, when deducted from a 12-note chromatic scale, leave only a CDEF#G# wholetone pentachord. This pentachord is used against the oscillating figure at strategically placed moments (for example, when the Spanish for 'mirror', 'espejo', is sung), and is presented both vertically and horizontally: that is to say, for its harmonic properties (in its contrast to the stacked third chords below), and for its highly idiosyncratic (and indeed, attractive) melodic properties. The wholetone scale has, given the types of shape contained in both it and the artificial/octatonic scales, a certain congruence with—and familiarity towards—the established musical language here. The spectrum of melodic and harmonic possibilities offered, then, by this complex of scales covers not just the chromatic 12-note scale (with its modernistic and dissonant associations), but an array of quasi-tonal (such as my strong emphasis on the interval of a third) and post-tonal, even mystical, allusions that are associated with wholetone, octatonic and other (often tritone-heavy) musical contexts. Such a musical language traces a lineage across the twentieth century, from the early (though contrasting) experiments of, say, Scriabin and Debussy, for whom such scales embodied a range of oriental, 'Othering' or religious connotations to, for example, Thomas Adès. Indeed, material like this holds an equal appeal to composers of late tonal and non-tonal music. Adès, by way of an example, appears to draw from these scales freely and in a manner both consistent with the likes of Scriabin (note the strictly octatonic counterpoint at the start mvt. III, *Arcadiana*). They also serve as atypical modernistic materials (consisting of patterns and other such abstract characteristics) to be treated and manipulated, perhaps mathematically. Beneath the decidedly unorthodox

rhythmic complexities of his *Piano Quintet,* for example, Adès evokes a strangely tonal, even neo-classical atmosphere. Yet interspersed between fragments of Mozartian rhetoric and clarity, exist a variety of wholetone-derived sequences or chords e.g. the ascending and descending sequences in the upper and lower voices of the opening violin solo. The result is a deceptively-holistic attractiveness and musical transparency that is not easy to define. By embracing, as I hope to have done in *a mute theatre,* and indeed much of the portfolio, a modified tonal language that emancipates consonance (much as Schoenberg did with dissonance), it is possible to begin to play with a language that is neither strictly tonal, nor atonal.

If the arrival of what we identified at **figure 1** constitutes a strophe, then the free-rhythmic breakdown that almost always follows it might be its antistrophe. The first instance of which can be seen in **figure 6** below. This is the one major instance of recurrent asymmetry in the piece, and each line—except for the last line in both verses drawn from *Los espejos*—is subject to a rhythmically open instrumental response. For brief instances then, a small and closely aligned, even intimate, ensemble is encouraged to forge continuity across two types of notation with their requisite and contrasting, though perhaps interrelated, interpretive demands.

By way of a brief explanation, such passages have a bracket which suggests duration (physical space between notes indicates relative duration within the bracket). Lines and arrows align entrances of new parts to a main reference melody, after which they proceed independently.

Figure 6, five bars after rehearsal mark **B.**

Unfortunately, I cannot summarise a century of experimentation with rhythmically open notation and controlled aleatory here. However, I do hope to give some insight into my motivation for incorporating a type of compositional practice that draws from a number of experiments which temper the complete rhythmic freedom of fully improvised music with more orthodox and strictly metered types of notation. Toru Takemitsu's *Rain Spell,* is an exemplary instance of this, and the rhythmically ambiguous nature of this piece fosters an intimate and engaged performance from its (typically virtuosic) players. It is also an ideal environment for the types of extended techniques that are demanded and for establishing the timbrally-focussed soundworld that the work seems to demand. In its chosen format however, it sacrifices none of its notational precision; Takemitsu's compositional voice remains present, even primary. The coda at the end of Oliver Knussen's *Ophelia Dances Book One* was likewise influential here, and contrasts rhythmically with the material that comes before it. Though short, the coda made a big impact on me, and without recourse to the score, the expanded and interpretive element

is not easily identified by ear alone. Circling out of the celeste cadenza (b. 172 in the score) the slight but significant rhythmic variances engendered, possess continuity with the material that preceded, but also produce something quite different. The Idiosyncratic notation of George Crumb's *Ancient Voices of Children* contributes elements consistent with all of the above; additionally, the notational presentation, which is not purely visual (even if it is most striking in its own right), is vital to the esoteric and ritualistic musical theatricalism that befits Crumb's composition aesthetic as well as the Lorca text it sets. There is then, I hope, a productive tension between my own use of metered notation, set in opposition to instances of unmetered notation. For a start, I hope it might galvanise the ensemble into forging continuities between two approaches; such an approach demands that the performer consider the piece differently. The result, which could be viewed in the context of the three highly contrasted (geographically and stylistically) works touched briefly above is, I hope, true to the fantastical implications of the Borges poetry it animates; likewise, I hope it communicates something more—rhythmically and otherwise—than either metered or non-metered notation might have in isolation.

Figure 7, Structure of *a mute theatre.*
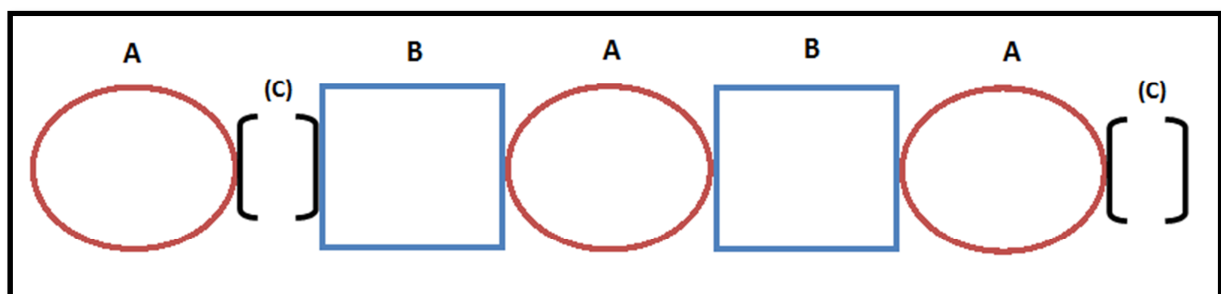
Figure 7 above goes some way toward detailing the 'corrupted' symmetrical structure that governs the piece. The two miscellaneous (**C**) sections (which begin at rehearsal marks **A** and **I** respectively) are scored with a rhythmically open notation; the first sets

one stanza from *La Recoleta* and the second acts as a type of coda for the work as a whole. The three **A** sections begin at the start, rehearsal mark **D** and rehearsal mark **H** respectively, with the third of these setting half of one stanza from *Ars Poetica.*[77] These sections (identified as a circle in the graphic) are both characterised by vertical free-flowing counterpoint and are metrically strictly notated, becoming progressively more complex and culminating in the moment of greatest material density and instrumental virtuosity just before mark **I**. The first instance relies entirely on the first artificial scale, the second introduces the octatonic scale and the third a mixture (for example, the harp and the clarinet are cast almost entirely in scale 1 and 2 respectively, sounding, in the process, all chromatic 12 notes). The two B sections set *Los Espejos*, and first introduce the second artificial scale (most notably in the scalic harp passage 5 bars after rehearsal mark **C** and in the clarinet/double bass duet beginning at **F**) these have been discussed in detail earlier. Both these sections draw particular attention to the tonal centres of F and Bb via repetition of these pitches, for example, in the rhythmic countersubject.

The idea that symmetry has a place in governing and/or explaining music has existed for as long has people have theorised about music. What this might have meant for successive generations of musicians has, however, probably been quite different, and it is not in my remit to draw any conclusions about that here. Nevertheless, I hope to have illuminated some of my working processes where, in the context of our present and diverse composition environment, an unprecedented range of materials are made available to the composer. I have enjoyed drawing productively from a range of (perhaps contradictory) associations and techniques, including, but not limited to tonal and non-

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[77] The final two lines, 'Art should be like that mirror-Which reveals to us our own face' was, I felt, better left out. I felt the self-reflective tone might have undermined the piece. Nevertheless, I think the sentiment is, in this context, better articulated by its absence.

tonal languages, metered and non-metered rhythmic approaches. Additional preoccupations with the manipulation of shape, and the evocation of a mystical (though ambiguous) subject matter have been, moreover, well suited to the musical context.

(ii)

Portfolio of Compositions (Commentary)

Meeting in the middle: 'modernity' and the contemporary audience

Unreal City - hoquet perpétuel - an incongruous collision (of events)

This section, the first of three, will be a discussion of three pieces, written over three years, for specific, student-centred concert activities at the University of Nottingham. Though the discussion will incorporate the requisite analytical insights, the salient point here concerns the challenges involved in constructing a real musical argument that too, can resonate with the ears of a concert audience not necessarily familiar with contemporary music.

The analysis that follows therefore, concentrates primarily on the manipulation of discordant pitch structures, the juxtaposition of the strange and familiar (etc.), but in a way that is both immediate and appealing, and indicative of a music that, likewise, has its own immediacy and appeal. Both *Unreal City* and *hoquet perpétuel* derive their sense of a harmonic character through the exploitation of the piquancy of 2nd intervals. In the case of *Unreal City*, it is the interval of a 3rd (or 6th, if inverted), with a 2nd in between, or adjacent to the 3rd, that provides the core material from which the piece was composed.

Figure 1, bb. *Unreal City*, bb. 1-3.5.

Figure 1 illustrates how the opening three bars establish the primacy of these sonorities. Note that the difference between large and small noteheads in the example indicates some sense of intended strong/weak pulsation and harmonic tension/resolution. Voice leading and melodic contour, as well as less abstract indications like dynamics and instrumental technique, are what actually articulate these parameters in music. Defining a sense of progression (harmonic and otherwise) in post-tonal music is—without the structural assurances granted by tonality—arguably, the major problem contemporary music faces in gaining a widespread acceptance. Adorno's manifesto (if you will) for a *musique informelle* suggests that overcoming this is the 'prime task of the material theory' he is seeking; a response to his own criticism of the then current total-serialism of the Darmstadt school. He concedes that 'it is nowhere laid down that modern music must *a priori* contain such elements of the tonal tradition as tension and resolution, continuation, development contrast and reassertion', but that it will be necessary, in an authentic and modern musical language, to develop equivalents that suit the contemporary musical materials with which composers must work. [78]

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[78] Theodor W. Adorno, 'vers une musique informelle', *Quasi una Fantasia*, Rodney Livingstone (trans.) (London: Verso 1998), 282.

