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**A PRACTICE-BASED INVESTIGATION OF THE CLARINET  
THROUGH FREE IMPROVISATION**

**by**

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**Thesis submitted  
for the Degree of Doctor of Philosophy**

2016

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## **Abstract**

In this thesis I present an overview of my approach to free improvisation with particular reference to the clarinet's instrumentality (its intended function) and its materiality (its accidental characteristics). Acknowledging an influence from the clarinet, I set out to discover its role in defining the music I make.

After outlining debates surrounding improvisation in terms of its compositional capacity, I then consider free improvisation in terms of relational aesthetics. The remainder of the thesis is divided into three main parts.

The first part explores philosophical and practical issues related to tool-use. In chapter one I discuss observations about objects, leading to conceptions of instrumental design. Discussing the special case of artistic tools I suggest an intrinsic link between intent and possibility, considering this relationship in terms of working with an instrument's design and materials. In chapter two I elaborate on ways in which instruments can lead towards musical material while addressing issues of culture, uncertainty and relationships. I describe a veneration of instruments as guides in free improvisation and suggest subverting traditional gestures as a strategy to advance an instrument's capacity. I address issues of uncertainty and posit failure as a viable aesthetic stance, welcoming rethought into performance.

Part two sees greater emphasis placed on my own praxis. In chapter three I outline uses of the clarinet with particular focus on its materiality. In chapter four I discuss recent recordings in light of the issues raised in the thesis. This part is accompanied by a DVD (also available online<sup>1</sup>) containing examples for chapter three and recordings for chapter four.

After a conclusion, which provides a summary of findings alongside a discussion of my current praxis, I present part three, a recording of a final performance made on 13/01/16 with Benedict Taylor (viola) and Daniel Thompson (guitar).

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<sup>1</sup> <https://www.dropbox.com/sh/e1vxrxl1iwu260d/AADA6owAljvT4kiUHapBg8SJJa?dl=0>



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## **Acknowledgements**

I have been encouraged in music by many wonderful, interesting and interested people.

Faye Perrin gave me my first clarinet after I relentlessly asked the school for lessons. Since then many clarinet teachers brought something special to my musical life, constantly reigniting the interest to explore the instrument. John Dawson, Alison Reynolds, John Meadows, Peter Fielding, John Reynolds, Ian Cook, Margery Smith, Andy Firth, Leslie Craven and Andrew Sparling made the exciting and expanding musical world I inhabit possible.

At the Royal Welsh College of Music and Drama I became friends with Keith Tippett who is to thank for introducing myriad young people to free improvisation. It was through his weekly classes that I realised this music would be an important part of life. In Cardiff I met with hundreds of musicians who challenged and enlivened my ideas. I'm also particularly grateful to Brenda O'Brien and Alistair McMurchie for providing a space to listen and play in the supportive environment of their jazz clubs in this formative time. For three months of 2006 I studied in Tallinn with Anto Pett. His structured and rigorous approach helped me to adopt free improvisation as a main focus of my musical activities.

I moved to London in 2009 to be close to a large community of musicians interested in free improvisation and was warmly welcomed, particularly by Sibyl Madrigal who offered me my first London gig at her venue, Boat-Ting. The colleagues who I share this music with have become among my closest friends. They know who they are.

I met Sam Bailey in February 2012 as part of his Free Range concert series. He encouraged me to apply to study for a PhD at Canterbury Christ Church University which I was then able to accept with the support of an AHRC grant. Sam has remained immensely supportive throughout. The process of undertaking this research has been an exhilarating challenge and I'm in debt to my supervisor Matthew Wright's gentle and sometimes justly stern guidance. When Darren Ambrose took over the role of second supervisor in my final year it brought new and invaluable focus to the issues I was trying to raise. I thank CCCU for their financial and practical support towards



recordings, travel and accommodation that have contributed to research during this thesis. I am also grateful to DSA for their recent support.

Thank you to Andy Hall, Andrew Newcombe and Blanca Regina for filming performances; to David Hunt and Andrew Lawson for recording studio sessions; to Matt Davison for recording the audio and Juliette Joffé the video for chapter three; to Sam Bailey for recording the final performance. Thank you to the musicians who feature on recordings discussed in this thesis: Alex Ward, Benedict Taylor, Daniel Thompson, Roland Ramanan, Ashley-John Long and Keith Tippett. The diagrams for fingering charts used throughout the thesis are taken from Jason Alder's online quarter-tone fingering guides (2013).

Without the encouragement of my family I wouldn't have lasted in such a demanding artistic endeavour. I'm forever grateful for their involvement and interest in my music. Thank you to Juliette for her encouragement throughout.

## **Introduction**

### **Original Concerns, Instrumentality and Materiality**

My formal study of free improvisation began with classes given by Keith Tippett at the Royal Welsh College of Music and Drama in 2001. Prior to this I had improvised solo mostly as a method of generating ideas with which to write notated clarinet compositions. I viewed this as an instrumental approach to composition, allowing the clarinet to guide my musical thinking and discovering things to then write down, thus safeguarding from producing a clarinet score that was unplayable. As I became more interested in improvisation it was this realisation that would often return. Anything I played on the clarinet was of course representative of the clarinet's capabilities; it was impossible to play otherwise. When I improvised on the saxophone a recurrence of different patterns manifested and I was interested in exactly why this would be.

That the design of these instruments has been guided and refined by musical conventions was a concern for me as an improviser. If musical instruments indelibly tend towards a particular set of parameters that cater certain musical norms, then my improvisations would in part be a response to their design. In this thesis I refer to that phenomena as “instrumentality”, the use of an instrument in line with its intended function.

There were also things I played that the clarinet was not designed to do but that it nonetheless was equipped for. In light of my original concerns I sometimes felt I was playing against the design of the instrument. In hindsight I realise that I was exploiting the clarinet's accidental features: certain multiphonics are a response to the clarinet's complex handling of the overtone series; bending notes is possible because of the malleability of the embouchure or subtle sliding of the fingers over tone holes; microtones are achievable through further non-traditional use of the clarinet's keys. There was room to operate outside of the intentions of the clarinet's design and as I continued in this way I cultivated an interest in its physical condition. I refer to this as the clarinet's “materiality”.

Since the clarinet is designed with reference to mobile human physicality (on which I elaborate in chapter three) it is a device that responds to particular actions. It is equipped

to reveal, through sound, a range of nuanced gestures. Stravinsky has written about this with regards to his compositional process: “Fingers are not to be despised; they are great inspirers and in contact with a musical instrument often give birth to unconscious ideas which might otherwise never come to life” (Stravinsky quoted in Dissanayake, 2000, p. 126). Performers of Stravinsky’s piano music recreate his gestures whereas improvisers demonstrate that very instrument-led inspiration directly to an audience without needing the material to be re-embodied. I am interested in what this means for the improvisational act. In this thesis I discuss ways in which the clarinet, with regard to its instrumentality (its intended function) and materiality (its accidental characteristics), can render influence on improvisatory thought. I also consider the influence of other musicians on my use of the clarinet.

To examine the above points I consider my own use of the clarinet in solo and ensemble improvisation between 2011 and 2015. Through this the thesis also serves as a formalisation and framing of my recent approaches to using the clarinet in free improvisation. It articulates and expands my considerations of improvising with regards to the clarinet’s instrumental design (instrumentality) and material properties (materiality) in the performative moment.

At the end of this introduction I provide a schematic outline of the thesis but first I discuss two of the overarching themes that are important to my engagement with the field of free improvisation which will facilitate a consideration of the above concerns. These are: the status of free improvisation; and free improvisation’s correlation with relational aesthetics. I investigate these issues via several key figures surrounding these fields including Edwin Prévost, Keith Rowe, George E. Lewis, Nicholas Cook, John Cage, Evan Parker & Nicholas Bourriaud. While their inclusion here is not meant to be indicative of regular returns throughout the thesis, their ideas are instead intended as a foundation of subsequent discussions.

I begin by discussing a complaint from Prévost (1995) regarding an unhelpful influence of traditional forms of music making, suggesting that free improvisation is capable of questioning a tradition that is nonetheless part of. Via Rowe (2009) and Lewis (2005) I highlight a scepticism that exists in improvisers towards traditional musical analysis/commentary and that some of the difficulties in approaching free improvisation from an academic viewpoint is the absence of a score which has proved vital to much of

the research in other musical fields. In raising this concern I aim to suggest an alternative approach to score-based analysis in line with some of Lewis' demands for improvisation in and out of academia as well as recent advances in how it is treated.

I then consider Cage's developing considerations of improvisation, outlining some of his objections for its use as well as noting his involvement with it later in his career. This leads towards distinctions between composition and improvisation suggested by Cook, Luciano Berio & Cornelius Cardew and I discuss possible overlaps of these distinctions. Having discussed areas where improvisation is seen in opposition to composition, I look at Parker's conception of his own practice as a compositional methodology. I finish with a brief summary and description of the ways that my own praxis relates to some of these descriptions.

In the next section I propose a reimagining of improvisatory performance as a relational rather than simply a representational methodology. In doing so I summarise Bourriaud's *Relation Aesthetics* (2002) which describes the growing importance in art of relationships being displayed and developed. Here I indicate areas that can contribute to an understanding of free improvisation as I practice it and I later highlight the importance of developing relationships with one's instrument, musical colleagues and the musical environment as a provider of material.

### **Free Improvisation – a culturally important music**

Sounds impart information. We respond to them. As cultures diverge, so sounds develop relative meanings. How else do we explain the mutual incomprehension of musics from different continents? But the work of 'western' culture is now projected as both absolute and as the norm. Sol-fa tonality is perceived as a given, something that we all know even though few have learnt about it in a formal structured way. Indeed, it is this apparent normality, the ease with which we accept its inner logic, that persuades us of the objective reality and measure of all music. Thus anything which does not conform is perceived as aberrant, alien, inferior. (Prévost 1995, p. 151)

As if in answer to Prévost's complaint, practitioners and audiences of free improvisation reject a reliance on established forms (and sometimes accept new forms) of music

making, providing a critical vehicle with which to question the validity of perceived “absolutes” and “norms”. Freed from assumed “relative meanings” listeners are able to experience not only a variable understanding of “sounds impart[ing] information” but also the methods that contribute to their construction as they unfold. I identify three engagements where this occurs: between the musician and their instrument; between the musicians themselves; and between the musician(s) and the audience/environment. However, this relational and moment-specific approach to an event is arguably still sidelined in favour of the representation of a musical ideal, often in the form of a notated score. That free improvisation has no recognisable score may be a reason for an absence of mainstream appreciation.

The historical relevance of improvisation as an important feature across global musical forms as well as its decline during the twentieth century is well documented in Derek Bailey’s *Improvisation: Its Nature and Practice in Music* (1993). Countering its marginalised position, there is a rapidly growing literature which theorises and celebrates the practice of free improvisation, indicating that the subject is gaining academic prominence in parallel with a growing body of practitioners.

There is some ambivalence as to whether there is need for a theory to support this praxis; several well-known improvisers seem to decry explanation<sup>2</sup> whereas many practitioners write on the subject<sup>3</sup>. In spite of a relatively healthy interest shown in free improvisation it remains a problematic area of study. As Rowe suggests in Hopkins’ documentary, there is potential for disparity between an improviser’s thoughts as they improvise and how their improvisation is written about:

In a sense, the thing we’ve lacked in the music that I’m part of ... is that I don’t get a sense that anyone, up to now anyway, has actually written in a way that comprehends what we do. Because I know what I’m going through and I read the reviews – scratching the surface isn’t even there. There’s no comprehension of actually what’s going on in the music.”<sup>4</sup> (Rowe in Hopkins 2009)

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<sup>2</sup> As Gary Peters writes in the introduction to his book *Philosophy of Improvisation*, “I know they [Veryan Weston, Simon Picard, Dan Brown, Cliff Venner, Dave Storey, and Lol Coxhill] don’t need a “philosophy of improvisation” to help them along (well, that’s what they think!)” (Peters, 1999, p. vii)

<sup>3</sup> Derek Borgo, David Toop, Edwin Prevost, George Lewis, Anthony Braxton and John Zorn are some notable examples.

<sup>4</sup> Transcribed by the author.

While I don't anticipate answering Rowe's concerns, I do hope to further a discussion that helps to elaborate on and advance my own praxis. The difficulty at the root of Rowe's complaint necessitates practical research and dissemination, demanding that a theoretical study reflects on and is augmented by observations of musical examples with particular reference to the moment of creation. Discussing the tuition of improvisation, Lewis makes a more general observation about the concerns expressed by Rowe, suggesting an existing scepticism of academia, and he later lists many established musician-created institutions which thrive outside scholarly institutions (*ibid.*, p. 83). Observing a reluctance to be associated with models developed for other musics, Lewis notes that:

Actively working musicians, while often expressing a somewhat less sanguine view of the virtues of neoliberal jazz economics, nonetheless question the necessity for, or even the desirability of, any "academicization" of the music, particularly where this term evokes the sacralizing, culturally hierarchical attitudes which many jazz musicians associate with the study of the theory, composition and performance of pan-European high-culture ("classical") music. (*ibid.*, p. 81)

In his conclusion Lewis makes demands for the future of improvised music's study (*ibid.*, pp. 107-108). He asks that musicians embrace the importance of literature to advance their own practice and he invites interdisciplinary exchange to enhance the scope of the music's development. He encourages collaboration between academics and non-academics to valorise the extensive work done by musicians in pursuit of their craft (for whom usually no acknowledgement is formally given) as well as providing university students with examples of the hardships endured in this particular musical discipline<sup>5</sup>.

Lewis acknowledges that residencies do exist for composers but that improvisers are only able to gain places if they are "suitably disguised with scores" (*ibid.*, p. 108), which hints at the notion that free improvisation was not yet an area of study that qualified for financial support, that the score was a necessary component of approval for

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<sup>5</sup> Lewis cites "the long absences from family and friends, the dreary train, bus, and car trips, the dislocation of time and space, the microscopically small hotel beds and the sometimes indifferent, thoughtless or even unscrupulous promoters" (Lewis, 2005, p. 108) as often overlooked professional difficulties.

residency organisers, a vehicle of cultural elevation. Finally he suggests that conferences be established which would help exhibit the work of external practitioners.

To some extent Lewis' demands have been answered. While older musical discourse often debated the legitimacy of improvisation in concert programmes, pitting the practice of improvisation against composition or notation, it has recently begun to enjoy resurgence and support. Huddersfield Contemporary Music Festival often programmes and commissions improvisers such as Evan Parker or John Butcher and it has become part of the undergraduate curriculum of many universities. In 2012 and 2014 Oxford University hosted the conference Perspectives on Musical Improvisation which welcomed The Oxford Improvisers Orchestra and other musicians as well as a wide range of academics. Music Omi in New York is one recent example of a residency that invites improvisers to develop work.

Thus there is evidence of a growing acceptance in the wider musical arena that improvisation is an important component of contemporary approaches to musical performance and composition, foreshadowed in Cage's 1937 lecture "The Future of Music: Credo" where he writes, "the means will exist for group improvisations of unwritten but culturally important music." (Cage in Feisst, 2009, p. 39). The citing of "unwritten ... music" alongside "improvisation" is a revealing coupling that begins to question an imagined (and largely upheld) opposition between composition and improvisation. It is perhaps a surprising quote for someone so famously resistant to free improvisation and I explore this below.

## **Composition and Improvisation**

Cage's oft-cited disapproval of improvisation is examined in Sabine M. Feisst's 2009 article *John Cage and Improvisation: An Unresolved Relationship*. It provides a detailed history of Cage's involvement with improvisation which included an extensive appraisal of its limits and possibilities. While Cage's authority is not principally on free improvisation, his appearance in this introduction is legitimised by his influence on contemporary musical thought. As Feisst concludes in her essay,

[Cage] undoubtedly created a greater awareness of the implications of improvisation and shed light on the challenges and illusions of improvisation. In

his search for the encounter with an unexpected experience or revelation, he provided new creative opportunities for his performers. Whether Cage fought against improvisation or embraced it, throughout his prolific career he found manifold ways of dealing with *imprévu*, the unforeseen. (Feisst, 2009, p. 49)

Feisst (ibid., p. 38) describes a general scepticism towards improvisation common-place amongst mid-twentieth-century composers and she considers Cage's ambivalent and evolving relationship with the practice. Abandoning many of the results that originated from writing down his own improvisations in the 1930s she describes how Cage then began incorporating improvisation into his compositions<sup>6</sup>. Feisst explains that Cage's suspicion of improvisation was in part because he viewed it as incompatible with his idea of art as "the imitation of Nature in her manner of operation" (ibid., p. 40). Suggesting that an improviser is bound to their past experiences, Feisst summarises that Cage dismissed improvisation because he believed it to be generally descriptive of the performer rather than what happens in the performative moment (ibid., p. 40).

Later Cage would utilise methods that removed his personal taste from the selection of material, relying instead on chance procedures or naturally occurring patterns. It would appear that by limiting personal influence Cage was questioning an assumed human-nature hierarchy. This is a thorny position firstly because Cage's decision to "overcome [musician's] personal taste and remove value judgements" (ibid., p. 43) is a value judgement in itself. Secondly, as Posthumanists would later suggest, any influence we have is indelibly *of nature*<sup>7</sup>. Improvising with an instrument is surely descriptive of what is happening when two objects interact. It surpasses Cage's request to imitate Nature, it *is* Nature. It is this interaction that I set out to highlight in this thesis.

The crux of Cage's criticism was that improvisation "does not lead you into a new experience, but into something with which you're already familiar" (Darter in Feisst, 2009, p. 42). Jon Corbett observes that Elliot Carter later made a similar claim, that "a musical score is written to keep the performer from playing what he already knows" (Carter in Corbett, 1995, p. 223) to which Parker has elegantly retorted that "improvisation is played to keep the player from playing what the composer already knows." (Parker in Corbett, 1995, p. 223) This competition for authority in originality

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<sup>6</sup> In contrast notating improvisations was a dominant methodology for Giacinto Scelsi. See Uitti (1995).

<sup>7</sup> See Pepperell (2000; 2009).



also adds to the rejection of an opposition between improvisation and composition suggesting instead that a different dichotomy may be posed, which we will return to below.

Cook differentiates between composition and improvisation suggesting that “improvisation is largely characterized by the sequential, concatenationist processing ... whereas composition places greater emphasis on the temporal restructuring facilitated by a representational medium” (Cook, 2014, p. 332). He terms these two activities as (for composition) “hierarchical” and (for improvisation) “heterarchical”.

For Cook, improvisation is the real-time arrangement of elements that are not pre-defined in temporal terms. In the case of free improvisation the elements are also malleable such that they can develop during performance, which chimes with the following comments from Berio and Prévost. For Berio, jazz improvisation is a “rapid extraction of musical modules and instrumental gestures from the great reservoir of memory” (Berio in Peters, 1999, p. 83). What form this “memory” takes is a key issue of this thesis and I later address how this might be managed by improvisers. Prévost writes that “[i]n its general currency the word ‘composition’ refers, as Cardew suggested, to possible *future* activity” (Prévost, 1995, p. 60). Composing alludes to an organised presentation of material whereas improvisation organises pre-conceived material. Free improvisation is concerned with the moment-to-moment organisation of nascent material. A slight reduction of these positions might suggest that composition is about the future, improvisation is about the past, and free improvisation is about the present. The following discussion elaborates and challenges these assignments.

Cook acknowledges that an overlap exists between these composition and improvisation suggesting that every performance of composed music has elements of improvisation in its realisation, since “all musical notations are to some degree fuzzy, ambiguous, conflicted, or incomplete in respect of performance” (Cook, 2014, p. 334). Here Cook alludes to the idea that a desire to represent a musical idea is ultimately confined to the limitations of notation systems and the precision of performers. For improvisers, who are often not reliant on notation systems, the role of the instrument and memory (including instrumental techniques) become limitations themselves, a crucial point that is developed throughout the thesis.

When Cage did embrace improvisation it was as a vehicle to emphasise a process. A well-known example of this is the instruction to perform on un-mastered instruments, in particular cacti: “the instruments are so unknown that as you explore, say the spines of a cactus, you’re not really dealing with your memory or your taste. You’re exploring. As you play you destroy the instrument – or change it – because when you make a spine vibrate it begins to lose some of its pliability.” (Cage in Feisst, 2009, p. 45) This exemplifies Cook’s description of improvisation as “heterarchical” and also raises questions about the role of memory. For Cage’s ever-changing cacti, memory and technique are redundant. Instead, the resistance in the spine provides the player with the necessary information each time they start to pluck it.

### **Composition: Improvisation and Notation**

In contrast to the above compartmentalising descriptions, Parker has criticised the notion that “improvisation is talked about as an activity distinct from composition” (Parker, 1992) and highlights examples which demonstrate the complex considerations we must make about these practices. His descriptions reveal a muddying of the assumed distinctions between notated and improvised musics. He writes:

Whether music is played directly on an instrument, read or learnt from notes made on paper beforehand or constructed from algorithms or game rules operating directly on the sound sources or controlling the players, the outcome is music which in any given performance has a fixed form. A form which, *inter alia*, reflects the procedure used to produce it. But that this is only part of the story is clearly illustrated by the fact that Boulez can title a strictly notated work "Improvisation sur Mallarme", or that Ferneyhough can write such complex notation that he knows the resulting performances will deviate substantially from what's written or that a group improvisation by the SME can be called "Webernesque" or my solo improvisations can be compared with the work of a process composer like Steve Reich. (ibid.)

Parker first suggests that composition and improvisation are both illustrations of decisions while also noting that the cultural elevation of the score (which represents decisions rendered *prior* to performance) continues. For Parker, the increase in detail

and precision (in the advent of New Complexity in particular) has “narrowed the scope of legitimate interpretation” (ibid.) since advanced notation has removed the possibility of a flexible reading. Here Parker is illuminating the possibility of an improvisatory approach even in performances of written music. In a later interview he clarifies his position that “improvisation is a compositional method, and notation is a compositional method” (Parker in Warbuton, 2010). Rejecting a dichotomy between composition and improvisation, Parker is instead calling for a dichotomy between improvisation and notation, both of which he considers as approaches to the compositional task.

Elaborating on this notion Parker lists ways in which he has worked with the saxophone in unconventional ways (including circular breathing, top-bottom tonguing and cross-fingering techniques) and explains that this has informed his awareness of what the saxophone represents. He writes:

All the technical considerations mentioned above are part of a total developing awareness of the instrument as a channel for the imagination but at the same time as a shaper and perhaps limiter of the imagination. In the end the saxophone has been for me a rather specialised bio-feedback instrument for studying and expanding my control over my hearing and the motor mechanics of parts of my skeleto-muscular system and their improved functioning has given me more to think about. Sometimes the body leads the imagination sometimes the imagination leads the body. (Parker, 1992)

The descriptions provided by Parker certainly illustrate that he has developed a complex set of ideas to work with which is akin to a composer’s organisational techniques, leading us to question the notion that a composer is someone who writes things down in advance of a performance. Parker’s approach instead expands the notion of notation suggesting that engagement with the instrument itself can represent the text or source material to which an improviser refers. Comparing this with the example of Cage’s cactus, we can see that they both provide the player with something to work with. But where the cactus serves to eliminate the requirement of a particular type of memory, for Parker the saxophone contributes to his memory. Whereas Cage enjoys the imperfectible response to a cacti’s spines’ and disallowance of precise techniques, Parker’s approach calls for the instrument’s behaviour to invoke practiced responses in

new ways. The improviser can think of their instrument as a heterarchical store of possibilities that seduces known and unknown physical gestures.

The worlds of notation and improvisation have met both in scores that call for improvisation and improvisations that are then noted. Parker refers to a comment from John Coltrane suggesting that he didn't think he could (re)perform transcriptions of his own improvisations (Parker 1992). Prévost questions the accuracy or validity of transcription in a music that has been liberated from needing to be written down first, suggesting that free improvisation advances possibilities past the scribable:

Christian Wolff has observed that most improvisations would be impossible to notate: he thought this especially true of AMM's. Does this also mean that such work is unthinkable in 'traditional' musical terms? (Prévost, 1995, p. 17)

A different kind of notation is important for Lewis. He suggests that residencies should be initiated to assist in the *documentation* of ongoing musical development. Rather than striving for a two-dimensional record of an improvisation, it is the appreciation of the processes involved that is vital to Lewis, as can be seen in his educational curriculums (Lewis, 2005, p. 95). Describing a compulsory improvisatory module in his faculty, Lewis suggests that "a different set of criteria for musical excellence in performances was being institutionally promulgated." (ibid.) Explaining how journals related to process were evaluated, Lewis writes that they were graded "not on the basis of polished excellence ... but for expressive content" (ibid., p. 102) and that the performances were evaluated "not only with regard to the more tangible factor of whether or not I found the audible results interesting, but as to the thoroughness of engagement with the assignment itself." (ibid.)

The suggestion that representation is being relegated relative to the *development* of an activity extends far beyond the classroom. Lewis describes many musicians working in American universities who "have sought to create environments where experimental music becomes a site for investigating and eventually refashioning concepts of music and musicality." (ibid., p. 98)

## **Brief Personal Reflection and Summary on the Status of Improvisation**

My own use of the clarinet is explained exactly in the way described above. Rather than refer to a particular score or set of ideas, I examine the clarinet's instrumentality and materiality to engage in an ongoing discovery of the instrument's capabilities.

I have outlined the rise in prominence and acceptance of free improvisation alongside calls for its inclusion in notable performance platforms as well as with an academic rigour that is enjoyed by other contemporary musics. I have also detailed attitudes to free improvisation that question its merits in contrast to traditional approaches to composition before providing a case for free improvisation to be understood as a compositional methodology.

Thus there is a rationale to develop an understanding of free improvisation, in terms of processes, as a broadening of the compositional act. I therefore propose a detailing of developing relationships that play out in free improvisation. In the next section I summarise Bourriaud's *Relational Aesthetics* which will assist a furthering of a relational conception of free improvisation.

## **Relational Aesthetics**

In improvising with natural materials, discovery replaces the expression of ideas or emotions. ... [These works of Cage] also reveal an ecological quality, where humans do not control nature but accept and try to discern her laws. (Feisst 2009:45)

Cage's appreciation of *discovery* in the improvisational act, which for him is exemplified in the playing of a cactus, mirrors the observations and demands of Lewis, Cook and Parker with regards to the importance of what is happening rather than just the results that emanate. The different terminologies they use (respectively: *necessity of documentation*; *processs*; and *bio-feedback*) reveal different aspects of this shared concern.

Recalling Rowe's concerns about reviewers of improvisation, Eric Clarke also suggests that literature regarding composition "tends to be concerned more with the products of creativity, because they are observable, than with the processes that go into it, which are

less so." (Clarke 2010:60). The authors and musicians I cite above illustrate that an emerging literature<sup>8</sup> is addressing this difficulty and that to develop an understanding of free improvisation an awareness of the processes involved is a crucial contribution.

Rather than presenting a demonstration of techniques, I argue that improvisers demonstrate a development of a technique's investigative possibilities. I detail my own approach to this in chapter three. Similarly for Prévost the development of his meta-music relies on "making skill a virtue rather than a means" (Prévost, 1995, p. 5). In free improvisation skill is redefined to demonstrate the ability to create and develop relationships rather than to curate a written composition or an established idiom. The artwork becomes the art of work. Since material is generated from the improviser/instrument exchange, that relationship is an essential component of this thesis. It plays a profound role in my own engagement with free improvisation.

In this section I summarise Bourriaud's Relational Aesthetics (2002) which is a detailed study of installational art with an emphasis on the playing out of relationships. In this respect I suggest it parallels with some of the processes involved in free improvisation and serves here to expand on the role and revelation of a musical practice that goes beyond realising decisions made prior to performance. After discussing Bourriaud's text I briefly discuss ways in which relational aesthetics has had particular resonance for me as an improviser.

Although relational aesthetics refers to a visual art movement initiated in the 1990s that deals with large-scale installations, an instrument-based approach to free improvisation can be described in parallel to relational aesthetics since they share elements of organisation and construction. Indeed an event of free improvisation itself could be considered as an installation of musicians, instruments, an audience and a venue. To frame this discussion I elaborate on the ways that free improvisation and relational aesthetics both present:

- 1) an emphasis on human interactions;
- 2) an elevation of artistic processes over its products;

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<sup>8</sup> Key texts including Bailey (1993), Borgo (2007), Corbett (1995), Nachmanovitch (1990), Peters (2009), Prévost (2011; 2008; 1995), Zorn (2014; 2012; 2010; 2009; 2008; 2007; 2005).

