Dialogical Music Systems: The Importance of Agency in Creative Processes

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A thesis submitted in partial fulfilment of the requirements of Edinburgh Napier University, for the award of *Doctor of Philosophy*

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Dialogical Music Systems: The Importance of Agency in Creative Processes
Declaration

Declaration

I hereby declare that the work presented in this thesis has not been submitted for any other degree or professional qualification, and that it is the result of my own independent work.

Gordon Thomas James O'Neill

Full Name Goes Here (Candidate)

01/10/21

Date

Dialogical Music Systems: The Importance of Agency in Creative Processes
Dedication

Dedication

Dedicated to the priest who called me a gift from the devil before I even spoke one word; here's roughly fifty-thousand.

Abstract

For many, music represents product, something to be created and consumed, whilst functioning merely as aesthetic noise. I have often regarded this viewpoint as problematic, which is why this thesis provides an alternative perspective on music through the lens of agency, rather than musicology. I have done this through a practice-based approach where the two components of this thesis, the commentary and portfolio, are intended to explore the meaning of agency, or more precisely, dialogical music systems in combination. As such, the commentary acts to contextualise the findings from literature as well as the practical research which consists of three distinct studies comprised of compositions with varying levels of perceived dialogicality, including an album and two interactive installations: these all took place telematically, or digitally, due to the concurrent global pandemic. Data was collected from participants via interviews, focus groups, and surveys, and then cross-examined with auto-ethnographic reflection before being thematically analysed. I argue on the basis of these findings that dialogical music systems with a higher perception of agency encourage a greater degree of active engagement amongst participants and in turn facilitates the maximal capacity for individual creativity.

Keywords: Dialogical Music Systems, Agency Perception, Creative Processes, Splintering, Temporality, Decentralisation

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1.Introduction

Prior to researching the topic of dialogical music systems, I focused primarily on the composition of algorithmic and generative music, however through further exploration into these topics, primarily via various socio-political lenses, it was clear that many of my personal perceptions were being challenged. Much of the initial time researching was spent in a state of introspection and retroactive engagement with the surrounding literature, which quickly lead from simply composing generative music programs to the development of systems with wider social implications, particularly as democratised pieces of art. This, in tandem with the Covid-19 global pandemic, elucidated many issues apparent in, but not limited to, the creative industries, and the need for more process-based systems that concentrated on agency as a primary driver.

Commentary Structure

The structure of the commentary¹ will begin with a contextualisation, which will span several chapters and primarily be employed to formulate the framework for which the three studies to follow will utilise. This will be done by means of producing working definitions for key terms, such as dialogical music systems, and unpacking the surrounding literature including any gaps in the field of knowledge. For that matter, throughout this commentary, there will be blocks of definitions derived from texts and cross-referencing at the end of each chapter and must be understood as my personal definitions rather than trying to control language. I have found that through research the focus of most academic writing on music tends to ground itself particularly on music as product and the relation between others to it or vice versa, as opposed to music as process that can be perceived dialogicality as a system of processes and actors within it. From my point of view, focusing on this issue is

¹ The distinction must be made here between the two components of the thesis, the commentary and the portfolio. The former consists of this document, and the latter being the artefacts (systems) used in the studies. The term thesis itself will act as the all-encompassing term for both of these components.

particularly important in our current situation, during a global pandemic, where an individual's need to actively engage in the creative processes with others is heightened due to prolonged isolation or lack of social interaction. For this reason, and for the thesis being undertaken as a practice-led Ph.D, each of the studies is principally a composition, or compositions, that have been produced with varying levels of perceived dialogicality (agency) as the integral factor that is being investigated. This, although somewhat unconventional by music Ph.D standards, since the compositions are not being explored musicologically but rather as a way to study agency through the lens of dialogicality. Mainly, the reason for doing this was because the compositions and the research on dialogicality developed in parallel with one another, meaning the compositions were not created to be examined via musicology but as ecological agency experiments.

Following the contextualisation, the three practical studies, in sequential order of increasing theoretical dialogicality: Wordeater, L'appel du Vide (LDV), and MusicBox, are investigated for perceived agency. Wordeater comprises of a digital album, consisting of three compositions that were developed as the assumed least dialogical of the three studies, where the music was notated, then provided to performers to actualise by sticking as strictly as possible to the notation, then finally provided to listeners. The second, LDV is a text-based notation that was provided to performers to actualise with room for participant improvisation in order to increase their dialogicality and subsequently creative capacity. Finally, MusicBox, the perceived 'most dialogical' composition, is comprised of a program developed for participants to interact with virtual objects in order to create music. For all of these studies the methods of analysis are particularly focused on qualitative data collection through interviews and focus groups in order to thematically analyse the findings - these methods are explained within the studies and differ slightly between one another depending on the data collection method utility. Furthermore, participant inclusion criteria, as well as procedures, materials used, and analysis methods will be provided before presenting the findings and finally discussing the outcomes. Diagrams referred to as 'Temporal Agency Perception Spectrum' ('TAPS') diagrams will be Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 1: Introduction

presented within each of the studies as visual representations of the qualitative experiences of participants, including findings on perception of dialogicality over time from participants and auto-ethnographically as the composer - this is used particularly not as a way of quantifying the data but as a more meaningful and engaging way for the reader to consume the data within each study. Finally, the conclusion will be composed of a summary of the commentary, from the key points within the contextualisation chapters through all three studies, and provide final thoughts on the thesis as a whole. This will also include what is to potentially follow and why this work has contributed to the field of existing knowledge, particularly through providing an alternative viewpoint on agential engagement with music systems.

Thesis Aims

This thesis aims to:

- (1) analytically disaggregate each of the key components in the term dialogical music systems through contextualisation;
- (2) produce three unique systems;
- (3) investigate the dialogicality and levels of temporally perceived agency of actors within said systems;
- (4) evaluate the importance of agency in creative processes based on the findings.

2. Contextualisation

2.1. Of Art and Music

Although commonly referred to as a literature review, the title of this chapter will utilise the term 'contextualisation' as a way of fundamentally signifying that this portion of the commentary aims to provide a foundational basis for the studies to follow. As such, this chapter will aim at disaggregating the term 'dialogical music system' into its key components for the purpose of creating a working definition, by exploring the field, the issues surrounding it, and the gaps within the existing bodies of work. This will be done through the following order of topics: Art, agency, decentralisation, reproduction, and temporality - all with regards to music. It is essential that close attention is paid to the underlying element, that is, the use and meaning of the word 'music' in this particular instance. In order to fundamentally clarify this, this section will strive to provide a working definition of 'music' with a framework beginning with the subtle, but important, distinction between 'Art' and 'art' that is to be made for the sake of this thesis. However, it is important to point out that the definitions of both Art and art that are to be used within the context of this thesis are not meant to be all encompassing, but as functioning components of this research. I will begin by investigating the difference between Art and art through the lens of Weitz, who explicates his proposed key aesthetic theories: Formalism, Emotionalism, Intuitionism, Organicism, and Voluntarism (Weitz, 1956, p. 27). The Formalist position is outlined by Weitz, referring to Bell and Fry, as follows:

'The nature of art, what it really is, so their theory goes, is a unique combination of certain elements (the specifiable plastic ones) in their relations. Anything which is art is an instance of significant form; and anything which is not art has no such form.' (Weitz, 1956, p. 28)

² Art can be understood at this point in the commentary as the all-encompassing term for all forms of art (visual, sonic, etc.), whilst art at this point can be understood as a specific art form. These definitions will evolve as the chapter progresses.

This concept has massive implications for what is exactly meant by the nature of Art, as Bell himself describes an instance of significant form as 'lines, and colours combined in a particular way, certain forms and relations of forms' which 'stir our aesthetic emotions.' (Bell, 1914, p. 5). It is here that the difference between Art and art can begin to be discerned. The Formalist aesthetic theory, including the definition of significant form supporting it, is far too exclusive. Primarily it leans far too heavily on visual arts whilst omitting other art forms. One example of such an omission is music, another form of artistic expression, since it is of course impossible for the sounds emitted by instruments and individual voice to comprise of significant form if it lacks the main qualities outlined by Bell, distinctly speaking of combined lines and colours. The only conceivable way of pairing the Formalist view to music would be to reduce music to an artefact, such as the notation itself, where the written implied sounds are able to be considered as Art. Nevertheless, this particular theory is counterintuitive due to its exactitudes, so the Emotionalist's point of view must be inspected, which theorises that art is that which projects emotion in some sensuous public medium (Weitz, 1956, p. 28). Tolstoy is a prime advocate for this type of aesthetic thinking, agreeing with Kralik somewhat, since there lies within his theoretical interpretation a deeply entrenched idea that: 'Es folgt nun ein Fünfblatt von Künsten, die der subjectiven Sinnlichkeit entkeimen... Sie sind die ästhetische Behandlung der fünf Sinne.' (Tolstoy, 1995, p.11)³. This is reinforced later by his understanding on the nature of Art, defining it further:

'To call up in oneself a feeling once experienced and, having called it up, to convey it by means of movements, lines, colours, sounds, images expressed in words, so that others experience the same feeling - in this consists the activity of art. Art is that human activity which consists in one man's consciously conveying to other, by certain external signs, the feelings he has experienced, and in others being

³ Roughly translated: there follows then a cinquefoil of arts growing out of the subjective senses... they are the aesthetic of the five senses.

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infected by those feelings and also experiencing them.' (Tolstoy, 1995, p. 39/40)

It can then be extrapolated that Tolstoy is suggesting that because he believed Art came from the subjective aesthetic senses, not only including visual art, nor only adding aural, but in fact that all expressive forms that are external signs of human creativity are represented under this theory. This understanding of Art seems to be more inclusive as it links it inherently to the five primary human senses: visual, aural, tactile, olfactory, and gustatory, meaning there is no restriction to any medium, such as a painting or sculpture, live or recorded, or types of cuisine, and does not discriminate against genres either (e.g. surrealism, baroque, or fine dining). It seems therefore that if something has any aesthetic quality, subject to the aesthetic of any or all of the five senses and can consciously convey an experienced feeling then it can be considered Art. It may seem somewhat intuitive to include the addition of this new element, the social; that Art must be an extension of an artist's emotive expression to another person. This, however, is idealistic at best, since it presumes that any given Art will be similarly considered in a social setting by all people involved, i.e. individuals will have similar emotive responses and experiences to that of what the artist is meaning to signify to any given perceiver. For example, under Emotionalism, in order for Art to be considered as such, it must have the capability of conveying to another a feeling that may not necessarily be accessible, or even recognisable, especially if it is niche to a particular socio-cultural setting or group, portraying an event not shared by all that perceive the Art, or simply that there will not be the same level of said emotion perceived as portrayed therefore the transmission of experienced emotion is skewed, if not entirely flawed. This particular idea is also contradictory, as later in What is Art? when Tolstoy states 'perverted art may be incomprehensible to people, but good art is always understood by everyone' (Tolstoy, 1995, p. 80). This would imply that something beyond ones comprehension, although able to convey emotions, is now not Art as it must be entirely understood by everyone to be classified as such. The answer to this contradiction may lie in the Intuitionist position, which is an amalgamation of Emotionalism and Formalism, where Art is defined as an expression of emotion in a significant form (Weitz, 1956, p. 28). To adumbrate, the Intuitionist's notion of art would be an expression of transmissible and comprehensible emotions through lines and form and the relation between them. It seems that the definitions, of Emotionalism and Formalism, have been vacuously conjoined to one another to create a Frankenstein Intuitionist. This monster still retains the prominent issue of transmission of emotion as functioning predominantly as comprehensive portrayal *to* rather than individual perception *of* the Art. Maybe the answer lies in the penultimate theory, that of Organicism, which defines Art as follows:

"...art is really a class of organic wholes consisting of distinguishable, albeit inseparable, elements in their causally efficacious relations which are presented in some sensuous medium." (Weitz, 1956, p. 29)

It would seem that from this theory the transmissive element has been condensed into the format of being presented. There are no assumptions made about its emotive response, however following closely is the problem that Art could then be considered as such if it just consisted of 'some related elements that present something... somehow'. Moreover, there is the issue of the terminology being used here: 'of organic wholes', which is not fully explained by Weitz (ibid.). By extrapolation these organic wholes are just the summation of elements created by an individual but this may leave the definition somewhat loose; all organic wholes comprised of elements which are then presented are become Art. The question therefore arises, is Art something which is considered of wholes and must be presented, or can it be of wholes but not presented at all? In order to clarify, and potentially find an answer for this, the final theory outlined by what Weitz called the Voluntarist, must be taken into consideration. The Voluntarist is considered as seeking to implement the importance of social elements in the definition of Art, by defining it as, '...the provision of satisfaction through the imagination, social significance, and harmony. I am claiming that nothing expect works of art possesses all three of these marks' (Weitz, 1956, p. 29). Again, by breaking down each point in this definition and relating it to what is already know. The satisfaction through the imagination can be understood as something that is transmissive and understood, assumedly through any of the given aesthetic senses, similarly to social significance. But again, the issue of who can understand the Art is then, much alike in Emotionalism, locked socio-culturally; it seems Art must be socially significant to *everyone* in order to be considered Art in this case. Harmony is also an unwelcome addition, adding almost nothing but an aesthetic term that boils down to 'complex wholes' found in Organicism - another appendage for Frankenstein. No answer is then found here as to whether Art is something that must be presented to be Art and, even more specifically, in what way it is, or must be, presented.

It is therefore my belief that each of these aesthetic theories are flawed in their own way and culminate to produce massive inadequacies whilst trying to define what Art is. That the vehement subjection of Art to any definition above must fulfil all of the necessary 'complex' requirements to be considered Art at all. For that matter, instead of considering the question 'What is Art?', and trying to implement the aforementioned empirical categorisations, the question must be reformulated as 'What is the use or employment of "x"?' to even begin unpacking a working definition of Art - one which is not based on simplistic and fallacious neglect (Weitz, 1956, p. 30). As such, the question becomes: 'what is the use or employment of Art?', which raises semantic difficulties in its own right, particularly with regards to what each of these theories is poised towards in regards to what Art is; Art as artefact. To elucidate, most of these theories do not use the same definitive language as the Voluntarist, who utilities the term 'work', but there is an underlying emphasis on the notion that Art is some-thing, whether it be comprised of related organic wholes, presented through significant form, emotively transmissive, and/or is socially significant. The artefact then becomes a representation of an idea, which is precisely where the semantic issue arrises for the notion of Art, as presented hitherto, specifically as noun, that which Derrida fleshes out here:

'The written signifier is always technical and representative. It has no constitutive meaning. This derivation is the very origin of the notion of

the "signifier." The notion of the sign always implies within itself the distinction between signifier and signified, even if, as Saussure argues, they are distinguished simply as the two faces of one and the same leaf. This notion remains therefore within the heritage of that logocentrism which is also a phonocentrism: absolute proximity of voice and being, of voice and the meaning of being, of voice and the ideality of meaning.' (Derrida, 1974, p.11/12)

In order to untangle this, with understanding from previous findings, an individual generates an idea which has some semblance of meaning (the sign), the meaning of this is then constructed as an artefact (an object of some Art form, medium, or genre; the signifier), this constructed meaning then has some abstract form of proximity (the signified). What can then be definitively entailed is that Art may be defined as: a sign, one which is signified specifically through some constructed signifier, where the meaning of the sign is always subject to transposition between voices from meaning, to being, whilst situated in an abstract proximity. There is a supposition of the social, through meaning transmission of, not necessarily to, by use of the term abstract proximity to omit specific limitations such as significance, exactitudes of meaning, number of individuals within said proximity, that it must be comprehensible emotionally or intellectually, and also fundamentally implies the genesis of the sign meaning via idea generated within an individual. This definition is almost complete, however one emergent issue must be cleared up before threefold can be done: rounding out a final working definition of Art, notably how that is then related to music, and also understanding what is its use or employment. That issue is, at what point does the sign become signifier and where exactly is the Art located? Goehr outlines an idealist position held by Croce and Collingwood that will help to clarify this:

'Works are now identified with ideas formed in the mind of composers. These ideas, once formed, find objectified expression through scorecopies or performances and are, thereby, made publicly accessible. Works are not identified with the objectified expressions, as one might

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expect them to be, but with the ideas themselves.' (Goehr, 1994, p.18)

The construction of the signifier here is just an expression of what is meant to be signified, it can therefore be said that the construction is an intangible point within the transposition of sign to signifier. It is so because the genesis of the sign may occur instantaneously prior to the origin of the construction of the signifier, or part of said signifier, or may occur within any given time period after such. It is in the state of construction of the signifier through transposition of meaning to being that the individual, who is the vessel for the genesis, is taking part in what can be considered here as the creative processes. The distinction being made then is that Art as a signifier; a constructed sign or a state of being, is not the same as Art as a process; the construction of a signifier or transposition of meaning to being. In the former, a work is created, in the latter the processes are occurring, which would insinuate that the former is a noun, and that the latter is a verb and will be referred to hereafter as 'Art-ing'. As for Art as a noun, music would be considered solely as an artefact; a signifier of what meaning the composer was trying to express, be it through notation, performance, or recording, but if that were the case then the use and employment of music would only rely on what was elucidated previously as being heavily reliant on transmissive qualities, rather than on the processes themselves. For that matter, I find it pertinent to outline the quote that was the foundation for my thinking on this topic which defines music, in terms of Art as a verb, which will hereby be referred to as 'musicking':

'To music is to take part, in any capacity, in a musical performance, whether by performing, by listening, by rehearsing or practicing, by providing material for the performance (what is called composing), or by dancing.' (Small, 1998, p.9)

For this definition to function within the realm of working definitions laid out thus far some distinctions must be made and a revision must occur. Firstly, the providing of material for the performance in and of itself can be considered as

a form of musicking as it may act as a component in a signifier being created, situationally speaking, however the material itself is not musicking, it is music as signifier. Secondly, dancing may potentially be linked to musicking but this is not necessarily the case, as music is not a requirement for dancing - more specifically, moving with signified meaning does not inherently imply music is involved or even necessary. Finally, to revise this definition; to music is to take part, in any capacity, in the creative processes, otherwise known as the transposition of meaning to being or from sign to signifier, in the aural form (or conglomeration of forms that include aural), in any medium (or amalgamation of mediums), in any genre (or hybrid of genres). For example, taking part in any capacity, in the processes of a live progressive metal performance would primarily involve the aural form, but could also include the visual element of seeing the performance, as well as the tactile, olfactory, and gustatory element of being there (the latter three are all dependent on the physical conditions). Since the performance is a live event, this could entail an amalgamation of mediums, for instance the use of recorded sounds being used in tandem with live ones, or a more obscure amalgamation example can be implored, one that could involve the use of recording for simultaneous live-streaming of the event. Lastly, the hybridised genre of progressive metal may involve the musicological hybridity of jazz, metal, rock, etc. and/or any combination of genres. This is one very particular example of the heavily nuanced employment, or use, of music, but every example of a situation in which musicking can occur will differ depending on the combination of situation, form(s), medium(s), and genre(s). With this in mind, the point has now reached where I believe it is suitable to conclude this portion by outlining the working definitions to be used for this thesis:

Art (n): a sign, one which is signified specifically through some constructed signifier by an individual(s), where the meaning of the sign is always subject to transposition between voices from meaning, to being, whilst situated in an abstract proximity. This signifier can comprise of any conglomeration of forms linked inherently to the five main

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subjective senses of the aesthetic, any amalgamation of mediums, and any hybrid of genres.

i: art (n): Art, specifically in the visual form.

ii: music (n): Art, specifically in the aural form.

Art[-ing] (vb): to take part, in any capacity, in the creative processes, otherwise known as the transposition of meaning to being or from sign to signifier, in any form (or conglomeration of forms), in any medium (or amalgamation of mediums), in any genre (or hybrid of genres).

i: art[-ing] (vb): Art-ing, specifically in the visual form.

ii: music[-ing] (vb): Art-ing, specifically in the aural form.

In the above definitions the sub-headings are not the exclusive types of Art, but are used to convey the point as concisely as possible. Other definitions such as dancing, sculpting, etc. are out-with the scope of this thesis, however the overarching definitions of Art as noun and verb can be extrapolated to a more general position. For the phrase Dialogical Music Systems, the term music will be drawing from the latter definition, from Art as verb; to music as verb.

2.2. The Artistry of Dialogue

In the example of a live progressive metal performance, the term situation can be used to define an event in which musicking can occur, particularly as a way to describe an employment or use of music. However, this term must be developed further in order to achieve what this section will aim to do; provide a working definition of the term Dialogical through the topic of agency. In order to do this, the concept of a situation will be outlined alongside the contextualisation of individuals that take part in any given situation, to latterly create an investigable framework for the term. I will

briefly return to Small, who provided the foundations for the working definition of musicking, who, as well as this, contextualises individuals within a situation, particularly here in that of a Western Art Music (WAM)⁴ Concert Hall Situation (CHS) (figure found on following page):

'It suggests also that music is an individual matter, that composing, performing and listening take place in a social vacuum; the presence of other listeners is at best an irrelevance and at worst and interference in the individual's contemplation of the musical work as it is presented by the performers. A flowchart of communication during a performance might show arrows pointing from composer to performers and a multitude of arrows pointing from performers to as many listeners as are present; but what it will not show is any arrow pointing in the reverse direction, indicating feedback from listener to performers and certainly not to composer (who in any case is probably dead and so cannot possibly receive any feedback). Nor would is show any that ran from listener to listener; no interaction is assumed there.' (Small, 1998, p. 6)

What then is the difference between this situation presented by Small, one which is a live performance of WAM in a concert hall, and one that consists of the previously mentioned live performance of progressive metal? In both cases the primary form is aural, within a conglomeration of others, the two mediums are, for the most part, live performance with some exceptions lined out for the recorded elements in the prior section, and assumedly the genres are different, for sake of argument, the former being classical and the latter progressive metal. They are fairly homogeneous for that matter: in both situations the flow of communication are extremely similar, however in the case of the former, a full orchestra under the management of a conductor performing a classical piece, such as Mozart's 'Symphony No. 40', today would be attempting to signify what Mozart, a dead composer, was trying to signify.

⁴ Usage of the term WAM will be in reference to common practice theory from roughly 1650-1890; otherwise referred to as common practice western art music theory or theory associated with WAM.

FIGURE 1: SMALL'S FLOWCHART OF COMMUNICATION KEY

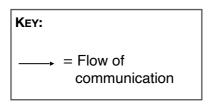
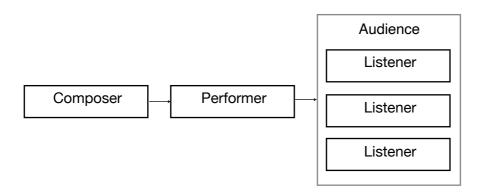


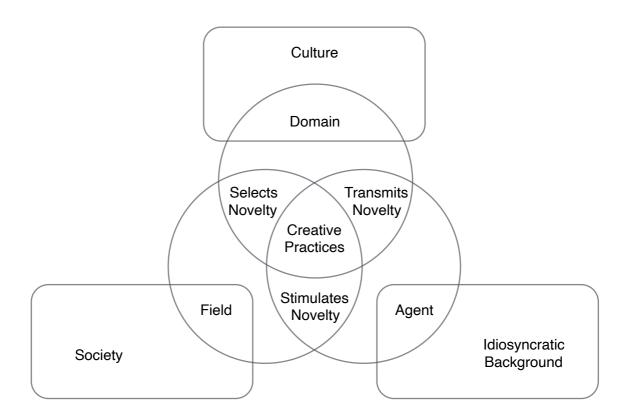
FIGURE 2: SMALL'S FLOWCHART OF COMMUNICATION



Conversely Spock's Beard, a modern band, labelled as progressive metal or rock, when performing a piece, such as The Light, is a case of the living individuals signifying directly to the audience, as performers themselves, what was to be signified through the work. Just because there is the minor difference of the signifier being filtered through a conductor and performers - who are assumedly not linked to the creation of the original signifier in the classical performance as opposed to a work being directly performed by the composers themselves in the progressive metal performance — there is still an apparent hierarchical structure. The voice of the signifier in both cases is still majoritively authoritative through transmissive communication in one direction only, from composer to listener. This hierarchical idea of the composer as genius, one who creates musical works and is at the apex of such a hierarchy, as authoritative figurehead of the sign, signifier, and what must be signified to the listener, is an idea that Taylor suggests has been '...deeply embedded in the world of Western Art Music since around 1800' (Taylor, 2016, p. 559). The permeation of this idea is readily apparent when viewed through

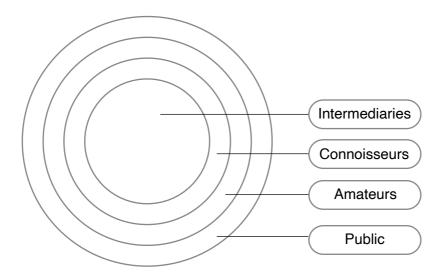
the lens of what Adorno coined as the Culture Industries, which he states, '... intentionally integrates its consumers from above... the masses are not primary, but secondary, they are an object of calculation; an appendage of the machinery' (Adorno, 1991, p. 85). The listeners in both previous examples above have become a subordinate appendage of the creative processes, having little to no voice or communication towards either type of composer, whether dead or alive - there is fundamentally no dialogue within such a system (Lerdahl & Jackdendoff, 1983, p. 13). Williams also points out this idea of subordination by indicating that whenever individuals come together they produce social relations which inherently include hierarchies of institutionalised domination, with distinct material, cultural, and moral privileges: a contextualised example of such being, 'In a composer-privileging mode of music-making, power flows from the composer via the score', to such subordinates (Williams, 2015, p. 224, 225/226). To contextualise all individuals within such hierarchical social systems a proposed example must be considered, one which includes all areas of the creative processes. Specifically, Csikszentmihalyi's Systems Model of Creativity Incorporating Creative Practice, revised by Kerrigan (Kerrigan, 2013, p.114) (found on the following page), where Kerrigan quotes Mihaly Csikszentmihalyi (2013), who initially developed this model, and defines the creative practices as being 'at the intersection where individuals, domains and fields interact' (Kerrigan, 2013, p. 112). Initially, at first glance, this system seems idealistic, or at least reasonable, since it incorporates each aspect of the creative processes, where the domain acts as the knowledge system in culture, the field is occupied with social organisations, and the agents with formal or informal education are nested within a field of their own via idiosyncratic background - selection, stimulation, and transmission of novelty are then shared amongst the groupings to formulate this theory of the creative processes (Kerrigan, 2013, p. 112). However, issues start to arise when the model itself is scrutinised, which implies by its visual design that, for example, the individuals as agents and individuals within the field have an equal say over the stimulation of creative processes, and therefore the works of Art that are actualised.