The opening material at **figure 1**—attractive and grand (even neo-classical) in gesture—employs an oscillating melody consisting of 6ths (the characteristic 3rd, inverted) in the upper strings. The oscillation itself is coloured somewhat by the chromatic alterations in violin II, which cover a chromatic cluster between F# and A#. Here, the cello, moving in contrary motion, emphasises 2nds, outlines precisely the 3rd with its dissonant 2nd in the middle, and articulates an end of phrase with a faux-cadential intervallic leap of a 6th. This is reinforced in the vibraphone, which underlines the downward contour of the melody with a figure coloured by 4ths and additional 2nd sonorities (D# and F♮), coming to rest by doubling the strings only for the weak end of phrase. It is worth noting how an often chromatic language can be mitigated by localising the typically dissonant intervals in the higher register and within the delicate timbral palette that is typical of the high strings and vibraphone. Sensitive voice-leading practices, likewise, help to reframe the difficulty typically associated with dissonance.

The first section of *Unreal City*, which begins in earnest at b. 7 (until b. 32), employs a harmonic language congruent with the introduction detailed above. This time though, there is a strong emphasis on the bottom register, and the section is characterised by a low and repeating two note figure (F# and E, a 2nd) in the double bass. It is repeated throughout, and deviates as far as a 6th for only two bars, four bars before the change of tempo at b. 33. The section is, for the most part, static harmonically, and has a structure built like layers upon the pillar-like rumble that comes from the double bass; each layer becoming either gradually freer, or contrasting with the bottom register like the self-contained 'lines and circles' that Jonathan Cross identifies in the music of Harrison

Birtwistle.[79]. **Figure 2** (heard over the material in **figure 3** to be discussed in the next paragraph), though confined metrically in the same way as its accompanying material, here emphasises the consonant compound 4th interval (with the percussive strike of the finger cymbal) alongside a rhythm that implies a short-lived but contrasting *ritardando* that cannot be likewise felt in the more spaciously arranged bottom layer.

Figure 2, *Unreal City*, bb. 8-10.

Figure 3, *Unreal City*, bb. 7-12, double bass, cello, viola, horn and bassoon.

The first 6 bars of the section (see **figure 3**) show the first three repetitions of the double bass figure. The immediate layers detailed in the example mostly strengthen the double bass ostinato. An inversion of the F#-E (now E-F#) figure in the bassoon both imitates the contrabass and preserves the static and block-like structure of the harmony by keeping

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[79] Jonathan Cross, 'Lines and Circles: On Birtwistle's 'Punch and Judy' and 'Secret Theatre', *Music* Analysis, 13/2/3 (1994), 206.

the F# present just as the contrabass descends to an E. It does, however, also provide a sense of resolution in its relation to the cello, by resolving their own shared close dissonance upwards to the F#. The two bar idea repeats a third time, but with the addition of the viola, which, through an upward-resolving figure against the repeated block described above, is able to emphasise two 3rds (G#/E and A/F#), a 2nd (G#/F#) as well as a new and comparatively consonant 4th (A/E). Finally, every instance of an E here—the lowest pitch available in the ensemble (when including a standard double bass)—is doubled with the horn, which plays with, then without, a mute. The effect, though subtle, adds a type of tension/release momentum that is, instead, textural, against the relative stasis of the harmonic and melodic material that it colours.

Figure 4, *hoquet perpétuel*, bb. 1-5.

So far, I have given a lot of attention to the micro-scale management of limited pitch content. I do feel, however, and it is important to emphasise, that it is precisely the transformation and manipulation of dissonant intervals, the negotiation of their resultant dissonances, and the general intensification of their sonic and harmonic potential, that characterises the compositional environment in which I choose *tow rok*. To illustrate this

further, **figure 4** details the first four bars of *hoquet perpétuel*, in which the intervallic hierarchies that will form the underlying harmonic structure of the piece as a whole are established. It is the first instance of a highly dissonant, rhythmically fragmentary and structurally significant brass chorale, which here sounds a simultaneous major and minor 3rd on an A, with a strong emphasis on the C/C# diminished second. This particular interval runs through the piece like a thread, and becomes both a point of reference or return, as well as a means from which to derive contrast, and thus momentum (thematic/harmonic/etc). Bars 3 to 5, slowly and uncertainly, fan outwards from the initial set (C/C#/A), detailing nearly all 12 pitches of the chromatic scale, omitting only a D and an F. An E is the first pitch class not belonging to the initial set to be introduced and will, in the fast section that both follows and ends the piece, take on a quasi-dominant function, acting as a type of tonal/modal centre for the contrasting and quicker material to come. This short example finishes on F#, the furthest distance from (and tritone to) the initial C (the lowest note heard in the initial brass set). The missing D and F pitches are later given considerable emphasis in a brief *tutti* that erupts from b. 29 and lasts for 4 bars, as part of a kind of B diminished triad with a tonal inclination towards, again, the C; the very same material returns to crown the piece from b. 133. This passage—which has a Stravinskian sense of rhythmic immediacy about it and was enjoyed most of all by the players of the University of Nottingham Philharmonia—ultimately provides a quasi-tonal sense of clarity towards which all participants were, in performance, capable of orientating themselves. The subtle and additive rhythmic manipulation too, with alternating 2/4 and 5/8 bars, both mitigates and underscores the relatively simple harmonic language here, resolving as it does (and satisfyingly so) on to a percussive C (and C#) dominated closing chord. The fact that people seem generally to respond to

complexity in rhythm—or rather, what might actually be the primal and immediate about rhythm—more positively than they do to the analogue complexities of contemporary harmony, seems to go without saying. This may account for the relative popularity of Stravinsky as opposed to Schoenberg, for example. Adorno viewed this Stravinskian ritualistic and atomised rhythmic approach with scepticism (in which 'the irregularity of recurrence replaces the new'). Furthermore, he diagnosed a form of pyschosis to it, in so far as it 'constructs a perspective of mental illness in order to manifest the primeval world as it permeates the present'. [80] In a contemporary context, though, I see this as a positive aesthetic outcome.

The most fundamental of dissonances then, through a mix of static tonal allusion and, of course, sheer insistence, finds a kind of reconciliation in the large scale and structural unfolding of the work as a whole. A strange interval, which at first is sounded hesitantly on two horns, and therefore prone to unwanted and uncertain, possibly microtonal, inflexion, finally becomes normal - perhaps uncannily so. The slow middle section, by way of contrast, is dominated by a fragmentary, though focussed, interrogation of this C/C# dissonance, and draws upon a more overtly atonal musical language than the multi-tonal and modal allusions of the fast sections. It begins with a return of the brass chorale at b. 50 and is dominated by a broadly homophonic texture that threatens to break apart at any moment. The section culminates in the passage illustrated at **figure 5**, whereupon the harmony, having stretched to incorporate spacious and mixed 3rd and 4th sonorities collapses back in on itself. There is, likewise, an opposition between instruments, and the lyricism and fluidity in the winds contrasts with the rather more stubborn and discontinuous material in the strings. Both nevertheless converge and eventually

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[80] Theodor W. Adorno, *Philosophy of New Music* (London: Continuum, 2007) 113, 122.

succumb to a brief silence. In the example, square noteheads indicate the C/C#/A set; smaller noteheads refer to either passing notes, or notes not strictly aligned with a larger more resonant chord detailed elsewhere.

Figure 5, *hoquet perpétuel*, bb. 86–98.

Helmut Lachenmann, whose own *musique concrète instrumentale* differs considerably with the music discussed here, notes himself the importance of tonality ('with all its highly complex, polyvalent dialectics of consonance/dissonance, tonal/atonal, familiar/unfamiliar…') as a requisite element in composition.[81] Though Lachenmann considers this in the context of a dialectic between the abstract sound-event and the historically determined character of the material itself, his insight is valuable here. He suggests that abrupt tonal forms in his music can function as 'temporal markers' to deconstruct and call attention to the complex processes employed in his music. He likens this to a 'moment of repose… in which the music glances around like a mountain-climber who only becomes aware of his new surroundings upon standing still, and only now experiences the characteristic stillness of the plateau he has reached'. I think this

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[81] Helmut Lachenmann, 'Philosophy of Composition—Is There Such a Thing?', *Identity and Difference: Essays on Music, Language and Time*, Jonathan Cross (ed.) (Leuven: Leuven University Press 2004), 58.

resonates with my earlier suggestion that moments of clarity are an opportunity for listener (and player) to orientate themselves.[82] Moreover, rejuvenated categories of sensation associated with tonality—rhythm, consonance, melody, pathos—ought anyway, to be 'uprooted from their bourgeois commodification and invoked in all their "dangerousness"'.[83] He has the following to say with regards to consonance itself:

> ...it is perfectly true to say that 'consonance as an artificial' product of natural sound has a presence as composition object equal to that of noise. The listener, I suppose, clings to familiar euphonies, which an academician of atonality would dearly like to exclude. In doing so, the listener often fails to notice, in the context which has been created the unpitched element or the noise produced by over-pressure, the 'dissonant' event[...] a 'dialectical atonality'.[84]

Despite being a contrasting point, this could well be considered alongside Stephen Walsh's description of how Stravinsky treats keys as 'static entities, rather than organic elements of grammar' in his Russian period: that is to say, emancipated from the functionality associated with strict tonality. For Stravinsky it is the 'the idea of tonality as the opposition of colours, rather than a system of relationships'.[85] This all amounts, or could amount, to what Lachenmann (in the above quotation) labelled a 'dialectical atonality' in which liberated consonant and tonal idioms can both co-exist with a more challenging and modern grammar to communicate structural messages to its listener and create alternate routes through which they can listen - *enactively*. A 'dialectical atonality' can likewise draw attention to, or create a new context for, any number of complex and

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[82] Ibid., 63.
[83] Ibid., 65.
[84] David Ryan and Helmut Lachenmann, 'Composer in Interview: Helmut Lachenmann', *Tempo*, 210 (1999), 23.
[85] Stephen Walsh, *The Music of Stravinsky* (Oxford: Clarendon Press, 1993), 141.

contemporary processes that are at work and smuggle, through the back door as it were, techniques that might otherwise make a prudish audience recoil in conservative terror. If there is any way that the music discussed so far could provoke a positive aesthetic response from an unfamiliar audience, it is with this.