- 3) a re-examination of the concept of mastery;
- 4) a shift in how time is used;
- 5) a distinction between the occurrence of the work and its documentation.

### **1. An emphasis on human interactions.**

Bourriaud describes a shift in approach regarding modern art's interests such that the substance of the artwork comes to be generated from relationships between members of a group rather than serving as the representation of an individual's imagination. He writes that "[relational art takes] as its theoretical horizon the realm of human interactions and its social context, rather than the assertion of an independent and private symbolic space." (Bourriaud, 1998, p.14)

Instead of aiming to present a finished artwork, relational art works with relationships. Bourriaud later elaborates on the nature of these interactions listing them as "relations between individuals and groups, between the artist and the world, and, by way of transivity, between the beholder and the world." (ibid., p. 26)

Bourriaud suggests that the veneration of the artist as one "[e]ndowed with the authority of the signature" (ibid., p. 93) has weakened in favour of art that allows a blurring of origination. His claim is supported through several twentieth-century examples: Marcel Duchamp's ready-mades that reduce both intention and emphasis of personal craft; Roger Caillois' use of natural systems that instigate form; and Félix Guattari's rejection of "a pure "creator" relying on crypto-divine inspiration" (ibid., p. 92) that reshapes the artist as "an operator of meaning" (ibid.).

By removing the importance of individual human influence the artist can instead present a portrayal of universality, reassigning him/herself as an operator of uncovering, rather than an inventor of ideas. In this way the relationship between artists and objects gains agency rather than the empowering of material through concepts of representation. Instead of a contortion of matter into form it is in the innate logic of interaction that origination occurs. Objects and the relationships they provide become the substance as well as the source of material. Bourriaud writes: "Only a "transversalist" conception of creative operations, lessening the figure of the author in favour of that of the artist-cum operator, may describe the "mutation" under way" (ibid., p. 93).

In free improvisation musicians use instruments (or their voice) to interact with others in order to create & develop relationships. This approach contrasts with other forms of music making that rely on a pre-existing physical score that must be realised. Instead musicians bring knowledge of their instrument to the venue for performance and there they allow interactions to govern the creation of a group music. This is still true when playing solo. Rather than plan a scheme or architecture to follow, improvisers are free to make decisions in response to how elements unfold and this informs how they should continue. This is a vehicle of thought created by the relationships between the improviser, the instrument, the room acoustics and the presence of an audience.

When playing in an ensemble the decisions of other members cannot be predicted. This allows the expression of relationships to come to the fore as a force greater than the representation of an individual imagination. In this way relationships co-define a possible reality. From a multitude of sonic possibilities only one is actualised through a process of unplanned decisions, demonstrating a shift from the idea of a single creator (the “composer” as provider of a score) towards collective realisation (improvisation). As Bourriaud writes:

“In our post-industrial societies, the most pressing thing is no longer the emancipation of individuals, but the freeing-up of inter-human communications, the dimensional emancipation of existence.” (ibid., p. 60)

The three categories of relationships that Bourriaud cites are all present in free improvisation:

- *Between the artist and the world* – The relationship between a musician and their instrument in free improvisation provides an uncovering between a musician and the complex sonic logic of materials.
- *Between individuals and groups* – Free improvisation deals with new meetings as well as established groups<sup>9</sup>. Individuals create relationships to co-create and co-accommodate each other’s presence. As a group establish an approach the relationships begin to deal with a negotiation of its continuation and/or development.

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<sup>9</sup> The “working group” is a term suggested by Bailey (1993).



- *Between beholder (audience) and the world* – As we will discuss below, audiences become an intrinsic part of free improvisation. Improvisers have an interest in the audience's observations.

This migration away from individualism is also described by Derek Borgo:

Because we tend to value individualism and innovation so highly in this culture, we have often fostered, directly and indirectly, the notion that individual musicians spin their own individual web from whole cloth as they create. But as we move our gaze into the social and historical realm, and we realize that all thought is in fact social, the notion that any one individual is controlling the unfolding web becomes rather untenable. (Borgo, 2007, p. 158)

Regardless of the amount of work that goes into preparing for a performance, this notion of dealing with a relationship, Borgo's "unfolding web" remains crucial. As Parker writes:

However carefully I rehearse, practise and otherwise prepare for a concert, the material I bring with me must be open to final "tuning" and adjustment to the specific circumstances of performance." (Parker, 1992, unpaginated)

Improvisers invite a refusal of certainty into their performance to give performative agency to exploration and/or refinement of material through evolving relationships between musicians and their instruments, between musicians themselves and between musicians and their environments.

## **2. An elevation of artistic processes over its products.**

The presentation of construction as part of an artwork has many examples that precede 1990s relational aesthetics. It has been discussed by Darren Ambrose (2012) in relation to the art of Francis Bacon as well as Elizabeth Grosz (2008) and James Elkins (2000) who both encourage an aesthetics of the materiality of equipment. Bourriaud uses Jackson Pollock as an example to suggest that an art work can serve as an expression of reality in another medium. He writes "every canvas produced by Jackson Pollock so closely links the flow of paint to an artist's behaviour, that the latter seems to be the image of the former" (Bourriaud, 2012, p. 41).

For Bourriaud art must function while it is situated with its receivers. It is in relationships between an artwork and an audience where art must work. Opposing the image of an artist at work in his/her studio to conclude a piece for display, Bourriaud claims “Art is made in the gallery” (ibid., p. 40). It is only in the gallery that relationships between the work and its beholders can occur, giving weight to Marcel Duchamp’s claim (cited by Bourriaud) that “it’s the beholder who makes pictures.” (Duchamp in Bourriaud, 2002, p. 26)

Free improvisation elevates process over product such that an audience witnesses the construction of material as it is born into form. Rather than being fixed to a particular future sound, free improvisation is also concerned with the physicality of the instrument in the improviser’s grasp such that sound serves as an illustration of physical and mechanical processes, recalling the notion of an instrument as the text to which improvisers refer. As well as being a store of ideas to utilise, the sonic and haptic response to an instrument informs the future actions of the improvisations. The instrument is a vessel and a guide.

Free improvisation contrasts with other forms of music making because it deals with problems in the present by allowing an audience to witness the process of confrontation with technical and musical issues. Where the practice of “classical” music addresses offerings of the past (score) and strives to faithfully produce a sonic realisation in the future (performance), improvisers create an interdependence between past, present and future. In contrast to desiring an end point, improvisers seek to constantly explore and revisit operations and relationships. In this way improvisation can be thought of as a compositional method that organises modules or as a heterarchical process as described by Cook, above.

### **3. A re-examination of the concept of mastery.**

The rejection of representation also releases the idea that an artist’s tool must be mastered and techniques perfected for a pursuit and depiction of “genius”. In traditional performance musicians have needed to demonstrate competence on their instrument to present demands from composers in notated forms. As I discussed earlier, the instrument can now be thought of as the text to which an improviser refers and it is the development of that reading which is of interest from the point of view of relational aesthetics. Bourriaud refers to the tool and a practice as at one time being

“contemporary bedfellows” (Bourriaud, 2022, p. 65) but suggests that a new approach acknowledges that between these an ill-fitting relationship is not necessarily an inhibitor of art but can instead be the cause of it. This recalls the issues of materiality and instrumentality above, which I elaborate on in chapter one.

Bourriaud uses the advent of photography, during a time imbued with ideas of perfect replication, as an example to demonstrate that tools designed for representation can adopt alternative uses, which allow colour to become more than merely idealised mirrors of a visual reality. He writes:

Let us recall that, in its day, photography did not transform the relationships between the artist and his *material*. Only the ideological conditions of pictorial practice were affected, as can be seen with impressionism. (ibid., pp. 66-67)

Photography provided a fast and direct mode of representation, opening up the ideology surrounding visual art. Rather than pursue the craft of visual realism, some artists felt encouraged to explore how else reality might be presented. Elkins (2000) describes how Claude Monet reimagined the paintbrush as possessing a set of techniques itself, rather than simply responding to its yielders command. In this way the materiality of the paintbrush is allowed influence. The notion of becoming a master of one’s tools is re-examined in relational aesthetics. Rather than regarding the tool of one’s craft as a cultural object to tame, the interest lies in how the tool can generate relationships. Bourriaud writes:

“Technology is only of interest to artists in so far as it puts effects into perspective, rather than putting up with it as an ideological instrument.” (ibid., p. 67)

The use of instruments in this way is exhibited in free improvisation. Rather than perfect techniques or strive for complete awareness of an instrument’s capabilities for a performance, free improvisers invite uncertainty as a catalyst for invention. As Prévost writes: “In any creative act there is a conflict between the imagination and the materials.” (Prévost, 1995, p. 138) In this way the term “virtuoso” is expanded, disempowering the traditional route of technical mastery and making space for an interest in a pliable use of the instrument as a mechanism for investigation throughout

the course of improvisatory performance. The audience is invited to witness and enhance this continuous coming into instrumental knowledge.

Corbett suggests that an easy description of improvisation would be that a musician “employs a repertoire of possibilities” (Corbett, 1995, p. 222) but he goes on to explain that this is in fact similar for all musics and that this on its own would make possible talk of the development of “a personal language” such that every member of the improvised music community could be seen as “equivalent of a “culture”” themselves. That it is not simply this complicates discourse (and commerciality). As a player becomes adept at executing a technique it may no longer provide interest or the player may seek to utilise a technique alongside other techniques presented by another part of the ensemble or by themselves. This approach is misaligned and disinterested with the presentation of perfection – improvisers are interested in continual development. Corbett suggests that what must be added to this is “risk” (which he suggests can only truly be present in a fixed time span, an event) and “the repositioning of knowledge in relation to the musician and, therefore, history”. (ibid.)

Audiences thus witness the constant work in performance that is demanded by free improvisation and it is here that the concept of mastery continues to be most redefined. Improvisers subject themselves to risk via a fluidity of their instrumental knowledge and a constant questioning of the relevance of material they present. Risk is enhanced by being observed.

#### **4. A shift in how time is used.**

Bourriaud describes how an artwork can frame and define a measure of time in the present rather than offering a work from the past to be examined during an undetermined future. He describes these states as being “factual” and “monumental” (Bourriaud, 2002, p. 29). In factual time, the audience are “summoned by the artist” and become a component of the work, which charges time through the action that takes place in its frame. By encapsulating the events within a start and finish, Bourriaud writes, “The work gives a material quality to existential territories” (ibid., p. 99).

Bourriaud stresses that rather than merely completing an artwork by observing it, an audience gives it a “time span”. Suggesting that the artwork is itself affected by the process of being observed, he discusses this time span as: “Time of manipulation,

understanding, decision-making, going beyond the act of “rounding off” the work by looking at it.” (ibid., p. 59)

Audiences witnessing free improvisation necessitate one element of the performance, its approximate duration. Clubs, concert series and festivals designate an approximate expected length for each set. The audience thus stamps the concept of a time frame onto the performance which is only defined when the improvisation is complete.

Urgency results from the concentrated frame of focus that an audience provides. The event must continue for the duration and any challenges that are met become the fuel that defines the relationships. This is a new type of obligation to the audience that demands the development of skills to deal with unforeseen sonic activity and which generates focus as an essential catalyst for action.

## **5. A distinction between the occurrence of the work and its documentation.**

Bourriaud demands a distinction between the presented artwork and representations of its state in the past. For an art so reliant on framing the present this is understandable and also emphasises experience over product. Bourriaud writes:

Once [a] performance is over, all that remains is documentation that should not be confused with the work itself. This type of activity presupposes a contract with the viewer, an “arrangement” whose clauses have tended to become diversified since the 1960s. (ibid., p. 29)

The notion of a “diversified contract” raises questions about audience expectation and their role in the artwork, briefly discussed above. An audience of free improvisation witnesses a unique and irreplicable performance. But rather than expecting novelty at each concert, free improvisers seek to cultivate in an audience the understanding that while similar events will occur, the processes of creating and adapting all three of relationships mentioned by Bourriaud (between the musician and their instrument, between the musicians, and between the musician and their environment) are being refined.

When improvisers do record (either gigs or in a studio) it is a documentation that serves as a snapshot rather than a definition of their practice. In this way recordings serve to intensify a process of a constant development of relationships. The fact that

performances are received through recording equipment agrees with Bourriaud's stance that the documentation cannot be equated with the artwork. The possibility of editing further distorts the façade of representation that a recording might falsely represent. We will return to notions about recording later, and in chapter four I elaborate on some of the issues associated with recording.

### **Summary of Relational Aesthetics and Free Improvisation and Personal Reflection**

Bourriaud's Relational Aesthetics demonstrates a rigorous understanding of the role of relationships in the production of installation artworks and I have listed parallels with an approach to free improvisation with particular reference to the ways that I practice it. It brings to the fore a reconfiguration of understanding in contrast to traditional analysis and discussion that dominates most musical forms as described by Clarke, above (see page 18). This relational reading of free improvising allows for a discussion of interactions (including the improviser/instrument interchange which is the main concern of the next chapter) and thus rejects the veneration of authorship while reimagining the role of mastery. It posits free improvisation as a framing *of* time rather than a presentation of material *in* time and as such is unrepeatable with respect to the interest in decisions made at the time of creation. A recording becomes a record of an event rather than an ideal description of a pre-formed idea as in traditional sculpture, photography or pop-music hits.

In my own execution of free improvisation the clarinet is an object to interact with and to explore physical and sonic phenomena. Like Cage's cacti spines the clarinet is complex in its consistency and deterioration. The clarinet's body is always degrading, its internal properties morphing with the rush of air and the gradual disintegration of matter. The reed weakens as saliva turns starch into sugar. The clarinet is not a static, stable object thus the clarinettist must adapt and work with minute unknowns that can spark huge variations. This reinforces the notion of a relationship in constant redefinition.

This process of interaction is one example of the effect of the clarinet on improvisatory thought. As I have written above, the clarinet's design represents decisions made by people prior to and in confluence with its performance (its instrumentality) but it also has naturally-derived properties that resonate when played (its materiality). The discovery of innate characteristics of materiality, which can sometimes be arrived at by

pushing limits of instrumentality is an example of Bourriaud's suggestion that the construction of the art constitutes its expressivity. It is a sense of discovery that I seek to present in free improvisation.

The emphasis on this relationship supports Bourriaud's notion that mastery is reimagined. Memory serves a different purpose in relational aesthetics and free improvisation. Rather than memorise a set of gestures to convey a sense of mastery, the instrument provides and enhances memory as an external store of possibilities that are accessed through playing. Muscle memory, so important to most other performers, is also vital to improvisers. It is the training of our bodies to assist instruments in their seduction of gesture. The familiarity provided by muscle memory also provides a platform of stability with which to investigate other areas. In the next chapter and in chapter three I further explore this idea.

Having explored two main themes that underpin this thesis – free improvisation as a compositional and relational methodology – and in both cases having briefly described my own approach with regards to the positions raised, I now move towards a discussion of tool-use in order to advance ideas about how a tool can be thought of in terms of an evolving text and how a relationship with a tool might be understood in improvisatory terms. Before this I provide a schematic outline of the thesis.

## **Thesis Outline**

The main body of this thesis is in three parts. The first part, consisting of chapters one and two, provides a theoretical contextualisation of the role of tools in the undertaking of creative work and I also consider the influence of risk and culture in free improvisation.

In chapter one I briefly consider the history of human's employment of objects and tools, drawing on definitions from Jacques Monod and Flusser. I note the power of bodily extensions provided by tools before discussing the special case of instruments with reference to Pauline Oliveros (2004). I then draw on Ernst Gombrich's observations (2002) that suggest a link between an artist and their tools, questioning the origin of creative thought.

This leads on to a discussion of the psychological effect instruments can have on musicians. With reference to Peter Evans's article for *Arcana* I discuss the tension that exists between musician and instrument in the improvisational moment which leads towards Bourriaud's description of the importance of materiality in works of art.

After a description of my own relationship with the clarinet, in light of the preceding discussion, I present the idea that a musical instrument surpasses our immediate biological resources and that the instrument deserves veneration for its role in the relationship-defining work. Through art theorists Elkins and Grosz I suggest that matter provides a vast store of potential for both artists and improvisers.

In chapter two I examine tool-use and its interaction with improvisational thought and suggest ways in which the instrument may provide material. I consider parallels to the common (idiomatic) improvisational strategy in which musicians refer to a body of knowledge or a repository of learnt patterns, drawing on Clarke's suggestion that the constructive powers of cognitive activity are limited. I show that in recent artistic movements there has been a questioning in the importance of self and culture and I unpack some of these issues in music with reference to Corbett and John Blacking. In relation to the influence of culture on individuals I consider Slavoj Žižek's observation of its indelible influence.

I then look at the role of freedom and risk in improvisational thought and the role tools have in this relationship. Again Clarke and Corbett assist the discussion of the ergonomics of musical training and its effect on inhibiting gestural variation. I show the importance of gesture and physicality in free improvisation and show how some practitioners temporarily modify their instruments as well as their physical approaches. I suggest that free improvisation provides a rare platform for engaging in risk as a useful catalyst for invention. Through the conception of an instrument as text, free improvisation is in a unique position to enable a detailed reading of an instrument's unpredictable elements. As such improvisers can elect to engage with a high level of uncertainty during performance, developing their skills of navigation and negotiation as they perform.

Finally I illustrate that free improvisation calls for a redefinition of the concept of mastery. I demonstrate this through the writings of Parker, Oliveros, Evans, Bailey and



Prévost and link these observations with Bourriaud's Relational Aesthetics. I recall the work of Gombrich, suggesting that art can only ever be a product of its materials.

In the second part of this thesis, containing chapters three and four, I intersperse contextual details about the clarinet's history with a detailing of my own use. I demonstrate how innate features of the clarinet (which stem from mechanisms to standardise sonic production as well as the material qualities of the clarinet) become the malleable elements which I employ in improvisation. I conclude by explaining why a mapping of the totality of the clarinet's possibilities is both impossible and contradictory to my methodology.

This is followed, in chapter four, by consulting a portfolio of my own recordings of improvised performances. I provide analyses and commentaries to illuminate and advance the findings of this research via practical examples.

In the conclusion I reflect on the findings of the thesis and suggest ways in which my playing will continue to be informed and developed as I continue. In preparation for part three, which is given in the form of a final recital, I explain that while the performance will not merely be a representation of the techniques described here, it will be informed by the relationships and investigative importance explained in the thesis. It will also serve to bear testimony to the intense practical research undertaken.

## **Part One**

### **Chapter One: Tool-use**

This chapter advances on the importance of an evolving relationship between the instrument and the musician to assist with detailing some of the processes at work in free improvisation.

Before discussing instruments directly, I begin by making some observations about objects and tools primarily with reference to the introduction of Jacques Monod's "Chance and Necessity" (1971) and Vilem Flusser's "Philosophy of Photography" (2014) since they both provide descriptions of the transformation of matter into usable objects. This assists an understanding of instrumental design and considers why these instruments persist to have influence in free improvisation. In this regard I draw on Pauline Oliveros' paper "Tripping on Wires" (2004) which introduces the posthumanist idea of externalised embodiment.

I then discuss how instruments fit into a category of objects that also contains tools used for visual art in order to present a discussion of tools and artistry. Ernst Gombrich's "Art and Illusion" (2002) presents an observation of tool-based art that is rooted in etymology, suggesting an historical link between an artist's style and the tools they use. This section concludes with a return to Flusser, describing the duty of photography to illuminate all of the possibilities of the camera's program and I draw parallels with free improvisation. At the end of this section I provide a description of how these initial ideas of tool-use are relevant to my own conceptions of free improvisation.

In the next section I consider tool-use and improvisation specifically. With reference to Steve Lacy, Edwin Prévost and John Butcher I suggest that for improvisers the instrument is an important ally of exploration which invites an individual approach. I then draw parallels between Flusser's photographic universe and improvisation suggesting that evolving techniques can draw on an instrument's materiality and instrumentality, introducing the idea that tension can be a method of working with an instrument's tendencies.

I next examine this tension through performative gesture with reference to Corbett and Eric Clarke as well as recalling Gombrich's work on the etymology of style. I discuss two clarinetists who have worked with apparent limits of the clarinet's possibilities in different ways, suggesting that both approaches encounter tension that issue challenges and opportunities.

With reference to my own use of the clarinet I then detail ways in which a relationship with an instrument can position tension as a source of leverage in the pursuit of further exploration. I continue with the concept of positive tension with a resolution of the "problem" of the instrument that I discussed in the introduction, leading to a suggestion that the instrument be venerated for its offering rather than feared for its limitations.

### **Considerations of Tool-use**

Tool-use is a consistent part of the human experience across cultures and histories. Tools extend mankind's operational potential beyond the realm of its own physicality, representing a shift from what was available with the use of the body to what is intellectually imagined and physically capable with the use of external matter.

Tools are a certain category of objects invested with an active function. The concept of a tool transforms matter into a condition prescribed by a design. Monod suggests a dichotomy between "the natural and the artificial" objects (Monod, 1971, p. 15), defining artificial objects as "products of human art or workmanship". For Flusser a tool is the result of matter being informed: "The object acquires an unnatural, improbable form; it becomes cultural" (Flusser, 2014, p. 23). In both cases the artificial object and the tool has an intended function and is unlikely to exist without human intervention.

Tools are thus testaments of human thought and as such are indicative of more than just their intended function. From stones halved to reveal sharp bludgeoning weapons to metal spears that leave the human grip (a disembodied flight of human physicality) tools are objects that offer a unique understanding to their user's biological, cultural and chronological context. A tool is a manifestation of ideas. As Monod writes:

The object renders in material form the pre-existent intention that gave birth to it, and its form is explained by the performance expected of it even before it takes shape. (Monod, 1971, p. 15)

Objects can further be divided into objects that are static, retaining their sole function, and those whose usability is malleable. A musical instrument is an example of this; it can inspire new uses. Classical musicians use “instruments”, artists may refer to their “equipment” or “apparatus”, and a studio musician may discuss their “gear”, but all these terms refer to a tool as described by Flusser or an object as described by Monod. I hope the reader will be tolerant of some slippage in terminology that is inevitably present when moving between discussing practitioners and various theorists of interdisciplinary activities.

Flusser also describes a genesis of tools suggesting that they began as extensions of various functions of the body demonstrating that tools originated as copies of human features:

Tools in the usual sense are extensions of human organs: extended teeth, fingers, hands, arms, legs. As they extend they reach further into the natural world and tear objects from it more powerfully and more quickly than the body could do on its own. They stimulate the organ they are extended from: An arrow simulates the fingers, a hammer the fist, a pick the toe. They are ‘empirical’.

(Flusser, 2014, p. 23)

A musical instrument can be understood as this kind of object, extending the desire to disturb vibrations of air in a manner that surpasses our immediate biological resources and intensifying our interactions with the world. Tools (specifically in this case, musical instruments) dictate their use because of their empirical nature. This is also observed by Oliveros who suggests a disconnection of body and production when she writes “instruments such as the accordion, harmonica, bandoneon, and concertina in the mid-nineteenth century ... all distance the performer from his or her own breath. The bellows replace the lungs; the fingers that touch buttons and keys replace lips, tongue, and windpipe.” (Oliveros, 2004) All instruments place distance between the musician and sonic production.

Flusser's notion of cultural objects as "improbable" elevates human activity above nature, a notion briefly discussed in the introduction with regards to Cage's artistic demands and this is challenged by Robert Pepperrell's posthuman manifesto:

Humanists saw themselves as distinct beings, in an antagonistic relationship with their surroundings. Posthumans, on the other hand, regard their own being as embodied in an extended technological world. (Pepperrell, 2009, unpaginated)

A musical instrument surpasses our immediate biological resources, as described by Oliveros. Like the empirical tools described by Flusser, instruments extend concepts of embodiment and enhance the role of bodily action. Sonic material thus demonstrates the actions of physical movement as well as representing abstract ideas.

Composers have played a role in stretching the expected function of instruments but improvisers are in a unique position of doing this in a highly personalised manner since they are acutely aware of their own abilities to extend technical possibilities. In doing so they reveal particular aspects of their instrument embedded in its design and I will return to this notion in the next section. Yet tools used for art enshrine ideas that are still suggestive of a particular artistic practice. Indeed, the tool and the artistic practice may be interchangeable. As Ernst Gombrich writes:

The word 'style', of course, is derived from '*stilus*', the writing instrument of the Romans, who would speak of an 'accomplished style' much as later generations spoke of a 'fluent pen'. (Gombrich, 2002, p.8)

To illustrate the effect of tools on the art they are used to create, Gombrich refers to Ludwig Richter's autobiography which describes the different stylistic approaches taken by two groups of artists each using different mediums to capture the same scene, suggesting that

The artist, clearly, can render only what his tool and his medium are capable of rendering. His technique restricts his freedom of choice. The features and relationships the pencil picks out will differ from those the brush can indicate ... Sitting in front of his motif, pencil in hand, the artist will ... tend to see his motif in terms of lines, while, brush in hand, he sees it in terms of masses. (ibid., p.56)

Here Gombrich is making a case for tool-led cognition. For musicians, the possibilities of what this instrument can present are representative of its physical construction. Flusser (2014, p. 23) and Monod (1971, p. 15) both suggest that an object's intended function dictates its design – it satisfies certain requirements. As such the designs and developments of instruments are made in response to cultural and aesthetic demands. The important point here is that the intention of an instrument is to assist a performer in the creation of music for which it was designed. Implanted therein are the ideas and possibilities that render the instrument a carrier of musical potentials, serving to demonstrate the instrument's instrumentality. Flusser writes:

Photographers ... create, process and store symbols. There have always been people who have done such things: writers, painters, composers, book-keepers, managers. In the process these people have produced objects: books, paintings, scores, balance-sheets, plans – objects that have not been consumed but that serve as carriers of information. (Flusser, 2014, p. 25)

A musical instrument clearly serves as a carrier of information and one that is not consumed (instead it is used to create the possibility of a sensory reaction) and in doing so becomes more valuable than the wood and metal it is made from. To reimagine this in terms of Flusser and Monod, an instrument represents the work done in *informing* material from *natural objects*. It also contains within it the entire possibility of what the instrument is capable of; it houses an exhaustive list of an instrument's instrumentality and materiality. As Flusser puts it in relation to photography,

The camera is programmed to produce photographs, and every photograph is a realization of one of the possibilities contained within the program of the camera. The number of such possibilities is large, but it is nevertheless finite: It is the sum of all those photographs that can be taken by a camera ... With every (informative) photograph, the photographic program becomes poorer by one realization while the photographic universe becomes richer by one realization. (Flusser 2014, 26)

For Flusser the program is all of the unique results and the universe is the collection of unique results already found. For photographers one photograph may provide access to a previously hidden realm of results.

Before looking at tool-use and improvisation in more detail I will first summarise the area of tool-use theory that is most pertinent to my study of free improvisation. For my praxis an important acknowledgement is that instruments exist in response to an existing situation but that their use is in fact flexible. It is in this reimagining of use that a relationship between an improviser and their instrument can be developed. As I shall explain below, this notion has been particularly important in providing a new way to conceptualise my own approach to free improvisation. The metal spear that I described above is akin with the clarinet I use daily - it fires at otherwise inaccessible ideas of activity. For me, improvising with an instrument is an extension of human's innate interest in exploring the magnitude of the world around them. Because I use an inherited instrument, the manifestation of ideas that it contains are influential to that end.

### **Tool-use and improvisation**

Free Improvisation is unique in Western culture in that it has no traditionally recognisable source material. Proponents of free improvisation don't refer to a score or a clear set of instructions nor do visual guides influence the course of their music. As described in the introduction (page 16), the only recognisable physical origination is the instrument itself. As Steve Lacy commented to Derek Bailey, "The instrument – that's the matter – the stuff – your subject." (Lacy in Bailey, 1993, p. 99) Musicians are often recognisable by the individual way they craft their instrument's sound, even when this incorporates a diverse set of approaches. John Butcher describes using opposing instrumental methods to improvising in two different contexts, suggesting that "I think anyone who follows this scene would have recognised that I was the saxophonist in both concerts." (Butcher, 2011)

The special relationship between a musician and their instrument is heightened in free improvisation because of the instant malleability of approaches available to improvisers. As Prévost writes, "No musician acts more individually than the improviser." (Prévost, 1995, p. 89). Improvisers are invited to access a detailed exploration of the potential of their instruments. Butcher writes:

A characteristic of much improvisation of the last four or five decades has been the utilization of "new" sound. Musicians and composers in all realms usually

have a passion for sound in the abstract, but improvisers have a special, and practical, recognition of how less common sounds lead to new concepts of performance (and vice versa). (ibid.)