FIGURE 3: REVISED SYSTEMS MODEL OF CREATIVITY INCORPORATING CREATIVE PRACTICE (KERRIGAN, 2013, P. 114)



This could not be further from the truth as Kerrigan continues with an explanation of the idea of a Nested Audience Model (found on the following page), '...which ranks social groupings from the least knowledgeable group of 'public' to 'amateurs' followed by 'connoisseurs' and ending with the most knowledgeable field experts, located at the centre of the sphere and generically named 'intermediaries'...' (Kerrigan, 2013, p. 119/120). This is a direct facilitation of hierarchical structures within the creative process, where those that are less knowledgable in the field have less say over the creative processes based on absence of knowledge of the field itself. In order to understand this, the nested audience model can be seen in McIntyre's (2008) article, where the production of a documentary on Fort Scratchley involved the insight and influence of intermediaries, such as historians with knowledge on the Fort itself (McIntyre, 2008, p. 4).

FIGURE 4: NESTED AUDIENCE MODEL (KERRIGAN, 2013, P. 119)



This can be understood in terms akin to music where a composer creates a work whilst utilising the insight and influence of producers to help shape the content. This is meant to be interpreted as trying to oppose the common misconception of the sole genius creator, a concept that formed during early Romanticism, since there is some semblance of a collaborative effort from all those involved underlying (Groth, 2016, p. 688). Nevertheless this does not detract from the fact that they, as creator-agents, retain primary say over the creative processes above that of the field, and even more so of society. Intermediaries that are not actively participating within the creative processes, those who are not acting as mere consorts of composer-agents, are only capable of what connoisseurs, amateurs, or the public are. That is to say they become audience, or appendages, without voice and are only able to interpret the works. As can be seen, even having more intermediary-agents, or any other agents for that matter, within the microcosm of a creative process does not necessarily make it any less hierarchical. Consider the fact that the only reason a product reaches the consumer in the first place, in a capitalist creative processes system, is because it has been deemed adequate for consumption by those with more agency over the product. In a traditional sense, every musical work that ever made it to the public masses was produced and scrutinised by those in power. In the instance of traditional WAM the composer holds most of that power. Goehr argues for example, that:

'...the effect that the compositional condition has no bearing on the identity of a work, even if knowledge of the composer is relevant to our aesthetic appreciation of, or even in our practical dealings with, this work. Knowledge of the composer might help us to better perform or listen to the work more adequately, but this has little to do with its identity as such. A fortiori, though the instrumentation specified by composers is aesthetically relevant to their works, that the works are performed on the specified instruments has no bearing on their identity.' (Goehr, 1994, p.85)

This is also highlighted by Gorton & Östersjö who argue that interaction between participants is not always there, or is lacking at least, since the composer may even be dead, or that any other participant higher in the hierarchy that led to the public consumption of the product, may also be dead, such as that of the actively involved intermediary (Gorton & Östersjö, 2016, p. 579/580; Goehr, 1994, p. 2). In such a case, there is little to no communication from audience to composer, there is, for the most part, only interpretation of the product after it has been constructed. Even in a modern traditional composition, although there may be the opportunity for negotiation between the agent roles, input is extremely limited, since, although there is more collaborative decision-making between them the composer has final say over the product (Aslan & Hargreaves & North, 2008, p. 2, Lloyd, 2016, p. 631). The hierarchy within the system model of creative and the nested audience model, in terms of product-based creation systems, are made extremely apparent; the position of an agent within the hierarchy is reflected, somewhat proportionally, by how much agency they have relative to other agents and the systems themselves. Emirbayer & Mische (1998), who define agency as actors temporally engaging within structural environments that, through said engagement, have the capacity to reproduce and/or transform the structures in an interactive way (Emirbayer & Mische, 1998, p. 970). Temporality here is presented as inherent to the structural environments, and the actors, who are socially contextualised within said structures, will always exist in relation to it, meaning that through emergent events there will be a continual engagement with one or more structures at

once, ultimately creating an agentic orientation in the continuum of events i.e. agents are never free from structures and are thusly always actors to some extent; social structures and their inhabitants are eternally rhizomatic (Emirbayer & Mische, 1998, p. 968, 1004). Therefore, an actor will be defined as follows: a socially contextualised individual who possesses agentic orientation towards any given point(s) in temporality, who also holds the capacity to reproduce and/or transform structures in an interactive way through continual engaging with them. If this definition is then placed into context with the hierarchies previous discussed it quickly becomes evident that 'participants in modern society enact in their identities substantial agency for broad collective purposes... to themselves, to each other, and indeed for the wider cultural frame itself' (Meyer & Jepperson, 2000, p. 101/102). Ergo, it is clear that these hierarchical structures and emergent events will always occur, be occurring, reproducing, and also transforming simultaneously - there will always be varying extents of interactions between actors to other actors and the structures themselves. If this is the case though, and all actors are continuously enacted on by other actors and structures alike, what does this mean for autonomy? I will now briefly outline my issue with autonomy, one which is held by Kant seen in his principle of autonomy:

"...to choose only in such a way that the maxims of your choice are also included as universal law in the same volition. That this practical rule is an imperative, that is, that the will of every rational being is necessarily bound to it as condition, cannot be proved by mere analysis of the concepts to be found in it, because it is a synthetic proposition; one would have to go beyond cognition of objects to a critique of the subject, that is, of pure practical reason, since the synthetic proposition, which commands apodictically, must be capable of being cognized completely a priori." (Kant, 1997, p.45)

In my opinion, it would seem that Kant's objectivity in regards to autonomy falls short of constructing a useful viewpoint on the subject from what has been laid out hitherto, since when contextualised 'a posteriori' the

proposition of practical usage is almost null (Kant, 1997, p. 45). To elucidate, the universalities of such explained by Kant's objective maxims gracefully forgets to include other actors within such a definition, similar to that of Luck & d'Iverno (1995) who believe that autonomous agents are capable of generating goals that are from within, rather than in relation to or adopted from other agents (Luck & d'Inverno, 1995, p. 258). However, since no culture, society, or actors within can be free from the power of the structures they enact on, and are enacted on by, then there cannot be such a thing as an autonomous actor - as soon as the theoretical autonomous agent is introduced into a structure, or structures, they cease to be, and in Foucault's words, paraphrased by Bevir, die and become a construct of an episteme (Bevir, 1999, p. 66, 68). If this is the case, then what was described as an appendage, a listener, or an audience member who, even in the previously mentioned Art (n) situations, should always have some form of agential interaction with the structure and other actors. There will always be a flow of communication, not just monologically as an authoritative utterance or transmission trickling from those at the apex to the bottom of the hierarchies, but more so as a rhizomatic dialogue within, and through, themselves, other actors, and the structures that they reside within temporally (O'Connor & Michaels, 2007, p. 267, 276). Furthermore, Emirbayer & Mische add to the definition of agency stating that there is an '...importance of intersubjectivity, social interaction, and communication as critical components of agent process: agency is always a dialogical process by and through which actors immersed in temporal passage engage with others within collectively organized contexts of action' (Emirbayer & Mische, 1998, p. 974). In order to understand this, attention must be drawn to how the language of monological and dialogical are going to be used as working definitions for this thesis. Although they have been proposed as being polar opposites to one another it must be made clear that this is a false dichotomy, there is no such thing as a perfect authoritative utterance via monological means, or perfect form of communication via dialogical means. For that matter when utilising each term, the implications being made will be aiming at as close to the theoretical understanding as possible, unless suggested otherwise. To illustrate the dialogicality of a situation a spectrum will be used, where actor roles can be plotted on.

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Presented here is an example of an emergent event (CHS) with plotted actors, specifically the composer, alongside participants including listener (A) and performer (B), and their theoretically perceived perception of agency - what must also be noted is that the spectrum model itself is non-numerical, it is based on conceptual or thematic perception, not figures as seen in 'Figure 6: Agency Perception Spectrum (Theoretical Example: CHS)'.

FIGURE 5: AGENCY PERCEPTION SPECTRUM KEY (THEORETICAL EXAMPLE: CHS)

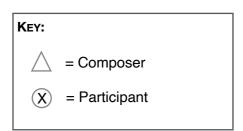


FIGURE 6: AGENCY PERCEPTION SPECTRUM (THEORETICAL EXAMPLE: CHS)



The reasons for each position in this matter must therefore be explained. Since all situations are shaped themselves by socio-cultural formations or structures, and these structures are dialogical to some extent, all actors within them will have some level of agency via dialogicality. Even the listener who was deemed as little more than an appendage will have some level of agentic orientation - specifically they will always retain the ability to freely (mis-)interpret any signifier at a bare minimum (Ahearn, 1999, p. 13, Emirbayer & Mische, 1998, p. 974, Hamilton, 2007, p. 178). The same can also be said for the performer, or musician in this instance, who through the

emergence of a particular voice, musically speaking, who takes part in the performance of signifier is thusly also taking part in a 'discursive voice' - what is being considered here as an agential dialogue is a defining feature of this participant-performer-actor (Gorton & Östersjö, 2016, p. 581). These are the reasons why the performer (B), is situated slightly further from monological to perceiving the situation as more dialogical. The composer in this CHS situation is situated greatly towards dialogical, as although potentially dead, still retains a much greater agency over the signifier and what is to be signified, since the Art (n) is somewhat set in stone once constructed. However, these positions will vary drastically when applied to a real situation, where actor perceptions of dialogicality of a situation will be entirely subject to what Hargreaves and North define as perceptive psychological biases, which although contextually dealing with enjoyment can be applied directly to the Agency Perception Spectrum (APS) (Hargreaves & North, 2008, p.64/65). Examples of such include, an actors own instrumental experience, their individuality such as sex, gender, ethnicity, race, religion, and so on, the complexity of the pieces (signifiers), and finally their individual aesthetic preferences (ibid., 2008, p. 64/65, 84/85, 122). What has not been explained thus far is where exactly the system is, i.e. the signifier, and how it is situated on APS, but before this can be answered it is pertinent that the key definitions within this section are outlined:

Actor (n): a socially contextualised individual who possesses agentic orientation towards any given point(s) in temporality, and also holds the capacity to reproduce and/or transform structures in an interactive way through continual engaging with them.

i: composer (n): a facilitator of structures via signifier-means creation.ii: participant (n): an actor who is engaging with the structures,centralised by constructed signifier, and actors within.

a: performer (n): an actor whose perception of dialogicality is rooted primarily in musical voice, via

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instrumentation or physical voice, and interpretation of signifier.

b: *listener* (n): an actor whose perception of dialogicality is rooted primarily in interpretation of signifier.

- Agency (n): actors temporally engaging within dialogically structured environments that, through said engagement, have the capacity to reproduce and/or transform the structures in an interactive way.
- Dialogical (adj): a theoretical position of a perfect persuasive or communicative form of agency apparent in structures occupied by actors; used to imply as close to theoretical position as possible unless suggested otherwise.
- Monological (adj): a theoretical position of an authoritative utterance or transmission of agency apparent in structures occupied by actors; used to imply as close to theoretical position as possible unless suggested otherwise.
- Situation (n): an emergent event in the present that requires the involvement of one or more actors to create.

Temporality (adj): an inherent state of an object, structure, or actor existing in relation to time.

2.3. Modus Operandi & Perceived Agential Boundaries

Now that a working definition of Music and Dialogical has been solidified, the term System must be examined. This is because within structures it is not only the actors engaging with other actors and the structures, they are actively interacting with the signifier itself via dialogical means and vice versa. This section will try to produce a working definition, through the combination of

the previously defined terms, of what exactly is meant by a System. Then contextualise it with regards to what will be classified nominally as different types of musical systems, with examples of a monological and dialogical music system to investigate how they place on the APS. To reiterate, the usage of the words monological and dialogical will be to imply as close to the theoretical position as possible unless suggested otherwise.

Fundamentally, I am proposing that a system is split into two concurrent abstract components, its modus operandi, and its perceived agential boundaries. The modus operandi, the operations or functions which are created by the composer-actor, is heterogenous to the concept of the signifier, otherwise Art (n). They are the non-malleable construct which is a necessary component to the system, and the centralised demiurge-like entity of situation within a structure, or structures. This component, as previously discussed, is the artefact constructed of any form(s), medium(s), or genre(s) which is both interacted on by and simultaneously interacts with actors agentially in such a situation. This is the crux of perceived agential boundaries, also known as the APS, a malleable component where the levels of dialogicality of a system are perceived dialogically based on interaction with the system operations - this is precisely how the notion of Art (n) can have a dialogical element. In the case of a monological system, such as that of a rendition of the classical piece, Mozart's 'Symphony No. 40', the operations of the system are fundamentally rooted in WAM theory, where to signify to a performer-participant-actor, and to further signify to a listenerparticipant-actor, the functions are compliant with a set of instructions which Goehr describes as a notational language which:

'...consists in atomic characters which in their modes of combination form compound characters of greater and lesser complexity. An atomic character is formed by exactly one single character; any other is compound. Pitch characters are atomic characters in musical scores. The constituents of compound characters stand to one another in modes of combination—in relations 'prescribed by the governing rules of combination', rules governing, say, harmonic, (p.23) rhythmic,

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chordal, and intervallic sequences (142). The compoundedness of characters has no upper limit, which means that a score itself can be conceived as a compound character.' (Goehr, 1994, p. 22, 23)

This conceptual understanding of a notational language as a form of a system operation is useful here. It is an artefact of sorts, and therefore it can be extrapolated that a compound character may include all qualities of sonic elements from simple pitches through timbre, effects, and equalisation if possible. It may even include linguistic terms such as how to play with particular emotive qualities or even go as far to include more complex and abstract characteristics in varying levels of compounded-ness in any format. The issue with this generality, especially in regards to WAM theory, is that of what Casey explicates through the ideas of Cage, that the performer is unable to identify wholly with the sign as their role which has been predetermined, the operations of the system centralise them via construct and hence exert control over them regardless of complexity or how compounded they are (Casey, 2016, p. 674). Even in the case of an atomic signifier, exertion of power will always happen to some extent regardless of composer intentions, since for a system to be, it must be created in terms of operations and also be perceived within agential boundaries. In the case of a monological system the roles are predetermined in addition to what is to be signified; the operations centralise and exert power through dialogical means over those involved in the situation, inherently binding the actors to the composer and thusly the signifier through what is to be signified. This idea goes entirely against Lividow & Young when they suggest that the difference between the worst architect, a form of composer-actor, and the best bee or spider, in terms of construction and conduction of operations, is that the genesis of the idea comes in the imagination, but as must be noted, it does not matter (Lividow & Young, 1981, p.14, Taylor [b], 2016, p. 563). The operations were created by individual(s) and are perceived dialogically, thus both are monological systems regardless of imagination prior to commencement of labour - a concept that only began emerging in the late eighteenth century (ibid.).

In terms of monological system, a few examples can be considered, such as total serialism, like Boulez' Structures, which aims to hold all elements within the score as equipoise relative to one another, including pitch, rhythm, timbre, etc., hence creating a complex operational system as to signify the composer's sign, then pit it against the relatively 'straightforward' work of Cage's 4'33" (Gable, 2016, p. 210). The organisation of characters of the former operations are situationally/intuitively much more complex than that of the latter, but in both cases operations have been created that centralise a situation dialogically speaking in a somewhat monological way. Bürger when speaking of avant-garde, particularly in a historical sense to be exact, creates a distinction between the classicist and the avant-gardist, where the signifier's significance is put into question. He creates an understanding that the operations, specifically notational language, is just an empty sign without social context, ergo showing that meaning is constructed by the actors within a system (Bürger, 1984, p. 70). It can then be realised here that through the increasing complexities of operations, such as that of the former example, the dialogicality of a system will inevitably diminish, due to a greater degree of individuals being further alienated from the sign. It must be stated then that this form of system, monological, is less for the people and more for the composer who exerts most control over actors through operational centralisation. This form of art is inherently destined for a small and privileged class, authoritative, and not 'of the people and for the people' (Hutchinson, 1916, p. 397). This shows the importance of perceived agential boundaries. So what then is an example of dialogical system? I will now investigate Abramović's 'Rhythm 0' as an example of such, of which the operations, in linguistic/verbal notation format, are as follows:

'Instructions.

There are 72 objects on the table that one can use on me as desired.

Performance

I am the object.

During this period I take full responsibility.

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1974

Duration: 6 hours (8pm-2am.) Studio Morra, Naples' (Wood, 2010).

The objects in this system operations were various and included items such as clothes, food, an axe, pocket knife, a gun, and a single bullet (ibid.). This system is again centralised to a point due to the operations, however the perceived boundaries of the piece are in theory greater than in that of a system where the operations are based on complexities that alienate actors from the sign. In the case of Rhythm 0, as dialogical system, there is more room for social dynamic, which in Cardew's understanding '...can easily lead to abdication and responsibility, depersonalised rebellion or provocation, and which can be pitiless when encountering weakness' (Fell, 2015, p. 189). This is opposed to the monological system which exerts power through subjugation of other actors through technical complexities and intimidation from the composer, rather than elucidating the fragility of such social structures and systems (ibid.). The system operations of 'Rhythm 0' allow for social dynamics to occur, which is exactly where the perceived agential boundaries exist; the participant-actors in this case are literally interacting with the composeractor through dialogical means by utilising the system operations, which is simultaneously distorting and expanding the malleability of the boundaries. The system operations in this instance can thusly be perceived as ceasing to be just a monological vessel of the composer's sign, becoming a dialogical system where participant-actors are more freely able to explore their capabilities with little prerequisites and complexities which would omit them from the creative processes (Gable, 2016, p. 220, Fell, 2015, p. 192).

To contextualise this in a musical sense, actors, particularly participants, in a dialogical system become a focal node in the system through interaction with the operations and other actors; with the intent as to not reduce the individual to an instrumental role or appendage of the machine and to bring into play the full bandwidth of communication in a music performance, which is typically a group activity, to facilitate said dialogicality (Hails, 2016, p. 2,

Jordà, 2005, p. 23). Through such system, actors participating can actively determine, influence, reproduce, and transform the structures they are within by interacting with the system operations (Jordà, 2005, p. 23). To illustrate the differences between a monological and dialogical music system the below diagram-figures have been included. However it must be noted that the shapes are not exact and are only examples to show the malleability of the elements; situation, boundaries, and agency, and non-malleability of element; operations. Actor malleability is assumed and only one actor element is represented for sake of clarity in the diagram (the 'Actor' portrayal could represent multiple actors, and types of actors, respectively). Additionally, the diagrams are instances of system interaction at one given point in temporality (represented on a 2D plane). The malleable elements would realistically change from moment to moment in temporality, as well as between each individual interaction with the system, in 'Figure 8: Monological (left) and Dialogical (right) Systems (Example)'.

FIGURE 7: SYSTEM DIAGRAM KEY

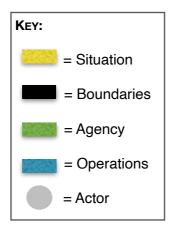
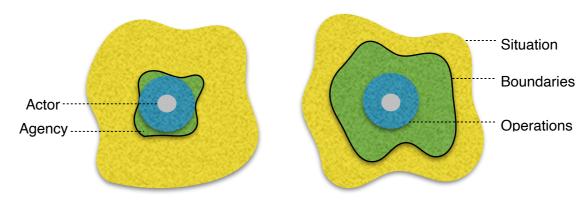


FIGURE 8: MONOLOGICAL (LEFT) AND DIALOGICAL (RIGHT) SYSTEMS (EXAMPLE)



The proposed concept of system centrality is readily apparent in these theoretical diagrams, as the perceived agential boundaries are drawn closer to the system operations in the monological system. This can be likened to some form of 'gravitational pull' towards the central point of a situation within a structure and to a lesser extent in the dialogical system, ergo, in the former the operations are considered as centralised and in the latter decentralised. It must be stated though that every structure, situation, and interaction with a system will create varying levels of perceived agency between each other, but also between each of the individual actors that take part, and, for example, when they take part and how many times they have subsequently interacted with it. The systems themselves will have some level of system centrality to them but this is entirely dependent on the actors engaging and interacting with the operations. For example, if a modern monological music system created by a group of actors were actualised - a song made by a band — this could be perceived as being more dialogical in its initial creation, since there was a collaborative or co-working creative process, and would subsequently resemble an aesthetic of a dialogical music system. This would transform quickly though once the system was constructed and transmitted to actors who have no agency over the construction and can only engage and interact with the system operations through, primarily, interpretive means. Even in the case of a dialogical music system created by a group of actors there could be a greater level of dialogicality perceived by the composer-actors who constructed the system, but as soon as it was provided to participant-actors the perceived agential boundaries of the system may be far more centralised than initially expected. The fact that the artefacts were created via more dialogical means is a null point, it is entirely based on subjective perception of dialogicality via actor interaction with system operations to create the perceived agential boundaries of the system. This is where the APS becomes useful as a tool to approximately estimate the perception of agency in a dialogical manner, not only to understand where each actor places in terms of agency, but to also place the system at a given instant in temporality. This is the exact fundamental relationship that is often times forgotten in literature surrounding music, the interactivity between actors and system and the reverse; how a system interacts with actors. Most

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literature will refer to music as just a work to be interpreted or acted upon and not a participant in the system that also enacts agency over you. To illustrate this, the previous APS example, 'Figure 6: Agency Perception Spectrum (Theoretical Example: CHS)', with the addition of the system operations (system) is presented here as 'Figure 10: Agency Perception Spectrum with System (Theoretical Example: CHS)':

FIGURE 9: AGENCY PERCEPTION SPECTRUM KEY WITH SYSTEM (THEORETICAL EXAMPLE: CHS)

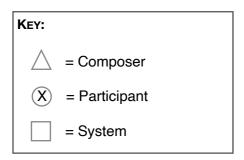


FIGURE 10: AGENCY PERCEPTION SPECTRUM WITH SYSTEM (THEORETICAL EXAMPLE: CHS)



The case above, once again, theoretically illustrates a CHS where the participant-actors in the situation have the least amount of agency relative to the composer and system, and therefore perceive themselves, and are perceived as, further to the monological side of the APS. The composer-actor on the other hand will perceive themselves, and be perceived, as having more agency, therefore further to the dialogical side. The system itself, cannot give explanation to its personal perception of agency but can be extrapolated from all actor perceptions of itself. The system in this case potentially being a system operation based on WAM theory, i.e. traditional music notation, hence

why it is so closely situated on the APS to the composer as it exerts control over participants as demiurge to the composer; a monological system that centralises the perception of agential boundaries within situation through subjugation via signifier, exemplified through system operations. In the case of a dialogical music situation the composer-actor may perceive themselves as having relatively equal agency over the creative process to the participantactors, but potentially slightly more since they created the initial construct, whilst the system would possibly be perceived as much higher in dialogicality. Each situation, however, is extremely subject to the system type, actors involved, structures, instances, and also successive instances, and many more perceptive and experiential subjectivities with regards to the situation, system, and other actors. To further understand this, it is intriguing to look at the intention of the system creation and some abstract examples to elucidate how perception of agency can be so varied regardless of the system. For example, a system must be created by an individual as composer-actor within a situation and it must also be subject to perception of agential boundaries to be considered a dialogical music system. If a machine, such as a train, printer, or fridge, were producing a sonic output that had rhythmic, melodic, or other aural aesthetic qualities and was perceived by an individual, or individuals, who interacted or engaged to some extent with it, then it would fulfil the perception of agential boundaries component of a system. It would also fulfil the modus operandi component, since even in its creation a set of operations and functions were created by composer-actor, even if that composer did not intend for the system to create a situation in which Art-ing could occur. In the case of the train, the operations may be viewed as much more monological by participant-actors than that of the printer, which assumedly has a greater degree of control available to participants, however, the composer - most likely composers plural due to the complexities of both respectively — may perceive themselves as having very little agency over the signifier due to the potential lack of intent. For that matter, this could be the theoretical 'most monological' or, in other words, the 'least dialogical' music system that can be constructed since the composer may perceive themselves more towards the monological position if prompted. It must then also be clarified that without the component of creation of modus operandi the system would also

not exist. Something with aural aesthetic qualities, such as that of a natural event like thunder or a tree falling in the woods, where no intervention of an individual as composer-actor was present, would not be a dialogical music system. In the latter example a composer-actor may exist, an individual who planted a tree could theoretically be a composer-actor since they created operations in which the final situation was actualised, but in the former I am unaware of a way to produce synthetic-natural thunder. There may be the argument here, which is not within the scope of this thesis, that is the theistic point of view, that a benevolent being, or beings, that created the operations out-with our knowledge and understanding capabilities, therefore everything that has aural aesthetic is therefore music - a position which is not held by this thesis. Therefore, with all of this in mind, and before discussing the final element of a music structure, a system will be defined as follows specifically for working usage in this thesis (please note, addendums have been made to the Actor definition to include operations and boundaries):

- System (n): a constructed signifier which facilitates, and acts as the (a) centralising point of, a (b) situation and potential occurrences of successive situation, that is occupied, determined, influenced, reproduced, and transformed by (c) actors via engagement and interaction with its (d) modus operandi, which is simultaneously limited dialogically by varying degrees of (e) agentially perceived boundaries.
 - a: Centrality (adj): the gravitational pull on individual actor's

 perceived dialogicality at the centre of a situation

 caused by the system operations. This can be either

 more or less centralised or decentralised:
 - i: Centralised (vb): a stronger gravitational pull on individual actor's perceived dialogicality towards the centre of a situation caused by system operations. [see also: Monological (adj)].
 - ii: Decentralised (vb): a weaker gravitational pull on individual actor's perceived dialogicality towards the

centre of a situation caused by system operations. [see also: *Dialogical* (adj)].