An incongruous collision (of events), by comparison, is a more overtly modal work which is texturally block-like and aesthetically minimalist in its insistent use of repetition (an audience member commented that it made them think of John Adams). Indeed, the circumstances of its commission—a baroque concert programme, amateur musicians, limited rehearsal time and a performance without a conductor—explicitly called for a work that was materially economical and approachable, that is to say, in an immediate way. My hope in this composition, then, was knowingly to embrace both repetition and an outwardly attractive modal harmonic and melodic language. The real challenge though, was to explore the extent to which I could deliver a degree of rhythmic and textural interest that does not undermine the affective capacity of the work to speak to an audience expecting, and primed for, the music of Bach and Vivaldi. **Figure 6** details one of several 'melodic assemblages' that are prominent throughout the piece; it is particularly effective, I feel, as an attractive, immediate, and above all, interesting melody.

Figure 6, *an incongruous collision (of events)*, bb. 29-32.

The example (**figure 6**) consists of a melody cast, simply, in the E mixolydian mode on the first violin. It is doubled, or rather ghosted at the octave by the solo violin, which provides a bell-like, and bright sounding, textural reinforcement on artificial harmonics. Violin II accompanies with a classical mix of contrary and similar motion, but emphasising 2nd intervals; a dissonance here allayed by octave displacement and the modal harmonic environment in which we are operating. Metrically, the melody is symmetrical, and the first and last bar read like *near*-transposed retrogrades of one another. However, it is thematically asymmetrical, and a downward contour for the first two bars is fragmented in the following two. Over all this, phrasing and articulation send further conflicting—or rather, overlapping—messages. This melody remains, however, consistently on the beat throughout. This short passage, thus, contains elements that seem to contradict its outward simplicity and attractiveness: a new type of appeal is forged from this dialogue.

Figure 7, Structural analysis of *an incongruous collision (of events).*
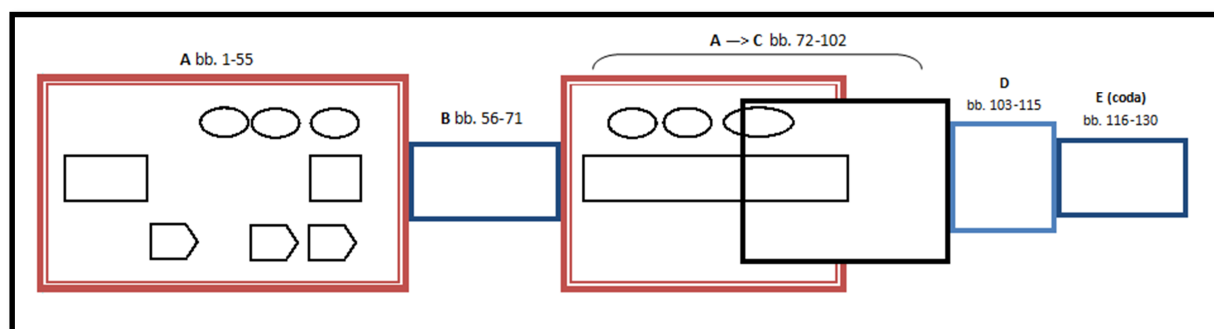
E is, in effect, the home key or tonal centre of the work, and much of the harmonic intrigue and tension that characterises the middle portion of the work is derived from the tonal ambiguities inherent in linear modal writing. This middle section can be observed in the graphic for **figure 7**—which details the large-scale structure of *an incongruous collision (of events)*—in the section labelled **A¹ → C** bb. 72-102. Briefly, before I explain this section in particular, I shall clarify what it is, exactly, that the graphic is illustrating, and in

doing so, provide a concise structural analysis of the piece. The small shapes, spread across three layers, and sitting primarily in the two **A** section squares, represent what I have already labelled as melodic assemblages.[86] The square, in the middle of the three layers (the initial shape concerns bb. 1-16), the first and most visible melodic assemblage in the piece, is characterised by cloudlike blocks (note the beaming across bars), that are developed, progressively and across several strata, see **figure 8**. The melodic material is, again, simple, but the various layers that emerge do so by strategically emphasising pitches and thus creating additional melodies, which exist on their own and in relationships with other instruments (note the interplay between the two solo violins at b. 13). An additional layer is articulated texturally at the level of non-instrument specific tremolando, which moves independently and across parts. The idea operates across a spectrum, then, in which the density of occurrence of ideas themselves is sparse—two instruments, two melodies—and, latterly, somewhat more dense (or overlayed). The bottom shape in the **figure 7** graphic, a block with an arrowhead, represents the ostinato that arrives at b. 17, and the top circle represents the motif detailed in **figure 6**. The graphic then, illustrates the capacity of these assemblages to interplay—indeed, this is how they were conceived—and the three initial assemblages are heard simultaneously at b. 50. The contrasting characteristics of each block (though at this stage, entirely within the E mixolydian mode), with differing articulatory and rhythmic emphasis, produces the

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[86] I use the term 'melodic assemblage' in so far as it would not be satisfactory simply to refer to the ideas represented here as just 'melodies'. The 'melodic assemblage', it should become clear, incorporates melody, texture, rhythm, ostinato (etc.), and can be subject to any type of manipulation, distortion and/or (re/)appropriation. Due to the minimalistic and linear nature of the piece, and its conception, though, it is important I think, to stress the melodic function of these blocks over, say, their harmonic (or indeed, rhythmic) characteristics; hence the term 'melodic assemblage'.

interesting effect of re-contextualising, and thus, in a sense, developing, the ideas themselves; despite the fact that they do remain, in some sense, materially static.

Figure 8, *an incongruous collision (of events)*, bb. 1-4.

The squares that detail section **B, D** and the coda at **E** are, likewise, section-defining melodic blocks, which function in their contrast to the main material discussed above. Section **A¹ → C** circumvents an ambiguous shift, which moves from the relative stability of the major-flavoured mixolydian into the white-note and minor-flavoured E phrygian; thus preparing, in a sense, the abrupt textural contrasts that characterise the contrasting and *incongruous* sections at **D** and **E**. It does this through a changing tonal emphasis across a mostly consistent modal backdrop i.e. our thus far predominant E mixolydian with its three recurrent sharps (F#, G# and C#) remains recognisable only in so far as the E pitch class remains the point of reference. If the emphasis changes—and this is most easily achieved through repetition in the low register—the modal character will likewise change. If the E mixolydian scale progresses from a D, it is the D Lydian, and if it does so from F#, the minor flavoured F# Aeolian predominates (etc.) - the effect is an inherent kind of polyvalent modalism. This uncertainty operates most openly between bb. 72-84, when at b. 85, a drone in the low strings reaffirms, undoubtedly, E as the point of tonal gravity. It does this, however, alongside a destabilising phrygian figure in the viola part which evolves into a full blown poly-modality by b. 95. By b. 98 the whole ensemble has

slipped entirely into an E phyrgian white-note territory. Most instructive here would be the music of Modal Jazz pioneers Miles Davis, Wayne Shorter, John Coltrane, Herbie Hancock (etc.). Though there remains some debate about what Modal Jazz (or even modal harmony) even is'[87] it seems the 'modal harmony' detailed by Ron Miller, which incorporates 'nonfunctional harmonic progressions, shifting harmonies over pedal points… non syntactic harmonies' shows the most confluence with the processes I have been employing in this piece.[88]

Complexity, eclecticism and personality: do I care if they listen?

Aphasia (for piano) – *(Grand Hotel) Abgrund – preludesonata* for Bass Clarinet & Piano

There will necessarily be some overlap between the avowed aims of the previous section and this one. Indeed, the three pieces that will be discussed now do exercise a number of similar compositional approaches and techniques: specifically, the manipulation of typically post-tonal chordal structures, in the context of a recontextualised consonance/dissonance dialectic that draws its techniques freely, for such foundationally operative processes as tension/resolution, contrast/sameness, from a range of practices associated with European art music - as I hope to have begun to establish here is my compositional practice. The extent to which they differ, though, is the focus here and, in so far as both *Unreal City* and *hoquet perpétuel* seek a kind of reconciliatory stance in their relationship with audience and (potentially amateur) performer (as, nevertheless, pieces of contemporary music), *Aphasia, (Grand Hotel) Abgrund,* and to a lesser extent, *preludesonata,* are altogether more confrontational, and personal, in style and outlook. It

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[87] See Keith Waters, *The Studio Recordings of Miles Davis Quintet, 1965-68* (Oxford: Oxford University Press, 2011), 44-46.

[88] Ibid. 46

is an overtly eclectic, even polyphonic (in the Bakhtinian sense), aesthetic that calls attention to itself.

Harmonically, *Aphasia* is—while intentionally disruptive throughout—unified by a preoccupation with the typically consonant interval of a third. It is something of an intentional irony that I chose this interval, given the bellicose treatment of dissonance throughout.

Figure 9, *Aphasia,* bb. 63-69.

Figure 9 shows a passage, in the middle of the piece, in which alternating major and minor thirds traverse the circle of fifths. As the passage progresses the surrounding material proliferates in complexity, rhythmically and otherwise. The pitch-content here is

drawn, increasingly, from pitch-classes contiguous with, and adjacent to, the emphasised third chords that they both decorate and obscure. This progression is disrupted by the final semiquaver of b. 67 where the presumed Ab (minor third) is displaced by one tone to F#(major)—enharmonically speaking—allowing the progression to begin again in a now slightly modified harmonic space, commencing as it does on F# major, in contrast to the F# minor two bars before.[89] A similar break occurs at the start of b. 65 with the repetition of the major sonority Db triad where a minor might be expected. Such disruptions, emphasised in these two instances by a crotchet length rest or a change in texture, function as a kind-of 'break' or 'comma', signalling something akin to a subordinate clause or parentheses. This is, at one level, a nod to the origins that Western classical music has in rhetoric and speech; the irregular rhythms throughout and in particular here, likewise approach something resembling complex speech-rhythm, too. It could be argued that tonality is itself rooted in an understanding of music as rhetoric and speech; after all, what is a half cadence if not a comma, and a full cadence a full stop? As early as 1696 Étienne Louilié notes:

> …the cadence is a melodic ending. Now, melodies are related to an air as periods and other parts [of speech] are related to an address. The endings of these melodies, or sections of which an air is composed, are related [in speech] sometimes to periods, sometimes to commas, sometimes to question

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[89] A schema, detailing a circle of fifths with alternating minor and major intervals would necessarily have to be duplicated (and inverted) in order to represent all 12 degrees of the scale (as both major and minor). These two chords then, would exist in different and contrasting spaces. An example is as follows:

C-Fm-Bb-Ebm-Ab-Dbm-Gb-Cbm/Bm-E-Am-D-Gm
Cm-F-Bbm-Eb-Abm-Db-Gbm-Cb/B-Em-A-Dm-G

marks, etc., according to the different manners in which these melodies conclude.[90]

With regard to rhythm, it can be said that 'both speech and music are characterised by systematic temporal, accentual, and phrasal patterning'; indeed, it is a question of periodicity that separates rhythm in both speech and music and as such our cognitive capacity to recognise them as such.[91] To be precise, the rhythm of language 'does not involve the [same] periodic recurrence of stresses, syllables or any other linguistic unit'.[92] For the sake of a new music resource, this contrasts with the orderly and properly metric rhythm of a European music understood to have been constrained by the logic of the bar-line and its requisite ideologies of order and balance.[93] It may come as no surprise, then, that European music since modernity has characteristically progressed along a rhythmic spectrum towards a speech-like aperiodicity in rhythm (whether with, or without, the bar-line). Be it the early nationalist concern that a music ought to reflect the prosody of the mother tongue, or the complexity found in speech-rhythm itself as a necessary rhythmic resource lending itself naturally to a contemporary music aesthetic. Frank Zappa—whose use of irrational rhythms to produce highly idiosyncratic melody-lines is a significant influence for me (bb.211-255 in (*Grand Hotel) Abgrund* illustrates this influence most explicitly)—has expressed this by comparing his own 'speech rhythms to

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[90]. From Louilié, *Éléments...* (1699), quoted in Gregory Barnett, 'Tonal Organization in Seventeenth-Century Music Theory', '*The Cambridge History of Western Music Theory*, Thomas Christensen (ed.) (Cambridge: Cambridge University Press, 2002), 447.

[91] Aniruddh D. Patel, *Music, Language and the Brain* (Oxford: Oxford University Press 2007), 96.

[92] Ibid., 159.

[93] A tradition and indeed, system, that could be said to prioritise notions of harmony and melody, and thus be, in some sense, limiting in its treatment of rhythm anyway.

the 'mathematically derived' rhythms of Boulez.[94] It is fitting then, that aphasia, a condition characterised by the loss of speech, be the extra-musical inspiration for this particular work; that my 'speechlessness' be, in effect, sublimated in music.

The question of speechlessness is taken to an extreme in the central movement of the work, wherein an empty tacet bar instructs the performer to sit in silence until a maximum discomfort has been achieved. At the time of writing this commentary, the Arditti Quartet gave the premier of Wolfgang Rihm's (a composers who's unremitting eclecticism is very much an influence here) *In Verbundenheit* (2014), in which the score dictates a silence that lasts 'just a little too long'. The silence is about 40 seconds (in the particular performance that I heard) and had precisely the—somewhat irreverent, but nevertheless highly seriously—drama I hoped my own silent passage might convey.

The final two bars of **figure 9**—to return momentarily to this example—draw to a close with a notable increase in 'harmonic rhythm'. This quick succession of fifths draws an end to the movement in a manner not entirely unlike a cadential II-V-I. This is a gesture that I hope treads the fine-line between a satisfying and authentic *musical* conclusion and both a parody and an homage. The feeling of a kind of musical momentum created by the movement through a circle of fifths, strengthened in this instance by a typically consonant interval of a third, is a fundamental characteristic of music employing a classically functional tonality. A traditional, and if you like, Riemannian, music theory understands all chords (on degrees of the scale), reductively, as parallels (or permutations) of tonic and dominant. All music, effectively, could be said to oscillate between these two poles. The artifice in composition, then, arises from the dialectical

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[94] This is quoted in Ben Watson and Esther Leslie, 'Introduction' *Academy Zappa: Proceedings of the First International Conference of Esemplastic Zappology* (London: SAF Publishing Ltd.), 29.

balancing act of a relative stasis (an emphasis on chords at one end of a spectrum) with a modulatory or cadential momentum afforded in the circle of fifths. There is something of this logic at work in *Aphasia*. This approach, a fixation with thirds and a knowing glance at the processes that typically underpin tonality, comes to a head in the final movement. **Figure 10** details the harmonic structure of this passage. Note, that omitted from the example is a parenthetical passage that begins on the final beat of b. 152; the harmonic analysis resumes half way through b. 154. The example illustrates the final movement reduced to 14 separate chords, rearranged here to show that they are derived almost exclusively from stacked (though mixed) thirds; arranging the chords in this manner helps to identify a logical root note, as well as triadic logic that underpins the progression. This underlying scheme, though consistent, is augmented by the use of appoggiatura, here a resolving gesture that leans into or out of one of the stacked third notes (indicated in the figure with a slur and a small notehead). Moreover, there are additional chromatic notes (see the splayed stems in the figure) that nevertheless fit into and alongside the stacked chords. There are a number of omitted notes too. The chords highlighted in the example are, relative to the shape depicting them, related (at the root) by fifths, and are in a sense, the harmonic nodes around which the harmonic progression here is orientated.

Figure 10, *Aphasia,* movement 1.9.
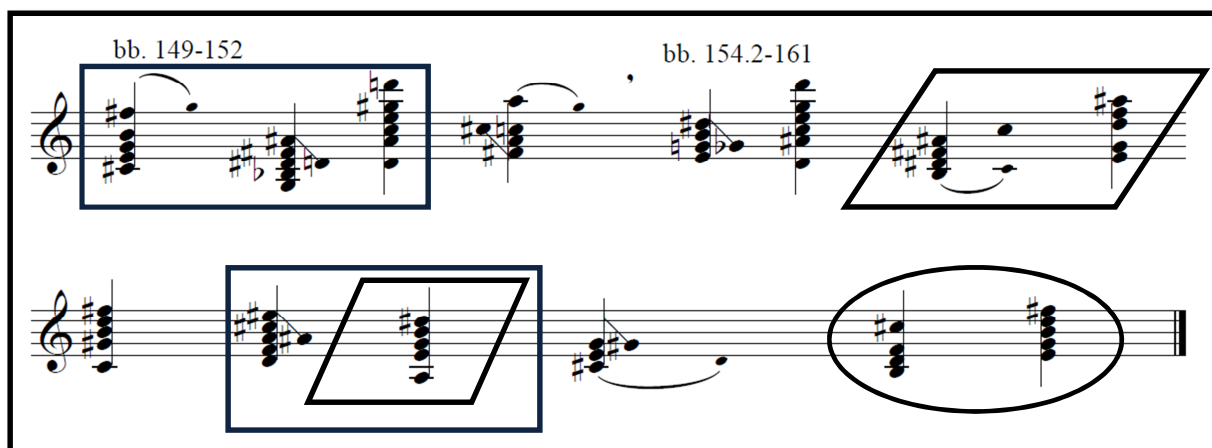
In the case of the very first two chords the interval is, in fact, a diminished fifth; despite the altered interval, and in an atonal idiom, the function I have described remains operational. The passage highlighted by two rhombuses depicts a three chord progression by fifths with a parenthetical two chord interruption; in effect, a suspension of trajectory with a resolution at its end. The final two chords, likewise, make for a kind of cadence. This is obscured by the temporal distance between them, the culmination of a steady harmonic deceleration over the duration of the entire movement. This deceleration finds its timbral analogue in the long advance from high to low register across the duration of the movement, which has the ancillary consequence of an observable physical readjustment on the part of the player, a dramatic closing gesture to end the suite.

(Grand Hotel) Abgrund takes the following pitch class sets as the core material from which all melodic and harmonic material is derived:

[0,2,3,6]/[0,3,4,6] and their inversions [6,9,10,0] / [6,8,9,0]

Figure 11, *(Grand Hotel) Abgrund,* bb. 1-8.

Figure 12, *(Grand Hotel) Abgrund,* bb. 8-12.

How it arrives at this stage is something of a musical joke, and the first movement

employs a self-consciously absurd pseudo-tonal framing device for its opening eight bars:

this is illustrated by way of a reduction in **figure 11**. The opening two bars hint broadly at a

V-I-IV in an implied key of D major, admittedly without a strong emphasis on the root.

There is, by b. 7, a supertonic-esque triadic sonority E minor, and as such, an approaching

sense of cadence. This arrives in the form of an augmented 6th (-esque) chord at the

beginning of b. 6. The natural inclination of this augmented sixth—if traditional voice

leading practices are to be followed—is for the C# and Eb to resolve by semitone to the

D. However, taken on its own, and alongside the inherent movement thus built into it,

this chord has a number of interesting properties all of its own. Not least of these is the

potential for third, semitone and tritone derived harmonies. The augmented 6th has

strong significations, both textual and structural, in the music of the baroque and

classical period.[95] It may be because of the chromaticism it engenders, or the unusual

spelling required, but the augmented 6th—because of its essentially cadential function—

had become one of diatonic harmony's most idiomatic procedures. For this reason it

lends itself particularly well to a process of deconstruction and **figure 12** details this in the

immediate bars that follow its initial statement at b. 9. The pseudo-tonal conceit that

began the piece thus promptly disintegrates and, through a process of repetition, octave

displacement and rhythmic obfuscation, the tonally derived augmented 6th is repurposed

as the basis of a new non-tonal idiom. This is a procedure that mirrors the postmodern

tendencies of, among other things, re-appropriation and irony associated with

composers such as Luciano Berio and Mauricio Kagel. This chord thus becomes (to use

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[95] At the time of Bach and Handel, the augmented 6th was regularly discussed in terms of textual references, terms such as 'doubt', 'conflict' and 'uncertainty'. Its immediate associations were that of a kind of word painting. As the sonata form took prominence it acquired a more strongly structural role (Mark R. Ellis, *A Chord in Time: The Evolution of the Augmented Sixth from Monteverdi to Mahler* (Farnham: Ashgate 2010), 85-86.). In an atonal idiom these connotations are, due to its function in a harmonic context, lost.

the Forte inspired prime form) [0,2,3,6], and is henceforth the numerical basis from which the harmonic language of the piece is almost entirely derived. In addition, I augmented my own compositional resources with the related [0,3,4,6].[96] Rhythmically, there is no discernible sense of pulse and the staggered rhythmic idea that first appears at the end of bar 8—a horizontal distortion if you like, of the homophonic [0,2,3,6] chord which here initiates its own thematic disintegration—is subject to a cyclical process of pitch rotation. Of the fifteen chords that follow the double barline at the end of b. 7 that are presented like this, seven are inversions of the original chord, three possess the same prime form and five are relatively alien. Of these five alien chords, four consist of a GABbB chord of stacked 2nds and the fifth initiates a twelve bar diversion (in which the staggered chorale moves instead into the brass) before a return to this material in the strings at b. 12. In this movement, then, harmony—and the progression thereof— becomes a process in which a chord, originally made strange, is made familiar again, through repetition. It is then established as a point of reference from which to depart, increasingly, as the piece progresses. Indeed, the pitch class set is littered throughout, and any abrupt change in texture or tempo usually comes with a return to the repurposed familiarity of a Forte 4-12; **figure 13** illustrates two instances of this (where boxes indicate the appropriate pitch sets).