Butcher is sceptical of the now ubiquitous use of “extended techniques” by composers, writing that “Because they are rarely derived from the player’s own needs and personality they invariably end up sounding like the awkward appendages they are.” (ibid.) In contrast, improvisers develop an expertise for refining “less common sounds” as well as a skill for deploying them in unplannable performance contexts. A complexity of sounds expands alongside a player’s individual physical investments both in practice and performance. For Butcher the saxophone is a wealthy source of sonic material both in its instrumentality and its materiality and this helps to posit instruments as a special kind of tool whose function is pliable yet which presents some indelible quality of the saxophone itself. He writes:

I’ve always felt it useful to restrict myself to sonic material rooted in the saxophone’s acoustics – to be aware of its traditions but to play with an ear for what lies hidden around the corner. I’m continually engaged with the mechanical and acoustic properties of a tube of metal in my hands and a piece of wood vibrating in my mouth. Even when I work with saxophone controlled feedback (nothing more than a microphone in the instrument’s bell connected to an amplifier) it still sounds like a saxophone to me because of the overtone structure embedded in its design and the use of pads and tone holes to change resonances. (ibid.)

Considering this approach it is not surprising that the human relationship with objects should receive special attention in an examination of free improvisation. Indeed, for Flusser the camera itself, rather than its products, is an essential crux of his *Philosophy of Photography* (Flusser, 2014, p.32). To examine the use of instruments is to begin to understand the fabric of improvisation. Discussing tool-use in this chapter will provide a clearer understanding of the musician’s principle observable task – to make decisions with their instrument.

There is a parallel of Flusser’s photographic universe in free improvisation. Many musicians have pushed the boundary of what has been expected of their instrument and in doing so have served as portals to reveal areas of the “program”, the design,



previously hidden. So as the “universe” becomes richer, so does our widening perception of the program. The possibility of one multiphonic leads the way for discovering all others.

Understandably, the expectation of an instrument’s capacity is often guided by how it usually is played. Seymour Wright has advanced the knowledge of what the saxophone is capable of and to which Brian Morton has observed,

[He] shows a command of the saxophone which in contrast to most ‘non-idiomatic’ playing – cynically translated as ‘make your saxophone sound like anything other than a saxophone’ – has deep roots in a tradition of playing that goes back to Frankie Trumbauer, Coleman Hawkins and Willie Smith. (Morton, 2009)

Recalling Butcher’s description of his own practice, the flaw in Morton’s criticism at some ‘non-idiomatic’ players is that it is impossible to achieve any sound from a saxophone that is not *of* the saxophone, a notion that recalls Flusser’s “photographic universe”. What Morton might be expressing is that the sounds don’t match what one has previously assigned to a conception of the saxophone.

The design of instruments typically facilitates the ideals of the music it was born into and I have described this as engaging with an instrument’s instrumentality. Playing against this design, asking the instrument to subvert its design tendencies while revealing its material tendencies, is to create tension between oneself and the instrument. It is to this tension that I will now turn.

### **Tool-use and Tension**

In questioning the anticipated performative action that is driven by a tool’s design improvisers confront a tension between themselves and the instrument. This tension exists not only in pushing certain physical elements of the instrument’s playability, but also in the musician’s history with the instrument.

Instruments interpret and transform the postural gestures of performers. Hovering over the keys of an instrument, fingers may ready themselves for movements as if imagining what might be played, an automatic posture honed by years of practice. Musicians’

fingers habitually know how to render chromatic material with such certainty as to make deviation uncomfortable. John Corbett writes:

If “correct” technique has been formed in conjunction with possible positionings of the performer in relation to the instrument, so has the instrument become complicitous in its very materiality. It is literally composed and manufactured by culture and its possibilities are previously encoded to the degree that the instrument facilitates facility. Implicit in the instrument are techniques for playing it; the knowledge one can have on an instrument is mapped out progressively in terms of a training that allows the musician to move only a certain way and thereby forces the instrument to sound only a certain way. (Corbett, 1995, p. 229)

In this way instruments standardise human action such that even the most adventurous improviser is restricted by an instrument’s guidance; tools serve as a filter of human interaction (I will elaborate on this below) and any swerving of this results in a physical tension, a resistance. For Gombrich there is a coupling between the outcome of the product, the “style”, and the tools an artist uses to realise it. When Gombrich says “style rules” (Gombrich, 2002, p. 56) he is suggesting “stilus rules”, that we are the servants of the medium we operate. The notion that tools frame what an artist can achieve mirrors Eric Clarke’s suggestion that a musical instrument has a grain, a given direction that shapes the potential output (Clarke, 2010, p. 42). Sonic material is an abstraction from the physical. This view is supported and advanced by ethnomusicologist Kevin Dawe who writes,

“musical instruments can transform minds and bodies, affecting states of mind as much as joints, tendons and synapses, ergonomics and social interaction—the joy of playing musical instruments is a joy that comes from exhilaration felt at physical, emotional and social levels” (Dawe, 2005, p. 60).

Rather than picking out features differently, using the tools to their best of their ability, Gombrich’s language suggests that he believes that the faculty of comprehension is altered by the type of tool in hand; that the tool acts to prejudice artistic thought, a direct impact upon cognition. This influence is the exhilaration described by Dawe that I identify with as an improviser. This extends to the employment of tension to antagonise an instrument’s design in order to make discoveries about its materiality. But this

tension also exists as part of the instrument's design, albeit accidentally. Corbett elaborates on the notion of tension and explains two approaches to improvisation:

“Contained in the very body of the instrument is the power/knowledge juncture capable of producing correct gesture. As a result, improvisers often divide into two groups regarding the question of technique/instrument: those who limit themselves to the instruments of culture and those who deface, deconstruct, and/or reconstruct them.” (Corbett, 1995, pp. 229-230)

However, regardless of the way an instrument is used it remains representative of itself and it alters what we present to the world. Gombrich uses the photographer's skill of choosing different exposures and papers to illuminate different possibilities of a negative as a further example of the limiting effect of a medium and moves to a general expression that

“the artist, too, cannot transcribe what he sees; he can only translate it into the terms of his medium. He, too, is strictly tied to the range of tones which his medium will yield.” (Gombrich, 2002, 30)

The carrier of art has become art. As Graham Harman writes,

“Only in artworks do rock, metal, and color first become what they are rather than being absorbed and suppressed by some ulterior function. Both masons and sculptors use stone. The difference is that the mason *uses up* the stone by fully assigning it to some practical purpose, while the sculptor lets the stone shine forth as what it is.” (Harman, 2013, p. 111-2)

There is something of importance here for the musician. The performer must work with and against the design of the instrument, its instrumentality, but also with the qualities of the matter that is exploited to carry the design, its materiality. For some musicians this will involve being aware of and negotiating physical habits that have been informed by the design and the material qualities of the instrument. Peter Evans describes this as “the tension that exists between a “player” and the thing “being played”” (Evans, 2009). In light of Harman's observations, an aspect of my own use of the clarinet in free improvisation now intends to let the clarinet “shine forth for what it is”.

For improvisers then, instrumentality and materiality are crucial considerations and the assumed program of the instrument is ripe for interrogation. Alex Ward and Xavier Charles are two clarinetists who have reached an advanced sophistication in free improvisation and their approaches together represent the two forms of consideration of the instrument that I have been describing. For both, their level of control is demanding much of the clarinet's capabilities regarding its instrumentality and materiality respectively. Hearing these musicians work at the boundaries of possibilities is a riveting experience and I attempt to describe their work here.

Ward's chromatic, multi-intervallic flourishes are pyrotechnical in their brilliance with a speed of digital movement matched by seemingly endless invention of patterns that develop or disperse at his will, which I consider to be a furthering of the chromatic language set out by Jimmy Giuffre.

In contrast, Charles magnifies the effect of air rushing through the clarinet's inner column with intricate embouchure manipulations and complex fingerings to reveal expanding universes of sound inherited from conditioned matter.

Rather than perform precisely controlled sounds or patterns, the importance for both Ward and Charles seems to be in locating sonic material through performance. The worlds of instrumentality and materiality receive detailed consideration from these two virtuosic performers. However, I do not mean to imply that Ward ignores the materiality of the clarinet, nor that Charles' dense textures are totally void of an awareness of instrumentality, rather that in these two pronounced respects they have demonstrated particular refinement.

The relationship between a musician and their instrument is important for Bourriaud's Relational Aesthetics which elevates the construction of the art as the essential component (point 2 in the introduction, page 22) and below I describe my own relationship with the clarinet which recalls Gombrich's observation that the stilus serves not just as a carrier of art but also as an indicator of art. In this light, improvisers present the continued interrogation of an instrument's program imbedded in both its instrumentality and materiality. My own improvisatory methodology seeks to embrace a fluidity between the approaches of Ward and Charles. Before addressing that in more detail in chapter three I will first outline the ways in which the clarinet has become integral to my improvisatory thinking.

## **My relationship with the clarinet**

Through constant use and therefore familiarity, the clarinet has become my primary interface for interacting with and thinking about sound. It is a filter through which I hear everything, through which I comprehend frequencies. When I hear a pitch or melody my fingers sometimes twitch the movements needed to create them. This physical response to sound is a common observation for many instrumentalists. As David Sudnow writes,

“my hands, arms, and shoulders ... *they* have almost perfect pitch. My thoughts don't.” (Sudnow, 1978, p. 63)

This happens through the acquisition of instrumental control. I have inevitably prepared an assortment of techniques that are derived from the design and materials of the clarinet. As I wrote in the introduction (page 7), it had been my concern that the presence of these properties may generate responses to a musical situation quicker than a response void of technical and mechanical limits. The practice of standard scales and studies accelerates acquaintance with tonal musics, but in non-idiomatic contexts motor habits that serve tonal music have an improper advantage over other physical manoeuvres such that truly non-idiomatic playing might be compromised.

This physical knowledge of a system is a convenient process but also points towards a potential dilemma. Have the size, shape and machinery of the clarinet afforded certain ergonomic preferences to pitches, phrases, dynamics and tones? Is improvisatory potential hinged to the technological capacity of the instrument? If some choices are made because of favoured physical conditions then do I play the clarinet or does the clarinet play me?

Indeed, the origin of this thesis was the observation that there are ideas I have that seem to come from the clarinet itself. It is my contention that the physical construction of an instrument lends itself to some instrument-specific actions. A number of these elements are obvious – the clarinet has a certain working dynamic range and keys that transform the fingers' actions into semitones. Other elements of clarinet music may be generated because of certain design attributes informing its special acoustical properties. Recalling Gombrich's concept of *stilus*, the clarinet itself may shape how the musician sees (hears) the world.

If that is the case then the clarinet itself can certainly be regarded as a site of memory and instruction. In light of the above discussion, my praxis now seeks to illuminate rather than limit the influence of the clarinet. I hope that through intense instrumental research, working with limits of various clarinet techniques and developing new techniques I will be able to offer a broadening of knowledge about the clarinet. Rather than try to limit disruptions presented by the instrument it is these features that now fascinate me and form the basis of my continuing relationship with it. It is an adorning tension that claims a resolution to the perceived problem of instrumental improvisation which I can now address.

## **Resolution**

Attitudes to one's instrument amongst improvisers are certainly not universally agreed. Violinists Bennett Hogg (2011) and Stephen Nachmanovitch (1990) both suggest the instrument amplifies the condition of the human, a resonance with the familiar assertion that the instrument is a vehicle of self-expression. This contrasts with David Borgo's discussion (2011) of the combined unit of saxophone and musician, when he comments "in important ways [Evan Parker's] horn shapes his playing".

Both descriptions point to the notion that the limits of a musician's artistic output may be defined by the possibilities of their instruments and this inspires many musicians to push at the capabilities of their instrument or to adopt completely new instruments. Harry Partch created elaborate instruments necessary to evoke his desired sound world. Ornette Coleman utilised violin & trumpet and Terry Day has at times performed with vast amounts of percussion. Other musicians prefer to limit what they have available, creating a greater demand for inventiveness. Alex Ward explained to me that he used to take clarinet and alto saxophone to all of his gigs but upon realising that a switch to the saxophone had become the inevitable accompaniment to louder, heavier musical territory he decided to just take his clarinet and work with that instrument alone, forcing solutions that would not have been necessary with the option of the saxophone. My own practice is also explained in this way. I am interested in how the clarinet can work when pushed to various limits and I explore this in chapters three and four where I address some of my own recordings.

Derek Bailey spoke of the relationship with his instrument in a way akin to Gombrich's argument, that improvisers may be led to consider reality in relation to the capabilities of their instruments (page 34). The affecting presence of the guitar on the choice and development of elements that Bailey explored, both in practice and performance, has been noted by Lash (2011) who states,

“while [Derek] Bailey's playing aimed at the greatest malleability and adaptability, it was nonetheless subject to a great many constraints which governed its coherence, one of which was the physical construction of the guitar itself.” (Lash, 2011, p.148)

And Bailey said in 2004:

“I wouldn't do what I do on any other instrument. It's very specific. I like the construction of it and the basic tuning, like fourths and a major third. That plays a significant part in what I play, harmonics, open strings, fourths.” (Bailey in Kennan, 2004, p. 44)

Revealed in these two quotes is, for musicians like Bailey, the necessity of a relationship with the instrument as a reliable interface. For me, playing on an unknown instrument would destroy the particular tension that develops from a basis of familiarity which I have found so useful. The clarinet represents something far more complete and refined than I am able to offer. As Bailey puts it:

“The instrument is not just a tool but an ally. It is not only a means to an end; it is a source of material, and technique for the improviser is often an exploitation of the natural resources of the instrument.” (Bailey, 1993, p. 99)

There is scope to reimagine the instrument problem described in the introduction as a blessing. By venerating the instrument it presents a new demand to work in order to discover its vast intricacies. As I see it, this is my work in free improvisation.

## Reflection/Veneration

To venerate an object rather than its user is to reconsider the role of the instrument in creating music as not just an amplifier but as a supplier of ideas. There is scope here to consider the instrument as a creative catalyst and I advance this in the next chapter.

Oliveros observes that throughout history memory has been supported by a variety of devices including the technique of written language. Suggesting that the instrument may act as part of one's memory, she writes

“this was true of the introduction of the alphabet and writing as well in the history of consciousness – technologies support memory.” (Oliveros, 2004, unpaginated)

As such, a musician's instrument as an object represents a set of physical parameters to be utilised. It is a database of possibility (again recalling Flusser's “carrier of information” and his “universe of the program”), a site where physical memory is ignited. For free improvisation the instrument serves as a repertoire of sonic minutiae which resonates with Bourriaud's manifesto on installational art. This is articulated by trumpeter Peter Evans,

“I've started to think of an instrument as many things all at once: a composition, a body of texts, a history, a noise-maker, an amplifier of ideas, and a real extension of the human body.” (Evans, 2009, p. 116)

This is a fairly common observation amongst proponents of free improvisation and certainly resonates with my own approach to improvising with an instrument. As an object, an instrument represents all of the decisions made by people who have advanced its design. It simultaneously informs the musician and gives voice to the musician's actions. For Evan Parker, the instrument represents a complex set of variables that may never truly be mastered. In Hopkins' film *Amplified Gesture*, Parker says:

“You couple yourself to that instrument and it teaches you as much you tell it what to do. So you're sensitive to . . . how it's responding to your efforts to control it. By hearing it, the way it's feeding back to you, you learn to control it better, so it's a very dynamic and very sensitive process . . . [But] the instrument at the same time seems to be giving you additional information so that there are



things you have under your control, but every so often something will go wrong. You'll lose control. [And] in that moment you are given an opportunity to learn something else that the instrument can do . . . the nature of the instrument and its will in relation to its destiny . . . [its] set of intentions in its relationship with you, and you start to find it difficult to distinguish yourself and your intentions from the instrument's intentions.”<sup>10</sup> (Parker in Hopkins, 2009)

I appreciate the notion that an instrument has its own destiny and that it actively imparts decisions in accordance with its will. However, I am sceptical of Parker talking about something going wrong. Instead these instances serve to reveal a mismatch between instrumental handling and desired sonic result. Rather than being an error, Parker explains that he sees it as an “opportunity to learn something else”. This is a positive example of what Luhmann discusses more generally:

To the extent that the basic technology guarantees the repeatability of operations in accordance with plans, the risk of unforeseeable disturbances also reproduces itself as a lasting, ineliminable phenomenon accompanying production. (Luhmann, 1993, p.93)

The “ineliminable phenomenon” is an instigator of ideas for Parker and something that he seems to enjoy realising has no reachable ground point. Parker seems to embrace the limitations of knowledge that can be achieved as a source of material for investigation in performance or practice, a product of the boundaries of a human/nature relationship. His praxis over the length of his career may have refined this process, but it is the friction/tension of the instrument that has continued to guide his approach and this is the approach that I have tried to cultivate in myself during the course of researching for this thesis.

Oliveros supports this notion when she writes,

I have attempted over the years to enhance my musical understanding, abilities, and performance as a human by using the musical tools that are available to me as an extension of my body. (Oliveros, 2004, unpaginated)

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<sup>10</sup> Transcribed by Daniel Fischlin (2009)

Oliveros' paper discusses the frustrations of tools that are *merely* human to such an extent that she seems to yearn for transhumanism in order to make use of the various emerging technologies that facilitate a greater scope of control, analysis and imagination than a single human could have dreamed of before. Here she mirrors the present enquiry regarding tool and responsibility when she asks,

what if the technology was all on board a posthuman body? ... At this point, who is improvising? (ibid.)

This is exactly the condition I experience playing an acoustic instrument. But rather than desire a refinement of the clarinet, an enhanced design, I opt for a continued learning of the vast intricacies of the clarinet I have owned for 16 years. As Elkins states in relation to many disciplines:

Despite the rise of multimedia, film, video, and installation, the majority of artists master their materials, and the majority of painters do not stray any farther toward modern technology than acrylic paints or brushed aluminium: not because they are suspicious of technology, but because there is so much to learn about even the simplest substances. (Elkins, 2000, p. 34)

By working with an instrument we afford it agency to uncover its totality. A musical instrument functions to shape vibrations of air and by doing so it imbues significance such that music can function as an activity of a listener, allowing frequency to speak of more than just its physical properties. Similarly as philosopher Elizabeth Grosz writes, "Art enables matter to become expressive." (Grosz, 2008, p. 4).

Instruments are special tools in that they allow artists to explore what is sometimes hidden yet indelible. An instrumental design doesn't eliminate that which is deemed unnecessary, instead characteristics wait to be explored – instruments invite exploration. By providing stage to the materiality as well as the instrumentality of an instrument we allow space for its veneration and thus we augment a curatorial space for its constant uncovering.

In the next chapter I aim to further the notions of an instrument's responsibility in providing material and guiding action. I explain that by grounding my praxis in the inheritance of an established instrument I aim to work with a material-based universality rather than my own personality.



## **Chapter Two: Matter and Material**

In this chapter I address ways in which musical material can be arrived at through techniques associated with tools, existing bodies of knowledge, the role of freedom & uncertainty and the reimagined act of performance in light of relational aesthetics. This chapter intends to advance my performative approach sketched in the previous chapter suggesting that as a store of memory the instrument not only provides a catalogue of material but also guides physical movements such that instruments inform the musician's approach to improvising. I also consider the role of other elements that influence the way instruments and musicians work together. In tackling these two main points the chapter also illuminates recent developments in my own praxis, helping to frame and define my current approach to free improvisation.

I begin by introducing Eric Clarke's ideas around cognition that suggest limitations of improvisatory thought. I then describe physical considerations of the human-instrument interface and suggest that externalism can include notebooks and a pool of conceptual and physical resources as well as the instrument itself. With reference to Barnett Newman's relationship with paint and Derek Bailey's treatment of the guitar I consider ways in which materials and instruments suggest usability which also informs an audience's expectations.

I then look at non-traditional approaches to technique with focus on accounts from visual artists and I suggest a parallel awareness of how external and internal physical influence can come to drive a body of knowledge that surrounds a musical discipline. This includes reference to artists Richard Serra and Bridget Riley as well as musicologists Blacking, Sudnow and Clarke. I end this section by explaining my own approach to the physical in improvisation, advancing the notion of an instrument's veneration.

With regards to freedom I return to the role of associated gestures that Corbett claims are often adopted in order to best play instruments in accordance with their design's intentions. Suggesting that a freedom exists in postural flexibility I also address how this is potentially paradoxical, that new gestures can become frozen into a "repertoire" of physicality, which goes against notions of gestural freedom.

Discussing the role uncertainty has to play in improvisatory performance, I begin by summarising some ideas surrounding risk in art theory with particular reference to John C. Welchman and Chris Burden before suggesting that free improvisation is unique in its acceptance of failure as a viable performance option such that unintentional sonic phenomena is celebrated rather than feared. In a world that treats risk with such mitigation I also question the reality of risk in free improvisation. After briefly explaining how my own playing only advances in a true performance context replete with unknowns, I then finish this section by highlighting that one difference between performers of written music and free improvisers is the valorisation of uncertainty.

I conclude with a discussion of the construction of musical material with regards to relational aesthetics, suggesting that in free improvisation an essential notion is an emphasis on development rather than pre-conceived refinement such that the concept of mastery is expanded. I argue for rethought *during* performance, which is often banished from other kinds of performance (usually reserved for traditional compositional approaches) and end with a brief description of my own approach to the clarinet.

## **Tools and Techniques**

While improvising a musician must make myriad decisions at quick pace and succession about the music's unfolding. Clarke suggests that there is a limitation of cognitive possibility such that a series of movements must be planned in advance and then executed rather than every single decision being made spontaneously:

The idea [of motor programming] is that complex and rapid movements need to be planned in advance, since human reaction times are too long for one action to follow another in a simple linear chain, and that the mind or brain therefore has to put together a set of 'instructions' that tells the various muscle systems what to do and when. (Clarke, 2010, p. 22)

This could be read as a provocation towards free improvisation which has often been labelled as working in the realm of spontaneous composition<sup>11</sup>. I argue that free improvisers do allow prior planning but only so that investigate work can be enriched

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<sup>11</sup> As I shall discuss later, the term "spontaneous composition" is offered by Keith Tippett (See McKay, 2003), among others.

during performance. In certain types of idiomatic improvisation decisions are made with reference to a pool of resources. “Planning in advance” may manifest in many ways. For jazz musicians this is often the employment of “licks” (learnt patterns derived from an idiomatic vocabulary)<sup>12</sup>. Many other improvisational systems have similar codified languages and are discussed by Bailey (1993)<sup>13</sup> but they all afford the performer the responsibility to make decisions as a contribution to the compositional process. Speaking of the choices of improvisation in general, Clarke suggests that

in improvising traditions ... players may choose in some cases to take the line of least resistance and produce what is either habitual or physically easy to manage and at other times to push the boundaries of both the musical material and their own physical control. (Clarke, 2010, p. 23)

Free improvisation invites this approach but does so unimpeded by conventional stylistic concerns. This physical consideration deals not just with the human body (in the case of the clarinet for example, the shape of the hands, the capacity of the lungs or the speed of the tongue) it also takes into account the physicality of the instrument - its designed layout of keys and its resistances. Advancing this idea, Corbett suggests that: “There are three bodies: the body of the performer, the body of the instrument, the body of knowledge.” (Corbett, 1995, p. 226). In chapter three discussing the musician-instrument network will help to explain the way I work with the clarinet in the performative moment. Below I will explore how the influence of the “body of knowledge” has been addressed by practitioners and theorists. First it will be useful to consult a general discussion of the interaction between musicians and their instruments.

Clarke groups “ergonomic and cognitive factors” (internal) together when explaining the production of musical material but suggests that style comes from “social and aesthetic factors” (external). He writes:

Ergonomic as well as cognitive factors explain how improvisers generate and produce musical material on their instruments, while social and aesthetic factors shape an improviser's style. (Clarke, 2010, p. 60)

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<sup>12</sup> The “Real Book” is an extension of this – a series of compositions that jazz musicians have either memorised or carry with them. It is a shared resource among jazz musicians.

<sup>13</sup> Bailey refers to the improvisational systems associated with Indian music, Flamenco, Baroque music, Organ, Rock and Jazz.

This suggests a separation of material and style which opposes the idea of Gombrich's tool-led artistic production and Bailey's coupling of his music and guitar. As Lash states, in Bailey's approach there is a clear link between the construction of the guitar and his style:

[T]he open string was conceptualized by Bailey as one of the three basic timbral varieties of sounds with stable pitch available on the guitar, alongside fretted notes and natural harmonics. (Lash, 2011, p.145)

From these three features Bailey would generate the material which would serve as his style. His notebooks<sup>14</sup> demonstrate a chronicling of ideas that he worked on in private which could then be used in a modular fashion during performance; a collection of ideas to be utilised at will rather than being a prescription for a composition. Lash writes,

Bailey continued the practice of writing down [fragmentary motifs] throughout his life, the aim being to develop a range of improvisational resources rather than to combine them into compositions. (ibid., p. 144)

The notebooks also demonstrate that Bailey not only developed different techniques to manage the material he was interested in but also advanced a notation system that could incorporate different ways of playing certain groupings. As Oliveros suggests, devices to assist memory (such as Bailey's notebooks) help surpass our biological capabilities. For Bailey then there were two external additions to himself – the construction of the guitar and the work done through the notebooks. Via Bailey we can think of preparations which enhance the possibility of improvisation.

The construction of the guitar and its role in producing material for Bailey can be seen in all musical instruments. Most western instruments in their general use work to standardise pitch production within the chromatic scale<sup>15</sup>. This is one example of how an instrument can organise the musician's actions – there is a range of positions on a guitar's fret or the piano's key which will result in the same pitch. As Flusser suggests, this is an example of how tools “liberate the human being from work” (Flusser, 2000, p. 72). Practitioners of free improvisation (notably Peter Evans as we saw in the last

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<sup>14</sup> Dominic Lash discusses the archive, held by Incus Records, and its implications towards the understanding of Bailey's playing (see Lash, 2011)

<sup>15</sup> Pianos have keys that correspond to set chromatic pitches, brass instruments have valves that allow only certain lengths of tubing, woodwind instruments have precisely placed holes and keys that work towards chromatic tuning, strings instruments have tuned open strings.

chapter), see the instrument as not merely an amplifier of ideas but a co-creator. The work that is done in performance illuminates this relationship. This “work” is important to Bailey who suggests a devaluing of the reliance on physical habits that drives most other types of performance:

When you can do something really well, that’s when it gets more or less no good to you. Because you know exactly what’s going to happen the moment you start it. You’re just going to do it. And there are some things I’ve never gotten the hang of and those are the things I quite like. I’ve been playing them for years, and I’ve never had complete control. I mean, I know exactly what’s happening. But I couldn’t produce the same thing twice doing these things. As soon as I can, I’ll stop playing them. (Bailey, 1975)

Painter Barnett Newman speaks of the same concerns of this work, as Shiff reports:

Newman referred disparagingly to “fancy tricks with the paint” and explained why he avoided them: “It [becomes] an endless search for a personality that never happens ... I do not work ... to express myself, to tell the story of my life, or to act out in painting a personality by acting out some character.” (Shiff, 2008, p. 255)

I find this a refreshing approach to an artistic intent that has been saturated in “self-expression”. Newman’s contempt of trickery is akin to Bailey’s rejection of traditional competence. Instead of curating predesigned and mastered techniques they instead opt for an investigative approach that valorises a medium’s innate, expressive qualities. They reject polished representation in favour of the relational. Peter Evans also encounters a problem of representation which for him is linked with reference, in self-appraisal:

[T]he trumpeter Steven Bernstein remarked that when one hears something back on a recording of themselves that they don’t like, *that’s* their sound – everything else in the playing is something they only like because it reminds them of music they are familiar with. (Evans, 2009:115)

Evans makes the case that self-evaluation can be linked to pre-existing sonic criteria that are shaped by what we’ve heard in the past. What we hear and “don’t like” might simply be something that isn’t recognisable to pre-existing notions of musicality. It’s



the sonic material that hasn't been standardised and accepted into the main. Because free improvisers are willing to embrace uncoded material this demonstrates an enhanced opportunity to convey the ongoing investigative relationship they have with their instruments. Free improvisers are unique in the development of material in the performative moment and it is the venerated instability of the instrument that serves as a body of knowledge in place of repertoire, idioms or norms.

Being aware of existing attitudes to bodies of knowledge will be useful to discuss the effect they can have on artistic endeavours and what this might offer to an understanding of free improvisation. In the next section I discuss artists that have presented a response to this question and I assess their transferability towards my own practice.