- b: Situation (n): an emergent event in the present that requires the involvement of one or more actors to create.
- c: Actor (n): a socially contextualised individual who possesses agentic orientation towards any given point(s) in temporality, and also holds the capacity to reproduce and/or transform structures in an interactive way through continual engaging with them.
 - i: *composer* (n): a facilitator of structures via signifier-means creation of operations.
 - ii: participant (n): an actor who is engaging with the structures, defined by constructed signifier, and actors within.
 - A: performer (n): an actor whose perception of
 dialogicality is rooted in musical voice,
 via instrumentation or physical voice,
 and interpretation of signifier through
 utilisation of operations.
 - B: *listener* (n): an actor whose perception of dialogicality is rooted primarily in interpretation of signifier through utilisation of operations.
- d: Operations (n): the centralised functions of a situation, otherwise known as constructed signifier created by a composer, which has the capacity to signify to actors within said situation what is meant to be signified via various means. [see also: Art (n)].
- e: Boundaries (n): the enactment of agency by actors utilising operations to create limitations on the operations themselves via perception of dialogicality.

2.4. To Splinter a System

The final element of a music structure, which is linked to dialogical music systems, is what will be deemed here as a splinter. To understand exactly what is meant by this, the meaning of a reproduction and its functions regarding a dialogical music system must be explicated. An example of reproduction, particularly mechanical reproduction, a term utilised by Benjamin to describe a work that is a replication of Art (n) via mechanical means, would be that of an audio recording of a musical event (Benjamin, 1936, p. 145/146). To undertake this reproductive process is to inhabit the role of composer-actor, since during the act of replication a new set of system operations is being created as a recording. The recording itself can then be perceived agentially and therefore possesses the two core components of a dialogical music system. In the modern age it must be made clear that one of the most common versions of reproduction is that of the digital, where, through the use of technology, a signifier can be replicated theoretically ad infinitum. To elucidate, a well known painting like the Mona Lisa can be photographed, which as an act is a reproduction in its own right, and then uploaded online where multiple situations can occur at one time, nevertheless the digital reproduction is not the original Mona Lisa. Aesthetically, yes, it is for the most part what can be perceived as the Mona Lisa, but in terms of operations, no, it is similar, but has been reproduced by a participant-actor who inhabited the role of composer-actor through photographing in the first instance of reproduction, then when uploaded in the second instance, to create a Mona Lisa in both counts respectively. The replicated signifier in this example has retained its visual aestheticisms, but has lost its tactile, as well as potentially even its gustatory, aural, and olfactory elements - although I am unaware of whether or not the original Mona Lisa is a scratch-and-sniff. Joking aside, in terms of the physical elements of the situation surrounding the artefact it has been reduced to its main form, visual Art (n), to be, primarily, interpreted. I would argue, by some interpretation, this is exactly what Adorno meant by regressive listening or - to generalise somewhat for sake of Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 2: Contextualisation

Art (n) — regressive interaction, which is a product of having less freedom, or agency, over the perception and engagement with a signifier's perceived agential boundaries via modus operandi, one that have been replicated almost identically but reduced to its main aesthetic form (Adorno, 1991, p.52).

Similarly, in the context of an aural artefact constructed, replicated, and then uploaded may have went through multiple instances of reproduction, simplified here as: (1) writing the signifier as musical notation, the original constructed signifier, (2) recording the signifier as digital audio, and (3) uploading the signifier audio online. Each instance in-and-of-itself is a form of splintering, where (1) the initial sign is replicated as a tangible signifier, (2) the signifier is then replicated in terms of audio recording, and (3) further replicated in an online format where the original signifier has been reduced to its main aesthetic form, the aural. In its perception, however, again, the perceived agential boundaries will be varied based on how a participant-actor engages with the modus operandi, which leads to many potential situations. For example, a group melancholically listening to a recorded musical work in one's bedroom on a grand stereo setup, or angrily listening to the same work through headphones whilst strolling alone in the local park. In both the former and the latter a participant-actor has created a situation, perceived agentially through engagement with the replicant system's modus operandi, and therefore, for the most part, are regressively interacting with the systemreplicant. The system in these cases, although replications of the original, still retain their agential dominance over the participant-actor and therefore subjugate them in their subsequent, what Hartley calls, fresh interpretations and performances. Just as a butterfly collected and artificially conserved then shown to onlookers is not fresh, neither is a replicated system, however fresh the interpretation of it may be (Hartley, 2005, p. 177/178, Perry, 1914, p. 141). What is portrayed here is a particular form of splintering; the replication of system operations, but what if a participant-actor engaged in the act of altering the artefact, whilst inhabiting the role of composer-actor, not just reducing it?

Hartley presents a situation where a jazz musician actively engages with the operations of a system, in which they are not only interpreting the signifier but imposing their agency upon its boundaries through means of improvisation (Hartley, 2005, p. 163). The jazz musician in this instance is interacting with the operations and is assumedly instructed to improvise via the operations themselves in a monological way, for example, to improvise over a set of chords for a set period of time, in a manner that is aesthetically similar to the piece as a whole - what the composer-actor would probably intend. This would therefore create a new splinter of the operations, an alterationsplinter, since each successive instance with the operations will be altered via dialogical means in the creative process, at least to some extent. Due to there being an individual actor participating in the creative processes with such dialogicality, as they would theoretically perceive it as more dialogical, it would potentially raise the overall perception of agency of the entire system, but the other performer-actors may not have had any improvisational elements and perceive it, or themselves, as in a less dialogical position than that of improvisor. It must be noted that in this situation that the monologicality of an instruction that tells a performer-actor to improvise is also a key factor, since 'improvise freely' is not the same as 'improvise in a manner that fits the stylistic qualities of the signifier as whole', the former being more dialogical but still exacting agency over the performer to some degree. In this form of alteration-splinter as improvisation, the performeractor is still being what Chomsky describes in a classical libertarian way as "... "a fragment of a human being," degraded, a tool in the productive process directed from above' (Chomsky, 2013, p. 16). Although in any sense of alteration-splinter there will always be some form of subjugation through dialogical means of the participant-actors, but there must be a way to mitigate this whilst not relying on the phrase 'improvise freely' and still facilitating the exploration of creative capacities from actors involved in a situation (Chomsky, 2013, p. 34). To do this, the system, once again, must be taken into consideration. Cardew perfectly illustrates how improvisation and dialogical music systems coincide in a diary entry from 1967:

'I compose systems. Sounds and potential sounds are around us all the time - they're all over. What you can do is to insert your logical construct into this seething mass - a system that enables some of it to become audible. That's why it's such an orginatic experience to improvise - instead of composing a system to project into all this chaotic potential, you simply put yourself in there (you too are a system of sorts after all) and see what action that suicidal deed precipitated.' (Tilbury, 1983, p.5)

Examples of such systems, ones that are intended by the composer-actor to be splintered in an alteration-mode of creative process by the participantactor through interaction, or jumping into a chaotic seething mass, are those of the Scratch Orchestra themselves. Which include operations, in linguistic or text-based format, such as MC9, which states, '17 people play simultaneously at one piano', and ABCOIR114, that instructs participants to, 'Start to play anything. Continue to play anything. Start to attempt to play something that somebody else was playing 10 minutes ago' (Scratch Orchestra, 1996). Both of these systems are intentionally left somewhat ambiguous to allow for participants to enact agency over the creative process, theoretically increasing the dialogicality which facilitates what will be called progressive interaction here: a product of enacting agency over a signifier's perceived agential boundaries via alteration of its modus operandi. Neither system operation above simply states to 'improvise freely', but also does not state that this is disallowed by any means, the systems are therefore decentralised. Unlike the jazz musician example previously, all participant-actors are capable of enacting agency on the operations and furthermore perceive them agentially in varying degrees. What is interesting about ABCOIR114 particularly is that it does not just encourage the engagement of actors and operations, but also to interact with the other participant-actors in an agential way. There is intersubjectivity amongst the actors as well as the system, further complicating the hierarchy, decentralising it, and showing that an alteration-splinter can achieve what a replication-splinter does not. It can allow actors to engage dialogically to a greater degree. The operations themselves create a situation which is littoral in nature, much alike a complimentary meeting point or in-between space for individuals to interact with the system, as well as others (Kester, 2000, p.1). Regardless of this, both of these systems can be subject to splintering, not only in the performative sense, but also as signifiers. To elucidate, a replication-splinter of one of the above operations can be found, quite literally, above - the signifier has been replicated and a new splinter has been created. The operations of the former can also be alteration-splintered and create a new set of operations: '13 people play simultaneously at one piano', or '19 people play simultaneously at two pianos', etc., however, in writing these two text-based operations which are alteration-splinters of the 'original' operations it goes to show that any type of system, no matter how dialogical or monological, retains the potential to splinter into another system, as either replication or alteration. It can even splinter into a different type of system, i.e. a monological to dialogical, and vice verse, by removal, addition, or persistence of dialogical elements to the modus operandi through some form of splintering.

Monological to monological (M to M) splintering is a form of replication, where the operations of a system are reproduced whilst removing all but its main aesthetic form, this type of splintering ascertains that there is a persistence of monological elements through the process of splintering. The previous example of the Mona Lisa being photographed, or printed, perfectly captures this splinter-type; similarly a music recording, or sculpture mould are all in the same vein.

Monological to dialogical (M to D) splintering is a form of alteration, where the operations of a system are transformed without removing aesthetic qualities, this type of splintering ascertains that there is an addition of dialogical elements through the process of splintering. An example of this could be a print of the Mona Lisa created for a situation in which actors can interact with the physical artefact, the splicing of a music recording, or painting of a moulded sculpture.

Dialogical to Monological (D to M) splintering is a form of replication, where the operations of a system are reproduced whilst removing all but its main aesthetic form, this type of splintering ascertains that there is a persistence of monological elements through the process of splintering. The audio(-visual) recording of a dialogical music system's output, such as that of Cardew's MC9 would exemplify this, or from the M to D example a photograph of the outcome from such a situation including a print of the Mona Lisa being acted on.

Dialogical to Dialogical (D to D) splintering is a form of alteration, where the operations of a system are transformed without removing aesthetic qualities, this type of splintering ascertains that there is a persistence of dialogical elements through the process of splintering. An example of this could be that of altering Cardew's dialogical music systems to create further dialogical music systems, such as what was done earlier in this section.

To illustrate this clearly, a family tree chart has been created to show how instances of splintering can occur that transform a system, for this example the original system is monological as it is irrelevant in explicating the point being made as to whether it is one system type or another - the instances of splintering are are also not indicated as alteration or replication types for this same reason. The 'Origin Point' (the final point of the original process in which a signifier is created) denotes where the system was first actualised, and is not the same as its 'Genesis' (the initial formation of the system idea) both of which are intangible instances in temporality. The destruction of a splinter is when a signifier ceased to be by some means, it is not a splinter inand-of itself, it is the point in temporality in which a signifier(-splinter) is further incapable of successive splintering, perception, or enactment on by actors. Please note that the following representation of 'Figure 12: Temporal Representation of Splintering (Example)' (found on p. 41) is a simplification of the previous system type/type diagram but with the addition of temporality, rather than being a single instance in time, in the system section to make the portrayal of splintering clearer. In the Temporal Representation of Splintering (Example) diagram (Figure 12), the progressions of a splinter from its origin point is allocated a number, these numbers are not in any particular order,

and are represented further in terms of M for monological, D for dialogical, or * for destroyed - each successive letter in the chain represents a splintering:

- 1: MDDM
- 2: MDD
- 3: MD
- 4: M*
- 5: MM
- 6: MMM
- 7: MMMD*
- 8: MMMDD

For example, number 1 would be a monological, to dialogical, to dialogical, and finally, for the time being, a monological system. In number 4 the original monological system has been destroyed, which could have just as easily been an original dialogical system, and furthermore in number 7 a dialogical system splinter was destroyed, but could have been a monological one - any iteration of splinter-type to splinter-type is theoretically possible and the potential for splintering will always remain unless a system is destroyed. What is not portrayed in this diagram, as it would surely be too chaotic, is that of mechanical mass production which would be multiple consecutive instances of splintering very tightly packed together (e.g. MMMMM...).

FIGURE 11: TEMPORAL REPRESENTATION OF SPLINTERING (EXAMPLE) KEY

KEY:

= Monological System

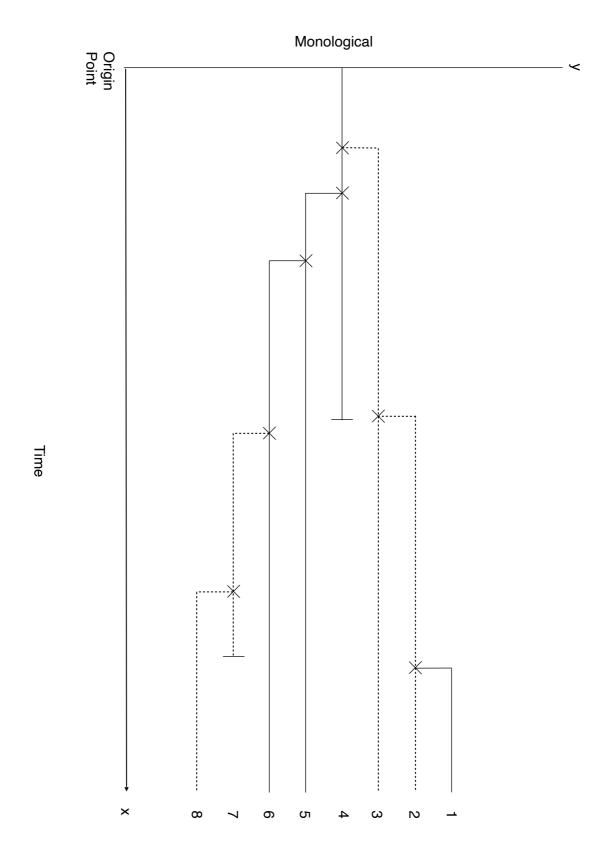
..... = Dialogical System

× = Instance of Splintering

| = Destroyed System

FIGURE 12: TEMPORAL REPRESENTATION OF SPLINTERING (EXAMPLE)

System Type



Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 2: Contextualisation

It is now conducive to outline the working definition of splintering, and its subsidiaries, that will be used for this thesis.

Splinter (vb): the act of (i) replicating or (ii) altering a set of already preexisting system operations.

i: making a copy and/or reducing them.

ii: making a copy and/or changing it without reducing them.

Replicating (vb): the act of duplicating, as closely as possible, a pre-existing system operations [see also: reducing]

Reducing (vb): the act of replicating a set of pre-existing system operations whilst removing all but its main aesthetic form.

Altering (vb): the act of changing a set of pre-existing system operations without removing most, if not any, aesthetic qualities.

Regressive Interaction (vb): a product of having less agency over the

perception and engagement with a signifier's

perceived agential boundaries via modus operandi

that have been replicated almost identically, but

reduced to its main aesthetic form.

Progressive Interaction (vb): a product of enacting agency over a signifier's perceived agential boundaries via alteration of its modus operandi.

2.5. Temporal Agency Perception

What was touched on briefly in the section on agency was that agency itself is inherently a 'temporally embedded process of social engagement', which ties in almost perfectly with the functionality of music, which itself can be

defined by the same terms, specifically since music (vb/n) is, at its core, sounds arranged in time and embedded in societal structures (Emirbayer & Mische, 1998, p. 963/964). The two important elements, of which this section will focus on, are temporality and its correlation with dialogicality and in order to do this justice an example of a system will be provided to illustrate as clearly as possible how the APS can be viewed temporally, proposed thusly as: Temporal Agency Perception Spectrum (TAPS). Firstly, however, it must be understood as to exactly why it is important to view dialogicality through the lens of temporality, specifically because it corresponds so closely to actors within situations, where Emirbayer & Mische state that actors themselves:

'...must continually reconstruct their view of the past in an attempt to understand the casual conditioning of the emergent present, while using the understanding to control and shape their responses in the arising future. This process forms the core of what Mead (1932, p. 76) calls "the deliberative attitude," the capacity to "get hold of the conditions of future conduct as these are found in the organized responses we have formed, and so construct our pasts in anticipation of that future.' (Emirbayer & Mische, 1998, p. 968/969)

This is the fundamental basis for what Emirbayer & Mische define as agential orientation, where an actor within an emergent and present situation and structure, such as that of the creative processes, will be orientated towards a given point in temporality, either towards the past, present, or future, whilst constructing the past and anticipating the future simultaneously - actors may also be orientated towards multiple instances in temporality based on multiple structures, situations, and interactions with actors (Emirbayer & Mische, 1998, p. 964). In context of dialogical music systems, an actor that is taking part in a monological music system, within a situation and structure, may be oriented more towards the past, particularly on initial instance of perception, since there would be an apparent utterance or transmission from the past via signifier through means of production and/or perception that the individual may be accustomed to. An example of this may be the first time listening to a digital recording of a song streamed online. The perceived

dialogicality of this system may however change with successive instances, since the anticipatory element of the future would be more easily foreseen in an agential way. Listening to the same song again may cause the listenerparticipant-actor to feel as if they possess, and potentially obtain or lose, more agency based on subjective individual experience and perception. On the other hand, an actor taking part in a dialogical music system may experience similar fluctuation and variations of perceived dialogicality with successive instances of the system through its communicative elements. This is also dependant on the aforementioned subjectivities, however, as proposed within the aims of this thesis, systems designed with intentionally encouraged dialogical means of musicking should be theoretically perceived with greater levels of agency than monological system types. Actors may also, however, through successive instances with any system type, perceive their agency as greater since they are able to more accurately anticipate, and somewhat predict, the future. For example, listening to a recorded song again may orient the actor towards the previous listening and also towards the future in anticipation of engagement, but in the case of dialogical music systems, which are generative in their output, may be more difficult to anticipate, due to it being ever-changing. Therefore, actors may lose perception of agency. It may be the case that predictability could also have an impact on agency perception. Furthermore, actors interacting with splinters of systems may have an affect on perception of agency, which will be explored shortly.

Agentic orientation also raises an interesting point coinciding with the concept of hauntology which Davis explains as, supplanting '…its near-homonym ontology, replacing the priority of being and presence with the figure of the ghost as that which is neither present nor absent, neither dead nor alive' (Davis, 2005, p. 373). It is ever-more apparent in a society which heralds capitalistic modes of production through industrialisation, globalisation, urbanisation, technological advancement, and mechanical reproduction alike, to which music is increasingly subsumed, while simultaneously correlating to social imagination rapidly deteriorating through preconceived notions, expectations, and anticipations of the future based on the past which is experienced as a haunting (Mason, 2019, Fisher, 2012, p.

16). In terms of monological music systems, particularly modern popular music, patterns tend to emerge as genres wax and wane through this rapid innovation until, as Fisher quotes Franco Berardi as saying, we are understandably living after the future — the monological systems are predictable especially in their perceptive and aesthetic qualities leading to a theoretical general lessening of dialogicality in music — there is no more innovation when it comes to these types of systems (Fisher, 2012, p. 16). 'Le fantôme des croyances populaires ne fait donc qu'objectiver une métaphore qui travaille dans l'inconscient: l'enterrement dans l'objet d'un fait inavouable'5 - the transmissive qualities of both dualities of system, monological and dialogical, are similarly linked here to that of the spectre or phantom, which is inherently found within the signifier, as 'les lacunes laissées en nous par les secrets des autres' (Davis, 2005, p. 374). This spectre, however, is not a being without voice, nor is the signifier just a phantasmagoric object to be interpreted: these systems will always retain some form of dialogicality, they are not just interpreted gaps and secrets left by others in society (Rancière, 2008, p. 34). Although the author may be metaphorically dead whilst the reader, or listener, rises, and limitations are imposed through the construction of a signifier, be it monological or dialogical system operations, this authorial death comes with the birth of dialogue (Barthes, 1977, p. 147, 148). This dialogue can be found at the intersection of actor engagement with the pre-existing system modus operandi, be they 'original' or splinter, and the temporal perception of agential boundaries to them and other actors within such situations in a creative process structure.

It will not always be clear as to which orientation an actor is perceiving a system, but it can be extrapolated, for now, through the use of an example of a dialogical music system being created. In the illustrations to follow some things must be firstly elucidated. Prior to the 'origin point', a system, no matter how dialogical, will always be more monological in nature and will

⁵ Roughly translated: the phantom of popular beliefs therefore only objectifies a metaphor that works in the unconscious: the burial in the subject of an unavowable fact.

⁶ Roughly translated: the gaps left in us by the secrets of others.

undergo from its initial conception — the genesis; an intangible point in temporality — multiple instances of splintering and destruction by the composer. These instances will, for the most part, not be displayed for sake of clarity due to the vast multitude of splinters and destructions that occur in tandem during the creative processes, however any following instances of interaction with the situation will be plotted numerically and not necessarily equidistant, and subsequently successive instances tracked, as measured by individual agency perception (y axis) in temporality (x axis) - both axes are not plotted numerically, by integer or real, since they are spectrums. The 'origin point' displayed will be the 'final' splinter of a system that will indicate where the composer ceases to alter, replicate, or destroy the signifier, unless stated otherwise. Finally, the composer-actor and participantactors, who will be labelled alphabetically, will be separated alongside the system for further clarity when multiple actors are introduced to the system and, furthermore, distinctions between listener-participant-actor and performer-participant-actor will be made when and if required. Please note, these are just extrapolations, employment of these will produce greatly varying results.

FIGURE 13: TAPS KEY

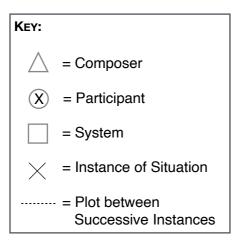
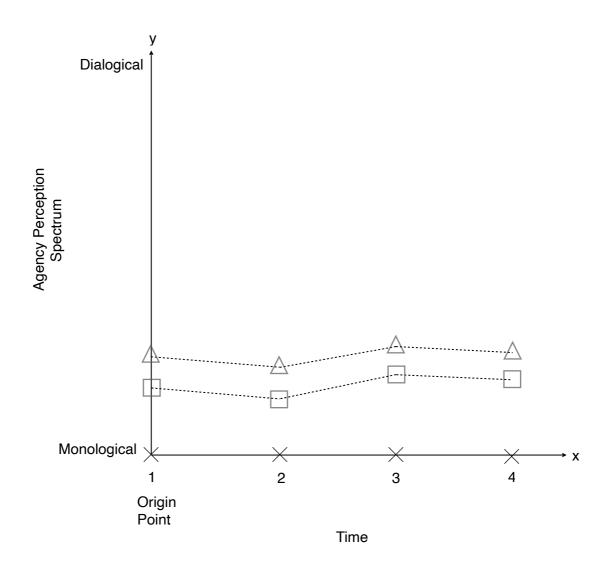


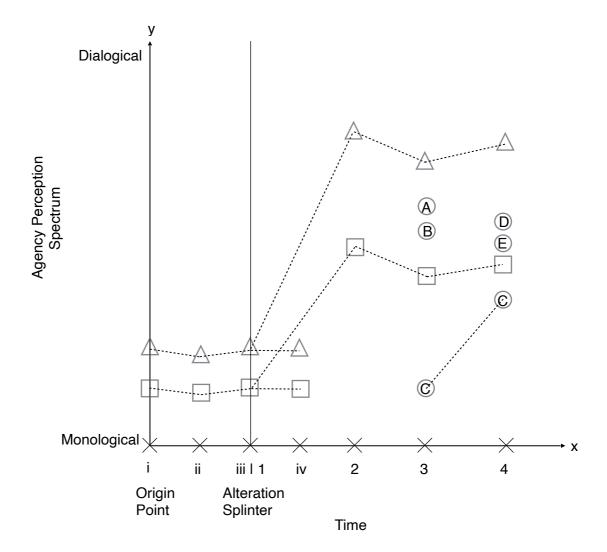
FIGURE 14: DIALOGICAL MUSIC SYSTEM PRECURSOR TAPS (EXAMPLE)



In this example a precursor to a dialogical music system is being created, that is to say, a system which is intended to be dialogical, but is still more monological in its development since there are also no other apparent actors directly involved, bar the composer, in the creative processes. Therefore, the system's perceived dialogicality is heavily linked to that of the composer, which is why the system and composer in the successive instances (2-4) after the origin point (1), are closely correlated whilst still fluctuating in perception of agential boundaries over time. What then, if the system was given addition dialogical modes of creation by the composer through means of alteration-splinter at instance number 3? To exemplify this without creating too much chaos in the following illustration, the Dialogical Music System

Precursor TAPS (Example) instances will be replaced by lower-case Roman numerals, and the new dialogical music system instances after the alteration-splinter will remain as integers:

FIGURE 15: DIALOGICAL MUSIC SYSTEM ALTERATION-SPLINTER TAPS (EXAMPLE)

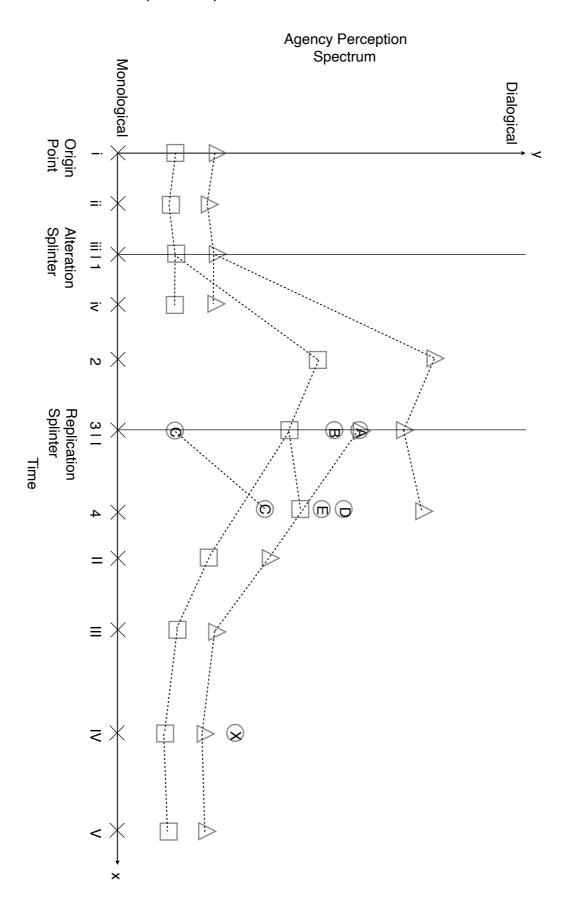


In this example the dialogical music system precursor has splintered via alteration and addition of dialogical modes of creation, this is at point iii | 1, which becomes the new origin point of the proceeding dialogical music system. Point iii | 1 is also the initial instance of composer interaction with the dialogical music system, and point 2 is the composer's first successive intense with the system prior to other actor introduction - it is at this point the dialogicality of the system is perceived by the composer. Point 3 is where other actors are incorporated in the situation created around the new

operations, where it is the initial interaction with the system for performer-participants A and B, and listener-participant C, whilst also being a successive instance of interaction for the composer. Point 4 is then regarded similarly as the initial instance of interaction with the system for performer-participants D and E, and successive instance of interaction for composer and now performer-participant C - who, in this example, has decided to actively engage with the system operations hence a theoretically higher perception of dialogicality. Finally, I will introduce the replication splinter; if performer-participant A decided to record the system output audio(-visually) at point 3 the proceeding (less dialogical system) instanced will be plotted with uppercase Roman numerals (found on the following page as 'Figure 16: Dialogical Music System Including Replication and Alteration Splinters TAPS (Example)'.