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[96] Both [0,2,3,6] and [0,2,3,6] share the designated Forte number 4-12.

Figure 13, *(Grand Hotel) Abgrund*, b. 53 & b. 73 (respectively).

The whole movement then, becomes a selection of extended parentheses, an indication that it has gotten lost in itself. The harmonious resolution at the end of the first movement, coming to rest serenely onto an E major triad as it does, appears then, as an absurd punchline; a tonal chord, treated tonally, but rendered meaningless nevertheless. This comes with a dissolution of texture that establishes, through contrast, the beginning of the second movement (which should follow without much pause) and starts with a dizzying full orchestral tutti. A graphic, detailing the structural layout of the second movement, can be observed in **figure 14** (note, the graph represents an approximation in scale, and is not precise).

Figure 14, Structural analysis of *(Grand Hotel) Abgrund*, Mvt. I.
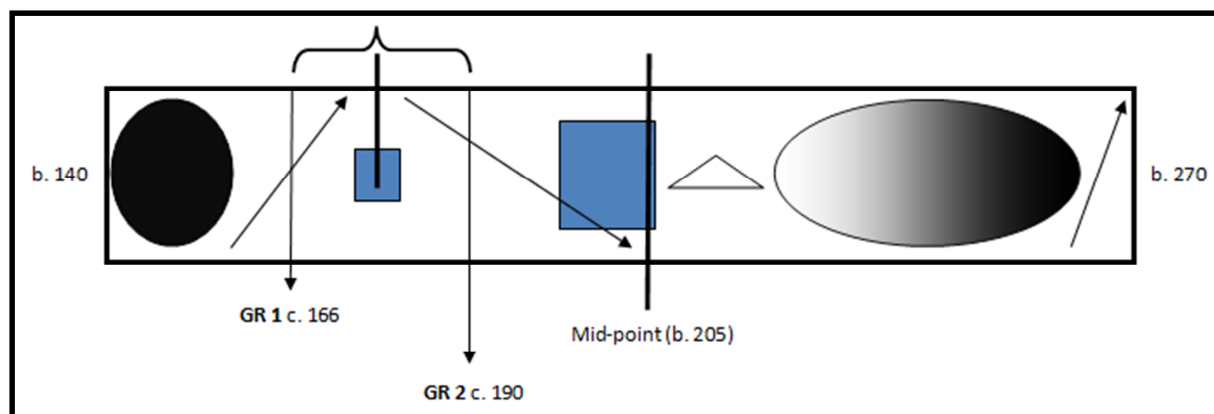
Though both movements of *(Grand Hotel) Abgrund* unfold as though it were stream of consciousness, there are a number of organisational preoccupations, however irregular, that structure it; a brief explanation of the graphic should give some indication of this. There is a sense of recapitulation for example, where the material, indicated by the first circle, returns at the end (beginning at b. 226); the black gradient in the second circle indicates a textural/orchestral development culminating in the full involvement of the orchestra.[97] The triangle specifies a brief and distinct diversion nestled at the centre of the work (from b. 210) that highlights a number of jumpy, irrational rhythmic groupings. The brass material, around which the complex rhythms proliferate, is a rhythmic augmentation of the overlapping horn material that begins the movement.

Figure 15, *(Grand Hotel) Abgrund,* bb. 190-191, violins, flute 2 & clarinet 1.
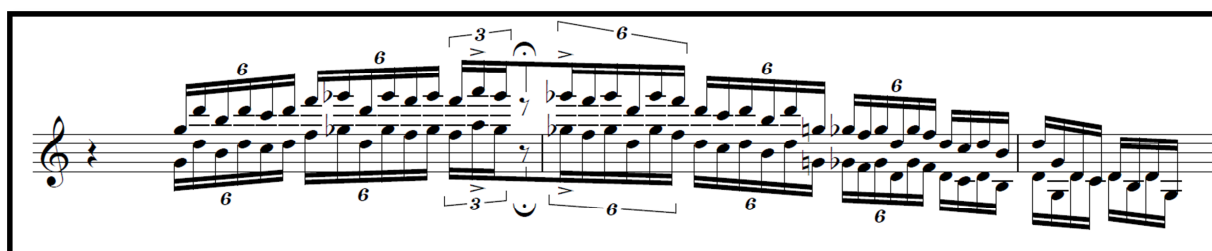
Indicated also are two instances of the golden ratio (GR 1 and GR 2).[98] GR 2 is the inverse ratio applied to the movement specifically, while GR 1 is the ratio applied to the piece as a whole (including the first movement). There is a notable break in texture at GR 1, a very short-lived silence, followed by a descending sequence of triplets in the brass section. GR 2 is signposted by a dramatic arch shape scored across the flutes, clarinets and strings;

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[97] That the first circle is fully black suggests a full orchestral texture from the start.

[98] Note that their positioning is an (admittedly very close) approximation – a proper calculation of the ratio here results in decimal numbers. Moreover, sound in time will always be imprecise, and thus a strict calculation is rendered meaningless in the context of a heard music.

this can be observed in **figure 15** (this is further underscored by the one instance of a tam-tam strike). The exact middle point between the two GR 'nodes' falls in the centre of a sweetly tonal, if melodically discontinuous, violin duet. This material is indicated by the square in the graphic, and returns at b. 196. The duet is raised (in a sense) by an arch, demonstrated by means of an inclining (bb. 152-174), or declining (bb.183-209), arrow. These arrow passages incorporate ever-accelerating or ever-decelerating layers of music, and recreate, by means of an acoustic approximation, some of the experiments in audio illusion, associated in part with Jean-Claude Risset.[99] As the arch descends, and the piece gradually decelerates, the material, progressively, morphs back into the material of the duet; the full orchestra becomes distracted and—as an obsessive might—fixated with the repetition of the passage, abruptly grinding to a halt at what is the approximate middle point in the movement.

It was my intention in *preludesonata (*for Bass Clarinet and Piano) to explore extremes in instrumental range (particularly with the bass clarinet) and extremes in tempo and gesture, cooperation and non-cooperation between two instruments (etc.). Indeed, the bass clarinet part regularly makes leaps, often in quick succession, between pitches at both extremes of the instrument's registral compass; many of these pitches are considered outside of the typical range of the instrument.[100] The first movement begins with a broadly unmetered, even vaguely lyrical, passage, which can be observed in **figure 16**. The bass clarinet meanders here across a mostly (as written) modal white-note

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[99] Some details can be found in, Jean-Claude Risset, 'Pitch and Rhythm Paradoxes: Comments on "Auditory Paradox Based on Fractal Waveform', *The Journal of the Acoustical Society of America*, 80 (1986), 186-189.

[100] Even as late as 1967, instrument manuals dictated that the range of the bass clarinet was three octaves and a major third. The full range is actually about (and not even limited to) four octaves and a fourth. Henri Bok, *New Techniques for the Bass Clarinet* (Shoe Pair Music Productions, 1989/2011), 4.

harmonic space (arguably centred on a written G)—rarely moving in a typically conjunct motion—while the phrases, which consist of relatively simple rhythmic units on the micro-scale, are treated additively and stretched or condensed accordingly (this is best observed in **figure 16**, where appropriate meters might have been 11/8, 17/8 and 9/8). As the piano gradually enters, it moves from an independence at odds with the swaying pulse of the bass clarinet to converging properly by the second page. Indeed, the score is forced to reflect this via a change to fully-metered notation. Nevertheless, this relational ambiguity between instruments is maintained throughout and it is never entirely clear who it is that accompanies whom.

Figure 16, *preludesonata* for Bass Clarinet & Piano, opening of Mvt. I.[101]
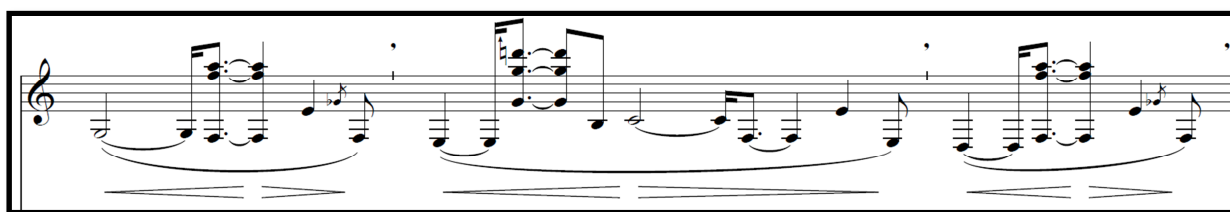
Movement II was a loose attempt at incorporating a traditional sonata structure in the context of my own broadly atonal idiom, though there is not room to detail this in full here. A simple, slurred and vaguely classical (resolving) gesture in the bass clarinet (written Db crotchet to a C quaver) begins the piece. The piano, too, attempts to negotiate a number of triadic harmonies with additional, and contaminating, chromatic notes; the loud and dotted-crotchet repetitions juxtaposed against the 5/8 dance-like passages, almost feel like an attempt to shake them off. This initial cluster of ideas constitutes the exposition. The ending is an overt and energetic, even aggressive, return

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[101] See score for multiphonic fingering instructions, which have not been included in the figure.

to these ideas which takes a great deal of enjoyment in the unpredictability and volatility of the established, if now more fully developed, dance-like rhythms just mentioned.