### **Bodies of knowledge**

An awareness of existing approaches has been described as a barrier to the creation of new artistic material. In his article, *To Risk Not Naming*, Shiff outlines some of the concerns surrounding subjectivity, suggesting that "certain artists seem to be driven to get beyond themselves, to get outside the culturally formed self, to lose or forget the self and its cultural orders." (Shiff, 2008, p. 251) Perhaps the most foreboding statement of culture's indelible constraint is Žižek's observation that

What we call "culture" is therefore, in its very ontological status, *the reign of the dead over life*. (Žižek 1992:54)

Shiff points to comments from two artists who deal with the influence of culture. Firstly, Richard Serra who is mostly known for his large free-standing metallic sculptures that demonstrate and rely on tensional balance, bringing the qualities of the metal and gravity itself to the viewer's attention. Secondly he refers to Bridget Riley whose work creates visual vibratory sensations through geometric repetition. Both artists work to reveal intrinsic natural phenomena outside of themselves. Shiff writes:

[Richard] Serra seems determined to escape whatever of himself belongs more to his culture than to his immediate experience. Only in this way does sensory experience break free, become wild ... To avoid style and type-casting, art

would need to generate sensations appearing to derive from the situation or condition just as it is – sensations resulting from the way the materials themselves work, or how a body, any human body, operates. (Shiff, 2008, p. 259)

This description, emphasising the importance of physicality, illuminates an essential component of free improvisation. Rather than advance or reflect on certain stylistic norms through gradual motivic development, improvisers generate material from the way their bodies and their instrument work together. Free improvisation demonstrates a collaborative work between bodies and instruments which has precedent in ethnomusicological studies; most notably in Blacking's *How Musical is Man?* (1973). Blacking notes evidence of symmetry in the hands of kalimba players which prejudice the formation of musical material.<sup>16</sup> The formation of material as a result of the shape of the hands (and indeed the entire human physicality) is an important consideration for me as an improviser. In chapter four I identify areas where my hands (and individual fingers) take turns to operate and thus influence musical material rather than material dictating when my hands should act<sup>17</sup>.

Clearly physicality can be an important catalyst for stylistic direction. Providing a different stance on his idea of a separation of material and style (page 51), Clarke had previously suggested:

A rather different way to look at the musician's physical relationship with his or her instrument is therefore to consider the ways in which the design of the instrument, inherent characteristics of the body, and demands (or opportunities) of the music work together in an optimizing manner. (Clarke, 2010, p. 23)

And later:

Playing music is an intensely physical activity, and it is inevitable that the physicality both of the performers' bodies and of the instruments that they play will be manifest in the sound patterns that are produced. (ibid., p. 42)

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<sup>16</sup>Blacking and John Baily later developed this observation through the study of lutes from Afghanistan. Baily wrote that "John Blacking had a long-standing interest in what he later came to term 'the biology of music making'" (Baily, 2006, p.107) which seems an appropriate term for the current discussion.

<sup>17</sup> This is a central tenet of Sudnow's 1978 study, *Ways of the Hand*, which argues for a physical-centric approach to learning jazz piano

In all music the relationship between a musician and their instrument is an important component of the music's production, but it is most evident when a musician is improvising without reference to an idiom. Since physicality is not contorted into gestures prescribed by an expected musical language, the body can respond to the slightest nuance of sonic activity in a highly personalised way. Free from stylistic demands and expectations (and these belong to the musician themselves as well as the audience), the improviser is free to navigate material in collaboration with their own body and their instrument. By allowing an approach that stems from human interactions, its voice inevitably presents a certain universality that speaks of an inherent logic related to humans and tools.

Shiff also explains that Riley also sought to eliminate subjectivity which, since 1961, she attempted through a removal of personal involvement with the construction of the art. By employing assistants to produce her canvases she hoped to create work that was not compromised by her own physical training and instead could present the effects of geometric repetitions in its purest form. De Kooning had also attempted to limit cultural influence by drawing with his eyes closed, relying purely on haptic sensation instead of a visual feedback. In that way the work could mirror the effect of a physical world rather than responding to the emerging visual work that would be bound up with cultural awareness. According to Shiff however, De Kooning's hand was already indelibly trained by the culture surrounding him and that "Riley solved the de Kooning problem by taking out her hand entirely" (Shiff, 2008, p. 256), thus making the suggestion that to make art devoid of a culturally trained physiology one's own physicality has to be absent from its production.

By not wanting to be physicality active in the production of her work, Riley sought an expression of the external world free from her own influence such that matter might speak of its properties un-impinged by her influence. Contra to this, my praxis seeks to embrace and express the very personal, human features Riley sought to remove. Instead they are filtered through an object which provides a distancing. For me the clarinet is a prism that allows a fluid relationship that embraces my own physical actions and their sonic results. Developing sonic material demands a new physicality while the development of physical gesture itself results in new sonic results.

In free improvisation then, the musician's instrument is an object through which human physicality is translated and informed as a result of the instrument's built-in suggestive tendencies. As such it is a praxis steeped in a critical interrogation of the instrument's design. Indeed as a reading of Žižek's quote suggests (page 54), instruments reign over our desire to play them. It is this that I hope to express through free improvisation.

In the next section I turn to two areas improvisers need to consult in relation to tool-use: freedom and uncertainty.

## **Freedom**

Corbett (1995, p. 227) discusses how imposed "traditional" ergonomics, through tutelage and a desire to replicate a certain set of techniques, serves to prohibit alternative uses of an instrument, which reinforces the expectations of what the instrument can do. He explains that as well as having techniques for particular sounds, there is the posture of the musician which is trained towards a cultivation that serves particular musics. He advances this point to suggest that technical training disallows deviation from a particular style.

In classical guitar training, for example, sounds that are otherwise obtainable - through a variety of "extended techniques" - are proscribed by a set of hand positions that cultivate correct and well-disciplined musicianship. (Corbett 1995, p. 227)

And later:

The improviser's task, then, is to subvert this disciplinary action at a number of levels: gesture, the object-body articulation, the orchestrated body, or a combination of these. This does not mean the abandonment of discipline altogether. It requires re-discipline. New techniques, new gestures, new responses. To reposition music in relation to the body of the performer, the player must be willing to stretch, must not be fearful of the exposure and detection. Abandoning virtuosity or embracing it: both become possibilities. (ibid., pp. 227-228)

When Corbett talks of abandoning discipline, rather than a complete deracination he calls for a resituating of technique that doesn't rely on the execution of a precise series of practiced gestures. In this way improvisation becomes a music more akin with mountain climbing than of gymnastics<sup>18</sup>. By refusing to rely on a set of perfected gestures associated with a codified idiom, the music that results speaks of more than the representation of a practice. It is a freedom to embrace gestures that have not been linked with a particular style but that are nonetheless informed by prior experiences. Corbett cites Phil Wachsmann who expresses this motivation:

The real feeling of the music is not in the sound – it's something going on behind it ... the gestures, which provide the beauty. (Wachsmann in Corbett, 1995, p. 228).

In this way the instrument can be regarded as a transformer of human movement which reveals physical gesture to a sonic world. The gestures are continually informed by the responses the instrument makes when touched – this is the basis of muscle memory discussed in the previous chapter (see page 28). In light of this musical elements can be re-examined. The focus on physicality elevates the effects of contact over abstract notions well-known to other musics. Corbett writes:

Melody, harmony, and metrical timekeeping are therefore less significant and tend to be elided in favour of surfaces: rubbing, clicking, snapping, overplaying, overblowing, growling, slapping; skin, mouth, tongue, nail, lips, arm, torso, face, hand. The audible possibilities of each player's body are the basis of this language, its "genotext." (Corbett, 1995, p. 228)

By building an idea of technique on the physicality of each human and their instrument, Corbett suggests the emergence of an individualised music. He writes

Structure is not abandoned, it is individualized ... it exists not at the level of the "score" or the "tradition," but in the friction between the player's body and culture (in the form of the body of the audience, the other players' bodies, or the body of the particular instrument used). (ibid., pp. 228-229).

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<sup>18</sup> I acknowledge this may be a rather strange analogy but I will discuss this further below.

Corbett suggests that subversion of an instrument's established gestures "displays a "lack of technique" in the sense that the action takes precedence over the specific tones or sounds produced." (ibid., pp. 230-231). "New gestures" of course have sonic components which Corbett calls "a sound that is the image of the performer's fingers" (ibid., 231) and this echoes Bourriaud's example regarding Pollock that his art was an image of his physical behaviour as he worked (see page 22). Corbett lists several musicians as examples of this approach where the instrument is momentarily appropriated into a world of gestures that were not imagined by its design. In the next chapter I will outline my own uses of the clarinet as a detailed example of this approach, exploiting the instrument's materiality as well as referencing its instrumentality.

Through this process of redefining technique is the possibility that a gesture becomes as habitual as fingering a scale and as such it can become deployable with ease at an ill-matched moment. Corbett writes: "For the individual improviser this is the danger of the gimmick, or trickery" (ibid., p. 231). Countering this, what Corbett calls for is a malleability of technique that is grounded not in ideals of product but of process. Essentially, this is the same proposal made by Bourriaud, outlined in point two of the introduction. Corbett writes that

desire is not constituted in the codes themselves – technique, personal and idiosyncratic materials, even in the individual's coveted "sound" – but in the implementation of those elements: not in *owning* the codes, the techniques, but in the process of developing them (ibid., pp. 231-232).

## **Risk**

With reference to an idiomatic tradition, the expectations that an improvising musician must adhere to are relatively clear. Within a praxis that rejects this representation the roles of success and failure are less straightforward. Through a capitalisation of the friction supplied by instrumental use, uncertainty becomes an obvious component of an improviser's praxis. The risk of engaging with uncertainty has the potential to act as an agent to intensify focus which serves as a catalyst in performance.

Art and critical theorist John C. Welchman suggests that "the modern subject is caught up in an ever-expanding network of predictive and proactive stratagems for the

management of risk.” (Welchman, 2008, p. 9) He notes that much of these changes have been “engendered by the development of quantitative ideas” and the results of which actually serve to remove the danger of risk from us. To Welchman risk has become a forbidden entity, hemmed in by systems of control that he portrays in alarming terms:

For, in addition to being subjects of the spectacle, we are also hyper-actualised citizens, under-written, over-ridden, speed-bumped, over-drawn, and not occasionally maxed out by the hydra-headed nooses of fiscalized social control that snatch the administration of risk away from us. (ibid.)

Free improvisation therefore provides a rare platform for engaging risk and even allowing failure. In light of the discussions regarding Bailey, Newman and Evans, the concept of risk itself is questioned. As performance artist Chris Burden explains,

I never feel like I'm taking risks. What the pieces are about is what is going to happen. Danger and pain are catalysts—to hype things up. That's important. The object is to see how I can deal with them. (Burden, 1975, p. 70)

Thus for some activities uncertainty may be an essential component of a psychological preparation. For musicians, going on stage with the presence of uncertainty can therefore be a crucial catalyst towards their work. This is important for Richard Barrett:

I don't think it's at all appropriate to be too complacent about sitting in front of an audience and saying, yeah, we can do this. The music always turns out better if we're constantly on the edge of thinking it isn't working. (Barrett in Gilmore, 2009)

When Corbett discusses risk in improvisation it is framed around its elimination and embrace. In contrast to performing written music, improvisers operate in a music that has no tangible “score” which clouds the perception of “mistakes”. While some mistakes might be obvious (saxophone squeaks for example) other unintended sonic activity may go unrecognised. Some elements perceived as accidents might be intended and indeed some practitioners (as Evan Parker described in the last chapter) express that accidents serve as a guiding towards new material or insight. As philosopher Daniel Dennett puts it, “Sometimes you don’t just want to risk making mistakes; you actually want to make them – if only to give you something clear and detailed to fix. Making

mistakes is the key to progress.” (Dennett, 2013, p. 20). It is in this sense Corbett goes as far as suggesting that improvisers “cannot “do it wrong””. (Corbett, 1995, p. 222)

Yet Corbett also discusses risk as something for improvisers to embrace as a methodology. Because there is no precise demand or expectation “the risk of failure, of complete collapse, is everywhere present” (ibid. p, 222) and improvisers need to have the skills to navigate in that kind of world. Derek Bailey had already described improvisation as being suitably equipped to explore unknown territory, saying: “One could approach the unknown with a method and a compass but to take a map made it pointless to go there at all” (Bailey, 1993, p. 127). Educated discovery is key.

My own praxis embraces risk by demanding that aspects of my playing are worked on during a performance or in a situation where something is at stake, assisted by an established urgency. Where there is no insistence to continue with an investigation, for example when playing solo at home, it feels impossible to generate a similar mental environment. Risk can’t be fabricated, instead we must put ourselves in situations steeped in risk. Welchman talks of this *authenticity* of performance arising out of *challenge*:

As with extreme sports, there may be a drive to establish progressively more challenging obstacles in order to preserve logical and physical exertions that make the experience authentic. (Welchman, 2008, p. 32)

In extreme sports risk is an essential component of the activity since with nothing at stake there would be nothing with which to work against and exhilaration would be absent. Some performers of written notation may hope to remove uncertainty from their performance but improvising musicians see this as inauthentic and void of challenge. When Chris Bonington writes about mountain climbers it could easily serve as a description of the thrill musicians feel in free improvisation. They prepare themselves to deal with uncertainties such that excitement manifests in exercising that skill. Bonington writes: “The excitement of [mountain] climbing is going into a danger situation and then using your skill to obviate danger.” (Bonington in Apter, 2007, p. 39) To reimagine this in terms of free improvisation, the entrance into a terrain of risk may provide an improviser something with which to grapple. The skill set that Bonington demands in his own excursions are akin with Bailey’s analogy of only relying on a compass. A further parallel is that free improvisers demand an ongoing development of



the ability to navigate unknown territory and they unfold this relationship in performance.

### **Free Improvisation and Relational Aesthetics**

An important component of relational aesthetics that I discussed in the introduction is the notion that mastery is reconsidered. We have seen that improvisers including Derek Bailey, Evan Parker, Peter Evans and Pauline Oliveros think of their instrument as having an effect on their decisions in improvised music; that the instrument and the musician work symbiotically. This upends the paradigm which suggests a musical instrument must be mastered and tamed to the demands of the genre it is serving. Improvisers work to prepare for performances in such a way as to develop and question a relationship with their instrument rather than to simply control it. It is in this light that we can re-examine the concept of mastery.

The emphasis on relationships posits free improvisation as an ongoing activity rather than a finalised (re)presentation. The transparency that is offered to an audience (and fellow musicians), then, is more akin to an artist's studio than a gallery. Richard Barrett describes his process of performance as research, suggesting that performance is a vital methodology towards his praxis. The value of the risk itself is in how it can antagonise relationships. Unlike Bailey, Barrett does seek an end point for his ideas, but the process in which he arrives at this is through investigative performance. The naming of the definitive version is done after it has been played, not before. Until then his duo, Furt, are still engaged in exploration as a principle concern. Barrett writes:

What [Furt] generally [does] is work on some particular material, or some structural or poetic idea, whatever it happens to be, which then goes into our live performances until we have a recording which seems to encapsulate the idea as fully as we'd like it to. Then it's a finished composition. (Barrett in Gilmore, 2009)

A distinction sometimes between improvisation and composition is that composition presents the results of rethinking whereas improvisation is denied it – an improviser can't take anything back<sup>19</sup>. However, this reading disregards rethought during

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<sup>19</sup> See Bailey (2012).

performance where a situation is tackled a number of times, each time being informed by previous approaches. In improvisation we witness the process, not just the outcome, of rethinking. Developing elements of playing can itself be thought of as a mechanism of rethinking that transcends one performance into several, a tour, or even into an entire lifetime of performances. It is in this depth of revisiting where mastery can now be located.

Similar to the approach described by Barrett, I aim to develop strategies to manage uncertainties as they manifest in performance. Since the clarinet is the medium through which I am a practitioner of free improvisation it deserves special attention in this enquiry into improvisatory performance. Everything that I play is indicative of the clarinet not simply because it comes from the clarinet but because the clarinet is continually conditioning me to experience reality in a particular way. As Gombrich writes, “The artist ... can only translate [what he sees] into the terms of his medium. He ... is strictly tied to the range of tones which his medium will yield.” (Gombrich, 2002, p. 30)

I will now move to part two of this thesis, which begins with a more thorough account of the clarinet. I provide contextual information about the clarinet’s history as well as a detailing of techniques I use in improvisatory performance which will provide useful guidance when providing analyses and commentaries of recorded examples of my work over the past few years.



## **Part Two**

### **Chapter Three: The Clarinet**

This chapter mirrors my approach to free improvisation: while surveying certain zones of activity I dovetail between historic considerations and an apparent abandonment. As a clarinettist I am part of its history at the same time as I seek to question its influence. An important aspect discussed below is the use of existing familiar gestures which are then transposed onto other areas of the clarinet in order to provide sonic material that is rooted both in the familiar and the uncertain. This is the appropriated role of muscle memory discussed above (see pages 28 & 50). What I know guides the exploration of what I don't.

My intention here is not to detail the entire history of the clarinet or to present a detailed scientific study of its acoustical nature. Instead certain elements of the clarinet's history and its response to my physicality will help to illuminate my current praxis. By engaging with an instrument that is not completely mapped out the investigative role is enhanced; it is the sound of exploration that I aim to generate in performance. As such this chapter is a survey of the territory rather than a manual to follow in the improvisational process.

While the clarinet's design bears testimony to attempts to standardise its production of music, my praxis incorporates its inherent, residual, and untamed possibilities. From this stance I suggest that my praxis is in part defined by the innate physical-acoustic condition of the doctored raw materials that the instrument presents.

Alongside descriptions of the clarinet's normal use, its instrumentality, I illustrate how my own approach to the instrument utilises unintentional features of its design. It is in this way that the use of tools for art advances Monod's observation about objects in chapter one. As discussed in chapter two, the expected function of an object's design is only part of the way artists can approach tools. Artistic tool-use can invite unexpected functionality and this is a key approach for my own praxis with free improvisation, drawing on the materiality of the clarinet.

Some of the questions and concerns raised here will be answered in the recordings and analyses/commentaries that I present in the following chapter. In turn further questions that arise there will be left open to feature in the culminating performance given at the end of the process of this research. Throughout this chapter I refer to examples which can be found on the accompanying DVD. The files are also available online<sup>20</sup>.

## Contextual Detail

The modern clarinet that I use is a response primarily to the demands of composers and performers of Western classical music's history. The clarinet represents a current end-product of an evolution through the past three centuries that can also be observed in compositions and pedagogical texts.<sup>21</sup> While the clarinet isn't frozen in its current design, my interest here is in the clarinet that I have used since I was 14 years old, the instrument that has been the main constant in my musical life.

An easy execution of chromatic material has proved an essential feature of the clarinet with regards to the role it plays in Western music. As we saw in the introduction (see page 9), Prévost suggests that this is a response to the ubiquity of equal temperament in Western music and that sol-fa tonality has become a norm to which most music is assessed. This pervasive influence on listening not only conditions our aural engagement with music but also has ramifications on the way that an instrument is able to take part in musics that don't necessarily elevate those particular frequencies. Derek Bailey writes cautiously of chromaticism, as an *imposition*:

“Equal-tempered chromaticism is an abstract imposition with a very particular history, but it is deployed here as a grid through which the guitar's physicality is made to pass...” (Bailey in Lash, 2011, p. 151)

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<sup>20</sup> See <https://www.dropbox.com/sh/e1vrxl1iwu260d/AADA6owAljvT4kiUHapBg8SJa?dl=0>

<sup>21</sup> In 1785 Amand Vanderhagen wrote *Méthode nouvelle et raisonnée pour la clarinette*, his manual for the clarinet, and in doing so was the first person to set down extensive instructions for playing the instrument including such important elements as fingerings, posture and articulation. See Blazich (2009). The manual references and informs Denner's invention (as an adaptation from the chalumeau) and his mechanical work and defines the clarinet's operation and the origin of its cultural identity, representing the starting point for all clarinetists. See also Berger (1975), Brand (2012), Brown (1984), Brymer (1990), Lawson (1996), Richmond (1972) & Thurston (1956).

It is interesting that a “particular history” should render such expansive influence on listeners and performers. The “grid” for Bailey is the guitar’s frets, set to semitones and for the piano it is the set of pre-tuned strings rising chromatically. For the clarinet, the tone holes and keys set the grid which intends to limit deviation from the chromatic scale. Tutor books teach a set fingering for each note and it is generally only for advanced students that ideas of timbre, pitch and harmony are introduced alongside the notion that each fingering is only a guide which must be assessed in the context of its musical intent. These advanced approaches elevate the role of fingers to more readily render influence to extend the clarinet’s range of expression (including textural capacity of multiphonics which I address later).

This understanding provided me with a starting point for deviating from a discrete reading of the clarinet to an analogue one. A crucial component that I will discuss throughout this chapter is the way that my use of the clarinet invites uncertainty as an opportunity for innovation. By interrogating the intentions of the clarinet’s design and its inherent capabilities I build a set of instrumental skills that develop during their deployment in performance. The minimization of strain necessary to play the clarinet has been one of the continuing goals of its design whereas my praxis invites strain as a catalyst through the development of new gestures. Below I describe some of the approaches towards this aim.

While some of the ways that I use the clarinet are already well known to composers and performers of contemporary music, others are utilised only by a small amount of improvisers and some are unique to my engagement with the instrument. For this reason I illustrate my departure from the standard use of the clarinet with the aid of audio and video examples. Rather than merely listing possibilities, these examples are improvised “etudes”. Part of the reason for this choice is that these approaches continually develop through investigative performance such that attempting to provide an exhaustive list would be hypocritical to my praxis. I also wanted these examples to demonstrate the investigate work at play in a praxis reliant on the constant development of material.

## **Glossary of Techniques**

In many respects the playing of a clarinet is a bizarre act far removed from normal human procedures. Muscle control in the abdominal area manipulates the diaphragm in a way that modifies natural duration of breath cycles, elongating and accelerating exhalation while shortening inhalation. The tongue contorts into various shapes that prepare air to work with the reed in order to create tone. Fingers move independently, precisely and delicately instead of grabbing, pointing or making a fist, as they are wont. At times the cheeks are a surrogate for the diaphragm exhaling air while the lungs are drawn down causing air to rush in through the nose; perhaps “circular breathing” is the most perverse of these biological disturbances. These descriptions could be read as examples of the calls of Oliveros and Corbett: technology seduces new forms of behaviour and gesture.

I invite the reader to view example 1 as an introduction to the way I use the clarinet in free improvisation. I will then refer to specific approaches that continue the actions described above which can be grouped into 4 key considerations of playing the clarinet: the role of the hands; the overtone series; the keys; and the embouchure.

### **The role of the hands**

The basic shape of the clarinet satisfies the size, shape and tendencies of the hands, limiting extraneous effort and assisting chromaticism<sup>22</sup>. In performance I sometimes seek to disrupt this composure. One of the ways I do this is by removing the right hand from its normal position, allowing new combinations of keys to be enacted<sup>23</sup>.

In example 2 I move the right hand up to top joint demanding new gestures and allowing new intervals at the sacrifice of the full range of the clarinet. The top two keys can now be opened alongside movement in the left hand resulting in new timbral and pitch qualities. The four trill keys at the side of the top joint can be executed much faster with multiple fingers of the right hand rather than the side of one finger as in the standard use. In example 3 I shape the hand into a fist and use a rocking motion rather than use fingers on the clarinet in their intended way. By using a fist on the side keys of the clarinet a much faster operation of their function is possible. As the right hand

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<sup>22</sup> Below I discuss the contribution that the clarinet’s keys make to this facility.

<sup>23</sup> Doing the same with the left hand provides little interest since all that can happen is slight variations on the open G note.

works with the top two side keys the left hand changes fingerings to reveal the effect of these keys on different lengths of clarinet. The warbling effect produced by the right hand serves to colour the pitches in slightly different ways.

I also question physical composure through instrumental deconstruction. Playing on just the top half of the clarinet, using the mouthpiece with the bottom half of the clarinet, and playing on just the mouthpiece are all examples of using the clarinet in ways it was not designed. These approaches distort the pitch tendencies of the clarinet and alter the tone.

In example 4 I play on just the top joint of the clarinet. This diminishes the normal intervals as they descend, providing a closer microtonal palate which lends itself to exploring different timbral variations of the clarinet's sound. The right hand, removed from its usual pitch control options is instead able to create flickers on each pitch presented by the left hand, imitating the approach of string instruments where the left hand sets the pitch but the right hand chooses how it speaks. In example 5 I play on the lower joint of the clarinet, with the mouthpiece reattached. Again a unique pitch set is created but this time with enlarged intervals. Since all keys available are accessed by the right hand, the left hand just serves as a support. Occasional twitching of the index finger reveals its habit to take part.

An extension of the first deconstruction is demonstrated in example 6. Because the top half of the clarinet is divorced from the lower joint & bell the clarinet can be closed entirely by blocking the end of the clarinet with the finger. As it is opened and closed at various points a rapid percussive approach becomes possible. In this example I also invert the normal production of sound (inhaling rather than exhaling) such that the set of expected results is further mutated.

Playing on just the mouthpiece removes all of the normal mechanisms to adjust pitch. I demonstrate this in example 7. The embouchure and hands must work to make pitch changes unencumbered by the pre-set lengths of tube that are dictated by fingerings. While this approach removes an important clarinet feature it retains the most important - the reed and mouthpiece work in exactly the same way as when they are attached to the



full clarinet, which helps remind me that the principal method of sound production is then modified by the rest of the clarinet<sup>24</sup>.

These approaches provide access to new material that is rooted in parts of the clarinet's construction. They lead to an enriched improvisational position by disrupting haptic and auditory familiarity. Since there are new connections between physical sensation and sonic response the auditory framework must work quickly to create new temporary associations in order to assist the development of material. The use of the clarinet in this way thus celebrates special unintended possibilities through investigation away from the familiar, marking it out as a useful improvisatory mechanism.

In example 8 we see several of the techniques describe above and below: the hands move from their established positions; there are percussive patterns at work which combine to reveal densely intricate results; I use flutter tongue. A particular point I want to draw attention to is at 1'39" where I hold the right hand down in various fingerings, each time moving the left hand fingers. Different pitch material emanates from this process. Rather than choose these fingerings for their pitches in performance it is the feeling of the fingers on the clarinet that dictates their initial use. The pitches are special because they speak of the material complexity of the clarinet.

These approaches celebrate a contortion of the grid of chromaticism. Except for the example that uses just the mouthpiece, these fingerings are guided by existing knowledge of how the clarinet tends to respond but it invites uncertainty to fuel its exploration. The physicality of the clarinet's chromatic grid is translated into new pitch sets so that the fingers can't rely on the sonic-haptic familiarity normally available and investigative necessity is enhanced.

### **The Overtone Series**

I discuss the clarinet's keys in more detail in the next section but here I mention the one key that most defines the clarinet's identity. The clarinet accesses higher notes of the harmonic series by accelerating air as it crosses the tip of the reed. Most woodwind instruments work in a similar way, but the resultant note is an octave higher. The

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<sup>24</sup> I discuss the workings of the embouchure, mouthpiece and reed below.

clarinet's particular internal shape dictates a dominance of odd partials of the harmonic series so a twelfth is the first sounding harmonic rather than the octave<sup>25</sup>. Early in the development of the clarinet, the addition of a hole at the back of the clarinet, controlled by a 'speaker-key', facilitated the acceleration of air needed to reach into the upper partials, taking work away from the embouchure and assigning it to the left thumb. As clarinettist Jack Brymer writes,

Denner [extended the compass upwards] by 'over-blowing', using the same fingerings but splitting the air-column at its upper end by the introduction of a small hole, covered or uncovered at will by a closed key. This was the 'speaker-key' and from that date to this it has always been the most important one on the clarinet. (Brymer, 1990, p. 23)

This trait of course has implications on the way scales are fingered over several octaves, how legato is considered, and how phrases are engineered. Whereas a saxophone can play a pattern in both octaves just by pressing the thumb onto the octave key, the clarinet must use a completely different set of fingerings to achieve the same result. This led me to consider that on the clarinet there are two types of note that could be said to be next to each other: those that *sound* a semitone away and those that *feel* a semitone away. The interval of low G up to middle Eb, a flattened 13<sup>th</sup>, is achieved by simultaneously playing chromatically one note up and adding the register key. I refer to this as a haptic semitone. The following is the notation of this example:

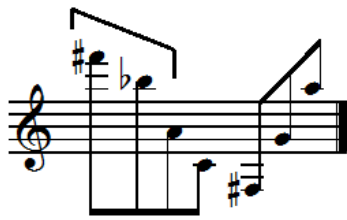


The overtone series of the clarinet has been very influential in the way the instrument is taught. In their tutor books, Stanley Richmond (1972) and Jack Brymer (1976) list examples in the repertoire where the clarinettist can utilise the fact that a phrase has been written with two adjacent notes that belong to the same harmonic series such that notes can be achieved by subtle embouchure manipulation rather than the quick movement of fingers. I will discuss Jack Brymer's excerpt of Messiaen's *Quatuor pour*

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<sup>25</sup> Much research has been done regarding clarinet acoustics including Gibson (1994) and Fletcher (2000).