The figure below (Figure 16), includes the instance points from 'Figure 14: Dialogical Music System Precursor TAPS (Example)' as lower-case Roman numerals, and 'Figure 15: Dialogical Music System Alteration-Splinter TAPS (Example)', as numerals, with the addition of the system proceeding the replication-splinter of which its instances are indicated with upper-case Roman numerals. Point 3 | I being the origin point of a monological system replication-splinter, where the performer-participant A, from 'Figure 14: Dialogical Music System Precursor TAPS (Example)', theoretically recorded audio(-visually) the output of the dialogical music system and thusly inhabits the role of composer and actor in different situations that are simultaneously occurring. Points I-IV are successive instances of the new composer interacting with the newly formed monological system, who theoretically would lose dialogicality over the system and be oriented towards to past — the system itself becoming but a transmission or utterance of a previously interacted with dialogical system.

FIGURE 16: DIALOGICAL MUSIC SYSTEM INCLUDING REPLICATION AND ALTERATION SPLINTERS TAPS (EXAMPLE)

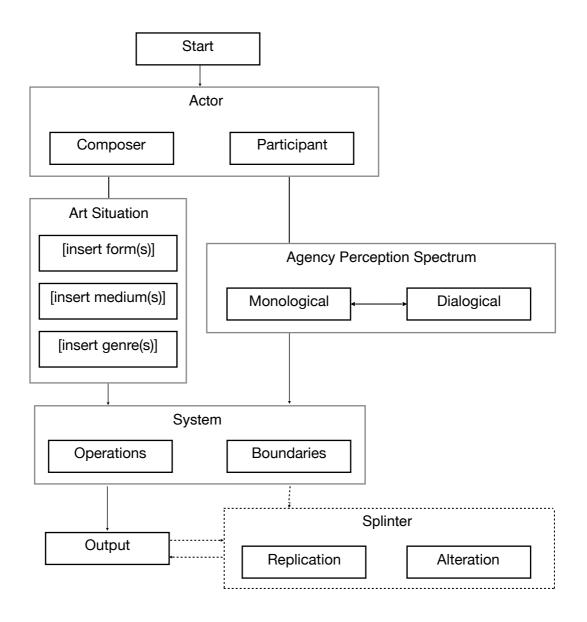


I will now pose, for sake of argument, that a new participant has been included as listener-participant-actor X, who could be any actor from previous figures, and theoretically has less agency than in the dialogical music systems preceding it, but still retains some perception of dialogicality from these interactions based on predictability and theoretically orients towards the past much alike the new composer. Finally, since these are, once again, just extrapolations, it is difficult to tell the exact perception of agency as well as orientation of individual actors without analysis of data from real events. What is known, however, is these positions of actors and system operations will vary and be entirely subject to the overall structures, situations, other actors, the individual themselves, and the relative perception of all elements hitherto.

2.6. A Creative Process Structure

The first aim of this thesis was to analytically disaggregate each of the key components in the term dialogical music systems, so to conclude this portion of the thesis, the contextualisation, the key points of each component will be briefly explicated and presented as an illustration for clarity (found on the following page as 'Figure 17: Creative Processes Structure'). The key elements that were outlined in previous sections in order are as follows: Art (as noun and verb which included music as noun, and verb), Agency (including actor: composer, participant, and listener and APS (monological and dialogical)), Systems (their operations, boundaries, and centrality), Splintering (replication, alteration, and reduction), and finally TAPS (temporality and orientation). Art was closely linked to the concept of sign, signifier, and signified, where Art (n) was posited as a constructed artefact in any given form(s), medium(s), or genre(s), including music (n), which would act primarily as a signifier of the composer's sign. The act of signifying was then analysed and the definitions of Art (vb), including music (vb) or musicking, were formulated, where the act of taking part in the creative processes was pinpointed as a transposition of sign to signifier which can be participated in by any individual.

FIGURE 17: CREATIVE PROCESSES STRUCTURE



These individuals were then identified overall as actors, particularly as socially contextualised individuals who possess some level of agency over the structures in which they reside. Actors may inhabit the roles of composers or participants (performers or listeners), which were ascertained as hierarchical positions, an assertion that was associated with agency - actors capacity to temporally engage with a system and to what extent their capacity to determine, influence, reproduce, and transform a system was then gauged in terms of dialogicality. The reasons for this was because dialogue was found to be at the core of agency perception, hence why a spectrum of agency perception was formulated with the two theoretical and dichotomous

elements monological, or entirely transmissive agentially, and dialogical, entirely communicative agentially, placed at either end - both impossibilities in totality. To identify how an actor perceived their dialogicality and that of the system and other actors, the system was then explicated in terms of its modus operandi and perceived agential boundaries. The former, being the signifier (Art (n)), was defined as the operations of the situation, and the latter was the perception of how much agency each actor and the system itself had through engagement and interaction with the operations themselves. If the system was deemed as less dialogical it was then therefore more centralised, and on the other hand if more dialogical then it was decentralised. It was then stated that any set of pre-existing system operations could be splintered, in other words replicated or altered in some form - as was within the capacity of the actors involved in such a situation a definition which was also used to elucidate mechanical reproduction, reduction, and how different system-types, and thusly perceptions of dialogicality, could be formulated through this mode of creation. Finally, TAPS was proposed as a way to track the temporality of a system, the perceived agential boundaries, and the potentiality of actor orientation whilst taking part in a situation, either initially or successively in terms of instances of interaction with the system operations. This final point is the most difficult to elucidate on as it requires the utilisation of multiple systems and individuals to analyse the hypothesis that systems which are intentionally designed to encourage greater levels of dialogical behaviour will increase perception of agency among actors to varying degrees. To analyse whether this hypothesis is correct aims two and three will be completed: to produce three unique systems for the purposes of investigating the dialogicality of the systems and the levels of perceived agency of actors within them, and their agentic orientation, which would allow for the forth aim to be completed, evaluation of the importance of agency in, and decentralisation of, the creative processes based on the findings. Ultimately, the definition of Dialogical Music System is as follows, which includes all of the elements above:

Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 2: Contextualisation

Dialogical Music System (n): a constructed (a) signifier which facilitates, and acts as the (b) centralising point of, a (c) situation and potential occurrences of successive situation in (d) temporality, that can be occupied, determined, influenced, (ei) reproduced, and (eii) transformed by (f) actors via engagement and (g) interaction with its (h) modus operandi, which is simultaneously limited (i) dialogically by vary degrees of (j) agentially perceived boundaries.

a: [See: *Art* (n)]

b: [See: Centrality (adj)]

c: [See: Situation (n)]

d: [See: Temporality (adj)]

e: [See: Splinter (vb)]

f: [See: Actor (n)]

g: [See: Art-ing (vb)]

h: [See: Operations (n)]

i: [See: Agency (n)]

j: [See: Boundaries (n)]

3.Study 1: Wordeater

3.1. Overview

This study aims at investigating the dialogicality of the compositions through the created album titled *Wordeater*, which was specifically designed to measure the perceived levels of agency and agentic orientation of actors, including composer and participants (performers and listeners), by exploring the composition, production, performance and reception of the album. The album itself, which was comprised of three aesthetically distinct musical systems, 'Dear, I', 'Aphasia', and 'Wordeater', was constructed with the intent of mimicking a CHS system. Being as such, it was signified primarily through WAM notation, provided to performer-participants to be actualised, then finally presented as a constructed aural signifier to listener-participants. Each of the performer-participants were then individually interviewed, the listener-participants were surveyed, and then data from each was compiled alongside auto-ethnographic data to thematically analyse the data respectively and ultimately in conjunction. This study will also act as the foundation of the studies to follow.

3.2. Method

3.2.1. Participants

Actors involved in the study included, myself as the composer (N=1), three performers (N=3), and multiple anonymous listeners (N=15). The performers were universally male (N=3) and age ranging between twenty and thirty (N=3), two of which were music graduates (N=2) and one being a current undergraduate music student (N=1). Performer selection was conducted through convenience sampling: the graduates were from the same undergraduate course as myself, at the University of the Highlands and Islands (UHI), and we still work together frequently. At the time of the study, the current undergraduate music student was unknown to me, but is from the same university that I am currently completing this research at - Edinburgh

Napier University. The reasons for utilising these individuals were due to the inclusion criteria set in place for performer-participants, that being, musicianship and idiosyncratic background. The performers needed to be people I could trust with playing relatively difficult music in the genre of prog who were also familiar with recording studio practice due to Covid-19 lockdown restrictions being in place at the time of recording. The listeners were sampled similarly, through convenience sampling, where, once the system was constructed and uploaded online a link to the system and survey were sent via multiple personal networks - there were no inclusion criteria for these participants. A brief ethical point must be made here, that due to convenience sampling being heavily utilised this could have had an effect, either positive or adverse, on the outcomes of the study, however the impact was mitigated as far as possible; all participants were treated with utmost professionalism.

3.2.2. Procedure

For the data to be collected the following chronological sequence of events occurred in the experiment, classified as phases including, composition, tracking and production, ethical procedures, instruction, interviews, audience survey, and auto-ethnographic reflection.

Composition

The composition of the system primarily took place at the end of 2019 to the beginning-middle of 2020 with the main intention of being an instrumental concept album in the genre of progressive rock or metal. The main reason for picking this style is that I have a personal preference for story telling through non-verbal means, for ambiguity-sake, and I find this genre aesthetically pleasing. The system was composed primarily with the use of an acoustic guitar for motif ideas and demos, which were then recorded using a smartphone. These recordings were intuitively arranged and finally transcribed using notation software. After the transcription of the guitar

parts, basic drums were created using Guitar Pro 7 to solidify rhythms, then lead guitar and bass were finally added with physical instrumental aid. The compositions were then re-arranged and developed further through reading the notation, play-throughs, and successive listening to MIDI demos created from the Guitar Pro 7 demos. The aims of the composition were to outline the hierarchical dominance of the composer, similar in a CHS, where ultimately the composer and the system are perceived by actors as possessing more agency than other participants, including performers and listeners, within the situation. The agential orientation of the actors within this particular system is also hypothesised as being primarily towards the past.

Tracking and Production

To actualise the compositions three musicians were sampled, via convenience sampling methods as previously mentioned, and provided with notation and MIDI demos in the form of WAV files. The drummer was, by request, given digital audio workstation (DAW) stems in the form of LOGICX (Logic Pro X native file) files. These stems consisted of MIDI WAV files and automation including, section markers, time signatures, tempos, and changes. Performers were then given three weeks, around the beginning of the forth quarter of 2020, to compile recordings and return them to me to forward onto a producer⁷ to finalise the mix and mastering of the compositions. Originally the recording of these pieces was to be done in a studio environment over the course of one or two consecutive daily sessions, however, due to the Covid-19 pandemic and the subsequent lockdown measures the process of tracking and production was done in isolation. The non-traditional workflow lead both graduate students to complete the recordings using home studios, and the drummer to record in isolation at a booked studio at Edinburgh Napier University. The former traditional workflow method would have been preferred, primarily to limit variables of different recording practices and to

⁷ The producer-participant is not listed as a 'participant' as such since this role is out-with the scope of this study. The primary focus being on the trichotomy of composer, performer, and listener.

view the dialogicality in person, but the subsequently implemented procedures yielded potentially beneficial data despite the peculiar situation.

Ethical Procedures

In order for the performer-participants to take part in the study, participant information sheets, which detailed the study as well as an ethical consent form, were provided to inform the participants that they would be anonymised under pseudonyms as to not be linked to any research or publication and furthermore emphasised that opting out of questions, or participation in the study outright, was entirely within their right. Prior to being provided to the performers the forms were authorised by an Edinburgh Napier University School of Arts and Creative Industries (SACI) Research Integrity (RI) representative. The ethical consent forms were then subsequently signed and returned by all three performers before moving forward with the aforementioned instructions. Listeners were provided with a brief ethical note also informing them that responses to the survey would be anonymised and not linked to any research or publication.

Instructions

Different instructions were given to the performers and listeners, the former were provided with the system operations and directed to produce a recording of their part of the system as closely to the written signifier as possible with some room for deviation. Room for negotiation was embedded as would be the case in a semi-professional setting depending on performer skill-sets. Any queries and dialogues were recorded during the creative processes. The performers were given an allotted time period of three weeks to read the instructions, including system operations. The latter, the listeners, were given much simpler instructions which comprises fundamentally of 'listen to this system (album) then respond to the survey upon completion'. Listeners were not formally allotted a time-scale to complete the survey, but the survey itself was available for completion for one week. Variables, such as the situation, the equipment used for recording by performers, and listening

devices by listeners, were left as uncontrolled in order to investigate levels of agency over the creative processes. It was also impossible to control for these variables during the lockdown measures.

Interviews

Each of the performer-participants were interviewed individually online through Zoom over the course of a week proceeding the final recordings being submitted in late November 2020, rather than as part of a focus group inperson which was part of the original experiment plan pre-covid. The initial idea of a focus group was nevertheless a point of contention ethically, since out of the three performers two were known and also knew one another on a personal level, which could have had adverse affects on the outcomes due to the third participant being out-with a pre-formed social network setting. Surveys were also eliminated for these participants as, in personal experience, it was more apt to acquire qualitative data from the small subset of individuals that inhabited the performer role. Hence, individual interviews, consisting of semi-formal questions (akin to discussion points) and some multiple-choice questions primarily aimed at discussion with secondary value of figure-data, were utilised to garner in-depth data on subjective perception of agency over the creative processes. The interviews were recorded, transcribed, then finally analysed between December 2020 and January 2021.

Audience Survey

Obversely to the performers, the listeners were surveyed rather than interviewed through utilisation of NoviSurvey, Edinburgh Napier's chosen secure survey method (NoviSurvey, 2007). The survey consisted of several multiple-choice questions, particularly based on Likert scales, aimed at gathering quantitive data from as many actors who inhabited the role of listener as possible in the shortest time possible (Joshi, Kale, Chandel, & Pal, 2015, p. 397, 402). This was the primary reason why interviews and focus groups were eliminated, as it was unclear as to how many listeners would take part in the experiment and may have taken too long to plan, organise,

and conduct multitudes of either. Secondarily, it was also fitting since the interaction between listener-participants was not a necessary component of the study and worked well during the covid lockdown measures. The survey was conducted anonymously by listeners over the course of a week between late January and early February 2021, and the only inclusion requirement was that listeners must have listened to the supplied artefact prior to completing the survey. The survey itself also had no time limit for completion which allowed respondents to listen to the pieces as much as they thought was necessary before beginning or during the completion of the survey itself. The data was then complied and analysed between February and March 2021.

Auto-Ethnographic Reflection

Due to myself being the composer, an active actor role in the development of the system and the research itself, it was important for me to reflect and contribute my own auto-ethnographic data and findings towards the discussion. The auto-ethnographic portion consists of personal memos and notes that outline the creative processes that took place, which were recorded between approximately January 2020 and February 2021, as well as my individual experiences within the context of the work itself (Chang, Ngunjiri, & Hernandez, 2013, p. 11). The use of such a method aims to aid in the interpretation and retrospective analysis of not only the data from the memos but also of the contextual basis for the entire dataset (Chang, et.al, 2013, p. 18/19). No other methods, including survey, interview, or other, were deemed reasonably useful for this type of data collection.

3.2.3. Materials

To conduct the study, a multitude of tools and materials were required. A concise list of these tools and materials can be found in 'Appendix: 1. Wordeater Tools and Materials'. The former, said tools, included personal tools from composition which included an acoustic guitar, electric bass guitar, and a laptop to write and arrange the scores digitally, and somewhat similarly the

tools utilised by the performers included their individual instruments, as well as their preferred means of recording which are all but unknown. The latter, the materials, included the system operations in the forms of the aforementioned notation in multiple digital formats and also the exported audio files, the documents including participant information sheet and ethical consent form, and the data collection documents; interview questions, survey questions and auto-ethnographic notes and memos. From the data collection documents, the interview questions were designed qualitatively as a way of extracting in-depth information about key topics from the performers, primarily on agency, where the performers were allowed time to explain themselves as much as they would like (Morgan, 1996, p. 134,140, Nobel & Mitchel, 2016). The survey questions on the other hand were designed with influence of the Likert Scale, allowing for answers on a scale of 0-10, but also allocating text boxes for more in-depth responses if the listeners would like to elucidate on their answers further with the intent of formulating some level of qualitative data from a primarily quantitative data set (Joshi, et.al, 2015, p. 397, 402). For both the interviews and survey, the questions were developed to gauge the attitudes of the participants in relation to agency over the creative processes.

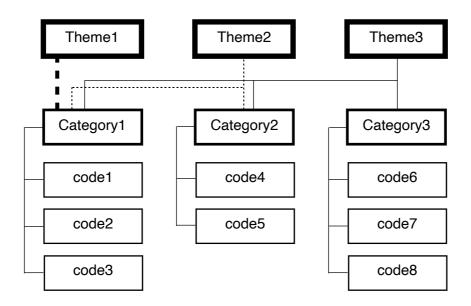
3.2.4. Data Analysis

The specific type of analysis used for this study was thematic analysis, described by Ibrahim (2012) as a qualitative analysis by means of classification of themes and relations between data sets (Ibrahim, 2012, p. 40). Firstly, for the data analysis to take place, once the interviews had been conducted, recorded via Zoom and stored on a private hard-drive, they were then transcribed. The surveys and auto-ethnographic notes and memos were collated and stored privately, then transcribed. Secondly, once all data was organised they were then reviewed through process of familiarisation to gain holistic data to find coded words and phrases, then categorised (Chang, et.al, 2013, p.106, Nobel & Mitchel, 2016). Finally, the texts were then reviewed and checked against each data set to find shared patterns and central

Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 3: Study 1: Wordeater

concepts and defined under overarching themes (ibid., ibid., (Ibrahim, 2012, p. 40). The following diagram 'Figure 18: Thematic Analysis Diagram' exemplifies this form of thematic analysis.

FIGURE 18: THEMATIC ANALYSIS DIAGRAM (CHANG, ET.AL, 2013, P. 106)



3.3. Findings

To preface this portion of the study, this section will be examined in three sections, corresponding to each type of data set, interviews, survey, and autoethnographic memos and notes, in order to understand the data sets in depth before bringing the data together in the discussion. As per the ethical documentation all individuals taking part in the interviews and survey will be anonymised: numbers will be used for the survey respondents (listener-participant-actors). For example 'R7' for respondent number seven, and pseudonyms for the interview participants (performer-participant-actors); the bassist, Samson, drummer, Ronan, and guitarist, Callen. The entire transcript for all three interviews can be found in 'Study Transcripts', under '1. Wordeater Interview Data' as '1.1. Samson Interview', '1.2. Callen Interview', and '1.3. Ronan Interview', respectively.

3.3.1. Interviews

Control

In terms of the theme of Control over the creative processes, the performers and myself exhibited varying degrees of perceived agency of the composer, and of the compositions (system operations) themselves, specifically in terms of composition and playing, and recording. When it came to composition and playing, most of the performers stated that they had little or no control over the arrangements of pieces themselves, however when asked they each ultimately stated that there was some or complete control over the interpretation of dynamics of the pieces when playing. Ronan said that during his experience as a drummer most instances of receiving notation were created by someone with no understanding of writing drum parts, where he would commonly be advised to 'ad-lib'. He continued by saying that although the Wordeater parts were written out he still had control, but not as much as he would have, 'if it just said little lines' or 'make it up'. This sentiment was reiterated when speaking about the dynamics, or lack-thereof in the notation, which meant that there was a degree of leniency in the interpretation of such. Additionally this was the case for the timbre of the pieces, the use of mezzo forte in 'Aphasia's' intro as an example, where there is no crescendo written but could be interpreted by an instrumentalist with idiosyncratic awareness. I noticed from Samson's interview that there is a relation here, particularly between phrasing and articulation, as he expressed that he had 'almost complete control' over the phrasing of the notes since there was little to no articulation indicated by the notation. He could fret wherever he liked on the neck, on any given string or slide into or from any note which created a sense of freedom. Samson then shifted the conversation onto compositional elements and stated that he was trying to keep to 'the spirit of the tune' but although he could have changed things there was less control over this element. He also explicated that although the composer wrote everything, there was still some leeway, as control over the dynamics, phrasing, and so on were delegated to musicians, but this did not take away from the fact that it

would be easier to make changes in the composition stage than suggesting them at a later point in the creative processes, particularly at a more 'finalised point' - seeing it as redundant to do so given the timeframe.

Leniency of the composer became more difficult to perceive once that arrangements and compositions were made, or finalised, particularly linked to the given deadline, which lead to the performers having little control over them. However, Callen agreed with Samson over the leeway element, but perceived it as much less stringent. Although Callen did state that he obviously had no control over the compositional elements, and did not want to have any control over them; his reasoning, 'it is your music'. He did believe that there was an open line of communication with myself as the composer which ultimately lead to discussions about playing in particular ways at certain points throughout the entire project. He did not want to change things without permission, however some liberty was taken over the feel and playing of the pieces, as communication over every little detail was almost impossible given the non-in-person situation. Callen gave an example of this: playing muted ghost notes at 160bpm being difficult, hence making amendments for ease of playing. Callen utilised this open dialogue more so than Samson, since the latter decided to have most communication prior to recording, where Samson asked 'what are you kind of looking for here?', 'what is it, exactly as written or is there some leeway in terms of how it's played?', to which he recalled me responding 'in the spirit of how it's written but if you need to make changes I understand that as well.' It is clear there are two different kinds of working methods here - conversely to Callen, Ronan and Samson utilised little communication to understand the requirements posed. Ronan particularly took an extensive amount of control over the recording processes by going to Studio 1 at Napier University's recording facilities which had a big impact on the influence of the drum's sound: 'how the drums would sound in the end', 'recorded professionally rather than on an awful kit in a little room with one microphone'. Whilst obversely he had little to no control over the compositional elements since they were already done or whether his recordings would be used in the final product or be replaced with MIDI samples.