By way of a comparison, I offer Michael Cherlin's suggestion that Schoenberg's frenetic dramatization of his own near death experience, the String Trio Op. 47 is able to find meaning from a rich set of associations related to uniquely musical types of memory, which, he claims come in three kinds:

> [...]the recollection and transformation of musical ideas within the work, the association of those musical ideas with a larger musical tradition, and the evocation of the "extramusical" by the musical.[102]

The String Trio, somewhat like my own 'sonata', appears to 'remember and then abandon the musical languages of its historical antecedents'; both juxtapose harsh and strident dissonances with passages that embrace the historically recognisable, be that 'the sweetness of tonality' or moments of dance-like rhythmic propulsion.[103] Musical phrases too, that have no apparent connection to the past, give way to phrases with, for example, classical and clear phrase structures.[104] These essentially formalistic descriptions account for the first two types of memory, but it is the third and extramusical depiction of a life-threatening heart attack that animates and lends Schoenberg's String Trio its immediacy. This does not refer necessarily to a 'programme' as such though, and the experiences depicted—in Schoenberg's case, searing pain and unconsciousness—have an abstract universality about them. To this end, Chernin suggests that the real work of interpretation lies in formulating a convincing sense of the flow of musical ideas, so that the 'crowding in, breaking off, and dozing off become expressive variables in the overall

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[102] Michael Cherlin, 'Memory and Rhetorical Trope in Schoenberg's String Trio', *Journal of the American Musicological Society,* 51/3 (1988), 601.
[103] Cherlin, 'Memory and Rhetorical Trope in Schoenberg's String Trio', 601.
[104] Ibid., 559.

flux of the work'.[105] It is in this context that the three pieces here ought to be understood. They seek to provide a holistic web of associations that incorporate, freely, the historical, musical and formal, alongside the extramusical (gestural, rhetorical and emotional for example), which are then manifested in a musical surface of eclecticism and unpredictability. It is through this excess of authorship that the composer's authority effectively dissolves. Meaning, if this was not already the case, needs necessarily to be rebuilt in these pieces every time, despite, and perhaps because of, the level of prescriptiveness at the level of the score.

Random numbers and compositional agency: a case study

A Million Random Digits – Triptych (for four voices)

By way of a slight, if not entirely unrelated diversion, I shall now explore two pieces that sought to incorporate random data at varying levels in the creative process, and the extent to which choice and agency on the part of the composer are underscored or even enhanced—rather than displaced and devalued—by the processes that this potentially engenders. This links directly, in ways that I hope will become apparent, with some of the concluding remarks about authorship made toward the end of the previous chapter. Harrison Birtwistle is known (perhaps apocryphally) to have suggested of his early music, that all the pitches could be replaced randomly without altering, in any meaningful way, the core musical argument. While this might well have been the kind of dismissive aside uttered regularly by composers about their own music, it actually gives some real insight into his compositional approaches, and his known, but not much understood, use of random number charts in generating the core materials with which he once composed. It

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[105] Ibid., 568.

is easy, at first glance, to see an experimental disavowal of creative authority here akin, you might say, to the aesthetics of John Cage.[106] I would contend, though, that the implication is, in fact, quite the opposite, and has its roots among the very difficulties that seem to permeate all musics in a post-tonal idiom (something of an *idée fixe* in this chapter). Birtwistle wishes (suggests Michael Hall) to preserve 'decision-making for high level matters'.[107] Since composition, then, is a process that—centrally—concerns decision-making, there is good reason for identifying and enacting a means of 'allowing music to write itself'; at least minimally, and if only to stop the composer, lumbered with altogether too many decisions, from seizing-up and coming a halt.[108] In a sense, then, this is precisely what tonality, with all the requisite rules we have since mistaken for natural laws, provides: a hierarchical system which engenders its own progressional teleologies and affords creativity by determining any number of would-be compositional decisions in advance of the composer.[109] What are the limits of authorial responsibility? And can random numbers, rather than being an environment within which agency may be bypassed, become the kind of principle upon which agency and creativity are already, and necessarily, contingent?

 A million random digits, a piece for flute and clarinet, uses as its starting point a page from *A Million Random Digits with 100,000 Normal Deviates*. The text, a vast compendium

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[106] Indeed, this article in *The New Statesman* seems to put forward that very, it seems to me, misunderstanding: 'Birtwistle embraces the anarchy of chance and rejects his authority as a composer', Alexander Coghland, '"I am an Old Lion" Profile: Harrison Birtwistle', *The New Statesman*, May 16, 2012, accessed June 30, 2014. http://www.newstatesman.com/culture/culture/2012/05/im-old-lion-profile-harrison-birtwistle.

[107] Michael Hall, *Harrison Birtwistle* (London: Robson Books, 1984), 10.

[108] Ibid., 10.

[109] For a critical discussion of how the social foundations of tonality govern, already, the way tonal music unfolds, see John Shepherd, *Music as Social Text* (Cambridge: Polity Press, 1991), 96-127.

of random number charts developed by the USA-based and government-funded think-tank, the RAND Corporation in 1949, was an early and significant contribution to a number of fields of inquiry.[110] This piece is, in effect, three smaller pieces intertwined: two solos and a duet. The first of these, an introductory solo for clarinet, derives its pitch data from a literal interpretation of the numbers detailed in **figure 17** applied to the pitches in a chromatic scale starting on D, in which 0=D, 1=D#, 2=E to 9=B (etc.). The second half of the figure lists the resultant pitches for the first 51 numbers in the sequence. The result is a passage derived entirely from a 10-note chromatic scale that has a minor third before the octave (and is thus missing a C and a C#).

Figure 17, The first blocks of numbers in *A Million Random Digits.*

```
10097 32533   76520 13586   34673 54876   80959 09117   39292 74945
37542 04805   64894 74296   24805 24037   20636 10402   00822 91665
08422 68953   19645 09303   23209 02560   15953 34764   35080 33606
99019 02529   09376 70715   38311 31165   88676 74397   04436 27659
12807 99970   80157 36147   64032 36653   98951 16877   12171 76833
```

D#D**D**BA[]FEGFF[]AAbGE**D**[]D#FGA#G#[]FF#G#AF[]

GF#A#AG#[]A#D**B**GB[]DBD#D#**A**[]F**B**E**BE**[]AF#BF#G[]**F**

[110] Random number charts once constituted important core data for these disciplines and can be used to 'solve problems of various kinds of experimental probability procedures'. Fields as disparate as engineering and economics often rely on analysis of data which shows a uniform and determined 'randomness' throughout; pseudo-randomness, then, would be the best way to describe these numbers, in so far as nothing that is pre-determined can ever be considered *truly* random. Some more information and a recently published PDF of the text can be located here:
http://www.rand.org/pubs/monograph_reports/MR1418.html. Accessed 30 June 2013

Figure 18, *A Million Random Digits*, opening.
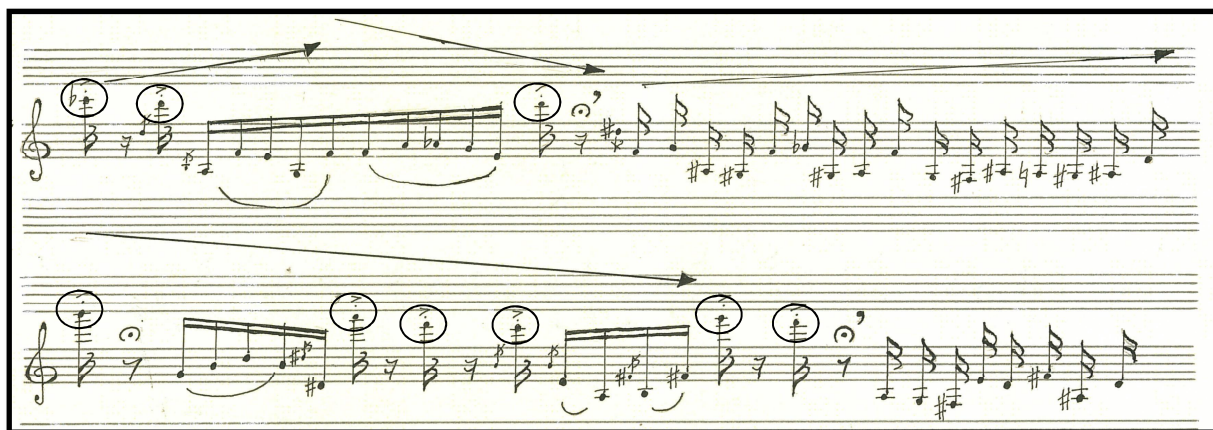
Here, an abundance of pitches are allowed to proliferate with minimal intervention on the part of composer, this is detailed in **figure 18**. A secondary recursive layer is articulated by a displacement at the octave (or two), which accents, and emphasises, the numerical sequence again, the same and from the start, but at (what is heard to be) a slower tempo and in a higher register. This is a process that could, theoretically, fan out infinitely. Emboldened letters in the second half of **figure 17**, and their corresponding notes in **figure 18**, again, detail this. A broad series of contours have been suggested by way of large arrows above the music which incline up or down (denoting acceleration or deceleration respectively). Notes that are beamed are to be played phrase-like and are interdependent, whereas detached notes, which tend to come with a mix of articulations, should produce a flurry of isolated and, typically, accelerating sequences that tend to build toward a climax. The music operates evenly across the contrasting registers available to the clarinet, a tendency in the instrument that lends itself particularly well to the recursive strata that constitute this monody.

A considerable degree of free-intuition, used to determine the rhythmic character of the music, has been allowed on the part of both composer and the performer. Here, a

profusion of pitches which, consistent in their psuedo-randomness, can afford (over time) an interpretive and perceptive multiplicity in shape and contour through which any number of unique hearings can be made or experienced. This all emerges out of a dynamic and co-productive contrast between both the open and interpretive rhythmic demands just detailed, and the strict determinism involved in the pitch selection process.