*la Fin du Temps* since I think his analysis here can be advanced. The excerpt follows:



(Brymer, 1976, p. 74)

Harmonic partials do not always align with equal temperament which, as discussed above, has become an expectation in Western music. By opening the speaker key this helps to correct the third partial. When the fifth partial is desired another hole must usually be opened to correct the tuning. Normally this is done with the left-hand index finger but other options sometimes have timbral or pitch advantages. With regards to the excerpt Brymer writes:

We come now to a consideration of the harmonic on the Bb (third harmonic). This theoretically should be a top G, but is in most big bore instruments an excellent F sharp. (Brymer, 1990, pp. 73-74)

I argue that the overblown Bb Brymer describes is actually an overblown A, vented with a side key to bring it up to pitch. Without the vent we should expect a flat F#. What Brymer calls “unrelated notes” (bracketed) are actually the fifth partial of D and the third partial of Eb. They are *related* because they are accessed with the same fingering, but with different parts of the fingering acting as the vent to correct pitch. The following illustration details the two sequences. The bracketed notes demonstrate the intersection of the two sequences.

Awareness of ways in which one can traverse and exploit the clarinet's partials has been

put to use by composers of written music<sup>26</sup> and I utilise this approach when I improvise. I labour this point because these physical manipulations have been an important part of the clarinet's development, reaching into higher registers and changing the timbre of notes. They continue to present themselves as possibilities; in written music there exists a precedent for this kind of exploration in free improvisation. By moving certain finger joints are created which facilitate movement between the overtones.

The clarinet's overtone series is also influential in the investigation of multiphonics. In the next section I discuss multiphonics that result from particular fingerings but here I demonstrate embouchure multiphonics that utilise the overtone series.

In example 9 I manoeuvre the tongue and lower jaw in order to condition the air to exploit the clarinet's overtone series. Instead of referring to a set of embouchure positions to achieve particular multiphonics, investigative movement allows rapid development of multiphonic textures during performance. In the example I present two examples of multiphonics achieved with the embouchure. In both a fingered pitch is maintained while higher pitches are brought out simultaneously.

In the first example I gradually ascend, stopping at points where I am interested by the effect of the multiphonic whereas in the second example I use glissando in conjunction with the multiphonic so that rather than particular states of arrival there is an emphasis on continual movement. I am drawn to the unique contemplation provided by this approach, which is fragile. When considering the static positions I was drawn particularly to the beating effect at 4'' which I try to enhance. At 16'' I reach the limit of maintaining two pitches but I reengage the multiphonic only for it to collapse again. This collapse is partly because it gets more difficult to sustain when the distance between the notes is large but also because of the reduction of support at the end of my air supply. Circular breathing is not possible here because of the necessity to maintain a precise embouchure and so this activity is limited to the duration of normal lung capacity. Instead of being disappointed by this, I enjoy the breaks in sound as an

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<sup>26</sup> Saint-Saëns' clarinet sonata is a good example of written musical material that consults the physical possibilities, demonstrating in-depth knowledge of the clarinet's physical relationship with the harmonic series<sup>26</sup>. The first movement has several leaps of a twelfth, as well as several examples of otherwise tricky passages that are facilitated by leaving a right hand key down which doesn't alter the notes controlled by the left hand, a technical feature shared in the opening motif of the second movement. Saint-Saëns' Sonata seems particularly suited to the Clinton system clarinet. Playing the work on an older clarinet renders incredibly fluid movements which are lost on "improved" modern instruments. As I suggest at the beginning of the chapter, it appears that the clarinet's design has informed the composer.

example of what happens at the edge of control. It's a sound generated by the frictionous interaction between human and machine physicality which I feel gets closest to the sound of exploration. It is one of the reasons that I enjoy listening to improvisers like Seymour Wright, particularly on his CD *Impossibility in its Purest Form* (2012)<sup>27</sup>.

Example 10 is a slightly longer example that demonstrates the way I combine embouchure manipulations with familiar and unknown fingerings to reveal patterns of activity that continue the kind of work done by clarinet theorists such as Brymer and Richmond.

### **The Keys**

The clarinet's keys and holes are neatly positioned to be easily accessed by the fingers, enhancing the composure offered by the clarinet's body as discussed above and reducing the need for awkward finger movements and stretches. The silver of the clarinets keys gradually mould to the shape of the player's fingers so the instrument becomes an inverse of its wielder, a perfect fit. The clarinet is an object designed to feel comfortable as it is held.

Careful construction of the modern clarinet allows the hands to fall in a natural position onto the clarinet's body via the aid of variously sized tone holes and metal proboscises that access holes beyond the hands' reach to facilitate chromaticism. The modern clarinet's ability to produce these precise pitches makes redundant the older methods of producing certain semitone including "half holing", where a finger is placed over only half of the hole and "cross fingerings", where a non-adjacent finger is used. Rings<sup>28</sup> and keys<sup>29</sup> were introduced to extend the efficiency and scope of the hands such that holes with specific diameters at specific positions could be opened and closed with ease. This results in a much more accurate, secure and rapid execution of chromatic material.

Writing of the time ring keys were first added to the flute, Jack Brymer (1990) describes the effect as "when a wind instrument first became a perfect mathematical creation". (Brymer, 1990, p. 18) Illustrating the increased scope brought by metalwork, Brymer

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<sup>27</sup> Sebastien Lexar, Eddie Prévost, Seymour Wright, Matchless MRCD82, London

<sup>28</sup> Rings surround a tone hole such another hole is closed simultaneously as it is pressed.

<sup>29</sup> Keys operate with pivots such that they open or close holes elsewhere.

writes of French maker Buffet's clarinet (inspired by the ring-key system): "Seventeen keys and six rings help the fingers to control no less than twenty-four tone holes." (ibid., p. 47) What Brymer refers to as "perfect" is only so for the particular musical conventions that the instrument was developed to serve. Whereas the clarinet represents a documentation of a certain organisation of pitch, my use of free improvisation invites a re-patterning of the clarinet's keys to deliver different pitches such that the instrument and the hands can contribute to the music's content outside a pre-scribed path.

As I describe above all fingerings are only approximations of a pitch. The question of ensuring all pitches of all registers are in tune continues in performance through the use of venting and in design development through examinations into tone-hole shape and the further addition of keys. The slippage that exists between the overtone series and equal temperament is a feature that I incorporate into my praxis. I often invite pitches to speak untamed by forced temperament<sup>30</sup> and exaggerate the differences in pitch through the use of microtonal exploration.

I also explore pitch control through the use of half-holing or by using particular cross-fingering combinations. These recall the old methods used to play chromatically, making use of the new technologies on board the clarinet but with antiquated gestures. A control of certain microtones on the clarinet is made possible because of keys that were added to facilitate chromatic notes.

Rather than try to acquire and learn a quarter-tone clarinet, I opt instead for a continued negotiation with the clarinet I have learned with for so long and that has conditioned my musical understanding. The uncertainty that is present when negotiating microtones on the standard clarinet would alter with an advanced key system representing a different kind of tension. For now I opt for a continuation of the particular tension involved with discovering microtones that I have developed over many years. Akin to Elkin's comments about artists exploring the complexity of simple substances (see page 47), I cherish the depth of discovery through uncertainty that is possible on a known instrument.

I prefer the term microtone over quartertone since it doesn't just refer to a new set of discrete pitches; it is an analogue approach to using pitch, a vagueness that invites

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<sup>30</sup> "Forced temperament" refers to the use of venting described above. Seen in this way it recalls Bailey's notion of equal temperament as an imposition. It demands work to promote a standardisation.

discovery. Microtones also come with unique timbres which can become the primary reason for utilisation rather than precise pitch possibilities. This can include acoustic beating. In *Marella Moulting* by Dominic Lash (2013) microtonal variation is encouraged by the players such that a dense set of beatings occurs<sup>31</sup>. Rather than set precise pitches to be used, Lash allows the players to modify the pitch to encourage this effect.

The amount of fingerings that can alter a pitch by a small amount is vast. Taking the written G as an example, which is played with no fingers on the clarinet, it can then be subtly modified by placing myriad combinations of fingerings resulting in a slightly unique character and pitch. Since it would be impossible to memorise all of these for every note (thousands of fingering possibilities) I instead explore these possibilities during performance. Sometimes a repetition between two close microtonal pitches helps to reveal their qualities in relation to the other.

In example 11 I explore various fingerings most of which result in microtonal pitch (i.e. those off the grid of chromaticism). Rather than refer to fingering charts to plan this kind of improvising each sound contributes to an evolving musical contour. It is my knowledge of the clarinet in its normal operation that allows this kind of leading; I have a developed understanding of the movements needed to make various sized leaps while the lack of microtonal cataloguing invites investigation and allows surprise. This combination of the known and the unknown, pushing at elements alongside a stable reference is something I find exciting in improvisatory performance.

At other times, I opt for a slow investigation that deviates from chromatic fingerings. Example 12 shows movement of a finger in three different fingerings. This is possible because the holes are open, allowing a very precise deviation from a given pitch.<sup>32</sup> The examples show that while this transition can be very gradual, quick movement can illuminate the amount of variation possible. When playing with other musicians precise physical moments can be lingered on to realise intervals that are outside chromatic or quarter-tone imaginations. The removal of a formalised list of possible pitches offers the possibility of the sound of the note, or of an interval, to govern its use rather than a sound resulting from an established fingering. While this partially answers Derek

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<sup>31</sup> A url link to a recording is provided in the bibliography and a good example is at 13'53".

<sup>32</sup> The saxophone's design represents the opposite of this, large discs of metal close pads around hole such that this kind of nuanced investigation is not possible.

Bailey's claims of an "imposition" (see page 66), the grid of chromaticism serves as points of reference. Here familiarity and investigation work alongside each other.

Another use of microtones is in *bisbigliando* where the repetition of a note followed by a very similar note results in a particular type of colouration. In example 13 I begin with a fairly wide interval, allowing the right-hand ring finger to be flexible in where it makes contact with the clarinet, moving from just pressing the ring surrounding the hole to covering the hole. A slight dip in pitch gradually occurs as this transition takes place. When I add the left hand and right-hand middle finger, it is the same finger that produces the *bisbigliando* but because of the presence of the other fingers the interval is much narrower. In this way each finger attains a variety of responses instead of being relied upon to do particular singular work as is normal with standard clarinet technique. A percussive quality also results from the slap of finger onto wood which is revealed here through repetition. At 13" there is an example of new gesture where the right hand joins the left hand at the top joint, enabling a much faster movement than the left hand's ring finger would have been capable of. At 23" I use two microtone fingerings again demonstrating that the action of a finger can be modified by the placement of other keys. This then develops into a double *bisbigliando* and from that point the video becomes an etude of *bisbigliando* investigation in which I seek out new melodic patterns to play with. Again this emulates a percussive approach such that the sounds serve as different timbres rather than particular pitches. Throughout the example I explore pacing as well as subtleties available to different finger combinations. In the later video, example 14, I demonstrate a furthering of this approach which incorporates the use of tremolo alongside *bisbigliandi* as well as the use of flutter tongue – another example of colouring a pitch which I discuss below.

The use of special fingerings can also result in multiphonics<sup>33</sup> and I demonstrate one of these in example 15. Because these fingerings provide one result rather than an opportunity to investigate my use of them in performance is fairly scarce. They are usually rooted in prior discovery rather than malleability. I do arrive at certain fingered multiphonics through a combination of microtonal fingerings and a manipulation of the embouchure but I make no effort to memorise them. Instead, I work to enhance the

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<sup>33</sup> Much has been written about fingerings for multiphonics and it is not my intention here to recreate those lists. See Alder (2013) Rehfeldt (1994), Bartolozzi (1969). Also see Spaarnay (2012), Watts (2015) (for bass clarinet) .



investigative control of the fingers and the embouchure.

Part of what leads the above approaches is that each hand has their own identity. As Borah Bergman points out in her article *Crossed Hands* (2007), this is because “The hands are mirror images of each other” (Bergman 2007, p. 39). She explains the implication of this chirality with regards to piano playing suggesting that the most important feature of this is the large gap between the thumb and the index finger. The hands cannot serve in place of each other, and Bergman spent considerable time learning to be left-handed towards a style she calls “ambi-ideation” (ibid., p. 38). The clarinet’s design is certainly a product of this observation, which is why I find it so interesting to subvert the assigned relationships in the ways described above.

Okyung Lee has also demonstrated interest in the activity of the hands in her composition *Gesture Study #5 Wuther/Pok-Poong* (2008). The notation for the piece lists actions for each hand rather than conventional notation where the player must decode information into left and right hand movements to achieve a desired result. Lee gives no clue as to the sound of the composition other than its dynamic range. It is a study rooted in the interaction between particular physical movements in their relation to an instrument.

In my praxis, by allowing the hands their normal positions but sometimes moving them, I allow and question their functionality in areas where they were not designed. In this way it is a music that exists in flux between familiarity and the unknown.

## **The Embouchure**

Having discussed the role of the fingers on the clarinet I now move to discuss the importance of the tongue, which has a more immediate effect on the activity of playing. The sound of the clarinet is made when air rushing past the tip of the mouthpiece sets the internal column of air in motion which sucks the reed onto the surface of the mouthpiece creating a beat that repeats many times per second and forms tone. This percussive action is the starting point for standard clarinet playing since once the reed and the air is in motion the rest of the clarinet acts to modify this sound. The tongue adapts the speed, frequency, articulation and attack of the air as it passes between the tip of the reed and the tip of the mouthpiece. The two main functions of the tongue that I

discuss below are articulation and the embouchure (the shape made by the mouth and the tongue).

Articulation on the clarinet is normally executed by the removal of the tongue from the tip of the reed allowing air that is supported by the diaphragm to agitate the reed and pass into the mouthpiece. This marks the tongue's responsibility as arbiter of the breath. It can decide when a note is allowed to speak and when it must cease. The instant return of the tongue after instigation of a sound provides a small unit of sound, staccato. The pursuit of rapid articulation often plagues many clarinetists. As Frederick Thurston writes: "Although [staccato] is difficult for [the flute, oboe, or bassoon] too, I think it is easier than for the clarinet." (Thurston, 1979, p. 29)

Some of the techniques described below are responses to this limitation such that they extend the palette of articulation. When playing with string players, who have a wealth of articulation possibilities, some of these approaches have proved useful to enhance the possibilities of my response. This isn't always in pursuit of timbral mimicry but instead can contribute to a detailed ensemble texture.

To begin I want to demonstrate the percussive component of articulation and tone which I use in example 16. By allowing plastic or cardboard to serve as the reed the physical action of the clarinet's tone production is exaggerated. Since the material is more flexible than cane it can move further from the mouthpiece thereby reducing the frequency of beats such that tone is not created. Instead we hear the individual beats of the material onto the tip of the mouthpiece. Pitch and textural control is now given to the embouchure by using mouth position and pressure from the lower jaw to bring the reed's position closer to the mouthpiece, thus assigning a radically new gestural interface. As the tip of the reed is positioned closer to the mouthpiece, more repetitions are possible, eventually resulting in sustained pitch. This is a device I use when improvising particularly if I want to respond to percussionists or string players since the normal reed is narrow in its capacity for both mimicry and complement.

The technique of using the jaw is also possible with a normal reed but it is far more subtle. In standard use the jaw is employed to execute vibrato but by tensing the jaw extremely it moves erratically against the reed, disrupting air flow into the clarinet and a kind of pronounced vibrato is created. Pitch control weakens in response to a constantly changing embouchure. I demonstrate this in example 17. At times I use this to change

the timbre of a sound but in example 18 I wanted to demonstrate how it can produce unpredictable material. Here I combine the technique with tongue and subtle finger movement which creates sharp angular material. The articulation is created because the increased pressure pushes the tip onto the mouthpiece, silencing it momentarily. This action also gives a percussive quality to the breath when the reed is not engaged; the sound amplifies minute unseen physical movements.

Above I described how pitch varies when lowering the jaw. I utilise this as a method of creating microtones. In example 19 I use the embouchure to lower and raise the pitch of various notes. At 15" I incorporate the use of the fingers to enhance the range of the pitch bend. Pitch bend is an exaggeration of the technique used to achieve vibrato which typically references the grid of chromaticism - oscillating around a pitch. I view at least the first part of this audio example as doing the same – the fingers are in position while the lower lip modifies the pitch in reference to it; the player's hands serve to remind of a fixed pitch and it is to this that the embouchure can most easily return. This technique primarily offers the option to quickly change a note's pitch with a degree of familiarity. It's the unknown combination (through the other musicians, environment or the rest of the performance) that provides interest here. At the end of the example I use fingers and embouchure to create a glissando over an octave which is the natural extension of pitch bend.

I also achieve more rapid articulation by using side-to-side tonguing. I use this type of tonguing as an enhancement of speed limitations of normal tonguing. I find this particularly useful if I want to imitate a fast articulation technique of a string instrument but I am also interested in the sound of the limit of this approach. With high material the embouchure can't maintain a tone with the disruption that side-to-side tonguing brings. At the end of example 20 we can hear how the pitch leaps and even breaks as the tone becomes weaker.

Flutter tongue is performed by positioning the tongue so that a fast air stream disturbs the tongue's tip at a high frequency. Example 21 demonstrates my use of flutter tongue in various parts of the clarinet's range. While flutter tongue is well known to contemporary composers and performers, here I want to demonstrate my own limit of this technique to show how I use that as a source of sonic material. The first time this happens is at 14" but I am then able to go further with better support. At 22" I play a

note that I definitely can't execute with flutter tongue and this results in a lower sound. The physical action of the flutter tongue comes to the fore. As I attempt other "difficult" areas, the sound develops to a guttural, percussive sound. This represents a sound that has arisen from a challenge, the exact type of activity I seek to explore in performance.

Finally in this section I will discuss the breath and its role in phrase length. Composers are careful to write phrases that do not challenge the capacity of the lungs whereas improvisers of wind instruments often utilise circular breathing which disrupts the biological expectation of duration and sustainability. This practice switches the focus from the lungs to the instrument, allowing development to occur in much longer continuous sections, not restricted by a human limitation. Far from being an unnatural act, this is a use of the bodily apparatus that has precedent in many cultures. As Parker writes, "I had heard Roland Kirk use this technique and recordings of folk music from Africa and the Middle East were an inspiration." (Parker, 1992, unpaginated)

Finding ways to work with the embouchure, providing new physical gestures for exploration, is a particular interest in my development of timbral possibilities in free improvisation. Since it is the starting point of sound production, the old gestures associated with the fingers are given new roles. This in part responds to the difficulty of articulation described by Thurston but it also widens the palette of timbral attack that the clarinet can engage with.

### **Brief conclusion**

I have described ways in which I turn to the clarinet's inherent characteristics (both intentional and accidental) as a source material to issue investigative possibilities. The number of fingerings available multiplied by innumerable tongue positions as well as dynamic approaches presents a vast opportunity for exploration. Gaining competence over these techniques is reassuring and rewarding but rather than attempt to create an exhaustive catalogue (which would be impossible) I rely on an incomplete and therefore catalytic understanding of the clarinet's possibilities. In this way I use free improvisation as a vehicle for revelation that is put to work to investigate the clarinet. Peter Evans discusses this in terms of his own attitude towards technique.

When my face is having a good day (trumpet-speak for when your embouchure

controls the instrument the way you want it to), I am thankful that I have such a strong connection between this hunk of metal and my ear and that I have an opportunity to externalize musical ideas in a way that is interesting and fluid. However, bad days are actually more interesting – they serve as a “reality check” and tend to disrupt and recalibrate the basic relationship between my body and musical mind. (Evans, 2009, p. 115)

What Evans calls a “reality check” is the alert of disruptions in his own conceptions of the relationship between his music and his physicality. This relationship with an instrument is the crux of my work as an improviser; I am in constant pursuit of ways the clarinet can speak of the ideas conjured by our conjoined physicality. This involves adopting new gestures and approaches to provide distance from the clarinet’s standard use allowing hidden areas of the clarinet’s capacity to come to the fore. I work to uncover the clarinet’s materiality.

I agree with Butcher that the pursuit of extended techniques should not be as gimmicks or appendages (see page 37). Instead I aim to develop an approach to playing that sees the above techniques as an intrinsic component of my approach to playing. Just as I have no claims to have invented standard approaches, I have no right to calling any of these other approaches my own. What I do possess is the particular performative combining, ordering and development that occurs through a free improvisation. As reported in the liner notes to the recent edition of *Monoceros*, Parker says,

I never felt that I was the ‘inventor’ of this language ... I have no copyright on any of these techniques. They are inherent in the relationship between the human body and the saxophone ... I was strongly influenced by ... musicians who played things I found highly interesting, things I worked with and tried to develop further. (Parker, 1999, unpaginated)

Revealed here is Parker’s interest in discovering the possibilities of the saxophone rather than claiming ownership of them. For him the saxophone is inexhaustible. As an object he venerates it to the highest level:

I know I’ll die before I have penetrated the mysteries of the soprano saxophone. I could worship it as an object – I could stand it in a shrine in the corner – I’m totally mystified by what it can do. (ibid.)

My experience of the relationship with my own instrument has similar aims. As an object the clarinet came to me loaded with prejudiced intentions that stretch back through its history, representing the decisions of people and cultures. It is this state with which I receive the instrument and to which I respond as improviser. That mystery fuels my performative research. As I begin to describe above, the process is augmented by other musicians with their instruments to deepen an interrogation of the clarinet in both its instrumentality and materiality.

For a festival I recently co-organised with Benedict Taylor and Daniel Thompson<sup>34</sup> we were interviewed about how our trio continues to develop after many years of playing together. Our answer expands on the relationship I have suggested I seek to nurture with my instrument and indicates that I rely on other musicians to assist investigation:

Surprise exists in the “working group” aesthetic as a response to our ever-developing musical tapestries. Rather than resulting from a precise intention our trio develops in line with the excitement that we still experience from each performance and each other. We are interested in the continual development of common languages. As a trio we work. (Jackson, Taylor & Thompson in Chuter 2015)

My use of the clarinet benefits from collaboration with others because of the sonic material we present to each other. The duality of the word “work” hints at the notion that *success* is defined by the willingness to *graft* during the improvisatory act. In the next chapter as well as making analyses and commentaries of solo recordings I elaborate on ways in which the characteristics of other instruments place demands on my development of the clarinet’s ever-expanding glossary of possibilities.

Before moving onto the next chapter, I invite the reader to view example 22 as a conclusion to this chapter presented in the way that I am most familiar. The way I see the purpose of each performance in my praxis is three-fold. It works to approach a conclusion to what I have done in the past, to explore what I am doing in the present, and to pave the way for future investigation. In the next chapter I will elaborate on these three purposes.

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<sup>34</sup> CRAM improvised music festival August 29-31, 2015



## **Chapter Four: Analysis and Commentary**

In this chapter I consult some of my recent recordings. Some of these are tracks taken from albums that I have released during the course of the PhD and one track is from an album scheduled for release in 2016. I provide tracks from the following albums: Songs from badly-lit rooms (Squib box); Zubeneshamali (Leo Records); Hunt at the Brook (FMR; and Four Quartets (Confront Records). There are also videos taken from live performances at London-based clubs dedicated to free improvisation: The Others; Boat-Ting; and Improv at Lumen URC. However, I begin this chapter with two home recordings that were specifically designed to question the influence of the clarinet on my improvisational thinking.

The analyses and commentaries for each track vary depending on what I want to illuminate. In the majority of cases I have provided a chart which draws attention to some of the salient points of the recording before moving to discuss some of the issues that are grounded in this thesis. I invite the reader to listen to the recordings before or during each of these charts. These are included on the accompanying DVD (in the folder “Chapter 4 - Tracks”). The names of the files and tracks numbers are listed prior to each commentary. The tracks are also available online<sup>35</sup>.

In the first section, transcriptions serve instead of charts. In the last three examples, where the ensembles sizes are greater, charts would become too crowded with information to be useful. In these cases I draw out specific concerns in each case, looking at instrumental influence, concerns related to recording and the co-creation of musical material as a compositional approach.

Throughout I make reference to some of the points from previous chapters (as well as linking to examples from chapter three) but I also describe how the playing of the instruments I use *feels* as I improvise because that has become an important part of the practical research towards my praxis. The recordings presented here are not in

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<sup>35</sup> <https://www.dropbox.com/sh/e1vxrl1iwu260d/AADA6owAljvT4kiUHapBg8SJa?dl=0>



chronological order but instead present a progression from solo playing to larger ensembles.

### **1) Improvising to a drone**

**Location of recording: Home**

**Date of recording: 10/11/12**

**File name: Recording 1A - Clarinet in A; Recording 1B - Clarinet in Bb**

The first set of recordings I want to discuss is an investigation into pitch content under a particular condition. At home I improvised to a concert Bb drone for roughly a minute on both the A and the Bb clarinet. In setting this experiment I was interested in the extent to which my playing would differ on each instrument. I anticipated that the drone would suggest a modal response using Bb as a central point, the pull of the drone drawing the fingers to this pitch in both cases. Because both clarinets transpose, on the A clarinet this would be played as a Db and on the Bb clarinet it would be a C. Because these keys offer different levels of familiarity, I suspected different pitch material would manifest from the design of the instrument as significantly different key combinations would have been necessary to play similar sounding material. Very different hand movements are required to create similar sounding patterns.

Because this is an inauthentic demonstration of the way I engage with free improvisation, I will not linger on this part for too long. However, some key observations will help illustrate the presence of influence from the intervallic, auditory (responding to the drone) and the haptic (responding to the feel of the hands on the clarinet) and will serve as a precedent for the subsequent recordings. In the previous chapter I suggested that auditory and haptic influences are both important to my practice and I will elaborate on this throughout the other examples.

Below are the two transcriptions of these improvisations. Where I have suggested that free improvisation exists outside of notated material, this experiment can be mapped after the fact because of the pre-designed interest in pitch. Since the subject of this experiment was pitch material the following transcriptions show only approximate

rhythms. Some carried accidentals where the notes appear in close proximity are assumed. Where there is ambiguity I hope to have clarified this. I have notated and described as sounding, in concert pitch.

Clarinet in A (as sounding):



Clarinet in Bb (as sounding):



The A clarinet mostly switches between A aeolian, A dorian modes and A harmonic minor which seems rather a strange response over a Bb drone, quite replete with dissonances with only occasional moments of playing the drone note or a fifth above as one might expect.

On the Bb clarinet the modes used are much more expected than with the A clarinet. It starts tentatively before ending the line chromatically ending a fifth above the drone. The second line then outlines a Bb harmonic minor scale, again ending on the fifth. In the next line it continues in Bb harmonic minor but with the presence of a major third (D) near the start of the third line, continuing mostly with Bb harmonic minor. Chromaticism towards the end once more ends on the fifth.

Comparing the two it is clear to say that the clarinet in Bb has produced material that is much more in line with what I had expected from this experiment. This may be because as instruments, despite their similarities, their differences feel huge as I play them. The darker lugubrious tone of the A clarinet and the brighter Bb clarinet have always laid different claims to my imagination. The Bb clarinet is also the instrument more readily used and so I'm more familiar with the closeness of its keys; there is an intimacy there that doesn't quite exist when I play the A clarinet; perhaps this familiarity is quicker to match an external sonic world.

But I also have to acknowledge that playing in C is far easier than playing in Db, especially when being evoked into melodic phrases by a drone. Perhaps it is also my lack of familiarity with the particular modality suggested by the drone in the case of the A clarinet that allows the feel of the hands to take control over the development of material instead of the ears.

One example of this is detailed in the following chart where I have listed a phrase from the A and Bb clarinets. The physical movements needed to play these two phrases are almost identical yet the sounding result is of course quite different especially when heard intervallically against the drone. This particular example is from the second half of the second line of the Bb clarinet and the middle of the A clarinet. The usefulness of the drone comes to the fore here – different parts of each track can be compared as there is no need to “line up” the examples.

	Bb clarinet	A clarinet
Sounding		
Written		
Fingerings		

This simple experiment begins to reveal that while an external pitch can influence the material in an improvisation, there are also certain physical tendencies that remain regardless of the constant pitch, suggesting that physicality is an important part of my improvisational method.

As I explained above, this does not represent all of how I normally conduct performance and I return to the concepts initiated here in later recordings. The aim here was to focus on one specific interaction between physical activity and pitch.