Collaboration

The theme of collaboration was heavily emphasised by the interviewees, with reference to the characteristics and dichotomy of particular modes of creative processes, such as the categories of in-person versus online and relationships with other actors. The performers brought to the forefront advantages of working in person, stating that there is a vast difference between working with arrangements in isolation as opposed to in the same room with others. Samson specified that when something is taken from the written element, such as in GuitarPro, and musicians are brought together it is possible to hear what works and what does not, leading to the inevitability of change. All performers stated that bringing people together in-person created a collaboration over parts, individually agreeing that it would have become more like an 'open forum'. Furthermore stating that having an outside perspective would give the creator more insight that they may not have otherwise had, such as bouncing ideas off of people and utilising other's expertise, both of which were brought up as 'healthy processes'. Ronan similarly believed that there was a benefit to this kind of in-person interaction, specifically with other musicians and recording with the composer present, but interestingly was the only participant to pose a disadvantage with playing with others. Stating that it would be beneficial in terms of visual clues and stagecraft with those involved in the same room, such as gestures, but would create an inability to focus meticulously on individual parts. He continued that this it is even 'detrimental' having people in the room other than the composer in the recording process, that he would not have had the option to set up the recording and practicing of the parts in the way he did if there were other people present. Ronan was not the only performer who brought up social cues in an in-person situation as Callen stated that when in-person there is 'no barrier between me with my instrument sitting in front of you' where adjustments could be made far easier than online. Adding that the social cues of an in-person environment create a human element that is enjoyable and is not necessarily available when interacting with the arrangements in an isolated setting. Referring to a live situation of 'Rosanna' by Toto, he recalled the live performance being tempo-mapped on a video where, during the chorus, the drummer is enjoying a section he presumably loves and speeds up almost 9bpm, the band then reacts to the change giving it the said 'human element'; they were all having fun, he said.

Another aspect which links to the human element was the existing relationships between both Callen, Samson, and I, and lack-thereof in regards to Ronan, who up until the point of executing this study was unknown to all actors. Samson took the approach towards the study that he was acting in a professional manner, where it was his 'job to do the bass', since although he knew Callen, he perceived him to be doing the same but on the guitar. Callen touched on this point as well, coming from a position as a paid performer saying that it was like a job - being paid, but because there was a pre-existing relationship between himself and me (the composer) there was more control than if he were to be employed by someone he did not know or talk to. He believed that since there is that relationship it created a lot of factors that contributed to him thinking he had more control, viewing the project as a little bit of his own for 'both selfish and unselfish reasons'. element between individuals played a massive role for Callen, since a large proportion of the interview revolved around playing with humans, not MIDI or GuitarPro, favouring more humanised recordings. This was not the case for everyone however, since Samson disagreed by stating that he was fundamentally just doing it as a job, that the performers did not matter as he was primarily playing along with the files - the drummer and guitarist were just GuitarPro files or notation to him and as such it made no difference as to how he approached the recording or playing of the pieces. This level of trust to complete the playing and recording of the pieces was also pointed out by Callen, who agreed that there is an importance in communication and trust which has an impact on the final product. He also added that he was more critical of Ronan's drumming since there was no relationship prior to, and during, the participation.

Limitations

As for the theme of limitation, two predominant categories were accentuated, that of time constraints and limits on physical ability and skill, both of which in an interwoven way hindered the interviewees to varying extents whilst participating. Whether or not there were pre-existing relationships with other performers, or myself, all performers had constraints relating to time, more specifically the deadline that was put in place to finalise the product. Callen stated that there was an underlying pressure in the fact that there was 'a deadline' in place, that the pieces were written, and it became a case of just 'fucking do it' - an interesting emotive response. Callen also added that he had other pressures in life, such as in everyday life, finishing the product, restringing instruments, recording, and trying to keep a good sleep routine, whilst making things sound good. With the additional caveat that if there was more time he would have liked to advise in, or recommend changes to, the written guitar elements of the notation. Obversely, with regards to suggestions being made by the composer to the performer it made things easier for the latter, as Callen stated, 'you offered a much simpler solution', which was to replace certain difficult parts written for guitar with a synth - this included Wordeater's intro section and the guitar solo in 'Aphasia'. These particular alterations were made specifically because of time constraints and could have been entirely circumvented if Callen was given more time to format and simplify the sections to a state that was playable for him. He continued, there was not much time to learn the songs verbatim, making the recording of the songs more about 'dropping in' at certain points. This was the same for Samson, who stated that the recordings were 'spliced together for sure', since he was 'operating on limited time' and was a replacement at a later point for the previous bassist. Ronan, on the

other hand, did not specifically mention time as a constraint or a limitation, however alluded to potential issues with learning songs verbatim, additionally simplifying in areas, that could have came from such a strict deadline. Specific reference was made to 'Wordeater' and 'Dear, I': by slowing certain parts down in the recording process he was able to play the parts as precisely as required, whilst simplifying the sticking in certain parts, or learning triplet fills to an adequate degree. This was an element of control over the recording that was particularly felt by Ronan, but was only created by the notation being at a level that was difficult to accurately actualise in such a timeframe - slowing things down and recording in his own way nullified the main limitation.

3.3.2. Surveys

The survey questions were designed to investigate the perceptions of agency possessed by the listener participants and analysed thematically, supported by numerical data via Likert scale (on a scale of 0-10; median values have been used to indicate average attitude of collective respondents), Yes and No questions (Y/N; represented as totals), comments (not included in 'Figure 19: Wordeater Survey Results' - labelled as N/A⁸), and mixed questions (e.g. a Likert scale with additional comments) answered by the respondents. The questions from the questionnaire have been included in the appendix as '2. Wordeater Survey Questionnaire'. Themes which emerged are as follows, Control and Situation.

⁸ P4Q3: Any additional comments? results will potentially be utilised in the discussion section due to responses being varied between the two main themes.

FIGURE 19: WORDEATER SURVEY RESULTS

Percentage (%)	Median	15	14	13	12	11	10	9	8	7	6	5	4	3	2		Respondent
	1.47	9	O1	0	0	0	0	0	0	0	0	6	0	0	2	0	P2Q1
Y: 60 N: 40		z	~	4	~	~	z	~	~	~	z	z	~	4	z	z	P2Q2
Y: 13 N: 87		~	z	z	z	z	z	z	z	z	z	z	z	z	z	~	P2Q3
	1.6	9	O1	0	0	0	0	2	0	0	0	51	0	1	0	2	P2Q4
	4	00	9	မ	0	10	0	4	0	0	O	O1	0	1	9	6	P2Q5
	6.6	10	မ	O1	4	œ	4	10	œ	4	œ	œ	4	O1	9	9	P3Q1
R: 67 L: 33	•	Recorded	Live	Recorded	Recorded	Recorded	Live	Live	Live	Live	Recorded	Recorded	Recorded	Recorded	Recorded	Recorded	P3Q2
Y: 67 N: 33		Y	Υ	Z	~	z	Y	Y	Υ	Y	z	z	Y	Z	Y	Y	P3Q3
	5.7	10	0	4	0	9	7	00	2	7	9	10	2	7	1	10	P3Q4
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	P3Q5
	4.85	20	10	0	မ	10	0	မ	0	0	N/A	5-6	0	1-2	N/A	10	P4Q1
Y: 53 N: 47		z	z	z	~	~	z	~	z	z	~	~	~	4	~	z	P4Q2
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	P4Q3

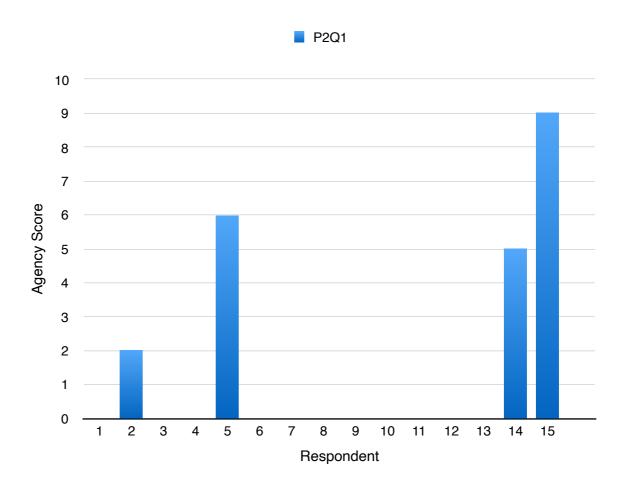
Control

One of the key themes, Control, particularly over the creative processes and subsequently the product, indicated that respondents did not want or prefer to have agency, and only wanted a little particularly over the changing of some aspects of the pieces.

P2Q1: How much control/influence do you feel that you had over the creation of these songs?

Results: Respondents feel like they have no agency over the creation of the pieces (\sim 1.47/10).

FIGURE 20: P2Q1



P2Q2: Is there anything you would have changed about these songs?

Results: Respondents would have changed something about the pieces (Y:60% to N:40%):

Reasons for Yes (Y):

More melody and percussion.

Arrangement, pacing, and fluid transitions.

Addition of vocals.

Mixed differently.

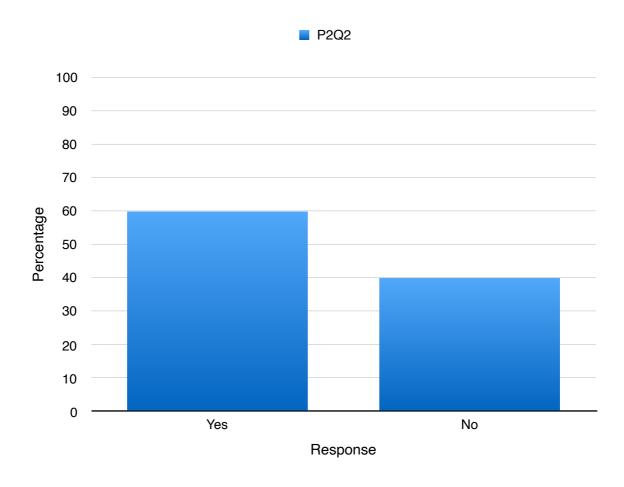
Reasons for No (N):

Enjoyed for various reasons.

Artist should have most agency.

Lack of musical understanding.

FIGURE 21: P2Q2



P2Q3: Would you have preferred more control/influence over the creation of these songs?

Results: Respondents did not prefer to have agency over the creation of the pieces (Y:13% to N:87%):

Reasons for Yes (Y):

Usefulness of feedback.

Self-expression.

Reasons for No (N):

Basis for own creative experience.

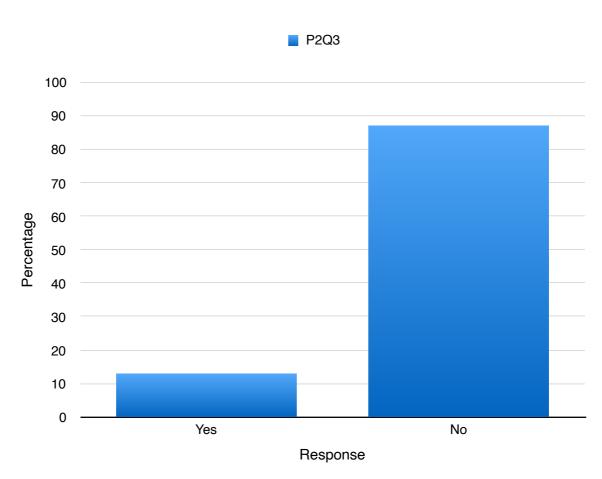
Not genre of choice.

Artist should have most agency.

Lack of musical understanding.

Not their songs.

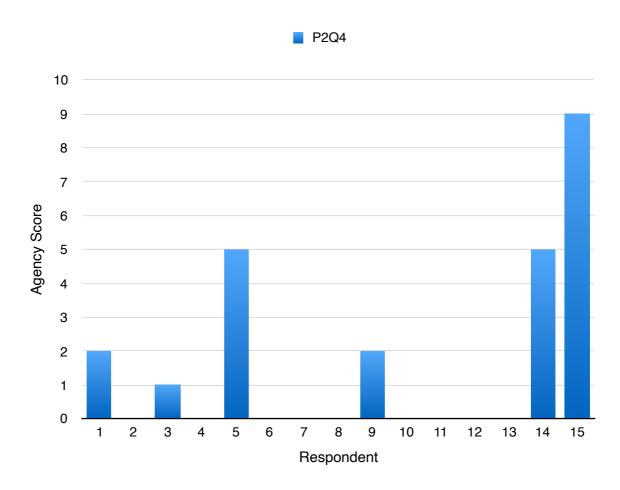
FIGURE 22: P2Q3



P2Q4: How much control/influence would you have preferred over the creation of these songs?

Results: Respondents only preferred a small amount of agency over the creation of the pieces (~1.6/10).

FIGURE 23: P2Q4



P2Q5: How much control/influence do you feel that you had over how the songs sounded based on how you listened to them?

Results: Respondents do not believe they have much agency over the pieces based on how they listened to it (-4/10):

Reasons in range 0-2:

Means of listening limiting (playback speed control and bad speaker quality).

Not involved in creation of music.

Reasons in range 3-6:

Means of listening (volume control).

Order of listening.

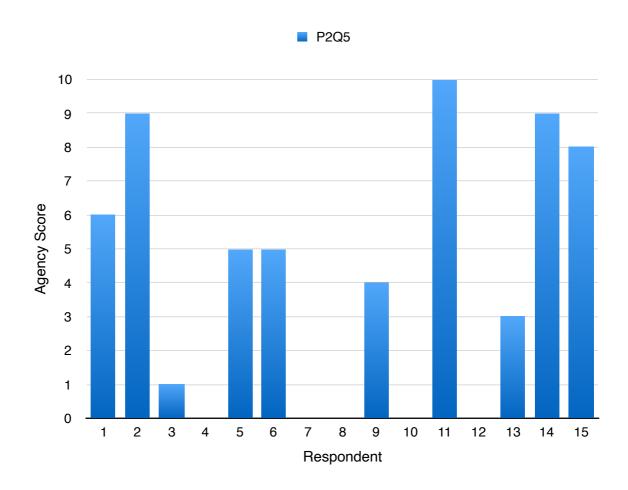
Relating to a wider context.

Artist intention.

Reasons in range 7-10:

Means of listening (adjustability and good speaker quality). Mood and perspective.

FIGURE 24: P2Q5



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Situation

In regards to the theme of Situation, a majority of the respondents preferred listening to recorded music in a non-social setting, but would rather attend a live event, for atmosphere and social connection, including for these particular pieces - citing also that Covid-19, and paying for music, somewhat affects how they engage with music.

P3Q2: Do you prefer listening to recorded or live music?

Results: Respondents greatly preferred recorded over live music (R:67% to

L:33%):

Reasons for Recorded (R):

Listen to it anywhere.

Control over social setting.

Option to replay.

Intricacies in recording.

Better sound quality.

Reasons for Live (L):

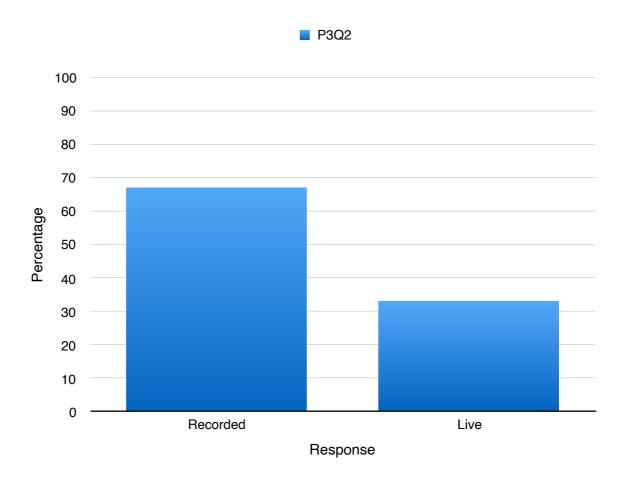
Atmosphere.

Physicality.

Connection to artists.

Organic sound.

FIGURE 25: P3Q2



P3Q3: Would you have preferred listening to this music live?

Results: Respondents would have greatly preferred to hear this music live (Y:67% to N:33%):

Reasons for Yes (Y):

Atmosphere.

Type of music.

Physicality.

Appreciation of sound quality.

Reasons for No (N):

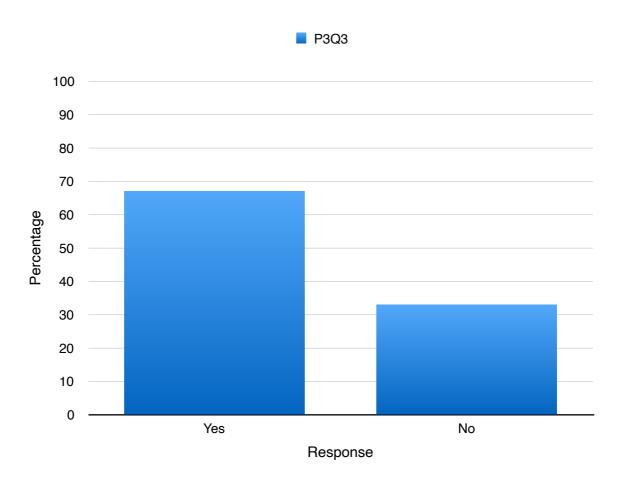
Indifferent.

Control over social setting.

Musical preferences.

Preference of recorded music.

FIGURE 26: P3Q3



P3Q4: To what extent has covid influenced how you listen to music?

Results: Respondents believe that covid has influenced how they listen to music (~5.73/10):

Reasons in range 0-2:

Selective about music choice and means of listening.

Control of social setting.

No impact.

Resons in range 3-6:

Enhanced emotional connection and impact from music.

Reasons in range 7-10:

Unable to attend live performances legally.

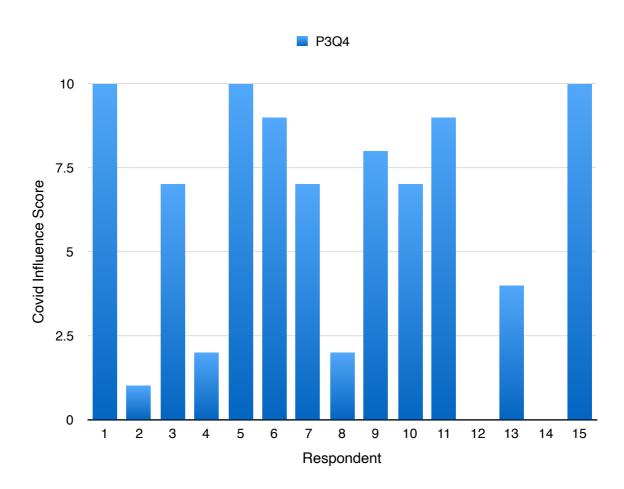
Lack of control over social setting.

Started exploring own creativity.

Listening to music more.

Music as an escape.

FIGURE 27: P3Q4



P3Q5: Give details on how you listened to these songs.

Results: Respondents primarily listened to the pieces alone rather than in a

social setting (Alone: 8 to Social: 2 mentions).

Respondents primarily listened to the pieces on a phone

(Phone: 7 to Tablet: 2 mentions).

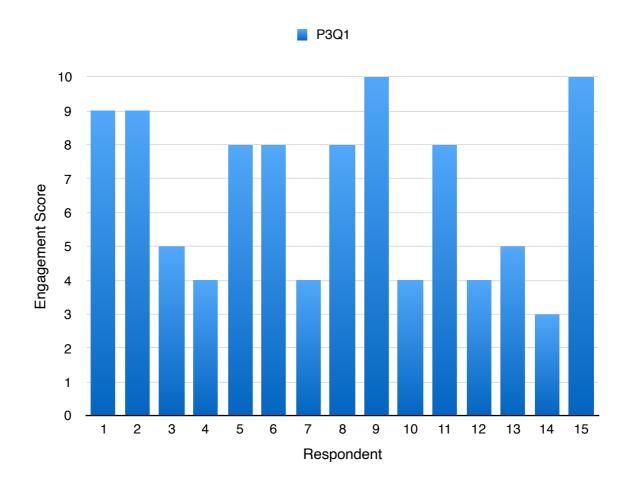
Respondents output device varied

(Head/Earphones: 4 to Speaker Systems: 3 mentions).

P3Q1: How engaged were you with these songs?

Results: Respondents were engaged with the pieces (\sim 6.6/10).

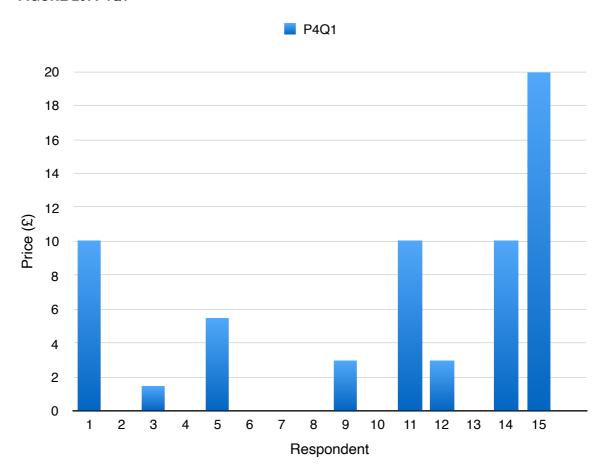
FIGURE 28: P3Q1



P4Q1: How much would you pay for this album?

Results: Respondents would pay on average £4.85 for the album (~ £4.85).

FIGURE 29: P4Q1



P4Q2: Does paying for music change how you experience it?

Results: Respondents split on whether paying changes the experience of listening to music (Y:53% to N:47%):

Responses for Yes (Y):

Feeling of contribution and/or investment.

Increased emotional response.

Feeling of ownership.

Responses for No (N):

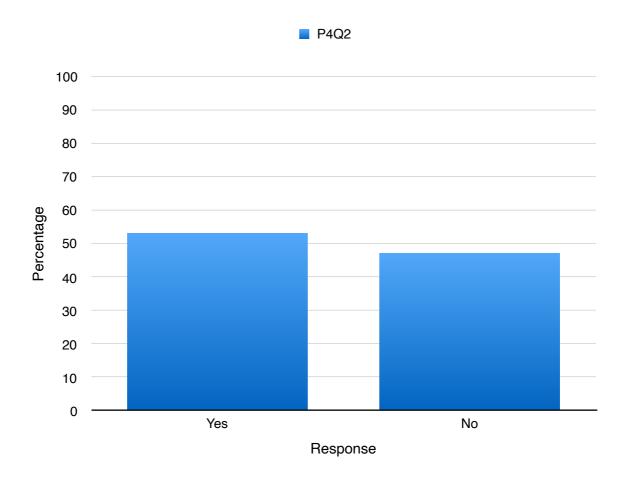
Only buy if liked (and trialed).

Valued music by quality not price (no correlation).

Free music widely available.

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FIGURE 30: P4Q2



3.3.3. Auto-ethnographic Data

Before the previous analyses can be discussed, the key points from auto ethnographic data, recorded between 2020 and 2021, have been organised and compiled for clarity where the overarching themes which arose include, Concept, Songwriting, Production.

Concept

The Concept for the album quickly became the underpinning for songwriting, where the songs were based on the abstract theme of cyclical nature. This feature of the music was based on personal situation, specifically with regards to the Covid-19 lockdown in the U.K. beginning in March of 2020, where each day became repetitive tedium; waking up, drinking coffee, sitting in-front of a computer screen — the same that I am currently looking at — writing music

or researching, eating, going to sleep, then repeating. The concept therefore became: an old man going about his daily routine; waking up, brewing a morning coffee, then writing a letter to his deceased lover forgetting that she was in fact gone, then finally becoming frustrated and leaving. The idea of longing for the past, or writing the letter was exemplified through 'Dear, I', forgetting and becoming confused through 'Aphasia', and finally not acknowledging the future and leaving out of frustration through 'Wordeater'. The name of the final song, and the album overall came from the title of 'Aphasia' which is a specific form of dementia that impacts reading, listening, speaking, and typing or writing (NHS, 2021). This linked closely with the topic of dialogicality in a literal communicative sense, and metaphorically via the eating of words.

Songwriting

When it came to the Songwriting process my personal preference for genre, that of progressive rock or metal with jazz elements, was chosen, with influences, at the time of writing, being Chon, Plini, Animals as Leaders, Toska, Mestis, Igorrr, Meshuggah, and Haken. Most of these bands fall under this genre in some way or form and had an impact on the instrumentation, where electric guitar (distorted and clean), electric bass guitar, drums, and synth were utilised, as well as influencing certain elements of writing and arranging, and production. The writing and arranging process began with the use of an acoustic guitar for motif ideas, used to indicate feelings linked to each aspect of the concept, and were subsequently recorded using a smartphone. These recordings were then transcribed using notation software (Guitar Pro 7), a process which took roughly three months from the beginning of 2020. After transcription of the rhythm guitar, basic drums were added to solidify the rhythms, followed by lead guitar and finally bass, which took another two months. Parts were then reworked through successive interaction with the MIDI demos exported from Guitar Pro 7 which took another three months. These songs were not written with technicality in mind, but specifically to cover the aforementioned abstract concept, however due to influences from other bands there were an intuitive affiliation with odd time

signatures based on feel. Most of these influences, bar Meshuggah and Haken, were also instrumental, which is another preference, that which determined the ambiguity of not having words attached to the concept. The motifs, once fully written, were stitched together before recording, primarily to emphasise the concept, however certain sections were extended or shortened based on this lack of vocals or overarching melodic elements.

Production

During the production of the album, two of the songs that were created to act as book-ends (intro and outro songs) to the main body ('Dear, I', 'Aphasia', and 'Wordeater'), were cut. These songs, which were extended motifs that had been written years prior sometime between 2016 and 2018, on classical guitar were designed to emphasise the concept, however budget limitations impacted their inclusion. During the recording process semi-close professional contact was kept with all performer participants where recommendations or suggestions could be made for possible changes. At this point I advised all participants that they were to keep to the spirit of the original vision of the notation given, but if changes were absolutely necessary then they could be made. Examples of this include, 'Wordeater' intro and 'Aphasia' lead guitar solo being changed to synths, the clean electric guitar in 'Aphasia' intro was changed to classical guitar, and there was the addition of a bass solo in 'Aphasia'. Both the guitarist and bassists recorded with personal DAWs in their private setting and the drummer recorded in private at a professional studio, all three without any composer supervision. Whilst the recording was taking place the guitarist connected me with a producer, who in turn, after being provided with the recordings from all performers, mixed and mastered the recordings to a list of specifications, such as what synths to be used for 'Wordeater' and 'Aphasia'. The reasons for this were based on personal skill levels in production methods not being adequate for this type of music, hence a process of corrections occurred and was repeated until the final product was completed around December 2020. The budget did not cover this particular element of the study and costs were subsidised with my own funds.