Figure 19, *A Million Random Digits*, beginning of section II.
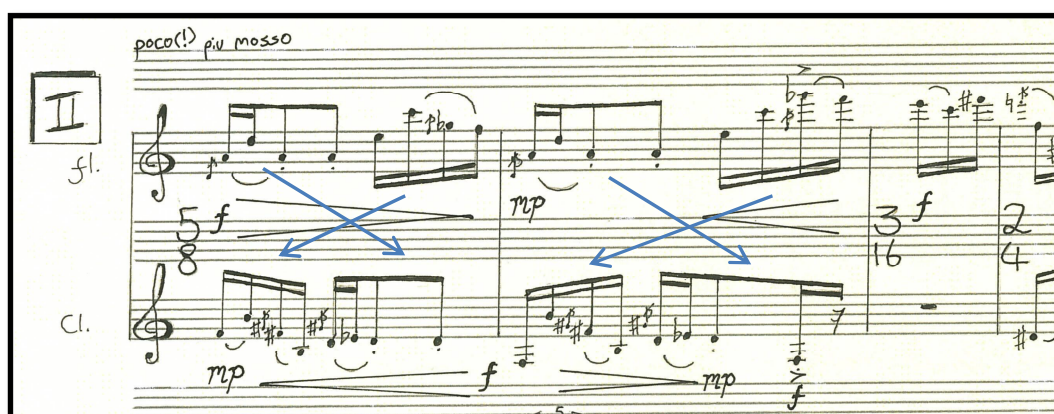
Another approach can be observed in the opening six bars of the duet, which begins at section II in the score, and is detailed above in **figure 19**. Here, the number sequence, which is imagined as a type of tone-row, is applied in an altogether freer manner. Once again, and at the level of free-intuition, I sought, through the distribution of pitches across both instruments to create an order that was, theoretically, never there to begin with. My aim was to compose onto, with, through, and against the backdrop of the sequence - which is revealed to be just what it is: an abstract and inherently non-significant collection of digits. Non-significant, yes, but a *means through which*, nevertheless, the extent of my own agency as composer could be distilled, even activated, and ultimately, understood. This example, then, came influenced by the following number sequence and the repetitions of apparently-key pitches that seemed to

possess, spontaneously, a kind of thematic and melodic coherence all their own (note: the emboldened numbers indicate a pattern of repetition which correlates with the example in **figure 19**):

5**0**5**00** 73998

60970 9**3**4**33**
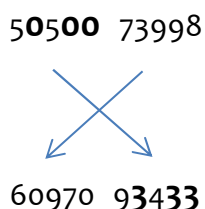
Using the same 'scale' as was used for the clarinet solo to begin with, but beginning on an A as opposed to a D (and thus now excluding G and G#), these twenty numbers provided the impetus—as well as the literal pitch data itself—for the first bar in **figure 19**. It is repeated in the second bar (with some octave displacement for dramatic effect) and would also become a 'theme' that I return to throughout. In the example, the ten pitches in the clarinet correspond directly to the first 10 numbers; the flute likewise, is derived from the second ten. Evident, then, should be the extent to which the repetitions of pitch give rise, innately, to a rhythm (and emphasis), and a sense of motivic symmetry is thus exploited *through* composition. That is to say, in this example, the repeated notes are emphasized by, and in, an invented new musical context. Though I proceeded sequentially through the random number chart, my intervention as composer becomes an essentially hermeneutic move that aims to bring out a latent cohesion otherwise unapparent in what is, in fact, a uniformly random number set. By way of some additional points: in its preoccupation with motivic clarity, a vaguely neo-classical texture is what results. The greater clarinet range affords the instrument an equal role playing melody as well as accompaniment, alongside the leading flute part. Consistent with some of the harmonic strategies detailed in the earlier chapter, a slower middle section in the duet is

able to make expressive use of close intervals, the resonant properties of which seem especially striking when performed on wind instruments, and in an intimate chamber setting.

This piece, then, shares something with the music of a number of composers associated with the post-war avant-garde. Composers who, not entirely convinced by (or committed to) the high modernism and total serialist project propagated at Darmstadt, pursued an altogether more holistic aesthetic in which the automated, and occasionally overtly scientific, treatment of compositional parameters, could co-exist with, and be complemented by, the more ephemeral, and arguably irrational, free-intuitive insight of the composer. Iannis Xenakis and György Ligeti were particularly influential for me (and in general) in this regard. For Xenakis, 'multiserial music' (as he called it) 'destroys itself by its very complexity', and is ultimately heard as an 'irrational and fortuitous dispersion of sounds'.[111] His development of 'stochastic' music—that is to say, a music that incorporates non-deterministic, or random, procedures into the composition process— came predicated on an aesthetic philosophy that sought to reconcile reason and order (*logos* and *taxis*) with chance and disorder (*tyche* and *ataxia*).[112] This is a sentiment echoed by some of my earlier comments regarding rhythm and pre-determined pitches in the clarinet solo section. The latter two categories, he claims, having been side-lined throughout much of Western intellectual history, have begun (thanks to then current developments in the sciences) to be rationalised, and ought, thus, to be subsumed into composition. That Xenakis arguably created a music more mathematical, and complex than anyone before him, is in fact something of a moot point, since what he actually

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[111] Iannis Xenakis, *Formalised Music: Thought and Mathematics in Composition* (Bloomington: Indiana University Press 1971), 8.

[112] Xenakis, *Formalised Music…* 4.

wanted was a kind of fine-grained authorial control at the macro scale, a control he could

achieve with a profound knowledge of probabilistic logic and mathematical systems, and

a control he felt Darmstadt composers had unknowingly surrendered to automatic 'self-

governing' procedures decided purely at the pre-compositional level. Adorno's criticism

that 'rolling up his sleeves' and composing like a scientist means the composers' effective

surrender to the 'philistinism of reified consciousness', might not, on first glance, seem

to accord with what Xenakis says;[113] but it may prove to be the case that their insights

align more than might, at first, have been presumed.[114] György Ligeti is here, probably the

most fruitful, and *musical* comparison, and indeed Richard Steinitz has emphasised, for

him, the:

> [...] absolute primacy[...] of the inner ear, of an aural imagination
> governing every composition decision. None of his music is dominated by
> systematic mathematical rigour, yet his interest in mathematical ideas,
> particularly during the last decade, goes far deeper than a merely
> superficial flirtation with popular science[115]

For Ligeti, cutting-edge developments in the sciences (or scientific modes of thought and

process) have proven, likewise, to be fertile ground for aesthetic insight and

compositional resource. Indeed, Ligeti showed considerable enthusiasm for

developments in chaos theory and non-linear dynamics: branches that have sprung up

since the 1970s. That is to say, the analysis of dynamic processes that appear to be the

result of chaotic and random systems—typically in nature—but which obey surprisingly

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[113] Adorno, 'vers une musique informelle', 228.
[114] Funny, then, that Adorno suggests a *musique informelle* and Xenakis *musiques formelles.* Admittedly, there are plenty of differences, which chiefly concern the imposition of forms alien to music, where the two positions differ drastically.
[115] Richard Steinitz, 'Music, maths and chaos', *The Musical Times,* 137/1837 (1996), 14.

simple rules at an initial and micro-level. With this, Ligeti was able to produce, suggests Steinitz, a music that had a 'turbulence and coherence' at the same time. Music that looked random, but could, from an alternative perspective, reveal a consistent and 'exquisitely fine', even orderly, structure. [116] By tapping, likewise, into types of randomness, I feel I am accessing a similar kind of musical language.

Triptych—a short piece for four voices—was composed out of a predetermined collection of randomly generated data groups; in this instance, a large number of *I Ching* coin tosses. As is typical of the ancient *I Ching* divination process, a number of coin-tosses can determine one of 64 hexagrams (plus some additional variants), which are accompanied in the *I Ching* itself by a short oracular statement or commentary. Each hexagram is composed of a binary structure of six stacked lines which are either broken or solid. Movements I and II, result then, from two different interpretations of the same basic set of coin-tosses (and its resultant list of hexagrams). Two separate systems were thus produced to do this task, and the first movement, subtitled *homophony,* begins as observed below in **figure 20**.

Figure 20, opening of *Triptych*, Mvt. I.

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[116] Ibid., 17.

In this instance, the music was conceived vertically, and the process I contrived was able to dictate four notes (out of an octatonic scale) from the six broken or solid lines that constitute a hexagram. Composition occurs when a, at this stage, non-significant list of pitches are distributed across, and prepared for, the score-page. Because the resultant chords consist of notes in non-specified registers, and without duration, it is the process of arrangement—in which voice-leading and emphasis through rhythm lend these pitches, chords, and intervals, meaning—where the bulk of my contribution, as composer, thereby resides. For example, the phrase that starts the piece (**figure 16**) consists of closely residing pitches and is, from a voice leading perspective, relatively static. As the movement progresses—and as a rule—horizontal repetitions within voices (as shown in the figure above) tend to be less likely, and the general distribution of pitches becomes more widely spaced. The conceptually indeterminate element is bolstered by a score that gives a great deal of interpretive freedom to the performer, particularly in the realisation of rhythm, which is only *suggested* spatially on the score-page. This ambiguity, which might be difficult for a larger instrumental ensemble to realise, lends itself particularly well to a small and closely aligned vocal ensemble concerned typically with the performance of, for instance, rhythmically complex and polyphonic music of the late Medieval and early Renaissance. It might be apparent that this era of music was the primary influence in the actual composition of *Triptych*, but there is unfortunately, not enough time or space to cover this in depth here. There are a number of inherent ambiguities in the reproduction for performance of this material, and the music itself is by definition, non-tonal; the rhythmic and isorhythmic experimentations of, for example, Machaut, have been much discussed too. For this reason I have long thought 'Early Music' was an excellent source of insight and

inspiration for the contemporary composer. The third movement, which will not be covered here, is a kind of mock-chanson and motet, with an isorhythmic-esque design. The second movement, in contrast to the vertical conception of the first, was plotted horizontally and the parameters that were here determined by the hexagrams included: individual rhythmic units and rest lengths; whether a pitch would, in its linear movement, progress to a pitch higher or lower than the current one; the interval it would move by. As composer, I determined dynamics, articulations, and—where I felt it necessary—to manipulate, move, and repeat materials that had come before. Although the score is, in a traditional sense, more prescriptive than the first, the rhythmic setting creates for a necessarily linear and freer flowing texture. **Figure 21** shows a typical sequence consisting of relatively simple basic rhythmic units (crotchets, quavers and dotted crotchets), in which two voices interact contrapuntally. Bar-lines are included as a point of reference (and to reset any accidentals) and do not detail a rhythmic schema as such. Voices move freely and independently, interacting spontaneously, or within a disguised structure, which—a composer-controlled—chance allows. The result is a kind of automatic counterpoint, a uniform wall of polyphony that is consistent in its randomness, but appropriately, and subtly unpredictable.

Figure 21, bb. 6-7 of *Triptych*, Mvt. II, bb 6-7.