The observation that certain patterns and fingerings are driven because of their physicality rather than a desired sonic result is illustrative of Gombrich's suggestion that there is link between a person's "style" and their "stilus" (see page 34). The instrument has the potential to influence the musician's actions during performance; it is a vehicle through which decisions are made.

At the time of recording neither example felt harmonically different. That the two responses led to similar finger movements and, subsequently, different pitch material doesn't mean that I am insensitive to pitch or that I view the pitch content of patterns irrelevant. Instead it expands the range of stimulus which can exert influence in the improvisational moment. While the A clarinet and Bb clarinet are similar instruments with an extremely high level of transferability, the semitone difference and particular characteristic traits invite an alternative haptic response to constructing motifs in relation to the sonic environment. As Gombrich suggests, tools influence the way we see the world (see page 34).

## **2) Groundings in solo bass clarinet and clarinet**

**Location of recording: St. Leonard's Church, London**

**Date of recording: 22/04/13**

**File name: Recording 2 - St Leonard's**

Free improvisation is rich with musicians who approach the challenge of playing solo. One of the first opportunities I had to do this was as part of a CRAM Records event in the large echoic church of St. Leonard's in Shoreditch. Daniel Thompson, Benedict Taylor and Vervan Weston also played solos and we played together as a quartet.

Having played in this space before I was prepared for the generous acoustic it offers. The church carries sounds, blurring tones together and providing trails to short articulations. Perhaps this is why I felt drawn to exploring multiphonics as I played, the effects of upper partials lingering to create shimmering textures. As I discussed in the last chapter, multiphonics and circular breathing are very hard to do at the same time but the church's acoustic provides a continuation such that phrases can exceed bodily limits. Even when I stop to take breaths the sound is there, the church responds.

The bass clarinet in its instrumentality (what it was designed to do) is very similar to the clarinet – the fingerings are almost identical (except for its extended lower range) and breath, embouchure & articulation are very similarly dealt with. Its materiality is rather different since it carries a wider and longer bore that receives air differently. A good example of this that comes up in my use of the instrument is that low-fingered multiphonics have a much richer textural capacity, owing to the much lower fundamental being sounded. Much has been written about the bass clarinet and its possibilities, most notably Sparnaay (2012) and Watts (2015), and it is not necessary here to write in detail about the construction of the bass clarinet, or the ways in which it is different to the clarinet. Instead, the bass clarinet (like the A clarinet in section 1) provides an excellent possibility for exploration through free improvisation. Many factors of the haptic interface remain but the differing sonic results guide new gestures.

The use of the bass clarinet followed by the clarinet divides this solo into two parts. In the following chart, notes are listed in concert pitch.

<b>#</b>	<b><u>Time</u></b>	<b><u>Description</u></b>
A1	0'00"	Silence
A2	0'08"	Bass clarinet starts. An embouchure multiphonic which ascends in pitch with glissando, from a very low note to a high note (A5). The top of the glissando lowers in dynamic and the sound blends into silence, slightly dropping in pitch.
A3	0'21"	After a very short gap, the previous note (A5) is repeated and the pitch is controlled with the embouchure, accessing different partials, a semitone and then a minor third higher (C6). Initially the lower partials of the multiphonic can be heard but then the higher pitches are isolated.
A4	0'32"	Gap
A5	0'34"	The middle note of the previous section, (Bb5) is found and there is a slight vibrato until a descending glissando (through A5, G5 and F#5) re-invokes the multiphonic before the high note (C6) is restated. This was likely unintentional - in the high register a minute change of embouchure can trigger a partial not necessarily aimed for.
A6	0'48"	Gap
A7	0'49"	A repeat of the idea of #A5 but without the high note.
A8	1'00	Gap
A9	1'04"	Faster activity prefaces a restatement of the multiphonic, this time maintaining the multiphonic with the high note, A5. This is repeated twice, with silences in between. Even though the silences are as long as some of the earlier ones, there seems to be flow developing here, repeating fragments of ideas rather than developing complete ones.

A10	1'21"	Gap
A11	1'22"	A repeat of the idea of #A9 but with longer faster activity this time. C6 is reached and after a short break another low note precedes it before the embouchure nudges it up to C#6.
A12	1'34"	Gap
A13	1'35"	A repeat of the idea of #A11 but at the end the high note is nudged higher, nearly up to D6.
A14	1'46"	Gap
A15	1'49"	Three rapid passages in the lower register, separated with silence.
A16	1'56"	Gap
A17	1'58"	A development of #A15. The compass increases, contrasting higher material (including embouchure manipulation of partials) with Bb2, the lowest note on the bass clarinet.
A18	2'17"	Gap
A19	2'18"	A multiphonic sounded on Bb2 heralds the next section in which higher partial are picked out using the same fingering as Bb2 and then interspersed with multiphonics on the note. The activity slows down and becomes quieter towards 3'00". The occasional murmur in the low territory keeps this section going. At 3'11" the murmur grows into a denser multiphonic. To maintain sound I have to cease the multiphonic at various points so that I can circular breathe. Each time I try to return to the previous pitch material, the density of the multiphonic increases and I attempt to build constant ascension. At 4'12" I lose the multiphonic and the high pitch is isolated, leaving a note shaking and fragile while the embouchure tries to stay stable to retain this.
A20	4'17"	A recommencing of the multiphonic is a renewed attempt to sustain the multiphonic intensity and it is restated again at 4'21".

		Realising I have approached the limit of what I will be able to do with this multiphonic, I activate a Bb5, which temporarily ends that investigation.
A21	4'28"	Gap
A22	4'28"	A combination of fingers and embouchure create the material here. Rapidly leaping activity that traverses the bass clarinet's compass.
A23	4'40"	A repeat of the idea of #A22 but this time Bb2 serves as an anchor for the rapid figures, sometimes articulated with slap tongues. The rapid figures grow in length and intensity until, aided by the acoustic, they come to emulate a multiphonic.
A24	4'54"	The material merges into a multiphonic which pinches into a high pitch. This is repeated three times before two partials are inadvertently isolated, G5 and B5. Jaw vibrato, a fragile technique in this territory, shakes the multiphonic.
A25	5'09"	Gap
A26	5'10"	A descending melodic line grows out of this harmonic, starting on D5 which is answered by a low phrase starting on E3.
A27	5'21"	Descending low notes at the bottom of the bass clarinet's range alternate with short melodies in the clarion register, creating points of reference. The bass clarinet feels equipped for this, its extended range and stark difference in tone between registers allowing a kind of partita which allows different voices to contribute.
A28	5'46"	The modal territory of Bb aeolian is explored until it starts to crack at 5'54" with an unintentional Eb5
A29	5'59"	Repeat of the tonal territory. Rises to higher pitch material then pushes at D#5 to E6



A30	6'08"	Material develops with reference to #A23 and #A27, using low notes as anchor. Two short version followed by a large one, separated by gaps. Bb2 is a prominent feature. The gaps grow in interval, up to 6'33" when a harmonic is used.
A31	6'44"	Recalls the pitch apex of #A29, enacting a glissando between C5 and D#5. This section uses special side fingerings of the bass clarinet (third partial from the throat notes) rather than the normal fingerings (5th partial of low notes, which assists with the pitch flexibility. Embouchure manipulation aids the development with finger changes, firstly at 6'52" to instigate deeper territory. Further fingering changes introduce variety and unpredictability in the hands and mouth of the performer. At 7'12" I play a phrase which is then repeated a number of times with slight variation until 7'24" when an ending is improvised.
A32	7'33"	Gap
A33	7'44"	Much quieter section recalling #A27, exploring the effect of sparse material in the environment. Leaps increase then diminish. Gradually the pitch rises, with the dynamic. Pace of activity steadily increases.
A34	9'00"	Rate of repetition increases. Consistent, muffled sound.
A35	9'16"	Repeated short see-sawing motif that varies little by little, anchoring on Bb2. The repetition of Bb2 speeds up.
A36	9'35"	Upper material starts to take prominence but Bb2 retains an active role. Multiphonics stem from Bb2, growing in intensity.
A37	10'28"	Much quicker material, louder. More frequent higher harmonic material.
A38	10'42"	Sudden increase in energy. Faster tremolo oscillations, which result in less variety. Fades to quiet material.

A39	10'59"	Gap
A40	11'00"	A return to the lasts sounds but slower and whimpering with narrowing activity.
A41	11'21"	End of bass clarinet
B1	11'21"	Gap
B2	11'29"	Start of clarinet. Pianissimo microtone (between Eb4 and E4). Slow vibrato navigates between pitches but this is a particular microtonal clarinet fingering (first two fingers on the left hand).
B3	11'37"	An F3 springs the clarinet to similar material, this time exploring the microtonal possibilities of different fingering combinations and other notes are incorporated, gradually increasing the compass.
B4	12'11"	First entry into the clarion register. The third note is an unusual fingering for E5 which flattens it. The following three notes leave the right hand in position but move two left-hand fingers resulting in non-chromatic pitch territory. G5 and Ab5 are both flat but by different degrees.
B5	12'16"	Gap
B6	12'17"	Short pitch of the clarinet's open note (F4). It is restated to begin a short diatonic phrase. The third time it is subject to vibrato by the right-hand fingers and the phrase is repeated.
B7	12'29"	Gap
B8	12'31"	More exploration of microtonal fingering, exploring greater range of compass in pitch variety as it increases. More exploration of leaving right-hand fingers down while the left-hand changes, which produces unknown pitches.
B9	13'17"	Speed and volume increase. Larger compass of clarinet used.

		Repetitions become cloudy.
B10	13'56"	Gap
B11	13'57"	Melodic material continues. Microtones further explored.
B12	14'17"	Gap
B13	14'17"	Notes start to blur more than with the bass clarinet. Note bending and the more dexterous nature of the clarinet assist this blurring. Much repetition of fragments.
B14	14'50"	Gap
B15	14'50"	Material descends into lower pitch rapidly.
B16	14'58"	Embouchure helps to distort tone and lower pitch. Flexible pitch material (embouchure and fingers) interspersed with several gaps.
B17	15'36"	Pitch bending with the embouchure and sliding fingers.
B18	15'45"	Gap
B19	15'47"	Microtonal pitch material continues and increases in pitch with embouchure and finger sliding.
B20	16'31"	Slower development of material, stiff with pitch bending, gradually rising with occasional extra notes entering. Interval of activity widens and rate of crossing the gap decreases, focusing on the inside notes.
B21	16'59"	Lower frequencies enter, with help from quick embouchure changes. Rapid finger movement starts to dissipate in favour of embouchure manipulation of pitch to explore oscillation of single pitches which develops into a multiphonic by 17'20"
B22	17'26"	Gap
B23	17'28"	A low note precedes repetition of the previous pitch

B24	17'37"	Similar material develops into a stronger multiphonic which is repeated four times.
B25	18'20"	End

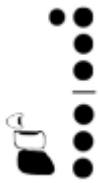
A challenge in this performance was duration. Since I was fairly inexperienced with playing solo I was unsure how I would fill the allocated time of twenty minutes but this was one of the reasons why I had suggested the concert, to gain experience and explore this challenge. Vervan Weston's extensive experience and expertise meant that my efforts were being witnessed by an expert, adding a sense of urgency to the event. This urgency is something I have claimed is a useful catalyst towards the investigative act. Because there's no possibility of ceasing, one *must* create.

The two clarinets provide different opportunities and challenges. It is interesting to note that while the bass clarinet section could be described as episodic, with seven distinct units, the clarinet section isn't as easily broken down into smaller units, instead showing more development. Levels of familiarity on both instruments are indicative here. With the clarinet, a better understanding of the tension between materiality and instrumentality afforded a more dynamic weaving of the two approaches.

Arguably however, the bass clarinet section is the more exciting part of the performance, with changes of direction and quick advances in the development of melodic content. I was learning more as I played than when I was working with the clarinet, allowing the worlds of materiality and instrumentality to question each other. I found myself losing control fairly often on the bass clarinet which created moments of intense demand. I would either try hard to pick up the remnants of a failed attempt or start again with something new. For example, when two harmonic notes spoke from the multiphonic at 5'05" (See #A24), the first was due to loss of embouchure control which I developed into the second. Rather than trying to "cover up" a mistake, this is an example of what Dennett describes – mistakes provoke solutions.

Contra to this, some of the more familiar elements of playing the bass clarinet served as anchors, as can be heard by the various physical repetitions. On the bass clarinet this was mostly in the form of its lowest note, Bb2. It is an easy note for the fingers to

navigate to because all the fingers are in their default places; the hands simply close. Like clutching an object it is a very natural gesture. The fingering for this note follows.



An example of this is at #A27 where I was responding to certain challenges physically as well as aurally. When I wanted to play a low note, rather than navigate the extra keys of bass clarinet it was mostly Bb2 that answered. In this way, a kind of drone was established, amplified by the church's acoustic, which provided a certain basis for the other material.



On the clarinet, the note F4 (above) is sounded by not pressing any keys at all, so to arrive at it just means removing the fingers. This is the inverse of the “clutch” described above, it is a release. It features in the improvisation and serves as a point of departure for #B6. Elsewhere it forms part of several fast passages, but it doesn't feature as much as the bass clarinet's low note. Again this points to my relative unfamiliarity of the bass clarinet and thus reliance on haptic groundings. These two notes are places of physical security that also speak of the materiality of the instruments: The clarinet's F4 requires no keys to be pressed; the bass clarinet's Bb2 is completely encased with the instrument's metalwork.

As I wrote above, circular breathing is difficult when playing multiphonics but during the performance I had developed a desire to do both of these things. Where the acoustic couldn't sufficiently carry the sound so as to provide a link, I had to cease the multiphonic while maintaining the fundamental in order to circular breathe meaning that escalating passages like at event #A20 had moments of low pitch with a break of multiphonic activity. Rather than being an aesthetic choice, this was something dictated by the physics of the bass clarinet and the human limit which serves as a sonic descriptor of the materiality of the human-instrument union.

The switch to the more familiar clarinet meant that I was also able to deal with pitch in a much more flexible way. I had more control over contours of phrasing and an awareness of subtle embouchure changes could colour the sound in a wider variety of ways. Because the clarinet's metalwork doesn't cover the holes (as it mostly does on the bass clarinet) I was able to slide my fingers to enact changes in pitch with much more control, resulting in a section that was able to deviate from the grid chromaticism a lot more. This instrumental shift was a move towards greater exploration of the clarinet's materiality.

As I discussed in the last chapter, Monod's suggestion that a "pre-existent intention" exists to inform matter, and that an expected function explains its form, is only part of the way musical instruments are set aside from other objects (see page 65). The display of dense multiphonic activity available to the bass clarinet clearly advances the design's intention. They sound the unintentional, exploitable acoustic properties of the instrument's deep overtone series. Demonstrated in this example is the catalytic function of instruments to create previously unimagined sonic material. Instruments extend far beyond what they were designed for. I see part of my role as a free improviser to explore this relationship.

This is the suggestion maintained by Bailey (See Lash (2011), Kennan (2004), Bailey (1993)), that the physical construction of an instrument becomes a source of material with which to improvise (see pages 44 & 52). For Bailey this included the set intervals between the strings of the guitar and its ability to play harmonics. This example sees a development of the bass clarinet's natural tendencies - the manual layout of the keys and its special acoustic properties. In this way the material is always to hand and simply by playing the instrument we are reminded of its possibilities and intricacies, like Cage's cactus spines discussed in the introduction (see pages 14-15).

Oliveros (2004) suggests that technology continues a long tradition of aiding memory (see page 45). For Parker this memory aid extends to a "coupling" that serves as a feedback loop allowing continuous and immediate development in free improvisation (see page 39). The complex multiphonic activity that a bass clarinet is equipped to generate needn't be memorised. Its rich offerings are held in the very feedback one receives from the instrument as it is played.

In these ways, the example above illustrates what Clarke refers to as “the ways in which the design of the instrument, inherent characteristics of the body, and demands (or opportunities) of the music work together in an optimising manner.” (Clarke 2009:23)

### **3) First solo clarinet performance**

**Location of recording: The Others, Stoke Newington**

**Date of recording: 29/11/12**

**File name: Recording 3 - The Others**

I was invited to play a short solo as part of The Mirrors of Hall big band run by Andy Hall in between a poet and one of the full band's pieces which I also played for. I had never played solo before and was intimidated but excited by the prospect. This was an opportunity to see how a high level of risk could manifest in urgency which I hoped would drive the performance. Being inexperienced in this area, I had loosely sketched out some starting points in my head: I could start bombastically with an emphatic multiphonic; I could start by improvising on the blues scale and gradually deconstruct it; I could play long still notes with spaces in between. I opted for a tentative microtonal passage which would eventually incorporate multiphonics. This "sketching" is something I'm dismissive of now. If I anticipate something prior to the event then I find that the disparity in performance is always disappointing due to a process of recreation rather than discovery. It inhibits the presence of a relational performance.

<b><u>#</u></b>	<b><u>Time</u></b>	<b><u>Description</u></b>
1	0	Microtonal passages merge with disjointed rhythms
2	18"	Repeat of the end of the previous phrase and testing of its fragility, with the embouchure.
3	24"	Angular melodic lines and rapid tonguing techniques (side to side, flutter).
4	49"	Addition of embouchure manipulation to melodic lines, blurring pitches between fingerings to provide patterns that are analogue rather than discrete.
5	1'32"	Continued investigation of the breaking point of multiphonics.
6	1'44"	Incorporation of a phrase that utilises the design intention of the clarinet, but lands on a fingered microtone at 1'48" and again the fingers flicker in



		microtonal exploration.
7	2'04"	Multiphonic exploration on more vulnerable notes.
8	3'04"	Involvement of melodic lines, embouchure manipulation of pitch, non-standard fingerings, embouchure multiphonic approaches.

This recording looks at the movement between elements that are embedded in the clarinet's materiality (the embouchure multiphonics and fingered microtones) and its instrumentality (the use of phrases that reference the grid of chromaticism). I was interested in how these two parts of the clarinet might meet.

The manipulation of a pitch through fingering variation at #2 is an example of investigation into the clarinet's materiality<sup>36</sup>. I wanted to find out what could happen to this note. It breaks for a moment but I was able to hold onto its pitch and I then moved onto another note, teasing out areas of weakness. I was searching for a lack of control.

The variety of tonguing approaches at #3 are a further example of this, at times the clarinet seems unable to accommodate the combination of side to side tonguing and microtonal fingering patterns<sup>37</sup>. Between 38" and 40" a loss of clarity is detectable, a fragility in the way the acoustics are playing out inside the clarinet.

At #4 the patterns blur and I repeat certain features to emphasise them. The embouchure and fingerings share microtonal responsibility here as well as multiphonic activity, demonstrating subversion on two sites of normal clarinet technique<sup>38</sup>. At 1'15" I restate a microtone, trying to tease out more of what is hidden in the note. What began as a multiphonic murmur is seduced into a growl. The fragility of this process is revealed at 1'23" when it breaks into a higher partial, serving to speak of the complexity of the clarinet's handling of the overtone series. The smallest of movements can create drastically different material and I try to incorporate this high note in a new multiphonic at 1'25", developing the embouchure manipulation of pitches and investigating the sudden high-pitch effect of small movements.

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<sup>36</sup> See example 11.

<sup>37</sup> See examples 11 & 20.

<sup>38</sup> See examples 9, 11 & 19.

Between #5 and #7 I was engaged with multiphonic investigation, pulling at the weak parts of my and the clarinet's ability to maintain the technique<sup>39</sup>.

It's this investigative work, expressed in the previous chapter, which is so crucial to my praxis and it is through performance in front of an audience where the work must take place. At home I would have stopped in light of these weaknesses and dealt with each one slowly. In performance there's a duty to carry on and so progress can be made in areas previously untended.

As I discussed in chapter one with reference to Flusser, the assumed program of the clarinet can be considered ripe for interrogation in free improvisation (see page 41). The presence of what Parker calls "ineliminable phenomena" are gateways to further exploration. Parker describes times when "something will go wrong" as "an opportunity to learn something else that the instrument can do". His discussion suggests that there is a conjoining relationship at play between the will of the instrument and the will of the musician. It is the development of this relationship, which I detailed in chapter three, that I find so vital to free improvisation.

Although I found this performance dissatisfying in some respects, it points towards Bourriaud's suggestion of a re-examination of approaches towards the concept of mastery (see page 23). As I have suggested in chapter three, rather than represent practised elements in performance, improvisers seek an approach rooted in developing relationships with their instruments. Part of this involves inviting and dealing with uncertainty that can result in what might previously have been termed a failure. Failure is reimagined in free improvisation towards a continued renegotiation of one's expectations of the instrument.

Against Bailey's suggestion (see Bailey (1993) and page 61, above), I approached this solo with a map. I feel this is one of the reasons why this performance was less dynamic than the recording at Shoreditch Church. Preparation had the detrimental effect of deterring the development of presented material. In chapter two Barrett (2009) explained that to perform in front of an audience with an existing set of refined ideas disallows the creative process (see page 60). Progress in this context goes beyond making mistakes so as to learn what not to do; instead "mistakes" are unforeseen sonic

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<sup>39</sup> See example 9.

results that provide challenges to control a new area, which in turn questions the standard use of an instrument. In this regard, free improvisation helps to inform my expanding awareness of the clarinet as a provider and an amplifier of ideas.

#### **4) The Materiality of Brandenburg Mansion**

**Location of recording: A Mansion in Brandenburg**

**Date of recording: 23/08/14**

**File name: Recording 4 - Brandenburg Mansion**

This recording (a year and a half after the previously example) was captured during a multi-day recording session of a quartet based in Berlin called *YNDGang* (featuring myself, Benedict Taylor, Stephen Crowe and Wolfgang Georgsdorf). I decided to take the opportunity to record a solo while the others were on a break. In contrast to the performance in St. Leonard's church, where I was to perform for roughly 20 minutes, I knew this piece could not take up much time.

<b>#</b>	<b><u>Time</u></b>	<b><u>Description</u></b>
1	0'03"	Three short bursts of cyclic fingerings with intermittent flutter tongue, each increasing in compass. Separated by silence.
2	0'25"	Long flutter tongue followed by short flutter tongue, both at extreme parts of clarinet range. Second includes glissando at the end. Separated by silence.
3	0'35"	High pitch, mf, followed by angular figure with large intervals. Occasional flutter in short duration.
4	0'40"	Three short flutter tongues in difficult areas of the clarinet, resulting in complex multiphonic material.
5	0'50"	Extended very high material, varying in pitch with finger and some embouchure manipulations. Finds multiphonics.
6	1'13"	Very angular figure, mostly in the upper register. Incorporates double tonguing and flutter tongue. Flutter tongue falters at the end leaving interesting sonic residue.
7	1'19"	Recalls #2 but with no glissando.

8	1'33"	Series of short flutter tongues, leading to thickly-textured territory and low partials with descending chromaticism.
9	1'52"	Short notes, mp. Very large leaps covering the clarinet's compass. Leading to high notes, flutter and note bending.
10	2'00"	Recalls #5, exaggerates pitch oscillation into wider intervals until the lower partials speak along with crescendo. Leads towards flutter tongue.
11	2'33"	Recalls #8, but much longer and fewer.
12	2'40"	Unstable pitch begins this section of legato lines that gradually become microtonally more complex. Investigative work ending on B5.
13	3'46"	Held Bb5 commences rapid passages before holding F#6 and then returning briefly to a rapid passage.
14	4'00"	Held Bb6 jumps to E3 before embarking on cycling rapid passages eventually ending on F#4. Some timbral distortion towards the end.
15	4'08"	Doubling tonguing starts section of articulated material which quickly returns to legato spiralling passages moving towards glissandi between fast, close bisbigliandi.
16	4'37"	Three short embouchure multiphonics interrogate capacity. Each seeks and falters a little further, all falter.
17	4'55"	Much more successful and longer multiphonic.
18	5'15"	Series of "failures" of multiphonic sustain which thins out and explores isolated upper partials, recalling #5, again exaggerated.
19	5'55"	Continues recalling #5 but much higher pitch material. Teeth on reed? Occasional multiphonics.
20	6'28"	Recalls cycling figures of #13, middle register, mf, and ends abruptly.

While the quartet recordings in the forest had plenty of space to develop, this short track was recorded in a hiatus stolen from the main task. It provided focus and allowed me to explore material that I hadn't been using with the quartet. Away from an ensemble that tends towards group development the possibility of rapid changes came to the fore.

A fluid movement between concerns of instrumentality and materiality fuelled an episodic improvisation: Dense material caused by flutter tonguing against its workable limit; demanding ever more control from embouchure multiphonics; using double tonguing techniques; and experimenting with extremes of pitch and dynamics. I will consider two of these in more detail here.

#### Flutter tongue<sup>40</sup>

The recording begins with a combined technique that I had not used before, sporadically adding flutter tongue to fast cyclic fingerings. As my knowledge of how this could work developed, each of the three episodes informed the next. To counter this explorative beginning I returned to something familiar and controllable, two normal flutter tongued notes.

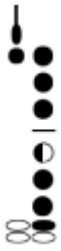
Investigating the materiality of the clarinet I use flutter tongue in ranges of the clarinet where it is not easily achieved, for example at #4. As I demonstrated in the clarinet chapter my standard use of flutter tongue has an upper pitch limit, but here I sought to bypass that limit which forced out an interesting sonic response in unusual areas. It was the pressure of time in this recording that assisted this, leading to an episodic demand from every area of technique that I visited rather than a lengthy solo where techniques can be hinted at but developed away from.

I also experimented with microtonal fingerings to see how this would affect the sound of the flutter tongue<sup>41</sup>. A particularly pleasing combination was a written Eb (top space) but with the index finger of the right hand only covering half the hole. I found that I could pinch the hole such that very minor physical changes had a big impact on the sound (see below). This technique has now invoked a complete new embouchure technique, which may be evident in the final performance. It's a testament to the advancing investigative work that is propelled through performance.

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<sup>40</sup> See example 21.

<sup>41</sup> See example 11.



### Multiphonics<sup>42</sup>

At #5, through extended exploration of high pitch material I arrived at a new multiphonic. Rather than rely on a known fingering this was created through a combination of embouchure and cross fingerings. As described in chapter three most multiphonics are formed of higher partials of a fundamental but this one was revealed through accessing lower partials. Just as the embouchure must work hard to maintain a low pitch when higher partials are engaged, so I discovered it must work hard to maintain a high pitch when trying to reveal lower partials. As I work with these physical considerations I continue to learn about the clarinet's capacity.

At #16 three multiphonics explore the material capacity of the clarinet, and each seeks and falters a little further. The second loses the multiphonic; the third tries to regain it then drops to a lower partial. But this is followed by a much longer multiphonic at #17. There is sustain and clarity as well as a shifting centre. Rethought in performance is given agency and the listener is allowed to experience the process as well as the result of rethinking. The multiphonic also fades in dynamic while sustaining the partials. This kind of arrival is testament to the investigative process at play in performances of free improvisation – it is unlikely that I would have found this through private practice alone. The multiphonics at #18 are examples of unrewarding failures; each breaks quickly and is unable to reveal any new depth. But this is just as much an informing as the finding of new material. In the previous recording, even though I imagined myself to be happy “failing”, I was actually scared to do so and I believe the results reveal that. Prévost points to this kind of work suggesting that

the key seemed to be in letting the music go out of control, in having the courage to fail. Indeed, seeking failure itself was a possible route to success! (Prévost 1995:19)

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<sup>42</sup> See example 9.

Section #19 demonstrates another example of multiphonics developing out of extremely high material. In this case I am employing a technique that uses increased pressure from the lower jaw, and at times places the lower jaw's teeth on the reed<sup>43</sup>. As I wrote in the clarinet chapter (see page 79), the tiny movements are magnified in sound. As well as close microtonal pitches and some unexpected intervals, some of the pitches merge into a very tight multiphonic, another example of discovery through improvisatory action.

Of the recordings presented, this one presents the most advanced case of exploring the clarinet's materiality and demonstrates that an uncovering of the clarinet's possibilities subsequently transforms my improvisational processes. The sounds that were created in this recording go far beyond what I could have imagined without the instrument in my hands in this situation. The sounds of the clarinet *become* my imagination.

As Peter Evans (2009) suggests, physical exhilaration can come from the tension that exists between what the instrument is wont to do and what the player demands of it (see page 81). This is an example of the relationship between instrumentality and materiality that I discussed in the introduction and chapter one. "Failures" as conceived by Prévost serve to signpost limits of instrumental knowledge and create a demand for the instrument and the musician to work together.