The product was then released on BandCamp in January 2021 where it felt at this point that it was out-with my control.

3.4. Discussion

To appropriately discuss the findings, and subsequently conclude this report, this section will aim to investigate the findings presented above in the three strands, interviews, surveys, and auto ethnographic data, by outlining and interpreting the key points in relation to one another, and simultaneously, with the wider theories discussed in Chapter 2. What was expected, what the key findings themselves show, what the outcome of these findings, and finally what could have been done differently, will be the main areas of focus for this discussion.

Expected Outcomes

Firstly, to exemplify what was to be expected from these studies please refer to the APS diagram, 'Figure 31: Wordeater Expected Results (APS)', which was created prior to the development of any of the composed elements for this study. For key reference please refer to 'Figure 9: Agency Perception Spectrum Key with System (Theoretical Example: CHS)'.

FIGURE 31: WORDEATER EXPECTED RESULTS (APS)



First and foremost, it must be clarified that the expectations at this point, due to being produced prior to the creative processes, ultimately failed to acknowledge and subsequently exhibit the element of time, which shows that

I naïvely assumed that perception of agency was going to be constant for all actors and the system involved - this is untrue and will be explicated further shortly. However, if this example were taken as a basis for understanding, my beliefs were that the agency perception of the listener was extremely limited. It was believed that their perception of agency was inherently tied to the passive listening or interpretation of the system, where their existence within a system was almost entirely monological; not being able to interact or engage with it at all. The performer was noted as being somewhat similar to the listener, that they have very little agency over the creative processes, however possessing more so since they were interpreting the system and had some control over how certain parts were played. In terms of the system, because it acts as the central point of the situation as the operations, it held relatively more control over what the listener and performer were able to perceive in terms of dialogicality - since conceptually, pre-development and nearer its genesis, it was to be monological in nature. Finally, because of this aim of being a monological system, the composer was perceived similarly due to being almost entirely in control of the system and its ensuing transmissive element of the signifier when interacted and engaged with by participants.

Key Findings

To understand how accurate the expected outcomes were to the findings I will now outline the key findings before illustrating them in 'Figure 21: Wordeater Findings Outcome (TAPS)'. When it came to the performers, it seemed as if they believed that they had little to no control over the arrangements. This is par for the course when it came to interacting with the system operations developed as monological and was expected as so, however they also perceived much more control over the playing of the pieces than initially anticipated. This was unexpected, but entirely justifiable when realising that, as a composer, I provided a much greater degree of leeway to the performers than in a completely formal or professional setting. When this was paired with the unforeseen circumstances surrounding the Covid-19 lockdown and the requirement of the performers to record in an unsupervised and isolated setting, it was clear to see why the performers also perceived a much greater

degree of control over the recorded elements as well as the playing, including the interpretation of dynamics, phrasing, timbre, and so on. Nevertheless, what was implied was that the performers would have also liked to have some control over the composition, particularly in terms of working alongside the composer in the development of the operations.

The lockdown restrictions also brought to the foreground the theme of inperson versus online creative processes, and it was expressively stated that the social aspects including social cues, human element, and interactivity, were all desirable qualities to working in a physical situation with other actors. It must be mentioned however that it was not entirely desirable as indicated by one performer who explained how it would be more difficult to meticulously dive into one's parts of an arrangement when working with other actors. This could be indicative of communication and dialogue elements not always having a positive impact, although this performer was also out-with the pre-existing relationships between other performers and myself which could be a reason for this. Due to this it lead to one performer stating that they were more critical of the instrumentation produced by this individual and additionally other performers were being perceived as just digital files; the performers were not just being dehumanised to the point of instrumentation, but even more so as just files, or perceived as inanimate parts of the system operations than real individuals themselves. This same distinction was contentious inter-performer-wise but was not made between performer and composer. There was a general inclination towards the composer involvement and the open lines of communication that were maintained throughout the process, even though the setting was designed to be one of a semi-formal professional job. This setting was also exemplified through the time constraints placed on the performers through the use of a deadline, which lead to the performers feeling restricted and pressured since the job had compounded with their ongoing personal life pressures. All of which culminated in all of the performers simplifying certain sections and not learning the songs verbatim for the recorded elements. Some of these changes were made without any interaction with the composer, a byproduct of the isolated situation and the composer relinquishing some control over the operations through delegation to the performers. The performers therefore had more agency than expected in this particular case.

The general consensus of the listeners ultimately provided that they did not have much control over the creation of the product, however in a contradictory manner, stated that they would have wanted to change certain elements. This included the addition of melody, percussion, and vocals, or changing the arrangements or mixes of the music, but overwhelmingly did not prefer to have control over the creation of the songs, specifying that it was the artist who should have most agency nor was it their music. Although this was the case the respondents generally believed that they had some control over their interpretation of the system, particularly in regards to the means of listening, which was interestingly seen as a limiting factor (no playback speed control and bad speaker quality) to a non-limiting factor (from volume control to adjustability and good speaker quality). This links to the situation in which respondents interacted and engaged, as well as their preferences of such an undertaking, with a system. A majority of respondents greatly preferred listened to recorded rather than live music, emphasising intricacies in recordings and control over social setting, as opposed to those who preferred live situations as a way to connect with the artists and be physically part of the atmosphere. What is also genuinely interesting is the affect Covid-19 lockdown measures had on the listeners engagement with how they listen to music. Some stating that it did not have an impact, but several indicating that there was a subsequent emotional connection and impact, particularly using music as an escape, whilst one respondent also began exploring their own creativity by developing their own music. There were also mentions of the lack of control over social settings, which probably manifested due to live performances being made illegal, and therefore individuals being unable to attend to them, as well as having lockdown imposed where listening to music in public or social spaces was impossible for some. Nonetheless, It seems as if the listeners had slightly more control over the situation surrounding the system than originally expected but realistically the expectations were quite concurrent with the findings but notably only because their agency was decreased from covid-related events.

My own personal agency was expected to be much higher than what it ended up actually being, since the development of the expected outcomes did not take into account the fact that agency was temporally linked. As it were, however, the concept of the product was one of the main elements that I had a great amount of control over, primarily as it was connected to my own personal experience, although this underlying experience was probably shared with many individuals during the Covid-19 lockdown. The other element being the creation of the system operations themselves, i.e. the songwriting and arranging of the compositions, in which the concept acted as an underpinning and heavily influenced the said system. This influence, alongside the genrespecific influences that guided the creative processes to some degree, seemed to also have an affect on my perception of agency, lowering it slightly, since the aesthetic elements were heavily associated. Although I could have quite easily abandoned this link during the creation but seemingly decided not to. That being said, it cannot be understated enough that my control over the creation of the system operations, up until the delegation of parts to the performers, was, for the most part, almost entirely under my control. Especially when it came to the creation, alteration, replication, and destruction of each successive splinter; no other actors were essentially part of these processes. In regards to the production of the album, after I stopped altering the original signifier (the system operations as notation and subsequent files), I realised that my agency perception began dwindling. This is down to many factors, including that the parts were delegated to musicians that I had to trust with recording in an unsupervised manner, due to the aforementioned lockdowns, and the fact that the lines of communication allowed for performers to make some changes to the system operations, some without my knowledge, and also suggest changes, of which a few made it to the final product. The most notable of which being: 'Wordeater' intro and 'Aphasia' lead solo being changed to synth, and 'Aphasia' intro being switched to classical guitar. Finally, my agency decreased further once the production had been finalised and especially so once it was released online, during a replication splinter, in which I felt that my agency had fallen to the point of experiencing the signifier as a monological artefact of the past. Therefore, as a composer, my overall perception was less than expected and similarly so

was the system operations, but not to the same extent. For the following illustration, on the following page, 'Figure 32: Wordeater Findings Outcome (TAPS)'9, please refer to 'Figure 13: TAPS Key'.

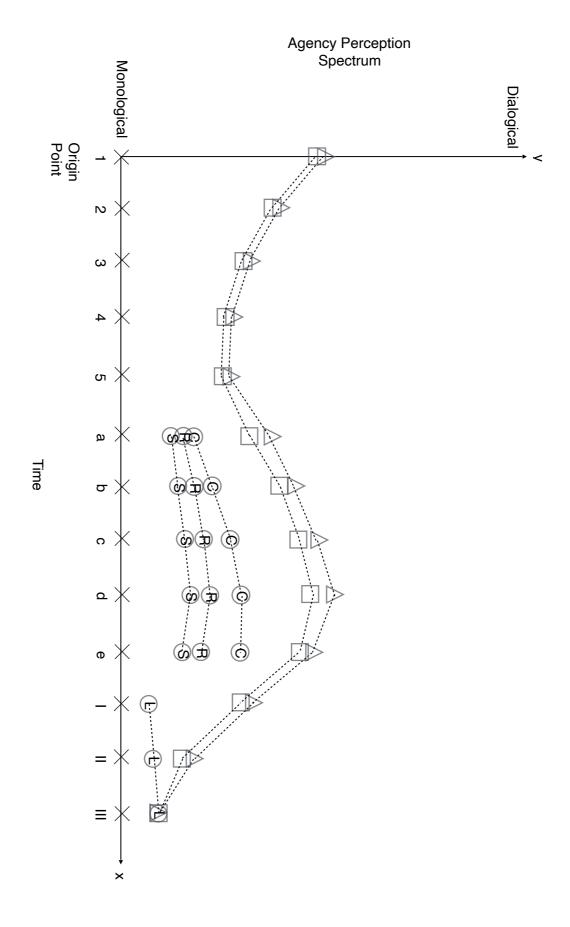
Outcomes

I will now extrapolate the outcomes from 'Figure 21: Wordeater Findings Outcome (TAPS)', with the preface that: the creation of the system section of the TAPS is indicated by numbers, the production indicated by letters with addition of individual performer labels; Samson (S), Ronan (R), and Callen (C), and the release indicated with lower-case roman numerals; respondents have been grouped as (L) at this point for sake of clarity in the diagram. Keep in mind that these listener respondents are individuals and did possess varying levels of agency perception as previously discussed and would range on TAPS but not enough to require individual plots as of this specific study. The origin point will be considered the point in which the conceptualisation of the signifier took place, at an intangible point in temporality following foremostly the genesis and also development of the expected results. Not all successive instances with the system have been plotted for each actor and system itself as this would create a confusing diagram. Furthermore similarly for the alteration and replication splinter indicators, which would have been inexplicably numerous, ergo have also been left out and explained verbally for further sake of clarity.

During the creation phase of the system operations no actors other than the composer was present alongside the system, hence why the system and composer are coupled. Proceeding the origin point (1), at point 2, where the

⁹ As a reminder to the reader, explained in the Chapter 1: Introduction: Diagrams referred to as TAPS diagrams will be presented within each of the studies as visual representations of the qualitative experiences of participants, including findings on perception of dialogicality over time from participants and auto-ethnographically as the composer - this is used particularly not as a way of quantifying the data but as a more meaningful and engaging way for the reader to consume the data within each study.

FIGURE 32: WORDEATER FINDINGS OUTCOME (TAPS)



motif writing (alterations) and recordings (replications) on my phone took place, and point 3, the transcriptions (replications) of the recordings, many instances of alteration and replication took place as noted. After the foundations of the system was created, the alteration of the notation at point 4 began which included the additional elements of different instruments (alterations), and further arrangement commenced where parts were extended, lengthened and moved for aesthetic purposes (alterations). As for the production phase, at point a the introduction of other actors (performerparticipants) to the system occurred through the distribution of system operations (replication), which lead to the decoupling of the system and composer due to such delegation. The system was potentially viewed as more monological by the performers until made aware that they could make suggestions and alter the operations as necessary. Through point b and c the performers were altering the operations by influencing the phrasing, dynamics etc. without the input of the composer, as well as suggesting changes which ultimately made it into the final product, such as the intro of 'Wordeater' and 'Aphasia', and the inclusion of a solo in the latter (alterations). At point d, the producer was altering the operations under the guidance of the composer (alterations), and finally the final product was created, represented at point e, where the perception of agency of all actors involved began dwindling since no more changes were possible for performers, and little for the composer. It must be noted here that: C perceived most agency overall, since he made the most changes and suggestions and also had some control over the production, whilst R perceived some agency mostly over interpreting the feelings of the songs but had little to no contact with the composer during production, and finally R perceived least agency only making minor changes with the least contact with the composer. The release phase, where at point i, the product was uploaded to a streaming service (replications), Bandcamp in this case, at which point the system and the composer were perceived as more monological by the composer and the listeners after each successive instance with the system.

In terms of agentic orientation, the creation phase was viewed as more dialogical than after the release by the composer since there was a form of internal dialogue and control over how the product would actualise, therefore agentic orientation was primarily towards the future. This continued through the production phase when the performers were incorporated into the creative processes who were potentially oriented towards the present, through interaction with the system operations, as well as the future, similar to the composer. After release however, since the listeners began converging with the composer and system from points i through iii as theoretically they may perceive their agency primarily through orientation towards the future temporally through successive instance with the system. Firstly they were oriented towards the past, through instances with similar situations and systems, and present comparably. The performers have not been included in the release phase but can assumedly be plotted similarly to the composer since no more changes are capable of being made; theoretically leading to the assumption that they would be primarily agentially oriented towards the past. Ergo, all actors and system therefore centralise around, and converge towards, the monological degree of the agency perception scale related to temporality. The highest points of overall agency perception were at the points of internal dialogue at the origin point and when the performers were operating with higher dialogicality with the system than later.

Reflection

Finally, to reflect on this study, what could have been done differently must be taken into consideration. Ultimately more compositions spanning various genres and difficulty levels could have been utilised to gauge whether the technicality of system operations were also a deciding factor in perceptions of agency. It would also be beneficial to include more listeners and performers over the course of these conceptual multiple compositions for the same reason. Furthermore, the inclusion of interviewing and surveying participants at different points of the creative processes, including for example, the performers before recording and after release, as well as the listeners before release; at the creation and recording points. This could have lead to a more accurate plotting of all actors and system involved and shown to a greater degree of precision what the agency orientation of actors involved were.

Additionally, a more in-depth versions of the TAPS diagram could have been created, possibly interactive digital ones to show all splinter-types and all individual actors individually rather than on one limited diagram. Limitations of time, budget, and number of participants, were at the core of these constraints.

4.Study 2: L'appel Du Vide

4.1. Overview

This study aims at investigating the dialogicality of the constructed system, titled *L'appel Du Vide* (*LDV*), through perceived levels of agency and agentic orientation of actors, specifically the composer and performer-participants. This will be done through the exploration of composition and telematic performance of the system - the use of telematic performance was a decision made during the U.K.'s second Covid-19 lockdown restrictions of 2020. The system itself is comprised of a text-based notation, or otherwise known as verbal notation, as Lely & Saunders put it, which they describe as '...scoring that uses the written word, as opposed to symbols, to convey information to whoever chooses to interpret it.' (2012, p.xix). This notation was composed and then provided to performers to interpret and actualise their version of *LDV* (Appendix: 3. LDV Notation). After which they were gathered collectively for a focus group to discuss their thoughts, feelings, and attitudes about the situation overall. Data from this focus group discussion was then compiled alongside auto ethnographic data to be thematically analysed.

4.2. Method

4.2.1. Participants

Actors involved in this study include, myself as the composer (N=1), seven performers (N=7) for two iterations of the piece (*LDV* 1 and 2), and subsequently a further two (N=2) for one iterations (*LDV* 3), for a total of nine performer-participants entirely (N=9). For the former, *LDV* 1 and 2, one participant was female (N=1), and the other six were males (N=6), a majority of which who were at the time of research part of the academic community, three of which being PhD students (N=3), one being a MA student (N=1), and two of which were lecturers (N=2) at varying levels. For the latter, *LDV* 3, one participant was female (N=1) and one was male (N=1), both of which were students at the time of researching being conducted. Specifics on educational

background were not entirely known, but may be important to note since an educational background may have an affect on the data gathered from research. The inclusion criteria that was utilised for these performer-participants was twofold, primarily being musicianship and also idiosyncratic background¹⁰, particularly for these iterations of *LDV* due to the focus of this research being mainly on the aural form of Art (n). For *LDV* 1 and 2, convenience sampling was used to find three performers from Edinburgh Napier University (N=3) with such criteria, and a further one performer from personal networks at UHI (N=1). Three participants were further sampled via the NowNet Arts forum (N=3), a production group that specialises in the 'telematic performance of contemporary art pieces' (NowNet Arts 2021). For the following, *LDV* 3, two performers were sampled through personal network (N=2) after connecting with individuals from NowNet Arts.

4.2.2. Procedure

For the data to be collected the following chronological sequence of events occurred in the experiment, classified as phases including, composition, ethical procedures, instructions, performance, focus group, and auto-ethnographic reflection.

Composition

The composition of the system was an ongoing occurrence between mid-2019 and early 2020, with the intention of creating an ambiguous text-based notation for performers to actively interpret and interact with through means of improvisation; musically in these instances. This score was created simply through the means of, initially, pen and paper and then transferred to a Pages document. The score was then subject to repeated scrutinisation, particularly in terms of semantics, in order to create wording that fundamentally provided

¹⁰ By musicianship and idiosyncratic background, these inclusion criteria are dictating that the individuals participating must be musicians with some level of experience, particularly with regards to their chosen instrument(s), digital recording methods, and performance.

performers with a higher degree of agency perception through deliberately obscure text which could be interacted with in a more dialogical manner. The key aim of this system was to measure the performers thoughts and attitudes of agency perception, with regards to the performing and engaging with such a score, which was created primarily to be more dialogical than that of a WAM score — please see 'Chapter 4: Study 3: Wordeater' — and additionally investigate the agential orientation of the actors who participated in the system; hypothesised as being present primarily.

Ethical Procedures

For the performer-participants to take part in the study, participant information sheets were provided, which detailed the study, as well as an ethical consent form, which informed the participants of their pseudonymity through the research process as to not be linked with any of said research or publication. Additionally emphasising that opting out of questions and/or participation in the study was entirely within their right. Prior to being supplied to performers, the forms were authorised by an Edinburgh Napier University School of Arts and Creative Industries (SACI) Research Integrity (RI) representative. The ethical consent forms were then subsequently signed and returned by all nine performers, in two groups, one for *LDV* 1 and 2, and *LDV* 3 respectively, before moving forward with the pre-performance instructions that detailed how the performance and focus group would occur via an online conference call hosted on Zoom.

Instructions

The instructions provided to the performers primarily occurred through email with the performers, where each was made aware of the fact that *LDV* was a text-based notation, and was to be provided with the instructions (the score/system operations) as PDF files shortly before the commencement of the performance and focus group Zoom call. During the introduction of each call the performers were instructed to read the *LDV* notation as a collective, at which point, as the composer, I was made unavailable unless entirely

necessary for guidance. No timeframe was set for each performance, including reading of the notation to again allow for the potential of greater agency perception, however times were recorded and included in the dataset. Obversely, a time limit was set for the focus groups, at approximately one hour. Furthermore, variables including the situation, equipment used for recording and musicking purposes, and performer's listening devices, were left as intentionally unregulated such as to investigate further the levels of agency over the creative processes.

Performance

Initially the performance of LDV was intended to be actualised in a physical setting, hence the elements of the notation which allude to leaving the performance space but due to the Covid-19 lockdown measures it was impossible legally to conduct a performance in such a manner with multiple individuals. For that matter, and through the introduction to the NowNet Arts forum, the use of telematic performance, through the online video platform Zoom, was utilised to circumvent the issue entirely with the additional benefit of internationality in the performer-base. The former and the latter, due to such a non-traditional workflow, may also have had an impact on the outcome of the perception of agency which will be explored further in the discussion section of this report. Performers were required to take part in a recorded performance with no set achievable timeframe in which to interact with the score and other participants, then improvise accordingly. Those taking part were provided with the notation, as PDF files, shortly prior to the situation occurring with little to no instructions other than those written in the score itself.

Focus Group

At the end of *LDV* 1 and 2, and *LDV* 3, the performers were collectivised as a group for the conduction of a focus group, virtually in the same Zoom call that the respective performance took place previously. The use of a focus group was deemed as the most suitable, for surveys would have collected

much too quantitative a data set and would have, assumedly, yielded similar results to the questionnaire regarding the previous study and thusly was eliminated. Similarly so for interviews which, although would have produced in-depth qualitative data, would not have been able to accurately depict the real-time dynamics between participants in a verbal dialogical setting post the non-verbal dialogical performance setting. The questions for the focus group consisted of semi-formal questions (akin to discussion points) and utilised to gain data on subjective perception of agency over the creative processes and additionally agentic orientation. The performances and focus groups took place November 2020 (*LDV* 1 and 2) and January 2021 (*LDV* 3), were recorded, transcribed, and then finally analysed between February and March 2021.

Auto-Ethnographic Reflection

As the composer of the system, inhabiting the only active role in the creation and subsequent development of system operations, as well as the research itself, it was deemed important for me to reflect and contribute autoethnographic data towards the findings and discussion of this study. The autoethnographic portion consists of personal memos and notes that outline the creative processes that took place, recorded between approximately mid-2019 and early 2020 which included my experiences within the context of the work itself (Chang, Ngunjiri, & Hernandez, 2013, p. 11). This method was utilised for the sole purpose of aiding in the interpretation of data collected from the performances by means of contextualised retrospective analysis in the form of memos and notes (Chang, et.al, 2013, p. 18/19). No other methods, including survey, interview, or other, were deemed reasonable or useful for this type of data collection.

4.2.3. Materials

To conduct the study, several tools and materials were required - a concise list of these tools and materials can be found in the Appendix under: '4. LDV Tools and Materials'. For the personal composition tools, as previously

mentioned, the use of a pen and notepad were the simplest method of creating a base for the notation when the conceptual idea arose, which was then quickly transmitted to Pages on a MacBook Pro for ease of editing, and latterly produced as system operations, text-based notation, in the form of exported PDF document. The tools utilised by the performers for both musicking and recording purposes are unknown in specificity, however the former spanned from traditional instrumentation such as a cello and classical guitar through a modern radio and a toy. Technical requirements for the participants included internet connection, Zoom, and an interface in which to transmit their performance telematically. Further materials include the aforementioned documents; participant information sheet and ethical consent form, as well as focus group questions and auto-ethnographic notes and memos in regards to contextualising my data as composer. The focus groups were particularly designed to be researcher lead discussions, where individuals participating in a group setting are allowed a substantial degree of control over their own interactions, and although being somewhat more broad than interviews allowed for more insight into the complex behaviours and attitudes interdependently allowing for the facilitation of data analysis on their agency perception and orientation (Morgan, 1996, p. 130, 133, 139, 140).

4.2.4. Data Analysis

For said data analysis, the use of thematic analysis was employed. For a more in depth description, please refer to 'Chapter 3: Study 1: Wordeater' section '3.2.4. Data Analysis'.

4.3. Findings

This section will focus on two data sets, the focus group and autoethnographic data. As per the ethical documentation, individuals taking part in the focus groups will be anonymised; pseudonyms will be used for the performer-participants. Furthermore, owing to the fact that *LDV* 3 was a smaller group of performers, and the focus group shorter, the data from the Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 4: Study 2: L'appel Du Vide

focus group was far less so than that of *LDV* 1 and 2, and may seem disproportionately represented going forward. The entire transcript of the latter focus group can be found in 'Study Transcripts', under '2. LDV Focus Group Data' as '2.1. LDV 1 & 2'.

4.3.1. Focus Group

Due to the questions being designed to investigate the perceptions of agency perceptions possessed by the performer-participants through means of thematic analysis of their attitudes, the primary themes that manifested through such analysis of the focus groups were the score, online vs. offline, and finally idiosyncratic background.

The Score

In terms of the score, performers from both groups began by deciding on their chosen word(s) to be used as stimuli and interpreted them through non-verbal improvisation, then additionally mentioned their expectations and framing of the pieces. For the first iteration of *LDV* ('LDV1:Bloom¹¹), Hunter presented a list of preconceived words, including: 'divide', 'flutter', 'flow', 'bloom', 'glow','frost', and 'crush'. These words were formulated prior to the commencement of the performance and after the notation had been given. Jacob suggested starting with one word and, after some deliberation, Hunter picked 'bloom', and the group concurred. After the performance of 'LDV1:Bloom' the group decided to perform again and during a brief intermission a dialogue occurred which clearly had an affect on the word(s) chosen for the second iteration. Connor asked the group who was American, since it was an international telematic performance, to which Jacob

¹¹ 'LDV1:Bloom' refers to the title of the piece, that being an abbreviation of *L'appel Du Vide*; *LDV*, it's iteration in Arabic numerals, then the sub-title (in this instance being 'Bloom') which represents the word(s) chosen by the performer-participants.

responded with a nervous hand raise, and stated that he was 'ashamed' to be from America based on who was in the White House - this lead to a lighthearted political conversation between the two participants. After the intermission had concluded, Hunter once again presented his list of words, with the removal of 'bloom'. Jayden picked 'frost' and quickly another word was chosen, 'division'. The group concurred and decided to do a simultaneous performance of the words (from this point on 'LDV2:Frost/Divsion'). At this point the mute and video signal was formalised by Hunter. The choice of words for 'LDV3' was similar to that of 'LDV1' and 'LDV2', in which the word was presented by Gerald, as 'novelty', and Jessica concurred (henceforth 'LDV3:Novelty') - the reason given for such a word choice was because there were tarot cards next to him.