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Though I believe that my music can, and should be able to, speak for itself, I have sought, in this section, to give something of a structured insight into a number of strategies and ideas that have animated and inspired my approach to composition over the past few years. Broadly speaking, the first part dealt with the manipulation and negotiation of chromatic intervals, in producing a language that is at once immediate, attractive and challenging. Moreover, that this was done in a manner that could inspire a degree of creativity, via interpretative involvement, in the listener (the way I have attempted to discuss this—in a musically perceptive rather than analytic manner—should, I hope, lend weight to this argument). In contrast, the second section detailed a music that is difficult, even esoteric, in content and motivation. This should not, I hope to have shown, be taken as evidence of a regressive solipsism on my part. Indeed, a complex music that draws upon history and form, parody and homage, and delivers this in a manner that is idiosyncratic and highly personal demonstrates precisely (and perhaps contradictorily) the limits of the musical text and of my own authorship and/or agency. Finally, a third section has attempted to demonstrate how, through the examination of two pieces composed with random numbers, creative agency is already contingent. Through this emerges, I hope, a fresh case for (what I have called) the composer's free-intuition. That is to say, the largely spontaneous means through which the composer is able to participate with audience and performer in the collaborative creation of works *ex nihilo*. Even though it might be impossible to exemplify thoroughly, and in practice, the concerns discussed in the first chapter, I hope to have established a justification of my approach to be open ended, interesting, and new in its contributions.

Bibliography

Books, Articles and Internet Sources

Abbate, C., 'Music – Drastic or Gnostic?', *Critical Inquiry*, 30/3 (2004).

Adorno, T. W., *Philosophy of New Music* (London: Continuum 2007).

Adorno, T. W., 'Vers une musique informelle', *Quasi una Fantasia: Essays on Modern Music*, Rodney Livingstone (trans.) (London: Verso 1998).

Alazraki, J., *Borges and the Kabbalah: And other essays on his fiction and poetry* (Cambridge: Cambridge University Press 1988).

Bakhtin, M.M., *Art and Answerability* (Austin: University of Texas Press, 1990).

Bakhtin, M.M., *Problems of Dostoevsky's Poetics*, Caryl Emerson (ed.) (trans.) (Minneapolis: University of Minnesota Press, 1984).

Bamberger, J., 'Coming to Hear in a New Way', *Musical Perceptions*, Rita Aiello (ed.) (Oxford: Oxford University Press, 1994).

Barnett, G., 'Tonal Organization in Seventeenth-Century Music Theory', *The Cambridge History of Western Music Theory*, Thomas Christensen (ed.) (Cambridge: Cambridge University Press 2002).

Barthes, R., 'Death of the Author', *Image Music Text* (London: Fontana Paperbacks, 1977).

Bok, H., *New Techniques for the Bass Clarinet* (Shoe Pair Music Productions, 1989/2011).

Born, G., 'Listening, Mediation, Event: Anthropological and Sociological Perspectives', *Journal of the Royal Musical Association,* 135/1 (2010).

Born, G., 'On Musical Mediation: Ontology, Technology and Creativity, *twentieth-century music,* 2/1 (2005).

Born, G., *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde* (California: University of California Press, 1995).

Burke, S., *The Death and Return of the Author* (Edinburgh: Edinburgh University Press, 1992, 1998).

Cardew, C., *Stockhausen Serves Imperialism* (London: Latimer New Dimensions Limited, 1974), 47.

Chanan, M., *Musica Practica: the Social Practice of Western Music from Gregorian Chant to Postmodernism* (London: Verso, 1994).

Cherlin, M., 'Memory and Rhetorical Trope in Schoenberg's String Trio', *Journal of the American Musicological Society,* 51/3 (1988).

Cook, N., 'Making Music Together, or Improvisation and its Others', *Music, Performance, Meaning: Selected Essays* (Aldershot: Ashgate, 2007).

Coghland, A., '"I am an Old Lion" Profile: Harrison Birtwistle', *The New Statesman,* May 16, 2012, accessed June 20, 2014.

http://www.newstatesman.com/culture/culture/2012/05/im-old-lion-profile-harrison-birtwistle.

Cross, J., 'Lines and Circles: On Birtwistle's 'Punch and Judy' and 'Secret Theatre', *Music Analysis,* 13/2/3 (1994).

Ellis, M. R. *A Chord in Time: The Evolution of the Augmented Sixth from Monteverdi to Mahler* (Farnham: Ashgate, 2010).

Ferneyhough, B., *Collected Writings,* James Boros and Richard Toop (eds.) (Amsterdam: Harwood Academic Publishers 1995).

Foucault, M., 'What is an Author?', *Language, Counter-Memory, Practice,* Donald F. Bouchard (ed.), Donald F. Bouchard and Sherry Simon (trans.) (Ithaca: Cornell University Press, 1977).

Fox, C., 'Why Experimental?' Why Me?', *The Ashgate Companion to Experimental Music,* James Saunders (ed.) (Farnham: Ashgate 2009).

Gadamer, H., *Gadamer in Conversation: Reflections in Commentary,* Richard E. Palmer *(*ed.) (New Haven: Yale University, 2001).

Gadamer, H., *The Relevance of the Beautiful and Other Essays* (Cambridge: Cambridge University Press, 1986).

Goehr, L., *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon Press, 1992).

Grant, M. J., 'Experimental Music Semiotics', *International Review of the Aesthetics and Sociology of Music,* 34/2 (2003).

Hall, M., *Harrison Birtwistle* (London: Robson Books, 1984).

Harvey, J., *Music and Inspiration* (London: Faber and Faber Limited, 1999).

Husserl, E., *Analyses Concerning Passive and Active Synthesis: Lectures on Transcendental Logic,* Anthony J. Steinbock (trans.) (Dordrecht: Kluwer Academic Publishers, 2001).

Johnson, P., 'Performance and the Listening Experience: Bach's "Erbarme Dich"', *Theory Into Practice: Composition, Performance and the Listening Experience*, Nicholas Cook (ed.) (Leuven: Leuven University Press, 1999).

Kane, B., 'Excavating Lewin's "Phenomenology"', *Music Theory Spectrum,* 33/1 (2011).

Kivy, P., 'Platonism in Music: Another Kind of Defense', *American Philosophical Quarterly*, 24/3 (1987).

Kliger, I., 'Heroic Aesthetics and Modernist Critique: Extrapolations from Bakhtin's *Author and Hero in Aesthetic Activity*', *Slavic Review*, 67/3 (2008).

Lachenmann, H., 'Philosophy of Composition—Is There Such a Thing?', *Identity and Difference: Essays on Music, Language and Time*, Jonathan Cross (ed.) (Leuven: Leuven University Press, 2004).

Leech-Wilkinson, D., 'Compositions, Scores, Performances, Meanings', *Music Theory Online*, 18/1 (2012).

Lewin, D. 'Music Theory, Phenomenology, and Modes of Perception', *Music Perception: An Interdisciplinary* Journal, 3/4 (1986). Quoted in, Brian Kane, 'Excavating Lewin's "Phenomenology"', *Music Theory* Spectrum, 33/1 (2011).

Lindsay, C., 'Experiments in Postmodern Dialogue', Diacritics, 14/3 (1984).

Mahnkopf, C., 'Complex Music: an Attempt at a Definition', *Polyphony & Complexity: New Music and Aesthetics in the 21st Century (Vol. 1)*, Mahnkop et al. (eds.) (Hofheum: Wolke, 2002).

Martin, R. L., 'Musical Works in the Worlds of Performers and Listeners', *The Interpretation of Music: Philosophical Essays,* Michael Krausz (ed.) (Oxford: Clarendon Press, 1993).

McClary, S., 'Terminal Prestige: The Case of Avant-Garde Music Composition', *Cultural Critique,* 12 (1989).

Merleau-Ponty, M., *Phenomenology of Perception*, Colin Smith (trans.) (London: Routledge, 1962).

Merrell, Floyd, *Peirce, Signs and Meaning* (Toronto: University of Toronto Press Incorporated, 1997).

Nattiez, J., *Music and Discourse: Toward a Semiology of Music*, Carolyn Abbate (trans.) (Princeton: Princeton University Press, 1987).

Patel, A. D., *Music, Language and the Brain* (Oxford: Oxford University Press, 2007).

Pryer, A., 'Nattiez's 'Music and Discourse': Situating the Philosophy', *Music Analysis,* 15/1 (1996).

Ridley, A. 'Against Musical Ontology', *The Journal of Philosophy,* 100/4 (2003).

Risset, J., 'Pitch and Rhythm Paradoxes: Comments on "Auditory Paradox Based on Fractal Waveform', *The Journal of the Acoustical Society of America,* 80 (1986).

Ryan, D. and Lachenmann, H., 'Composer in Interview: Helmut Lachenmann', *Tempo,* 210 (1999).

Schmidt, L., 'Sound Matters: Towards an Enactive Approach to Hearing Media', *The Soundtrack,* 4/1 (2011).

Shaffer, L. H. and Todd, N. M., 'The Interpretive Component in Musical Performance', *Musical Perceptions,* Rita Aiello (ed.) (Oxford: Oxford University Press, 1994).

Shepherd, J., *Music as Social Text* (Cambridge: Polity Press, 1991).

Small, C., *Musicking: The Meanings of Performing and Listening* (Connecticut: Wesleyan University Press, 1998).

Sobchack, V., *Carnal Thoughts: Embodiment and Moving Image Culture* (Berkleley: California University Press, 2004). Quoted in Lisa Schmidt, 'Sound Matters: Towards an Enactive Approach to Hearing Media', *The Soundtrack,* 4/1 (2011).

Steinitz, R., 'Music, maths and chaos', *The Musical Times,* 137/1837 (1996).

Toorn, P. C., 'Will Stravinsky Survive Postmodernism?', *Music Theory Spectrum,* 22/1 (2000).

Torrance, S. 'In Search of the Enactive: Introduction to the special issue on Enactive Experience', *Phenomenology and the Cognitive Sciences,* 4/4 (2005).

Vinet, H., 'Recent Research and Development at IRCAM', *Computer Music Journal,* 23/3 (1999).

Walsh, S., *The Music of Stravinsky* (Oxford: Clarendon Press, 1993).

Waters, K., *The Studio Recordings of Miles Davis Quintet, 1965-68* (Oxford: Oxford University Press, 2011).

Watson, B. and Leslie, E., 'Introduction', *Academy Zappa: Proceedings of the First International Conference of Esemplastic Zappology* (London: SAF Publishing Ltd.).

Xenakis, I., *Formalised Music: Thought and Mathematics in Composition* (Bloomington: Indiana University Press, 1971).

Other Sources (DVD & Television)

Brian Ferneyhough: Sixth String Quartet, Colin Still (dir.) (London: Optic Nerve, 2011), DVD.

'Easy Listening?', *Sound and the Fury*, BBC, Ian MacMillan (dir.), aired 26th February, 2013.

Orchestral Rehearsal (prova d'orchestra), Federico Fellini (dir.) (Infinity Media, 1979/2006), DVD.