When a limit is acknowledged a challenge is issued, recalling Bourriaud's observation that what is important in relational aesthetics is the construction of art in the performative moment, an elevation of artistic processes over its products (see page 22). This doesn't reject the notion of preparing for a performance. As I discuss in the next few examples, the space for discovery can be defined by how we choose to prepare, albeit in a way that invites a variety of possibilities.

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<sup>43</sup> See example 18.



## **5) Two duos with clarinettist Alex Ward**

**Location of recording: Boat-Ting, Bar & Co. Temple Pier, London**

**Date of recording: 16/01/12**

**File name: Recording 5A - Boat-Ting**

I was privileged to have been asked by Boat-Ting's curator, Sibyl Madrigal, to play a duo with Alex Ward. As I explained in chapter one, Ward is an improvising musician with whom I have great admiration. At the time my relative inexperience suggested that playing with an accomplished, experienced and esteemed practitioner meant that I may be guided into demanding territory that would be difficult to prepare for. Alex's agility and clarinet erudition is widely established and venerated. The doubling of the clarinet meant that any external judgments could easily be made comparatively, and I was clearly the fledgling in this scenario. The event thus invited anxiety as well as excitement and I hoped this would translate into a catalyst of urgency.

Through knowledge of Alex's playing I anticipated that the musical territory may utilise rapid lines referencing scalar figures, large leaps, bisbigliandi and fast trills. There was no implicit demand to respond in a similar way to Alex but I imagined that this might be a possible route that I would take. As a concentration of my normal practice routine I worked on scales and arpeggios in all keys, diminished scales and triads, and whole tone scales. While I didn't plan to specifically insert any of these patterns it was a way of enhancing physical control to prepare for the kind of improvisation I anticipated, that this duo would have a particular interest in the clarinet's instrumentality. While the materiality of the clarinet did feature in this performance, it was often as a colouration of standard clarinet techniques.

Part of the performance, which I discuss here, was recorded by Andrew Newcombe.

<b><u>#</u></b>	<b><u>Time</u></b>	<b><u>Tom</u></b>	<b><u>Alex</u></b>
1	0'00"	Tom joins the first line with a held subtle bisbigliando using the	Playing two descending melodic lines which end on trills. The first

		first finger of the right hand, followed by a slower chromatic descent than Alex. Finger movement but no sound.	trill is made with the right hand middle finger and the second with the right hand index finger which matches Tom's final note (a twelfth apart). The first line spans a much greater compass than the second. This concludes the section that has been going since before the video started.
2	0'04"	Plays very short phrase (one or two notes) in the gaps left by Alex. Finger movement shows that the notes are not chosen in advance and instead response to the heard material just before execution. Alex doesn't leave many gaps, clearly leading this section of the performance.	Begins angular, antiphonal phrases with himself.
3	0'12"	Tom's rate of interjections increases, playing not only in gaps but also during the Alex's lines. Short phrases elongate.	Increase of phrase length.
4	0'30"	Matching Alex's phrase length	
5	0'35"	Introducing more gaps.	Alex decreases phrase length
6		Move towards repetition.	
7	0'43"	A period of parallel thematicism begins.	
8			Descending bisbigliando (with low trill key, then normal fast finger movement).

9	0'45"	Much faster bisbigliando (with top trill keys).	
10	0'46"	Elongating of Alex's bend by minor 3rd chromatic descent.	Quick bend down from high note.
11	0'48"		Much longer descent, most of the chalumeau range, with flutter tongue)
12	0'49"		Slap tongues mark the start of a new section. Slap tongue heralds short phrases because it is difficult to maintain.
13	0'50"	Slap tongues answered with very short and pinched notes	
14	0'53"		Double tonguing techniques adopted. Flutter tongue.
15		Short fragments from both players act as one texture.	
16	0'59"	Large leaps and occasional trills with trill keys and fingers.	Distort tongue with tongue, (low range multiphonic).
17	1'05"	Pace of activity slows.	
18		Embouchure multiphonics from low notes.	
19		Continues with large leaps	Alex shakes fingers against their tone-holes to elicit vibrato.
20	1'10"	New section in which pitch starts to rise.	
21		Leaps confined to chalumeau register, mostly right hand.	Held notes bent with finger sliding. Increasing in pitch and pace until the throat notes are

			reached, then this area is explored. Finger bends turn into embouchure bends and chromatic material increasing with the use of side trill key while left hand moves.
22	1'20"	Smaller intervals and at a quicker pace, pitch rising.	
23	1'29"	Briefly moves into clarion register.	
24	1'30"	Sudden dynamic drop to pp.	
25		Steady intervallic movement across chalumeau and clarion registers.	Melodic pattern developed with trill key and left hand index finger, functions as textural material. Left hand incorporates other fingers (possibly no thumb), while the right hand maintains trill key.
26	1'41"	Repeated interval lasting 3 seconds.	
27	1'48"	Chromatic descending passages with occasional larger intervals to higher pitch.	Material matched but with lower pitch, ascending through the chalumeau range.
28	1'58"	Mutual ascending material, short overlapping fragments.	
29		Fingers reveal unusual patterns, not belonging to scales, use of cross fingerings etc.	
30	2'03"	Descending material, emphasising low note at 2'05" with flutter tongue and slowing of movement.	

31	2'05"		Flutter tongue copied in higher pitch material.
32	2'06"	Ascending material with lean on semitone down.	
33	2'08"	Area of mutual movement, ascending in patterns that conjoin.	
34	2'12"	Mutual held high note arrived at via a culmination of the phrases.	
35	2'16"	Break of held note	
36			High descending glissando.
37		Imitation of high descending glissando.	
38	2'17"	Rapid movements including trill keys while left hands move, creating a blurring effect.	Use of embouchure to distort tone, drawing the clarinet closer.
39	2'19"	High note that merges into held multiphonic which rises in pitch and is "shaken" with the embouchure.	
40	2'23"	Slight gap	
41	2'24"	Rapid low pitch material that is developed using jaw vibrato and then embouchure placement.	Rapid finger movement and access of high partial with embouchure contortion to create high pitched blurring.
42	2'32"	Repeated rhythmic unit with notes across harmonic partials.	Embouchure relaxes to allow lower partials to speak. Use of slap tongue.
43	2'38"	Pace of activity slows	
44		Some bending of notes. Embouchure deciding pitch more than fingers	

		- high pitch material makes this possible.	
45	2'43"	High held note.	Unexpected pitches from embouchure manipulation, including glissando.

For this analysis I want to focus on three elements – musical dialogue, thinking physically and limits of the clarinet.

### **Musical Dialogue**

This duo demonstrates various approaches to the notion of dialogue and these contribute to the development of a relationship between Alex and me. Melodic lines are copied or augmented in a way that goes behind mere thematic parallelism and I point out six main examples.

- From #2-11 I place short interjections between Alex's long phrases. As the material continues Alex extends his lines and I start to overlap with them. The rate and frequency of my notes quickens and Alex starts playing shorter phrases until we arrive at similar phrase lengths. By 0'35" we are playing very similar lines but we quickly enter dialogue characterised by mimicry. Two particular examples to point out are 1) at 0'43" where Alex executes a descending bisbigliando glissando and I present a contracted version in a higher register and 2) at 0'46" at which point Alex quickly bends a high note and I expand this with a chromatic major 3rd descent. Alex comments on this at 0'48" by descending and adding impact with flutter tongue which is copied by me.
- At #15 the tonal qualities of both players develop into a chirruping quality. Although Alex is playing long phrases and I am playing shorter fragments, the sounds work together to provide a collective texture.
- From #24-26 when the dynamic drops instantly by both players, Alex provides a repetitive passage which serves the role of a chordal instrument while I play what could be considered a solo line with slightly louder, articulated pitch material.

- At #27 we play antiphonal chromatic passages which start with alternation but gradually overlap and then expand intervallically, showing how parallel thematicism can develop a group texture.
- Antiphonal phrases return at #28 but again they merge and serve to move the performance to the climax of #34
- At #35, when Alex breaks the unison held high note. We both provide roars of sound, imitating each other's playing. A further unison at #39 and an exploration of different kinds of unison playing follows.

These points illustrate that a wide response to dialogue exists in free improvisation. There are parallels to the written techniques of homophony, contrapuntal lines, chord and accompaniment, antiphony, unison. Rather than need to be pre-designed, these features manifest through a desire to work together in the performance. One of the joys of playing with another musician is that these approaches become possible through reliance on the other and it is a relationship that can develop and expand through several performances. As I show in the next video, our mutual language had already advanced after only two gigs.

### **Thinking physically**

Video footage provides crucial information regarding the physical condition of the hands in relation to the instrument. Between the second and fourth seconds the video shows my fingers moving but without any sound being made, illustrating that I was thinking with the hands. Since I didn't arrive at anything that felt right to play, I remained silent. This supports the notion from chapter one that a physical condition or gesture can correspond to an associated musical known. Improvisers can think through musical ideas with the physicality of their hands/instruments before they commit to sound. It is through action that thought can happen. In this case, where the instruments are the same, heard patterns can much more easily trigger the associated physical memory of pitches and timbre. My moving fingers continue throughout the first few seconds, sometimes changing just before playing. Here I was not planning notes to play in advance but instead responding rapidly to sonic information received from Alex.

This addresses Clarke's (2010) proposal that improvisers must create strategies to counter limited human response times (like planning in advance, or developing and

memorising patterns to deploy) (see page 50). When an immediate response is made by a duo partner it is evidence of an alternative way of processing the flow of information. In solo playing a path can be followed and tools of development seasoned throughout performances can deal with material linearly. Playing with others provides a challenge to this which is met with reference to the musician-instrument interchange.

There are instances when physicality directs the music in ways such that the exact pitch output is not the most crucial consideration. At #20 Alex is working with bent notes and chromatic material around the throat notes, the notes first created by Denner's original clarinet design. The repeated use of the side Bb key (with the right hand index finger) while the left hand changes fingerings is an example of a physical approach to clarinet technique which I discussed in the last chapter<sup>44</sup>. Rather than providing particular pitches, the side key is used as a non-interval-specific trill from various notes to higher notes of ambiguous pitch. The key was designed to create semitone trills with particular fingerings but when used with other fingerings unpredictable intervals result. Though these pitches could be worked out, the precise pitch here is not important. Instead the effect of these slightly shifting tremolos is the reason this technique is employed. As I said in chapter one, although Alex's playing demonstrates an advanced awareness and control of the clarinet's instrumentality, its materiality does also feature in areas like this.

Both players work to delay a climax in this section of music by constricting the rise in pitch mostly to the chalumeau register. This is another example of the clarinet's grid, dividing pitch into three areas that would seem irrelevant if transcribed and performed on the piano or seen on a score. The sense of extremity is important here since Alex's use of the side keys works to extend the normal range of the chalumeau register into the first pitches of the clarion register but without going across the clarinet's break.

### **Clarinet limitations**

Once Alex adopts slap tongue at #12, the terrain is set for short fragmentary episodes due to the staccato nature of slap tongue and its difficulty to maintain for long durations illustrating that a clarinet technique and its limitations have directed the activity of the improvisation. This is also evident at #34. Although the held note at 2'12" is only 4

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<sup>44</sup> See example 2.



seconds of clock time, in the context of the rest of the music it seems to hold as a frozen moment. The pitch and dynamic of this note make circular breathing difficult so standard biological limitations place a restriction on this moment.

These three main points illustrate the role of the clarinet in improvisatory thinking. Because there are two clarinetists responding to each other, this effect is magnified. Like speaking to someone in one's own language, my fingers and embouchure can rush to the physical movements needed to make the sounds I hear without the need for translation. But rather than do this, other types of responses can provide an enhancement. One source for this is the physicality of the musician and instrument, supporting Clarke's suggestion that "the physicality both of the performers' bodies and of the instruments that they play will be manifest in the sound patterns that are produced." (Clarke, 2009, p.42) My duo with Alex is an intensification of this process.

**Location of recording: Lumen URC, London**

**Date of recording: 31/10/13**

**File name: Recording 5B – Lumen URC**

No record of our second meeting exists but the final four minutes (of thirty) of our third meeting was filmed by Blanca Regina. Thus this video represents a jump in our performance history. Within the field of improvising music there is an established value perceived by some practitioners regarding new partnerships. As Prévost writes in relation to Bailey's Company week,

"Avowed mismatch is part of Company's creative credo. The celebration of the isolated individual creativity is valued above any consensus or sense of musical resolution. Bailey is interested in what happens to musicians before a common language has evolved." (Prévost, 1995, pp. 144-145)

I'm certainly alert to the nascence of new pairings as a vehicle of discovery but I also value the ongoing development and crystallisation of relationships in an established ensemble through continued interrogation of a group language.

During the time that had passed between these two events my own playing had advanced. I had also learnt more about Alex and his virtuosic versatility and had

developed a confidence in his fearless expeditions into very disparate territories. For me this encouraged license to venture further into wider musical landscapes. In later performances we delved into textures that I have come to associate with the clarinet's materiality.

<u>#</u>	<u>Time</u>	<u>Tom</u>	<u>Alex</u>
1	0'0"	Concluding previous section	
		Diminishing intervals with rising pitch culminating in repeated notes at the top of the clarinet register.	Rapid activity mostly in the clarion register.
2	0'12"	Short interjections of two or three notes, gradually descending in pitch in the chalumeau register.	Trilling with left hand first and third fingers ended by descending embouchure plus finger glissando.
3	0'15"	Overlapping phrases.	
4	0'21"	Brief unison gap.	
5	0'22"	Diatonic and chromatic pitch material rising then falling. Phrased with reference to neo-romanticism.	Slap tongue and very fast repeated notes. Side-to-side tonguing?
6	0'31"	Faster paced material and moving away from a pitch centre but still based very much in the chromatic grid, moving through chalumeau and clarinet registers. Ending phrase with repeated intervals.	Repeated rhythmic figures mostly in the chalumeau register.
7	0'42"	Repeated intervals start to feature more prominently and turns in the melody, indicated by changes of direction are highlighted with	Repeated notes prompt short notes in isolation.

		dynamic swells E.g. at 0'46".	
8	0'49"	Brief unison gap.	
9	0'50"	Continuation of material with some introduction of timbral distortions from the embouchure.	Frequent articulation contrasts with Tom's legato lines but eventually slurring is employed also.
10	1'02"	Top two trills keys are used the first unconventional finger use in the excerpt, which heralds a deviation from the grid.	
11	1'06"	Movement of middle finger in the left hand which complicates the column of air inviting unpredictability.	
12	1'10"	Playing in similar pitch territory and antagonising a sense of unison and microtonality.	
13	1'13"	Return to previous material and a slowing of pace.	Return to previous material.
14	1'18"	Incorporation of held notes which contrast the tendency for movement and helps create a change in ensemble direction.	Repeated notes an octave lower than Tom's held note.
15	1'25"	Rhythmic unison, playing harmonically.	
16	1'27"	Brief unison gap.	
17	1'28"	Melody jumps between players.	
18	1'33"	Exact same finger movements in the right hands, using cross fingerings.	

19	1'40"	Starts using the left hand.	
20	1'42"		Prominent descending pitch bend permeates the texture.
21	1'46"	Repeated notes separate periods of rapid movement.	
22	2'03"	Very brief embouchure multiphonic.	
23	2'06"		Sudden high material in microtones.
24	2'10"	Descending and incorporation of occasionally double tonguing on descending chromatic passages.	Individual staccato notes move to descend and develop into double tongued passages.
25	2'20"	Exploring microtones in the chalumeau register, repeated favoured discoveries which develops into patterns.	Use of rapid slap tongue on low notes, picked out notes, pinched notes and moving towards rapid fingered patterns focusing on low notes.
26	2'36"		Sudden jump to throat notes, use of the right hand side keys and embouchure bending of the notes.
27	2'38"	Perhaps nudged by Alex's bending notes, the pattern moves away from microtones and develops to reference the jazz idiom. Here I resemble a walking bass line.	
28	2'50"	Patterns develop into a jazz "solo", using notes from the blues scale and resembling slowed-	Pitch slides up and down with no fixed centre.

		down swing lines.	
29	2'57"	Held note prevents the stylistic appropriation from dominating.	Slow vibrato with the embouchure which provides interesting intervallic consideration with Tom's held note.
30	3'01"	Trills on the top two side keys augments Alex's vibrato effect.	Alex answers Tom's trills with left hand index and ring finger oscillations.
31	3'04"	Trill keys remain in operation while the left hand fingerings change. Embouchure glissando add to the effect as the pitch rises.	
32	3'09"	Brief unison gap.	
33	3'10"	Return to the original material.	Continues finger oscillations, an advanced bisbigliando technique followed by descending flurries with matched finger speeds.
34	3'24"	Further jazz referencing including flutter tongue and glissando.	More note bending with embouchure and use of side keys.
35	3'27"	Repeating bent notes ascending which get closer to the bend's destination then rise in pitch.	Embouchure pitch bend and fast vibrato (almost jaw vibrato).
36	3'33"	Notes bend in both directions	
37	3'38"	Matching pitch areas and activity, similarity in hand movements.	
38	3'56"	Arrival at high pitch (Alex much higher partial) and sustain.	
39	4'03"	Notes end.	

The two parts of the duo's language has greater independence in this video. I copy Alex's material far less, having developed a range of possible responses as well as the confidence to provide material. By resisting following certain ideas, such as at 1'42" when I don't repeat Alex's note bend (a response that would have been easy to execute), we are instead offering independent lines that contribute to a more interesting ensemble sound. This illustrates an intention in my own praxis to move away from a reliance on thematic parallelism which is arguably the most clichéd demonstration of listening; at best an echoic development of material, at worst an effete need to inform the audience that one is listening. Instead the video demonstrates an advance with regard to a range of responses to detailed listening; through performance we develop a working relationship.

The subverting of the normal posture continues here. When I play the top two side keys of the clarinet at section #30, it is with the index finger on the top key and the middle finger on the next key down<sup>45</sup>. These two keys are designed so that the top key is meant to be only used at the same time as its neighbour and in that case the index finger presses both of them, usually as a trill between written Bb (made with the left hand) and C. By moving the right hand from its normal position and thus allowing greater access to these keys, the clarinettist subverts the design intentions and can press them independently. This allows manipulation of those ventages while holding other keys and fingerings with the left hand.

Playing with Alex heightens my awareness of the clarinet's history such that my engagement with the clarinet is expanded in response to its instrumentality. Our improvisations tend to be dominated by an approach that acknowledges the clarinet's history. But the above is an example of some of the times we stretch that awareness.

As Corbett suggests, a "traditional" ergonomic approach is a route to repetition or a particular standardisation (see page 39). The physical approach demonstrated by Alex and me nudges discipline rather than reinvent it. In improvisation this can extend to the creation of new material. When hands are displaced to unconventional areas of the clarinet they are liberated from attending to chromaticism such that the hands reclaim an investigative role.

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<sup>45</sup> See example 2.

## **6) Haptic Kinship in Songs from Badly-Lit Rooms**

**Location of recording: 20 Tuskar Street, London**

**Date of recording: 10/10/12**

**File name: Recording 6 – Songs from Badly-Lit Rooms**

Collaboration with Benedict Taylor has been a major part of my activities on the London free improvisation scene as well as performances in Brussels and Berlin. This home recording contributed to a set of tracks that came out on the Squib-Box label in January 2013. Having discussed the development of language between two clarinetists, in this section I particularly want to discuss ways in which non-similar instruments can have haptic kinship, how seemingly different techniques can have similar physical underpinnings.

<b><u>#</u></b>	<b><u>Time</u></b>	<b><u>Clarinet</u></b>	<b><u>Viola</u></b>
1	0'01"	Long held notes, pp, with occasional short higher notes.  Note become short, repeated fragments of melodies, mixing with previous material.	Short notes, mp, developing into scraped strings.  Notes repeat and develop into short motifs, mixing with scrapings.
2	2'00"	Angular material, mf	Long notes, punctuated with short textural effects
3	2'18"	Angular material continues, mf-pp	Moves to short notes
4	2'29"	Short duration material, mp	Short durational material, mp
5	2'50"	Return to melodic material	Introduces note bends and pizzicato
6	3'13"	Contrapuntal lines with viola	Contrapuntal picked lines with clarinet

7	3'14"	Gap	
8	3'18"	Contrapuntal language continues, mf	Contrapuntal language continues, mf.
		Clarinet sometimes relaxes embouchure and uses flutter tongue.	Use of portamento.
9	3'50"	Gap	
10	3'51"	Contrapuntal material continues but rhythm separates.	Contrapuntal material continues but rhythm separates.
		Clarinet employs bisbigliandi, imitating viola.  Pitch rises.	Introduces sliding of pitch.
11	4'22"	Gap	
12	4'22"	Repetition of fragments. Wide compass. Continuation of bisbigliandi, introduction of shimmering material in upper registers using jaw vibrato.	Repetition of notes and patterns. Sliding elongates.
13	5'12"	Clarinet drops out	Longer durations, longer sliding.
		Clarinet joins again, recalling #A1.	Thin timbre.
		Attempt to match viola timbre at 5'50", builds to texture that seems to almost crack, with jaw vibrato and bisbigliandi.  Clarinet drops out in last few seconds.	Interesting timbre at 6'10"



14	6'44"	Slow vibrato (#A1) brought in again, this time with relaxed embouchure, slow moving pitch centres.	Moves towards spiccato, mp.
		Attempt to compliment spiccato with increased vibrato. Mp-mf.	
			Track ends with continuing slow viola spiccato, then slow repeated notes.

The attempt to play alongside certain viola techniques on the clarinet was an evident challenge in this track. Rather than try to match the sound of the viola, as can be heard in some of the other tracks on this album, I tried to compliment the sound with different clarinet techniques. When the viola begins playing spiccato passages, which can't really be matched on the clarinet, I instead worked with jaw vibrato since the underlying processes are very similar<sup>46</sup>. The bows bouncing ricochets off the strings do the same work as the jaw on the reed. Although the sonic effect is somewhat different, there is a physical kinship in the two sounds.

The rapid string traversing and sliding ability of the viola pairs with the bisbigliandi<sup>47</sup>, tremolo and vibrato on the clarinet, which again mimics the physical process of the viola's left hand. With bisbigliandi, the fingers create the allusion of quickly crossing strings. Vibrato applies the physicality of the viola's sliding the left-hand fingers to the clarinet's movement on the jaw. At times the boundary between normal vibrato and jaw vibrato becomes blurred, and this is reminiscent of the action of spiccato and the fast movement of the viola's left hand as heard towards the end of the track.

The final piece of haptic matching occurs when my embouchure slackens to try to compliment the viola's portamento – the viola's gliding left hand is mirrored by my lower jaw. Since the register is low at these times, the clarinet cannot easily employ glissando, so a number of techniques attempt to compensate. The relaxed embouchure

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<sup>46</sup> See examples 17 & 18.

<sup>47</sup> See examples 13 & 19.

makes the pitch more flexible and allows vibrato to be more easily effective. While it can't match the compass of the viola's portamento, it is suggestive of it and provides contrast based on the limitations inherent in the instrument.

While the sounds that result might not seem to sound similar, the physical actions that underpin them make a connection. As Wachsmann notes (Corbett 1995), what is "behind" the sound is of interest here, in this case the intention towards kinship (see page 58). This recalls Corbett's suggestion that "new gestures" are "a sound that is the image of the performer's fingers [and jaw]" (see page 59). Corbett's observation that an interest in musical elements is replaced with physical actions comes to the fore in this duo. Using the term "genotext", he suggests that the capabilities of the body of the musician *with* the instrument generate technique itself. Playing with a clarinetist (as in the last section) creates less demand for investigating the genotext. To recreate, comment or compliment the sounds of a viola invites this physical/material investigation. Playing with other instruments is a beneficial way of enhancing the interrogation of the clarinet through free improvisation.

## **7) The A and Bb clarinet in Hunt at the Brook**

**Location of recording: Stamford Brook recording studio**

**Date of recording: 24/02/14**

**File name: Recording 7A – Hunt Bb clarinet; Recording 7B – Hunt A clarinet**

Benedict Taylor, Daniel Thompson and I co-run the record label CRAM<sup>48</sup> and they are both amongst my closest and most frequent collaborators, performing throughout London, Berlin and Brussels. Here I present excerpts of two tracks from our album *Hunt at the Brook* which was recorded by David Hunt and released on FMR. For this recording I decided to take both A and Bb clarinet partly because of the observations made at the beginning of this chapter, that their close but specialised physicalities can render particular influence on my improvisational thinking. I hoped that using the A clarinet in a familiar trio would provoke interrogation of the clarinet's design. I also hope that this CD will serve the reader as an introduction to the music of this trio since it will feature in the final performance as the culmination of this research. I would like the reader to be allowed space for surprise and questioning as they listen to the performance so rather than elaborate on the relationships that exist in the trio here I restrict comment to my own use of the instruments. I was interested in the way that an accustomed situation might still generate material that was bound to mine and the clarinet's physicality and so I write specifically about the finger movements that were necessary to produce the music highlighting ways in which the clarinet's design dictates this.

Because this analysis is concerned with physicality the transcriptions below are notated as written, not as sounding. Transcription only goes part way towards representing what happened in the performative moment. To some extent the discussion below each transcription is a necessary addition to the limitation of staff notation, explaining precise finger and key movements. This issue has been considered in detail with regard to Pat Metheney's jazz guitar solos by James Dean (2014). This reminds us of Prévost's suggestion that staff notation is unsuitable to carry the activities of free improvisation

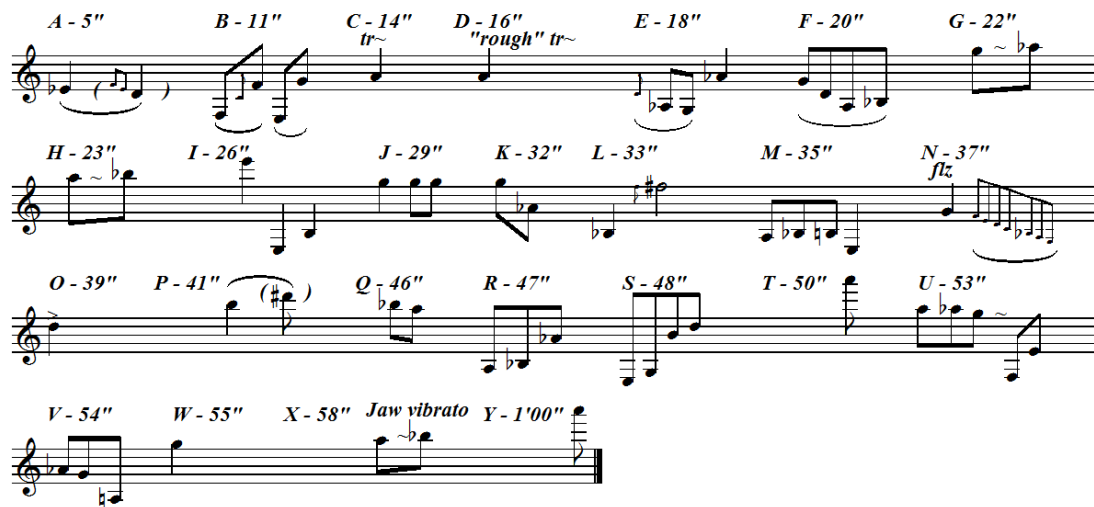
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<sup>48</sup> <http://cramrecords.blogspot.be/> - CRAM organises concerts and releases recordings of free improvisation and new music. We also recently organised a three-day festival of free improvisation.

(see page 17). In this light what follows is at best an approximation. The only true notation is the witnessing of a live performance.

Rather than discuss the entire tracks I have transcribed the clarinet part of the first minute of each track as there is ample material with which to discuss the clarinet's influence. Rather than cover each lettered event, I pick out certain events that demonstrate this influence more clearly.

## 7A – Hunt Bb clarinet



#B begins with all six of the main fingers down and the little finger of the right hand. The ascending octave passes the note C which is made simply by releasing the right hand. From C to F the left hand must then release in the same way. While we hear different intervals of a fifth followed by a fourth, the method of transition is the same – release. In both cases the thumbs remain static. The right-hand thumb almost always stays in place because it is needed to carry the clarinet. The left-hand thumb is essential for the majority of the notes on the clarinet, usually only releasing to achieve the “throat notes”, notes in between the first and second registers. So while this set of notes could be seen as affirming the normal functions of the thumbs, it also signifies a kinship between the left and right hands; the octave leap uses a bypassing note that allows the movement of the hands to mimic each other. This is immediately followed by two notes that can be seen as opposites on the clarinet, an act of haptic inversion: the low E closes as many holes as possible and the G closes none (this note is known as “open” G because the hands are open).