When the first group was prompted on their interpretation of the words chosen prior to the performance, Hunter stated that the words were chosen to be 'open-ended', such as 'bloom', which was not too specific or limiting and gave an example of what he perceived as a more limiting word: 'notepad'. Jayden responded in dispute, saying that 'notepad' may have been less limiting, since it is something that can function differently for everyone, making the point that any 'extrapolation of a word is incredibly tenuous'. A conversation followed on the contrast of the two performance word(s) where Jayden immediately used the word 'division' as an influence for rhythm and what could be done physically with the interpretation of the word rather than thematically. Mila disagreed to an extent saying that their initial reaction was that 'bloom' does not last very long, that it was 'transient' and 'periodic', likening it to Spring blooms - utilising this in a thematic way by creating quick injections of noises and and short bursts of sounds. Jacob stated that 'bloom' was a difficult word and decided during the course of the performance to actually drop the word entirely, however realised that ironically that is exactly what a bloom could be interpreted as. For the second performance however, Jacob connected with the word in a way likened to the aforementioned conversation about the division between people - relating to America and the White House - seeing it as a division of sounds and people;

'almost a motive than physical', rather than in 'bloom' being a more 'cerebral' connection. Joshua took the words into account but rather used them 'like a canvas', where everything that was created by the participants added to it. The words themselves to Joshua were not important, there was more of an interaction with people, by 'bouncing ideas' off of everyone for example, at the forefront of his interaction with the word(s) - saying that the word(s) had different meanings to every individual anyway.

The interpretation of the score was also taken into consideration which lead to a similar opinion to Joshua's being voiced. Connor and Jayden discussed the importance of functionality within the score, and how this had affected their interpretation of the words presented. Connor stated that it was a 'beginning to something else', but ceased to matter to an extent during the performance, that there is an inevitability about forgetting the initial score and just interacting with people - likening it to Cardew's Treatise. Jayden disagreed and stated that this was the exact function of the score in the first place, that it was to 'pass agency from the composer almost entirely to the performers', creating what he called a 'framework for making music' (similar to Joshua's canvas analogy). Jayden also said that there are two sets of agencies: 'you have the agency of each individual then you have the agency of the group reacting to each other'. Connor concurred and stated that it felt 'infinitely generative', likening the score again to another individual 'Christian Wolff's' text scores. Furthermore adding to the point of a 'canvas', and a 'framework', by saying that it was like a 'launching point' for him where the words were forgotten, although it was not entirely a free improvisation session. With these concepts in mind, that of the 'framework' and multiple agencies, Jacob said that they work in movement arts, and utilise a concept called 'flocking' where individuals work together in a flowing movement whilst following one or more individuals. This seems to be tied together perfectly with what Edward states:

"...if we were to construct the revisionist history and tear down statues and put something else up, who was the first sound, was it purely the

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function of the first sound's instrument that then became the impetus for the generation?'

Finally, with regards to 'LDV3: Novelty', Gerald stated that the format of moving away from the usual modes of communication to non-verbal leads to what he considered a power play with words, similar to S&M roles discussed by Foucault, where the data set out is used as inspiration from one person as something and responded to by another. The rules of the game are in play, but the play is controlled; likened to by Gerald as Ludic play, similarly where the rules of safety and limitations are defined. To which Jessica responded that there was a degree of trust between those participating that they would not completely destroy everything and vice versa - disregarding said rules. This form of framing and expectations was also mentioned in the first group of participants where Edward said there is a different approach to this kind of music, that it is an entirely different set of expectations to this as opposed to performing a Brahm's piece. Jayden also explained that his expectations were limited to equally-tempered-twelve-tone scales, which was different for other individuals where they could choose whether or not they played in the 'luminal space'. When prompted, Joshua and Connor both agreed that the expectations are fundamentally solidified in a social aspect, it was a case of reacting to other people's sounds and relating to people during spontaneous improvisations and compositions.

Online vs. Offline

The theme of online vs. offline was particularly apparent since the Covid-19 lockdown measures had affected participants worldwide to a varying extent, so there was a focus on the space, technology, and also the situation of the pandemic itself. With regards to the space, the performers began by discussing the differences between being online in a digital space and offline in a physical one. Mila stated that it was easier to see everyone at the same time whilst looking at the score, which she mentioned is different as opposed to offline, something she believed was less important on stage than in an

online context. Jayden, since this was his first instance of a telematic performance of this nature, did not know what it would feel like to be online. He stated that he 'thought it would be more difficult' but also that it was harder to have 'the whole sound palette' non-verbally online - something that would have been much easier to achieve in-person. Connor concurred by saying that there was a distinction between feeling the sound palette and not, that there are visual clues as well as physical ones too and, although feeling fluid, performing in an online setting did pose restrictions on 'keying in to individuals'. Hunter said that it was easier utilising headphones in the performance as it was interesting 'to be able to pick out what individuals were doing', something that can be done in-person and online. Mila referred to Zoom as 'the dive bar of online music making', a place where things just work although there is no pretence, which was a perfect way of describing the situation as well as the technology being used for the telematic performance. To which Joshua added that this particular idiom works for online music making, relating it to Fleetwood Mac doing performances on Facebook utilising Jamulus, and that these platforms are becoming 'much more tactile; easy to use'. This ease of use was also recognised through individual participants use of the Zoom platform itself where Jacob and Connor both used the glowing green boxes around participants video feeds in a game-like manner. Jacob said that when the box was glowing for too long he was taking up too much space and obversely Connor utilised it as a way of noticing whether or not he was adding to the entire soundscape; 'my quest was to make my square light up as much as I possibly could'.

Jacob, on the other hand, disagreed stating that this type of platform was entirely intuitive, that there was an element lost in the online space which is only currently available in person; that of the feeling of movement by people. He stated that there is a way of telling what someone will play or do, and there is a reaction to that, such as 'going inside and outside the space' in certain performances - playing with the physical space - which he likened to turning off the video feed and muting to suggest being off stage. He also said that depending on the settings that are being used, especially if there was an

audience, that there is a thought process behind playing where only three people may be heard at a time, something that had occurred in the NowNet Arts group. A discussion followed from this where Mila, another member of NowNet Arts, reiterated the term 'dive-bar' since they tend to use Jack Trip, where 'you have to be, not only a musician, but also an engineer, and suddenly a network technician, oh, and you need to know how to use the command line'. The use of Zoom in particular means that someone can just show up and play, however with Jack Trip there is more of a pre-requisite to being able to play with others, there are different expectations at play. Connor added to this by stating that he would not be interested at all if it were not just a case of straight forward and simple communication through the platform. Hunter's opinion also coincided with Connor's, where he stated that it is a nightmare setting things up for a Zoom or Skype gig, that there is a type of instant connection between the performer, instrument, and performing and the utilisation of something like Jack Trip may hinder a performer in that instantaneous connection. Joshua positively replied that these technological advances have only really came into existence with modern capabilities in the past five years and may allow for the facilitation of music making to a greater degree in a 'networked environment'. However, Jacob stated that, at this time, there is a sense of anxiety linked to playing with NowNet and utilising Jack Trip since there are so many moving parts to even begin rehearsing. An anxiety which connected heavily to the Covid-19 global pandemic, since others were unable to touch and musicians were not able to gig, furthermore saying that in the 'current paradigm more people being self isolated are having to play together online', in an implied forceful way.

Idiosyncratic Backgrounds

Finally, the participant's idiosyncratic backgrounds were discussed in varying degrees, including their experience with this particular type of music system and their choice of instrumentation used during the performance. Jacob

mentioned that he was used to playing in ensembles with free improvisation often involved, however a few other performers had had more experience with telematic performances. Mila stated that they had been doing this for nine or so years, producing their own concert over Zoom, utilising individuals who watch on Twitch or Facebook as additional featuring artists. Edward (also part of NowNet Arts), said that they are doing their Ph.D and have a background in composing. Connor exclaimed that he has been doing this sort of performance for almost forty years, but not in a telematic way before. Each of the performers, in addition to having varying levels of experience with this type of performance style, also had varying instrumentation choices. Concerning this, each performer provided an explanation of theirs with the reasoning for utilising such. Edward, who used an earphone microphone wired through a Max/MSP patch stated that he thought that building his instrument was as much part of the performance as just playing it - seeing himself as an instrument builder. Mila similarly created her own instrument, using a modular synthesiser, running their voice through it as well. Similarly to Hunter, Connor utilised a steel string acoustic, and the radio to play Fleetwood Mac, because they did not have access to their modular synthesiser due to travel restrictions set in place by the Scottish Government. Jayden stated that he utilised a piano because it was there, and a box of instruments nearer the end of the performance such as recorders and an ocarina because he had initially forgotten about them.

4.3.2. Auto-ethnographic Data

Before the previous codified data can be discussed, the key points from the auto-ethnographic data, recorded between mid-2019 and early 2020, have been analysed where the overarching themes which arose include, Concept, Composition, Performance, Production.

Concept

Initially, the composition arose from a concept twofold, firstly from the idea presented by Tolstoy in 'What is Art?' where he presents his belief that art is a human activity what expresses emotions and has the ability to infect others, this idea was placed in conjunction with the idea of a call to the void (Tolstoy, 1995, p. 39/40). The call to the void phenomenon, otherwise known as L'appel du Vide or the high place phenomenon (HPP), entails the experience of an often inexplicable feeling when one wishes to jump from a high place, often associated (wrongly) with suicidal ideation (Hames, J., Ribeiro, J., Smith, A., & Joiner, T., 2011, p. 1114). Ergo, LDV was conceived from the idea of infecting others with the feeling of jumping from a high place, specifically in a metaphorical way with regards to myself as a composer undertaking first of all a Ph.D and second of a new form of composition, that being text-based notation, both being leaps into the unknown, or the void. This feeling of LDV is one that I have felt, and the suicidal associations were dear to me, hence it was an interesting concept that I wanted to portray through a composition. The advent of a text-based notation provided a perfect outlet for it, especially when paired with dialogicality. The fact that LDV is a non-verbal feeling or experience and is usually not verbalised allowed for the communication elements to permeate the existence of the composition for myself.

Composition

The composition of the piece linked heavily to the concept, and began with a rough approximation of the fifth line of the text, found in the Appendix as '3. LDV Notation', created with a pen and tattered notepad, which states: 'If an individual did not experience an initial reaction, they must not participate (initially at least) and may choose to leave the performance space.' What became contentious, particularly between myself and supervisors, was the semantic difficulties of text-based notation and instructive qualities laid on participants in terms of agency. Multiple iterations of the notation were formed, through the use of Pages on a MacBook Pro, prior to its final form, as PDF document, which depicted the compulsory act of leaving the performance space without the choice to stay, or become convinced not to leave by others.

The composition itself was also created specifically as to be entirely ambiguous in terms of Art (n) forms, where the semantic choices made through the creative process of the composition left this entirely in the participants control. The aims were to allow for greater perception of agency whilst still being controlled by the composer by some boundary-like degree.

Performance

The performance of the piece was interesting, as I noted that when the notation was provided and the performers were interacting verbally, coming to a decision on the word(s) to be used, there was no initial reaction from myself to the word(s) nor the performance - retrospectively noting that this could have been nerves. This however, changed drastically when the performances were taking place: 'I felt as if it was not mine', there was a state of disjoining from the piece as soon as it began to sonically actualise - the same occurred in all versions of *LDV*.

Production

Exactly the same feeling occurred after the performance in the production of the recordings, however I felt as if I had at least slightly more control over these because I was able to mix them to a degree, whilst stopping myself from doing anything more than lining the tracks up and making sure volumes were near equivalent to the Zoom audio recording.

4.4. Discussion

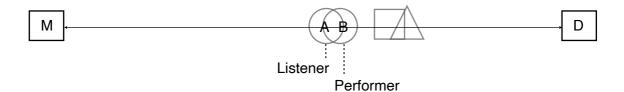
In order to discuss the findings and conclude this report, this section will aim to investigate the findings presented above in the two strands, focus groups and auto-ethnographic data, by outlining and interpreting the key points in relation to one another in conjunction with the wider theories discussed in Chapter 2. The main areas of focus for this discussion will be as follows, what

was expected, what the key findings themselves show, what the outcome of these findings was, and finally what could have been done differently.

Expected Outcomes

In order to visually represent what was to be expected from this study please refer to the illustration, 'Figure 22: LDV Expected Results (APS)', which was created prior to the development of any of the composed elements for this study. For key reference please refer to 'Figure 9: Agency Perception Spectrum Key with System (Theoretical Example: CHS)'.

FIGURE 33: LDV EXPECTED RESULTS (APS)



First and foremost, it must be clarified that the expectations at this point, due to being produced prior to the creative processes, ultimately failed to acknowledge, and subsequently exhibit, the element of time, which shows that I naïvely assumed that perception of agency was going to be constant for all actors and the system involved - this is untrue and will be explained further shortly. Nevertheless, as a fundamental understanding of what was to be expected, particularly in regards to my own thoughts and beliefs of actor and system perception of agency it is quite clear that, relative to a situation such as that described in Chapter 3: Study 1: Wordeater, the listener and performer have much more agency, specifically the listener, and that the composer and system, which were still somewhat equidistant here, are also slightly lower in terms of perceived agency. The listener in this case was assumedly perceived as having much more agency, since the type of composition itself, that being text-based, does not rule out the involvement of the listener within a situation as the operations themselves are developed

to be more dialogical; nothing is explicitly barring the listeners from taking part. The performer was placed higher due to the fact that within the reading of the score there is the presentation of word(s) and verbal discussion element to come to said word(s), meaning that the performers initially have a say over one element of the system operations, whilst also being able to improvise without the imposition of set system operations. In this case the operations are left ambiguous leading to potentially higher levels of perceived agency by design. Finally the system and the composer were placed lower than the previous study, however, still higher than both participant types since the compositional, and conceptual, elements of the system operations are almost entirely withheld from the other actors taking part in the situation. Even when the performers have an initial say over one element, the composer is still placed hierarchically above them and there is still a monological undertone to this element of the composition. The recording and production of this piece was not considered in the expectation and will be clarified shortly.

Key Findings

To understand to what extent the expected outcomes were accurate in accordance with the findings, I will now outline the key findings before illustrating them in 'Figure 23: LDV Findings Outcome (TAPS)'. For the performers it seems that, with regards to the score, one individual in the case of each of the iterations produced for this study took the initiative to provide a word or words to the group of performers. In 'LDV1:Bloom' and 'LDV2:Frost/Division' the words were presented by Hunter and chosen by the group, and 'LDV3:Novelty's' word similarly being presented by Gerald. For 'LDV2:Frost/Division' however the interesting political division between an American and British participant, albeit in jest, could have had an impact on the word choice and further interpretation. The choice of words in all counts shows that the intended function of the notation reading left dialogicality in the hands of the performers, able to interact with one another in a communicative way both verbal prior to, and non-verbal during, the performance, but failed to recognise that power dynamics would naturally

arise in the actual choice of the words; a minority of individuals holding most agency over said choice. The obverse is true of the interpretation of the words themselves, which were deemed as not limiting and could be interpretable and extrapolated in a multitude of ways, where the word bloom was noted as being interpreted as: not lasting long, periodic, injected sounds of 0.3s to 1.5s, that the word itself was forgotten in a metaphorical blooming fashion, transient, and even cerebral which made it somewhat difficult to pin down. Frost as being a physical interpretation of the word, and division being that of groups of sounds and people. Even going as far, for LD3:Novelty, as to say that the words themselves became rules of power play, likened to that of S&M roles designed as degrees of trust and limitations for participants with the dangers of disregarding such rules. These interpretations are interesting on there own, but the fact that the interpretations themselves were capable of being be almost completely disregarded shows a higher level of agency. Most participants decided to utilise the chosen words as; a canvas, common perception, individual meaning, frameworks, beginnings, and launching points leading to interpersonal interactions to create generative music. The two sets of agency were pointed out by one participant noting that there is the individual agency and the group agency reacting to one another, the latter flocking to an extent. The text seems to have an impact on the participants, making them consider their own agency perception, but also the group's, since there is a level of interaction amongst themselves. To that degree the interpretation of the score and the words shows that there is a much higher level of perceived agency than expected, especially relative to the word choice itself. What was interesting, however, was the expectations and framing of the pieces, which was expressively detailed as being entirely different to a WAM CHS, like a performance of Brahms, and fell in the category of free improvisation or spontaneous improvisation/composition, being more about the people and reacting to other's sounds than the system operations themselves. Although this was the case there was also the noted limitations in such a situation, most of which were self imposed, since expectations were somewhat limited by the 12TET scale as opposed to luminal space between tonality available to certain instruments, as well as the self mediation perceived in a group setting to come up with words. The

system operations themselves were not entirely free in that case, which was close to the expected outcomes of the study.

The theme of online vs. offline was also an intriguing topic, since the space was perceived as being easier in some regards as opposed to a physical space, since it facilitated the sound palette and overall landscape of the music being created. It was stated that online spaces are becoming much more tactile for that matter, where one participant even likened Zoom to being like that of a dive-bar with no pretences of sound quality or the space itself. However there were some limitations that presented themselves through such a virtual space, that being the lack of physical cues, as movement, or even just simply in a musical sense, since it is easier to key into individuals in a physical room. One factor arose that produced a duality in terms of playing, that of the gamification of the Zoom borders around the individual participants, where one perceived the lighting up of the border as a sign they were making too much noise and the complete obverse for another. The agency perception of the space was therefore fairly limited by the technology being used as well as the fact the performance was telematic in the first place. This was particularly due to the fact that even with Zoom only needing to turn on 'original sound' then focus on playing was inversely related to the opposing example of JackTrip where one needs to know how to be a musician, engineer, network technician, and also posses knowledge of the command line that could induce anxiety in individuals. The former seemingly facilitating instantaneous gratification with a simple set up that is somewhat expected from the modern age of connectivity in a networked environment. Therefore the technology used here, that being Zoom, can be seen as increasing the agency of participants, especially those with less experience than others in a situation that calls for it. Ultimately the performers stated that the lockdown measures due to the Covid-19 pandemic somewhat forced them, and others, to work in an online format, stopping musicians from performing or gigging in physical space and even going as far as likening lockdown to a war. With this in mind, the online situation created was a necessary one, but nonetheless allowed the participants to express themselves when they were otherwise unable to in such a manner.

What also played a part in participants expression was their individual idiosyncratic backgrounds, that being their experience in chosen instrumentation. The former seeming to have an affect on some participants, especially those who had varying degrees of experience with this kind of performance of improvisation and experimental music, one of which even to the point of producing their own show, however this was not the attitude of all performers and some did not comment on this having an affect on their playing. It may have done so in terms of dialogicality of the piece, since having prior experience with such music may have made expression oneself less tied to WAM theory as previously mentioned, or on the obverse too tied down to previous experience of experimental music. This tying down was also seen somewhat in the instrumentation where participants mentioned being restricted by 12TET instruments, wanting to switch to a different instrument or an electronic one whilst still wanting the instant gratification of being able to make sounds easily. Two participants however were less tied down, since they built their own instruments, one utilising a Max patch vocoder fed by a microphone and another a modular synthesiser.

For the matters expressed as key points above with regards to the performers, it is clear that they have a substantial perception of agency. Although each of their perceptions varied whilst taking part in the performance, including the interpretation of the notation. Performers possessed a reasonable level of dialogicality overall. Where they did not possess much agency was at the points elucidated by the auto-ethnographic memos, where firstly the control over the concept was entirely held by the composer, which was not made apparent, and did not necessarily need to be, to the performers. There was no dialogue apparent here also in the composition stage, where it was almost entirely controlled from a top down position, even though an extremely limited level of control was relinquished to performers via the operations, specifically in terms of their choice over words. This would be akin to replacing an already existing cog in a machine with a visually aesthetic one concurred upon by a group of individuals, but with the caveat that the machine itself could be interpreted and interacted with in whichever way the

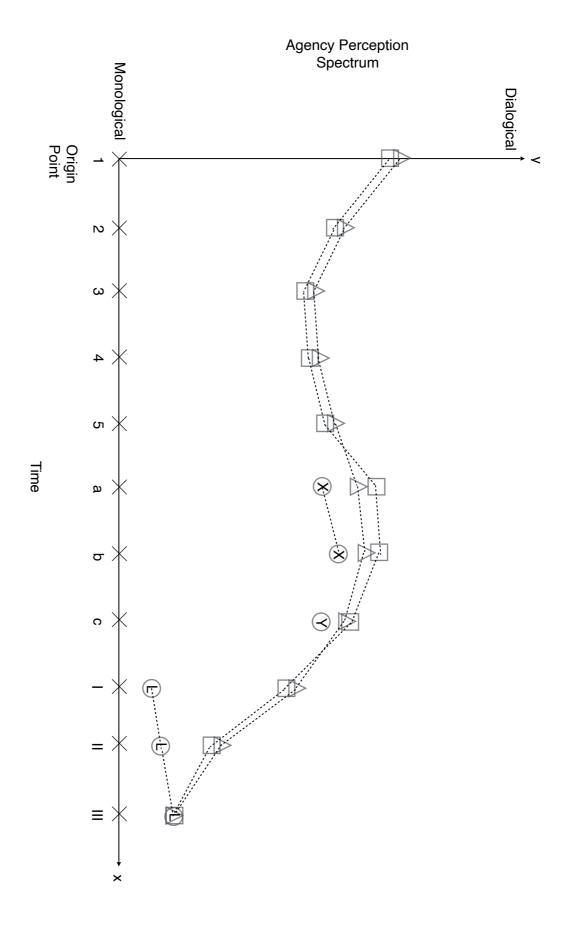
participants desired. Even though the rules seemed to be defined as text on a PDF document, a way to make this more dialogical would be to allow for all cogs to be removed like an Ikea kit, providing the performers with an editable document, rather than a PDF, however there were still no rules preventing participants from disobeying said rules, i.e. the system operations, but I digress. During the performances of LDV as a composer there was the feeling of a decreased level of agency perception, since the operations themselves, which was the primary creation made by myself, was not the same as the output. Since I had no interaction with the system operations during the situations for this study it felt as if the system was much more monological and similarly so as with the performers at this point - I could have taken part, but this could have skewed the data. Finally, during the production of artefacts for submission during this thesis, not intended for release, there was little agency perception, just myself acting as a producer. Those listening to this artefact, probably only including some select friends, colleagues, supervisors or examiner, would assumedly experience similar levels of agency perception to the listeners in Chapter 3. Study 1: Wordeater; very little. For the following illustration, on the following page, 'Figure 34: LDV Findings Outcome (TAPS)'12, please refer to 'Figure 13: TAPS Key'.

Outcomes

I will now extrapolate the outcomes from 'Figure 23: LDV Findings Outcome (TAPS)', with the preface that: the creation phase, including concept and composition, of the system section is indicated by numbers, the performance

¹² As a reminder to the reader, explained in the Chapter 1: Introduction: Diagrams referred to as TAPS diagrams will be presented within each of the studies as visual representations of the qualitative experiences of participants, including findings on perception of dialogicality over time from participants and auto-ethnographically as the composer - this is used particularly not as a way of quantifying the data but as a more meaningful and engaging way for the reader to consume the data within each study.

FIGURE 34: LDV FINDINGS OUTCOME (TAPS)



phase, indicated by letters, with the addition of the collectivised group of performers, labelled as (X) for the 'LDV1:Bloom' and 'LDV2:Frost/Division' group, and (Y) for the 'LDV3:Novelty' group, for clarity in the diagram. Keep in mind that although the groups have been collectivised and averaged for this reason, the individuals did posses varying levels of agency perception as previously discussed and would ultimately range across TAPS. Listeners, indicated by (L), were not involved in this study, but extrapolations have been formulated in the TAPS diagram at the point of the production phases, indicated by roman-numerals, for understanding. Furthermore the origin point will be considered the point in which the conceptualisation of the signifier took place, at an intangible point in temporality proceeding the genesis and the development of the expected results. Not all successive instances with the system have been plotted for each actor and the system itself as this would create an ineligible diagram. Additionally, the alteration and replication splinter indicators, which would have been profuse, have also been left out and explained verbally for further clarity.

During the creation phase of the system operations, no other actor was involved other than the composer alongside the system, hence why there seems to be a coupling of system and composer at this point. Proceeding the origin point (1), at point 2, is where the initial writing began; where pen met paper, quite literally. The dialogicality of the system began to decline here, and further so when the first replication occurred at point 3 where the beginnings of the composition where transferred from a physical notebook to a digital one, that of a Pages document on a laptop. From this point, through points 4 and 5, the dialogicality of the system and composer were perceived as roughly even overall through multiple iterations (alterations) of the addition of extra words, lengthening the notation, as well as the changing of semantic meanings. The dialogicality here was perceived as slightly higher though since it, although intending to restrict the performers through the system operations was also developing in a way that allowed for the

performers to interact with the system in a more dialogical way. Due to the aforementioned coupling of system and performer the composer dialogicality also perceivably rose slightly here too. With regards to the performance phase, at point a where other actors as performers were included in the situation, the dialogicality of the performers themselves was substantial and almost aligned with the expected outcomes. The system at this phase was also perceived at a higher level because of this, since the performers were capable of interpreting and interacting with the system to such a degree, but the composer feel slightly through the feeling of lack of ownership over the sonic output. The second instance of (X) with the system, at point b, confirmed this, where the performers perceived greater dialogicality of the situation overall. Point c was the involvement of a new group, (Y), where the degrees of perceived agency were similar to that of (X) at point a, however, since the rules were observed more rigidly here the perception of the system decreased. The production phase, at point I is the instance where mixing occurred from the recordings (replication), and the extrapolation of listeners (L) began, the system and composer both fell in perceived dialogicality in a drastic manner. If the performers were also to be extrapolated here, they would, alongside the system, composer, and theorised positions of listeners, begin to centralise around the monological point of the spectrum. If the latter phase, that of production, did not exist however the perceived dialogicality of the system and actors would have been quite substantial, centralising generally similar to that in points a-c. Nevertheless, if listeners were involved at this stage, the averages would have theoretically decreased. With regards to agentic orientation, the performers are perceived to be oriented primarily towards the present (unless successive instances occur then the future), composer to the past (unless actively involved in the system then the present), and listeners to past (otherwise similar to the performer in successive instance).