At #E there is the first reference to chromaticism that will prove important throughout both of these extracts. This refers to the idea of haptic and auditory chromaticism that I raised in chapter three. After the grace note, three notes are played with the range of a compound semitone but the final note is a flattened ninth higher. In this example, we hear the chromatic movement of semitones but it is achieved through complex multiple movements of the fingers. The end note of this event, Ab, is achieved by angling the index finger, aided by a slight lowering of the wrist, such that the side of the finger can press a key on the side of the top of the clarinet. This note is easy to reach quickly from any position, heralding its frequent appearance even in the first minute of this recording.

#F presents a melodic fragment that would be more at home with other musics than any of the other events would be. The notes outline a Gm9 chord, ending in an elongated enclosure onto the flattened 3, and thus presenting some of the features of a bebop solo, perhaps a remnant of my previous training. It also represents a continuation of the concept of haptic kinship and chirality discussed in #B. From G to D, the left hand must place the first two fingers and the thumb into their standard, closed positions. From D to A the left hand then completes the closing of the left hand by placing the ring finger down and the right hand copies the first movement of the left hand, that is, it places down the first two fingers.

#G begins with a note that is made just using the left hand. All three fingers are down and the thumb is on both the thumb key and the register key. Similar to the Ab discussed in #E, this is another example of an easy note to reach on the clarinet from almost any position, it is made by “grabbing” the clarinet with the left hand, a very easy physical gesture. The right hand index finger then uses the third side key and thus exposes a particular nuance of the clarinet while the left hand raises a tone hole with the little finger to change the pitch to G#. The third side key was designed to assist the kind of trills mentioned in #C. In particular, when used in conjunction with the throat note A it elevates the pitch to Bb. Here, however, it is used with a note that it was not designed to be used with and so intervals of less than a semitone, in this case a shimmering *bisbigliandi*, results. Haptic influence is evident when, at #H, the left hand moves to two fingers such that the note moves to an A and the right hand moves to the fourth side key to continue with the shimmering affect.

#I begins with a note that is slightly flat because it was produced by using a fundamental fingering and particular tongue position to achieve the third partial. The fingering used to get this note is the throat note A which is executed with just the index finger of the left hand. Another haptic inversion occurs when all the fingers switch to create the lowest note on the clarinet. The B that follows a little flat since it was produced by just removing the right-hand index finger from the low E. This fingering not only generates a microtone close to B but also a particular timbral colour.

The three declamatory Gs that lead to #K descend a major seventh followed by a minor 7<sup>th</sup> into #L. The major 7<sup>th</sup> is of course an example of auditory chromaticism but the lower note is a repeat of the familiar note Ab mentioned in #E such that haptic and chromatic concerns combine. #L begins with the Bb followed by a high F, which is a capitalisation of the clarinet's speaker key to sound the 3<sup>rd</sup> partial. This note functions as an auxiliary note however, to reach the F#. At #M the register drops and the material chromatically ascends but this auditory chromaticism is actually an extension of the haptic chromaticism which was nudged into play by the twelfth rise: the A of #M being a haptic semitone away from the F of #L. What's interesting here is that chromaticism can function for the audience (auditory) but also as haptic (performer) and sometimes there is overlap (chromatic scales in one register) and sometimes there isn't (major sevenths and flattened ninths).

This low note rises with some ambiguity towards a flutter tongue<sup>49</sup> on "open" G, the note which is easiest to find on the clarinet because no keys are pressed and the fingers lie in wait. The flutter-tongued note starts rather breathy but as the embouchure firms so does the pitch and with this manipulation comes the raising of an originally flat note. The event ends with a fall of the fingers that trace a G dorian mode. Certainly here a sounding F dorian wasn't driven by intended pitch. Rather this fall is conjured by the ease of fingers falling one by one, which just so happens to achieve that mode.

#P starts on a B that uses the left-hand index finger and the thumb which presses the thumb key and the register key, a pinch. The rise to the D# is achieved by lifting the thumb and finger off and lowering the wrist on to the side key. This is actually the third partial of the note G#/Ab which I have described as a very easy fingering to find. This movement mimics #E where both hands came off the clarinet and the left-hand wrist

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<sup>49</sup> See example 21.

lowers to sound a G#. The high D# is slightly flat here because it is a partial of the G#. Normally this would be corrected by adding the register key or using a different fingering but here the haptic sense of lowering the wrist governs the phrase rather than the intention of a pitch.

#Q and the start of #R illustrate pitch inversion, separated by two octaves, an auditory device. It also has haptic relevance since #Q ends with the left hand using just two fingers and #R starts with the right hand using just two fingers. The auditory significance continues through this event onto the third note, Ab, which completes a dislocated chromatic pass of three semitones so that the pitches read Bb, A, A, Bb, Ab. That final Ab is yet another example of this easily findable note.

The first two notes of #S, created by lifting the little finger are followed by the same two fingerings a twelfth above such that the four notes E G B & D are executed with the movement of just the little finger and the thumb (speaker key).

#V starts at the now ubiquitous side position of Ab which then falls with jumbled chromatic material (Ab, G, A). The note at #W stays within the pitch description of #V but a haptic influence is also evident here: the note is the left-hand grab that was important in #G and #J.

## 7B – Hunt A clarinet

The musical score for 'Hunt A clarinet' consists of ten measures, each labeled with a letter and a duration in seconds. The notation is written on a single staff with a treble clef and a key signature of one flat (Bb). The measures are as follows:

- A - 1"**: A single eighth note on G4.
- B - 4"**: A quarter note on G4, followed by a quarter rest, then a quarter note on A4, and a quarter note on Bb4.
- C - 8"**: A quarter note on Bb4, followed by a quarter note on A4, and a quarter note on G4.
- D - 16"**: A quarter note on G4, followed by a quarter note on A4, and a quarter note on Bb4.
- E - 12"**: A quarter note on Bb4, followed by a quarter note on A4, and a quarter note on G4.
- F - 17"**: A quarter note on G4, followed by a quarter note on A4, and a quarter note on Bb4.
- G - 18"**: A quarter note on Bb4, followed by a quarter note on A4, and a quarter note on G4.
- H - 20"**: A quarter note on G4, followed by a quarter note on A4, and a quarter note on Bb4.
- I - 21"**: A quarter note on Bb4, followed by a quarter note on A4, and a quarter note on G4.
- J - 24"**: A quarter note on G4, followed by a quarter note on A4, and a quarter note on Bb4.



This excerpt exhibits more rapid figurations than the first. Since my fingers were moving faster, I initially wondered if this would reveal more evidence of physical “clinging”, that is, more occurrences of relying on learnt fingerings and positions. Certainly in the previous track there were several fingers that occurred regularly, particularly at the ends and starts of phrases. The low note E (three lower ledger lines), the side Ab (which sits in the second space of the stave) and the clarion G (which sits above the top line of the stave) are all examples of this. To identify some of these examples with this track, which uses a differently pitched clarinet, would be to strengthen the claim that those figures were driven by haptic, as well as auditory, influence.

#B falls to a Bb then quickly rises to an E (an interval of a sharp eleventh) via a Bb an octave above the low note which serves as a bypass note into the clarion register. This means that the register key is already down, ensuring an easy transition up to the E. If we ignore the Bb, we can see that this ascent acts as haptic chromaticism which is then continued with auditory chromaticism through F, E and F#. The jump down to G# is a further haptic chromaticism because it is physically just one semitone away from E when we ignore the register key. From this point the right hand manoeuvres chromatic territory in the range of a major third before a flat 9 up to the Ab, the familiar fingering often witnessed in the first extract. What is demonstrated here is that the right hand and the left-hand thumb can be thought of as working independently; the right hand moves



chromatically and the left-hand thumb moves slowly to create a set of notes that might seem divorced but nevertheless are governed by a physical logic.

A major arpeggio begins #E, another example of how prior training can be present in improvisational material, particularly when the hands are moving quickly. The note C then lowers to F (a twelfth) via the familiar side Ab. This is in part dictated by the difficulty to descend a twelfth with legato so the Ab serves as a passing note. In this case the right hand remained in place such that the movement is just enacted by the left hand requiring just a lowering of the wrist, raising of the fingers and repositioning of the thumb.

The rising flutter tongue at the start of #F ends in two high notes which result from harmonics that spring from the throat notes. This jump happens partly because the flutter tongue disrupts the embouchure's control such that the upper partials speak unexpectedly.

At #H the starting note F falls a twelfth to Bb via the familiar G# which helps to maintain legato. After this haptic-driven event, #I seems to be dominated by auditory considerations. An inversion of material in the upper octave is followed by chromatic material before repeating the first two notes in reverse.

At #L a glissando from Eb heads an octave higher. The slightly flat pitch is a result of the side key being used (a harmonic of the throat note Ab), exactly as we saw in the previous track. To conclude the event, another example of the twelfth's influence is played out. The Bb jumps to a familiar (Ab) which then descends via tri-tones before a restating of the Bb and then the octave above before heading towards the F (a twelfth above the Bb).

The next note, the first of #M, could be read as a comment on the last note of #L. While the F is the result of the right hand's index finger, so does the B belong to the left hand's index finger. This change is a kind of transfer between the hands. It is passed back in the second note of #M which is followed by notes that continue some of the themes discussed above.

There are further examples of the familiar notes: the sudden low E in the middle of #N and the G# at the end of #O. It gets more interesting, however, at #P where both groups of the three notes start with the open G. The other two notes are the same in a haptic

sense. The A & E and the Bb & F are both a twelfth apart but the notes are inverted in a way that seems to convey an awareness (and perhaps a disruption) of the haptic process.

At #W two harmonic fingerings begin the event (the lower note is the unsounding fundamental) and the character of the twelfth is revealed.

The two extracts discussed above demonstrate that the physicality of the clarinet is an important component of my approach to improvising which I regard as an act of revealing rather than a process of inhibition. It recalls from chapter three the work of Brymer and Richmond (as well as the mention of several composers) surrounding the importance of the clarinet's overtone series and the speaker key. Recalling Corbett's suggestion in chapter two, rather than relying on pitch relationships between instruments, improvising allows other modes of connectivity to surface (see page 58). Here I have focused on the idea of haptic kinship. In future I could also address the role of rhythm, dynamics and timbre.

As Corbett suggests, patterns and responses can be formed by a practiced posture, which not only means the shape of the body but also the position of the fingers, readied to engage with the instrument's design intentions (see page 39). Corbett writes: "Implicit in the instrument are techniques for playing it" and that training "forces the instrument to sound only a certain way" (Corbett, 1995, p. 229). By using differently pitched clarinets I was interested to see what would happen if I were to alter the voice of this established mechanism. The transcriptions and descriptions above show that that despite the change in pitch there are several similarities of physical approach.

I propose that alongside other musical considerations, the physical movements a musician makes are an important part of their process. Whether or not an audience is privy to this is irrelevant. Instead it carries an object-led logic which voices a universal element; this is what an object influencing a musician sounds like.

## **8) Microphones of Zubeneschamali**

**Location of recording: Stamford Brook recording studio**

**Date of recording: 22/04/13**

**File name: Recording 8 – Zubeneschamali**

The inclusion of this track serves as a vehicle with which to discuss issues of recording an activity that is primarily understood as a live art form. Because recordings are the only way in which the reader has been able to hear my engagement with free improvisation, it will be worthwhile to illuminate some of the ways in which a recording fails to truly recreate a performance suggesting that the only way to really hear an improvisation is to be present as it is created. In chapter two I discussed how Barrett sees recordings as an end point to a period of discovery. In contrast I see them as incomplete snapshots of an ever-evolving praxis. The process described below is not indicative of my normal approach to recording. Ideally I prefer to present the album as it happened in the studio. That said, I don't have a very strong ethical objection to editing. The studio already removes a vital element of real performance – the urgency that comes from the audience. To attempt to answer this Evan Parker recorded his 1978 album *Monoceros* straight to wax so that he knew as he was improvising that there would be no possibility of editing the results.

This trio, which regularly performs in London and Berlin, features Roland Ramanan and Dan Thompson. We recorded this album to create a testament to the work we'd been doing up to that point, rather than a record to represent what we might sound like in future performances. We left the studio with a basic mix of our tracks and later discussed thoughts we had about each track, deciding whether some should be deleted and whether some tracks should be separated into smaller tracks.

Roland was keen to reorder the tracks and while I had no objections I normally prefer to leave them as recorded, to preserve any thread that may have naturally been woven into the development of the day. Reordering is a traditional compositional adjustment, the kind of rethought that is associated with composers of written music. Arguably, the environment was already artificial – playing into microphones in a sterile studio – and this kind of editing could be used to address that.

Recordings demand a longer playing time than most gigs do (several hours as opposed to 20 to 40 minutes) and we had never played for so long before. The album runs to 63 minutes but on top of that was the material that was eventually deleted. The studio had created an intensification which had already turned the event into something external from what we had done before.

The possibilities of deleting, reordering and extending portray the act of recording as a different object than merely a documentation of our live performances. Recordings are therefore problematic; however, the studio presents the best way of capturing sound in high quality.

Mixing and mastering the tracks goes further to crafting an object. The first thing that we decided on was that volume manipulation should not be used to bring out hidden features because dynamically we wanted the recording to reflect what happens in live situations. Sometimes features are not articulated within the context of the trio – the ensemble chooses their own balance. Nonetheless, these features are important to the group's sound, sometimes contributing to a combined texture or perhaps even providing a moment of visual and sonic incongruity, where an action doesn't reveal any obvious sonic material. This can be a startlingly dramatic impact on an audience though the visual element doesn't exist on a sound recording. Even so sometimes one may be able to hear that something is almost happening or trying to happen and that can have a similar effect. There is a useful analogy in Berg's Violin Concerto when a quiet beautiful violin passage is masked by powerful French horns. In recordings engineers might tamper with levels to reveal the hidden song, completely destroying the subtext – the violin represents the death-song of Berg's close friend Manon Gropius.

So we had agreed that any edit should be minimal. Dan commented at the time that "when the guitar is naturally lower than the trumpet and clarinet, I don't want that brought up." We were surprised to find, however, that there were times when the recording did not represent what we had experienced during the recording process. To complicate this we already had three conceptions of how the performance had sounded – we were all sat in different parts of the room and closest to our own instruments. Experience and skill already mitigates for this difficulty but there was another feature which had proved much more dramatic than we had realised, especially as revealed

through the microscopic capabilities of the studio's powerful speakers. This issue was Roland's position to the microphone.

Dan and I are both fairly static performers and I had a microphone dedicated to each clarinet, so no extra movement was necessary. Roland, however, habitually employs microphone technique into his vocabulary, moving in closer for quieter moments (with a trumpet mute perhaps) and recoiling when preparing a louder passage. Because we did not use monitors the microphone's effect was oblivious to us at the time of recording – an absence of the kind of feedback Roland would normally expect. Perhaps some of the movements Roland has come to associate with modes of playing have become as important as the aural effect.

This highlights a further possibility in improvisational thinking. Not only is the body's capabilities extended through an instrument, but so is the activity of its sound extended through the microphone. Thus it affects the listening experience during and after performance and posits the recording as an alien artefact. In our case this resulted in a number of places where Roland wanted to be brought down in the mix, feeling that he was too loud. Presumably he had played louder because his normal hearing of the microphone's amplification was absent.

An example of this was listening to the track presented here, when Roland's trumpet hissing was deemed a little intrusive. During recording the hiss was at a comfortable level and we had responded to that. The closeness to the microphone had increased the hiss and so it was no longer representative of what we had organised musically at the time.

This did also happen with Dan's guitar in the final track during a particular aggressive passage. Perhaps the presence of a contact mic boosted the level beyond what he had expected and so we slightly brought that down in the mix. Prior to that change the dominance of that particular guitar activity was not something that would have happened in an acoustic performance.

The methods utilised here were to restore the recording to what we perceived to be our original contribution when the recording was made, what I would call reparative editing. Derek Bailey cites an interesting example that, unfortunately for him, opposes this approach and demonstrates the transformative potential of recordings, recalling poor

Manon Gropius. Describing performing with Mark Kramer and John Zorn, Bailey wrote:

I decided to play acoustic. That way, I thought, I'll keep out of the trouble. I'll chip along in the background playing some kind of accompaniment while these two guys cover the waterfront. Probably nobody will even hear me. (Bailey, 2009, p.15)

He then explains that he had enjoyed the event but that the manipulative potential of the microphones had drastically changed the results:

It seemed they'd close mic'ed the guitar and on the recording ... instead of accompanying them it sounds like they're accompanying me. I got exposed. (ibid.)

This "exposure" is a kind of "revealing". In the context of this chapter it also helps to reveal that the microphone hears more than an audience can and it never stops listening. Bailey's account echoes my sentiments that a recording distorts the reflection of reality and thus posits itself as an alien artifact.

The processes described above bring to the fore the observation of Bourriaud that documentation and the event are never really comparable and that the event ceases to exist at the end of the performance. This is a crucial consideration for free improvisation and indicates the importance of a final performance at the end of this period of research towards this PhD.

## **9) Quartet with Keith Tippett**

**Location of recording: Fieldgate recording studio, Penarth**

**Date of recording: 24/07/14**

**File name: Recording 9 – Keith Tippett Quartet**

Finally in this chapter I present the full 38-minute third track of this forthcoming CD. Recording in a quartet with Keith Tippett felt like the culmination of a 13-year process. It was Keith who introduced me to free improvisation when I started my undergraduate degree at the RWCMD in 2001. Three years later, Ashley-John Long joined the classes and we immediately formed a duo which is ongoing. Keith describes these classes that were such an important part of my introduction to free improvisation:

[At the Royal Welsh College of Music] I take mainly classical musicians in spontaneous composition—no time, no key, nothing fixed, just there and then, and listening [to each other]. It’s purely about being a sound sculpture.” (Tippett in McKay, 2003)

Referring to free improvisation as “spontaneous composition” raises certain considerations that I have dealt with in this thesis. As I have stated I agree with Parker that free improvisation can be thought of as a compositional methodology. The notion of it being “spontaneous” however obscures recognition of the intense continual development that I argue is essential to free improvisation as I practice it. I don’t think Keith would disagree here and perhaps this a terminological issue rather than an aesthetic one but I raise it here to emphasise my belief that each performance serves also as a testament to work done in the past. Conversations with various improvisers have revealed an interest in working *through* performance as well as prior to performance. This concern with development is a vital component of what I strive to do. The emphasis on “listening to each other” described by Keith definitely resonates with my own approach. It is here where the challenge to develop relationships is situated.

Together with Keith and Ash I decided that involving Benedict would be an interesting way to bring together some of my key musical associations in free improvisation so far. Our individual musical backgrounds were also a reason for this union. Keith describes his work as being involved with improvisers, contemporary classical musicians and

avant-garde jazz musicians (Tippett in Scotney, 2013). Outside of free improvisation my own background is in contemporary classical music as well as jazz and Ash is likewise professionally acquainted with both those fields. Benedict is deeply involved with contemporary classical music and free improvisation as well as having a sociological and anthropological interest in British folk music<sup>50</sup>. Keith is no stranger to bringing together people with different backgrounds. His 50-piece ensemble, Centipede includes people whose main musical activities were in the fields of soul, R & B, jazz, classical music and progressive rock. He refers to that time as a “glorious musical circus” (Tippett in McKay, 2003). I was interested in how these distinct musical personalities (with some close links between various groupings) might manifest in collective improvisation. There are sometimes assumptions made that assign improvising musicians with jazz but Benedict and I are examples of musicians who came to this music primarily through contemporary classical music. As Keith observes “many European free improvising musicians have never even played jazz, nor wanted to.” (ibid.)

Here I move away from detailed technical discussion and instead provide a brief survey of an extended piece of improvised music, giving space for a more relaxed listening. Instead I discuss ways in which the quartet co-creates and develops complex musical environments through listening to each other. I wrote in the introduction that in Hopkins’s documentary Keith Rowe criticises reviewers of free improvisation, saying that “scratching the surface isn’t even there” (Hopkins, 2009). What I hope to do by providing this track and brief commentary here is to embrace a descriptive writing that I have tried to avoid elsewhere in order to provide the listener with an itch.

The track starts with Keith’s measured piano chords and the ensemble responds by colouring these punctuations of space, extending and developing the tone set by the piano. The rest of the ensemble does what the piano cannot, trailing the decay of the piano’s sound, elongating and colouring each articulation. My use of slow *bisbigliandi* joins Benedict’s gliding fingers and Ash’s harmonics. When Keith moves to the inside of the piano at 2’50”, he advances its possibilities of colouration, using his fingers to make delicate *glissandi* which is later incorporated by the rest of the ensemble. Rather

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<sup>50</sup> See Taylor (2010).



than any of the ensemble members exhibiting soloistic thinking, this is a collective sound where the members feed each other and cogenerate.

At 6'22" Ash's percussive activity, using brushes on the body of his bass, creates a very different texture. Again it is contributively that the ensemble acts, but rather than the development of a particular group texture, little motifs serve to inspire the group into new directions. Ash's emphatic bass note at 8'48" sets a new approach instantly adopted by the other players and gives Keith time to prepare the piano with objects, slowly building a rhythmic figure. By 10'11" roles are temporarily assigned where the piano provides a repetitive figure (a groove) and I contribute a soloistic line, while Ash and Benedict advance the texture through held notes and regularly moving patterns.

Lugubrious bass clarinet notes at 11'17" suddenly move the ensemble back to previous material but Keith provides an interjection at 12'18" which reminds of the variety of responses to detailed listening; opposition is a viable response in free improvisation. Many examples of parallel thematicism follow as lines take turns to interweave and penetrate. Ideas are presented that are adopted or left to stand alone.

Keith's playful teasing figures at 13'55" usher a different exploration from me with multiphonics on the bass clarinet before moving back to the clarinet. The ensemble builds from this point towards a climax at 16'22" which is interrupted by Keith's held notes before moving to more rhythmically driven material until 17'04" and again we enter sparser territory, responding to a moment collectively.

Around 18'10" the idea of roles returns until 19'30" when we readopt the approach of colouring Keith's piano playing with brushwork, bisbigliandi and harmonics. Quiet flourishes in the clarinet develop until Keith again heralds another section with new material at 21'04" which develops into trio material without the piano. At 22'00 I enter brusquely with an interjection quickly adopted by Benedict and then Ash and we continue as a trio until Keith rejoins with prepared piano around 23'08", developing towards a brief implied metre at 25'23". Eventually the ensemble moves back towards a group texture around 27'45" with individual accentuations making special contributions, like light peeking through clouds.

At 31'05" we prepare for the final episode of this track, injecting agitations that slowly unravel the homogeneity. Phrases grow, complement and contradict until the end.

In the studio, after recording an hour's worth of material but with time still available, Keith asked if anyone had played anything they weren't happy with. We all agreed that we were happy with the performance but decided to carry on recording in spite of Keith suggesting that the first take is usually the best. I appreciate this notion that subsequent "takes", when they are designed to improve on what has come before, are fraught with an obscuring intention, but there was no harm recording more material that may add to the record. We didn't imagine that this extra take might replace the previous performance.

The quartet with Keith was an opportunity that was unlikely to be repeated. As such it created an intensity of focus on my part which I believe served as a creative catalyst. I think the recording speaks for that.



## **Conclusion**

Conclusions traditionally articulate firm discoveries mined from an extensive period of research. For a praxis concerned with constant evolution this seems hypocritical. What I have provided instead is to briefly outline the development of my thinking over the past three years. I then comment on how this might present itself in the final performance. Really it is this performance that will serve to conclude the work done here. As I wrote above (see page 83) it will also serve as a demonstration of present activity and will indicate future activity.

In the introduction I made a claim for free improvisation to be understood as a “culturally important music” (Cage in Feisst, 2009, p. 39) and a compositional methodology that questions the elevated status of notation, instead suggesting that the instrument itself can be read. In laying out ways in which free improvisation could be considered as a relational praxis I set the tenor of discussion in this thesis to be concerned with relationships in free improvisation rather than representations.

In chapter one I introduced the idea that whereas most tools are used solely in line with their intended function, tools used for art invite uses that weren’t previously imagined. Describing instruments as extensions of human physicality I suggested that the instrument imbues its user with ideas. It is from this point that I made a case for the musician’s relationship with their instrument as a positive force towards investigative work in free improvisation.

I recalled my original concerns regarding the instrument’s influence, questioning whether it played me rather than vice versa and then resolved that its (designed) intentions, coupled with my desire to subvert them, was where the crux of the relationship was situated. This led to the notion of veneration, respecting not only its intentions (its instrumentality) but its allowance in being questioned (its materiality).

In chapter two I argued that free improvisers work with their instruments in performance rather than present pre-mastered material. In doing so there is a parallel made with Cage’s demand that music should rely on naturally occurring patterns – an instrument serves as a vessel through which free improvisers can give life to “naturally occurring patterns residing in its construction”. This took me away from self-expression

and instead towards making musical statements that reveal the logic of instruments through free improvisation. It is here that I differ from Riley's desire to remove her own physicality from her work. As well as being concerned with the inherent logic of the clarinet, it's the clarinet in my hands as a performative methodology that interests me. Again this recalls Clarke's observations about the indelible presence of the instrument in the sounds that are produced (see page 55)

I made a claim towards malleability of gesture rather than intended refinement prior to performance, allowing previously undefined actions to be present in performance. I suggested that improvisers practice strategies rather than techniques so that any sonic material that might arise can be dealt with during performance.

In chapter three I articulated ways in which the clarinet can provide new material and conceptions in my praxis, particularly when adopting a tension in its use in order to capitalise on an incomplete knowledge of the instrument. I also tried to make clear that the techniques I use belong to the clarinet and not to me. As such, I have no fear of them being used or advanced by other practitioners. The techniques and approaches I use originated because of the investigation into how the clarinet and I work together. If I can lay claim to anything, it is this relationship.

Chapter four sought to explain that relationship further. Through analyses and commentaries of recent recordings, I set out to demonstrate physical influence on improvisational thinking. I first did this via a simplified experiment (*Improvising to a drone*) and later through a recording that pointed towards regular returns to sonic material originating from particular physical conditions present when holding the clarinet (*Groundings on the bass clarinet and clarinet*). I later expanded on descriptions of these physical movements emphasising where "haptic chromaticism" took place and where the hands demonstrated mimicry or inversion (*The A and Bb clarinet in Hunt at the Brook*). I highlighted the investigative work undertaken in my praxis, first through a solo recording which I felt was compromised by too much planning (*First solo clarinet performance*) and then in a performance charged through a short time frame that allowed episodic yet detailed exploration (*The materiality of Brandenburg Mansion*). In both I explained the process of pushing at limits of control as a method to reveal unknown clarinet characteristics. I then described how playing with others could heighten my investigation of the clarinet firstly in duo with another clarinettist (*Two*

*duos with clarinettist Alex Ward*) where a mutual instrumental understanding enabled a considered demand of each other's clarinet-use and then with Benedict Taylor (*Haptic kinship in Songs From Badly-Lit Rooms*) where certain gestures were translated from the viola to the clarinet. Towards the end of this chapter I elaborated on some of the issues surrounding recordings, suggesting that they can never serve in place of live performances (*Microphones of Zubeneshamali*). Finally I hinted at some of the many approaches to listening that contribute to the demands of instrumental as well as musical investigation in free improvisation (*Quartet with Keith Tippett*).

The course of this research has fundamentally changed the way I think about my own musicality. I began with an untrusting scepticism of how an object external to myself might influence and deny decisions in performance, potentially compromising my musicality. I thought of the clarinet as limiting my choices, forcing ideas that were a product of its history rather than my imagination. By the end of this research scepticism has transformed into a veneration, thinking of the clarinet as a source of material to navigate in the field of free improvisation. This research has provided and intensified the approach I am currently interested in. Performing on the clarinet has become an investigative activity rather than just an expressive one; I seek to develop relationships rather than powers of representation.

Just as recordings of free improvisation present a snapshot of current projects that will evolve through future performances, so this research acts as a window to the developing activities that will continue past its frame. As such I anticipate changes in my approach between the end of this writing and the final performance. While I don't know what these changes will be I do know that the investigative work outlined in part two will continue and intensify. Perhaps some of the techniques that are so important to me now will have vanished, replaced by other nascent approaches to be revealed through the ongoing process of exploration. This is the heart of my work in free improvisation.

Please note the final performance took place as part of Free Range which was held at Water Lane Coffeehouse on 13/01/16. Sam Bailey opened the concert with a fantastic

solo piano set. The recording of my trio is available on the DVD. It is also available online<sup>51</sup>.

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<sup>51</sup> <https://www.dropbox.com/sh/e1vrxl1iwu260d/AADA6owAljvT4kiUHapBg8SJa?dl=0>

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