Reflection

Finally, to reflect on this study it must be taken into consideration what could have been done differently. More performances would have been beneficial to

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the data collection ultimately, however it would also have been intriguing to include the additional element of an editable system operation or notation to further gauge agency. The addition of more performances, and subsequently more performers, over the different interactions with the system and also the inclusion of listeners at this performance stage too. Listeners and performers would also be included at the point of production to see how individual agency was perceived. Furthermore, the utilisation of interviews would be beneficial in the garnering of in-depth qualitative data from the performers who partook in focus groups to round the data out - this could have allowed for more accurate plot points for individual performers rather than medians. Additionally, a more accurate versions of the TAPS diagram could have been created, possibly interactive digital ones to show all splinter-types and all individual actors individually rather than on one limited diagram. To conclude, the core limitations and constraints of the study were viewed as edibility of system operations, time, budget, and number of of participants.

Chapter 5: Study 3: MusicBox

5.Study 3: MusicBox

5.1. Overview

This study aims at investigating the dialogicality of the constructed system titled *MusicBox*, through perceived levels of agency and agentic orientation of actors, particularly with regards to the composer and performers. This will be done through the exploration of composition and telematic network performance of the system - the use of such a mode of performance was a decision made at the conception of the network elements of the system. The system itself is comprised of an application, developed using Max/MSP, and comprised of a 3D virtual and tactile space, with simplistic instructional elements for users included - similar to a text-based notation as accompaniment. Participants were provided with the system to interact with as a collective group, and after which they were gathered for a focus group to discuss their thoughts, feelings, and attitudes about the situation overall. Data from this focus group discussion was then compiled alongside autoethnographic data to be thematically analysed respectively and in relation to the other dataset.

5.2. Method

5.2.1. Participants

Actors included in this study were as follows, myself as the composer (N=1) and three performers (N=3) over the course of one performance of the piece. Out of the three performers, two were male (N=2) and one was female (N=1). Other nominal characteristics were not important specificities for the conduction of this research. The inclusion criteria that was utilised for this study was simply the possession of a computer with an operating system capable of running the application, no other criteria was fundamentally necessary for the participation in the research, since no instrumental requirements or musical background were ultimately needed. The sampling method used was convenience sampling, in which two participants from a personal network were utilised (N=2) - one of which being an acquaintance

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and the other a participant in a former study, and finally one from the NowNet Arts forum (N=1), a production group specialising in telematic performance of contemporary art pieces (NowNet Arts 2021).

5.2.2. Procedure

In order for the collection of data to occur, the following chronological sequence of events took place in the experiment, classified as phases including, composition, ethical procedures, instructions, performance, focus group, and auto-ethnographic reflection.

Composition

The composition of this system was an ongoing occurrence between early 2019 and late 2020, with the sole intention of creating a space, which later became virtual, for performers to actively engage and interact through means of tactile elements to produce primarily a musical output. The system was subject to a rigorous development process, which spanned through varying iterations from a physical version pre-covid through to a virtual one throughout the pandemic, that intended to produce a situation that was deemed as dialogical as possible by actors involved, regardless of their musical capabilities. Specifically through developing the system as an interactive music system (IMS), for non-expert users for exploratory and experimental purposes (Yongmeng & Bryan-Kinns, 2019). The key aim of this system was to measure the performers thoughts and attitudes of agency perception, particularly in regards to interacting with the latterly produced application, and furthermore explore the theoretical agential orientation of the actors who participated in the situation; hypothesised as being primarily present.

Ethical Procedures

The ethical procedure that took place consisted of the performer-participants being provided with participant information sheets and an ethical consent

form. The former detailing the study, and the latter informed the participants of their inclusion in the study being entirely anonymised through use of pseudonym throughout the process as to not be linked with any of the research or publications, this letter document further made the participants aware that they were in their right to opt or questions and/or participation at any time. Before being supplied to performers to sign and return, the forms were vetted and authorised by an Edinburgh Napier University School of Arts and Creative Industries (SACI) Research Integrity (RI) representative. The ethical consent forms were subsequently read, signed, and returned by all three performers, before moving forward with the study.

Instructions

Instructions provided to the performers were twofold, one through email where participants were recruited and made aware of the situation, the performance, to occur, and also through the provided instructions alongside the application itself. The latter consisting of a text document guiding performers prior to the performance on how to install, open, and use the application. During the introduction of the performance participants were given little to no instruction by the composer, whilst there was no timeframe set for the performance, in order to achieve as much perception of agency by the performers as possible. A starting cue was given and I was made unavailable unless entirely necessary for guidance or otherwise. The variables for this study fundamentally only involved which operating system and how capable it was of running the application, this was impossible to regulate. All other variables were unregulated to further investigate the levels of agency perception over the creative processes.

Performance

Similarly to the study on *LDV*, in 'Chapter 4: Study 2: L'appel Du Vide', the performance of *MusicBox* was initially meant to be hosted as a physical installation only meant for a physical space, albeit in a different iteration to its final form. However, this became impossible due to the Covid-19

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restrictions and the virtual iteration as application became the only, legal, way to host a multi-person performance. The performance itself was hosted using the application itself which has a built in network hosted on a public server, but for the study a group of performers were acquired. The performance took part whilst on a recorded Zoom call - this was unnecessary for interaction with the system but was a requirement for the data collection. Prior to the performance, those who were taking part were provided with the application as a Zip file and a text file guiding them on the second requirement of downloading the application. The participants were informed that there was no set timeframe for them to interact with the score and other participants.

Focus Group

After the performance, the participants were collectivised on the same Zoom call that was used for recording the respective event, for the conduction of a focus group. The use of a focus group was deemed as the most suitable for this study, since surveys would have collected much too quantitative data than what seemed necessary. Interviews were also eliminated prior to the engagement with the system, where a higher participant turnout was expected. Although would have produced much more in-depth qualitative data it would not have been able to accurately depict the real-time dynamics between participants in a verbal setting proceeding the performance. The questions for the focus group consisted of semi-formal questions (akin to discussion points) and were used to garner data on the subject of agency perception over the creative processes with additional agentic orientation. The performance and focus group took place in March 2021 and the data was analysed between March and May of 2021.

Auto-Ethnographic Reflection

As the composer of the system, specifically inhabiting the only active role in the creation and subsequent development of the system operations as well as the research itself, it was deemed important for me to reflect and contribute Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 5: Study 3: MusicBox

auto-ethnographic data towards the findings and discussion of this study. The auto-ethnographic portion consists of personal memos and notes that delve into the creative processes that took place. These were recorded in note form between early 2019 and late 2020 and included my experiences within the context of the work itself (Chang, Ngunjiri, & Hernandez, 2013, p. 11). This particular method was utilised in order to aid the interpretation of the data collected via the focus groups and performances, by means of contextualising my role retrospectively and actively in the analysis overall (Chang, et.al, 2013, p. 18/19). No other methods, including survey, interview, or other, were suitable for this type of data collection.

5.2.3. Materials

To conduct the study several tools and materials were required - a concise list of which tools and materials can be found in Appendix: '5. MusicBox Tools and Materials'. As for person composition tools, the vast majority of the system as application was developed using a MacBook Pro, with the operating system macOS Catalina installed, and the graphic user interface, Max/MSP, specifically Max version 8, for programming (Cycling '74, 2021). The tools used by the performers in order to partake includes their individual computer and operating system, both of with are unknown specifically, and Max/MSP in order to run the application, and finally an internet connection to connect to other participants through the network and Zoom. The materials included the MusicBox application itself (as well as patch). The documents required specifically included the participant information sheet and ethical consent form, as well as data collection methods such as the focus group questions and auto-ethnographic data. The focus group was designed to be a research lead discussion, where individuals participating in a group setting possessed a substantial degree of control over their own interactions. Although being somewhat more broad than interviews this allowed for more insight into the complex behaviours and attitudes interdependently, allowing for the facilitation of data analysis on their agency perception and orientation (Morgan, 1996, p. 130, 133, 139, 140).

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5.2.4. Data Analysis

For said data analysis, the use of thematic analysis was employed. For a more

in depth description, please refer to 'Chapter 3: Study 1: Wordeater' section

'3.2.4. Data Analysis'.

5.3. Findings

To present this portion of the study, this section will be separated into two

main sections, the focus group and the auto-ethnographic data. As per the

ethical documentation, the individuals who took part in the focus group will

be referred to by pseudonyms and entirely anonymised in-text. The discussion

which will follow these findings will aim at compiling these two data sets in

order to interpret, compare, contrast, and reflect in relation to the wider

theories, literature, and beliefs investigated in Chapter 2: Contextualisation.

The entire transcript of the following focus group can be found in 'Study

Transcripts', under '3. MusicBox Group Data' as '3.1. MusicBox Focus Group'.

5.3.1. Focus Group

As the questions were designed to investigate the perceptions of agency

posted by the performers, then latterly analysed via thematic analysis of their

attitudes, the primary themes that manifested through such analysis of the

focus groups were agency, collaboration, and aesthetics.

Agency

When it came to agency, the performers discussed their thoughts primarily in

regards to the program, as in the coding of it, and the controls which allowed

them to interact with the program itself. For this performance, one

participant in particular, Maya, decided to investigate the code behind the

MusicBox application, and found that it was entirely editable. She stated that

she had taken the time to re-write parts of the patch, creating a version that

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had one button to turn all of the objects within the virtual space on and off, but thought that it was 'a little intense'. Hunter added that he was nowhere near good enough with Max to re-write patches. Later in the focus group, Maya replied to Scott, who mentioned that the controls and perspective were odd for him preferring some silence to compliment the sounds, by saying that the button that she had initial tinkered with in the patch to turn everything off made her believe that having that sort of 'godlike power' wasn't fair although no rules were set out specifically disallowing this. She furthermore added that this seemed like an ethical limit and decided not to do it in the end. Maya continued that in the preparatory stage of the performance she had taken the time to look into the code and understand it to a greater degree through exploration, something that was well within the power of all of the participants, but that for her it was part of the discovery of the performance - learning how the controls worked and how sounds were made (good or bad). Hunter took the opposite approach and took little to no time to prepare, downloading the patch ten minutes beforehand and learned it in a pragmatic way without prior familiarisation with the piece. He preferred to think of it 'more like a game, because it's so interactive', and that 'It was just like an interactive game-music'. Hunter continued when prompted about whether he would have preferred instructions by stating that it depended on the individual and how much someone read into the instructions. Scott additionally stated that they 'enjoyed being thrown into it as well with no prior experience'. From this, a discussion of agency in terms of the program and controls can be exemplified perfectly here by a dialogue that occurred between Maya and Hunter. Maya said:

'Anyway, with the Max patch open like that, you can change it and I was curious about whether that was part of the puzzler, cause Max is a great environment for improvisation coding as well as delivering things to an audience. So, it's like, well, we're the rats in the maze, we're helping [Gordon] with his experiment, but what if the rats could change the maze and mess with the head of the experimenter at the same time. Is that legal?... I decided that wasn't legal, so I didn't.'

Hunter replied to this by questioning if the experiment was designed for such improvisation, and adding that it is just a case of downloading Max and participating, however for those that do know about code they can take part in a different way through improvisational coding. Maya replied that it is not like any musical instrument, analogising it to an audience member marching on stage and re-tuning a violin just to annoy the performers or changing the tonal qualities of musical output in real time. It was however difficult for both Maya and Hunter to recognise what changes the controls were affecting: whether or not the output, both visual and sonic, was an illusion to an extent. This had an impact on the performers sense of agency where Scott stated that although not much of musician, the movement they felt was nice but the restrictions imparted by the code to move objects only to a certain point left or right halted the project. Hunter similarly did not want to lose any of the objects, saying that if they were too far he would forget where they were. Maya concurred by stating that sudden movements of the objects out of his field of view made him have to 'frantically re-read the instructions' to figure out the controls. Although this was the case, the physical controls utilised by the performers, that being the mouse and keyboard, did not seem to constrain anyone. This is most likely due to the controls being a physical interface that most individuals with access to a computer can instinctively interact with rather than relying on someone to understand intricacies of an instrument, as per Maya's example of ability to play keyboard versus someone who cannot.

Collaboration

In terms of collaboration, the performers focused on the idea of having more people involved, which would have facilitated the dialogical elements and discovery involved with such an experimental piece. When it came to group size specifically, Maya said that it would have been 'nice to have more people in the group', that she could have 'huddled over' her virtual objects and contributed more with the group. She did however mention that it would have made it more confusing, but potentially more complex and nuanced in terms of interaction. Hunter added that it would be a 'delicate balance' between

more and fewer participants, since having too many people could result in losing a group improvisation and more about people just doing things in a virtual space; 'a free for all'. The collaborative elements focussed on the dichotomy of working together to create an improvisational space, or being territorial and possessive over virtual objects, where Maya said that she was 'going after' other's cubes, trying to mess with people. Collaboration became a discovery for the participants, where there were 'periods of agreement' and moments of chaos whilst trying to find soundscapes through 'ebbs and flows' that were pleasing, although it was agreed upon that the amount of sounds in the sound palette was nice but limiting. From this a discussion on the limitations of such a system in regards to having multiple people interacting ensued, where Maya believed that there was a lot to learn about each other in a 'voyage of discovery', whilst trying to probe the limits of non-verbal communicative collaboration. Hunter added that there was an instinctual element to working with others whilst enjoying the learning experience of the performance, whereas Scott just enjoyed the chaos of the sounds and controls; not communicating as much.

Aesthetic Qualities

The final theme for this focus group consisted of the aesthetic qualities of the system, spanning the types of sounds, qualities, and even the gamification of the piece. In terms of the types of sounds, Maya thought that there was an 'interesting dimension' in the tonal versus rhythmic elements, even though there were some 'ugly sounds' which were more or less ignored by the group. Hunter stated that he would have liked to have seen more interaction with the cubes and effects, that there was a lot more potential in a piece of this type. The minimalistic qualities were also described as being 'nice' and 'clean', by Maya, and that the complexities in Sono-Bus and Jack Trip were sometimes overwhelming in terms of masses of complicated features, further adding that there is definitely a delicate balance to be had between 'too many controls' or 'too few controls'. This preceded the discussion on gamification, where participants understandably noticed that there were elements that they could add to the performances, by participating in ways

that were not explicitly stated such as, forming groups within the virtual space (like choirs), additions of complicated visual elements, and coding the entire project like a 'video game program' with proximity effects. All of which could have an affect on the aesthetic qualities of the overall experience that is MusicBox.

5.3.2. Auto-ethnographic Data

Before the previous codified data can be discussed, the key points from the auto-ethnographic data, taken between early 2019 and late 2020, have been organised and compiled for clarity where the primary themes which are include, Concept, Development (Composition), Performance, and the minor element Production.

Concept

The concept for *MusicBox* arose from previous work on generative music systems in my undergraduate degree at UHI. This in addition to the research I was conducting at the time made me consider the idea of introducing multiple individuals into the creative processes taking place with a generative system, specifically by facilitating the interaction and interplay of performers as a group activity by creating a multi-user instrument (Jordà, 2005, p. 23, 26). I wanted this system to be one that could be interacted with by any individual, even those without preconceived notions or knowledge of music theory, by lowering the barrier to simple means of engagement apt for any skill level; an IMS (Yongmeng & Bryan-Kinns, 2019). Furthermore, the concept of a music box was interesting, and a fun play on this seemed interesting to me.

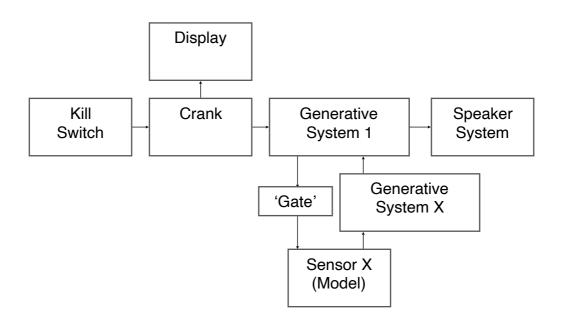
Development (Composition)

To understand the concept further, the development, or composition, of the system must be elucidated. As previously mentioned the initial concept developed for *MusicBox*, prior to the Covid-19 pandemic, was to have it be a

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physical installation. At this point the system was entirely different to its final iteration, being conceptualised as comprising of a generative system, connected to a physical crank (like that of a real music box), and hooked up to tactile elements within a room. These tactile elements were to be models with conductive paint or materials attached to sensors that could be interacted with and would ultimately change parameters within the generative system and only heard if the system was in operation after being physically cranked. Below is an illustration of this initial concept that was prototyped:

FIGURE 35: MUSICBOX PROTOTYPE



However, due to the Covid-19 pandemic, and the subsequent lockdowns that created inconveniences and difficulties for hosting a public installation where performers would be interacting with tactile elements, the idea was redeveloped with the emphasis still being on concept. To do this, a digitally tactile and virtual 3D world was creating using Max/MSP, with the visual elements comparison of twenty-seven smaller cubes constructed as one large cube (a play on the origin concept and name), with the sonic generative system reimplemented, making changes where necessary to produce the *MusicBox* application in its final iteration. This process took several months of development over the course of 2020, due to having a lack of knowledge in

jitter, the visual component of Max/MSP, and underwent a multitude of versions. The network elements of the system were created by a third party programmer who was paid to develop the server-side client that worked with the pre-existing code, since I am not versed at all in this kind of programming. Once this was implemented, and the instructions provided within the code, *MusicBox* as an online, networked, and generative IMS, was complete. The program was exported, as a package and Executable file, then placed in a Zip file for participants to download, unzip, and begin playing.

Performance

Prior to the performance, one participant had dropped out due to their operating system being incapable of handling the application, and several others for unknown reasons. During the performance it was noted that, after development and performance of the *LDV* system, I was worried that I would feel a similar way, that being a diminishing of agency perception, however, it did not feel like this. This piece felt as though it were mine, even though I had no control over what the participants were doing within the application, the fact that I could very easily participate with the click of a mouse, in the exact same manner that the performers were doing, in-real time, without exacting any more, or less agency, over the performers than they were with one another was an enjoyable idea.

Production

Finally, the recording of the sonic output, for artefacts used in examination of this project and thesis, made me feel less control over the musical element and almost none over the mixing; there was no mixing, just bouncing the WAV file.

5.4. Discussion

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To discuss the findings and conclude this report, this portion of the study will aim at investigating the findings present above in the two datasets, that being the focus group and auto-ethnographic data, but outlining and interpreting the key points in relation to one another in conjunction with the wider theories discussed in Chapter 2. The main areas of focus for this discussion will include, what was expected, what the key findings were, what the outcome of these findings were, and finally what could have been done differently.

Expected Outcomes

Prior to the development of any of the composed elements for this study a visual representation of what was to be expected from the research can be seen as illustrated in 'Figure 25: MusicBox Expected Results (APS)' - for key reference please refer to 'Figure 9: Agency Perception Spectrum Key with System (Theoretical Example: CHS)':

FIGURE 36: MUSICBOX EXPECTED RESULTS (APS)



Firstly, it must be emphasised that the expectations at this point, due to being produced before taking part in the creative processes, ultimately failed to acknowledge, and subsequently exhibit, the element of time, which shows that I naïvely assumed that perception of agency was going to be constant for all actors and the system involved. Furthermore, 'Figure 25' also merges the two participant types, that being the listener and performer, which is inaccurate and will be referred to as separate for this remainder of this study, unless specified otherwise. Both of these points, and the fallaciousness behind them, will be explicated shortly. Nonetheless, as a fundamental point of

understand what was to be expected in regards to my own thoughts and beliefs of actor and system perception of agency, it is evident that the listener and performer both have a significant amount of agency over the creative processes, more so than of the system and the composer. This was expected due to the fact that the application itself was entirely editable by any actor taking part, as well as the fact that there were no prerequisites for the participants based on musical knowledge or skill - that saying, for editing to take place the actors would have to have some knowledge of the programming language. Nevertheless, due to the design of the virtual landscape provided as the system, the performers were expected to be capable of controlling it to a substantial level. The only thing stopping an actor who is, by either choice or happenstance, part of the situation in which MusicBox is the centralised point as system operations, is their own will to do so or access to the application. The composer was also expected to have a substantial level of agency perception over the creative processes, particularly through the development of the system, but also in the fact that once development had taken place there were no restrictions on participating in a *MusicBox* situation alongside other actors. The system itself was expected to possess a greater level of dialogicality than the composer specifically due to the participants being able to actively engage, in a somewhat simplistic manner, through controlling the virtual space and making an artistic output, or in more complex way via the editable programming element and changing the system operations themselves. Splinters of this particular system operations will be discussed separately as this has not been considered in this particular diagram.

Key Findings

In order to understand to what extent the expected outcomes were accurate in accordance with the findings, I will now outline the key findings before illustrating them in 'Figure 26: MusicBox Findings Outcome (TAPS)'. With regards to the agency perception of the performers with regards to the preparation of the performance itself, one participant in particular, Maya, prior to performing had taken the time to explore into the inner workings of

the application, but decided to not utilise the version with newly developed controls as they did not want 'godlike powers'. This participant actively restricted their own control and subsequent dialogicality over the system operations for sake of the other participants, wanting to equally interact. What was found was that even though the participants had the opportunity to prepare in such a manner, being provided with the system itself and means to enact agency on them through editing, this did not seem to have an affect so much on agency perceptions. The participants viewed it overall as an experience where they became aware of things during the process which may have been different if participants had more knowledge in coding, such as Maya, and decided to greatly change their controls, i.e. increase their dialogical levels to 'godlike' status. In regards to the controls, the perfect analogy of the performers being alike rats in a maze experiment where they have the ability to change the maze itself, also likening it to a performance where audience members, or listeners, could interact with the instruments on stage, seemed appropriate. However, because of the complexities behind the system it was difficult for the participants to necessarily understand the exactitudes of the controls and inner workings of the program, unsure about what was exactly causing certain sounds, such as the proximities of the cubes or moving them in particular ways. This seemed to be the biggest restraint for the participants regarding the dialogicality of the system, seeing as the physical controls or hardware that was being utilised by the individuals appeared to cause no real issues. The programming element of the system was also an issue as the composer, since this was the point in which many of my personal limitations came into play, lowering my dialogicality to an extent. All of which seems to coincide with the expected results thus far.

As for the theme of collaboration, what was very apparent was the group size discussions, where initially the idea of having more participants could have been seen as a beneficial thing, since there would have been a multitude of different interactions and nuances between all involved. However, it was quickly pointed out that this could have made the complexity go from nuanced to chaotic to an extent where the participants may have felt less control over their own creative processes whilst interacting with the system

operations. The fact that the performers were non-verbally interacting with these operations, via controlling the digital elements to create sounds, but also communicating in a creative way by collaborating with and also against one another shows the variable levels of dialogicality that participants can have in such a system. This was also exemplified by the fact that this creative process was seen as a point of discovery, or a story-arc, by the participants, where through the collaborative process the performers were able to explore the palette of sounds and each others voices through the system. Limitations, however, were also discussed, where the sound palette itself was seen as quite basic, only consisting of a few different kinds of sounds, but the fact that this mode of discovery gave participants control enlightened them to the restrictions of not being able to communicate verbally, leading to a sense of consensus for two of the participant. Conversely one participant preferred to embrace the chaotic elements. Moreover, this sense of discovery permeated from the facilitation of agency manifested through the aforementioned controls coded into the system. Going from a point of not knowing anything about how the system works, to being able to actively interpret and interact with the system and other actors in a dialogical and collaborative manner; learning as one goes. Two participants were also very intrigued about the musicality of the system, since they have experience in the field, whereas one did not, but this did not inhibit anyone in particular, although potentially facilitating a higher level of dialogicality for those who had said experience. Low latency also seemed to allow for instant gratification from the system operations and engaging in the creative processes. The amount of agency possessed by the composer in the sense of discovery was completely unaccounted for in the expectations, and realistically there is very little agency to be had here, since the feeling of discovery is a very subjective element possessed by those taking part. Especially in an initial instance with a system. The levels of agency held here by the composer and even the system are minimal, however, the control over group size for collaborative aspects of the system could be controlled, however were not. For this system, the only theoretical limit to the amount of performers in the space are the individual's computers and internet speed, and the server being able to handle a plethora Dialogical Music Systems: The Importance of Agency in Creative Processes Chapter 5: Study 3: MusicBox

of data changes at a given time. That being said, this was not an issue perceived in this research.

Lastly, in terms of the aesthetic qualities of the system and how it was perceived, the main point made by the participants was that there were interesting dimensional qualities to the tonal and rhythmic elements, however they became quite boring themselves. With additional elements, such as different interactions between the cubes, such as proximity, distance, sound effects, etc., being coded into the original piece there could have been more engagement with the system. This is where the composer limitation must be noted, since I am not a programmer, it was difficult to create exactly what I would have liked to aesthetically have, as well as the fact my MacBook cannot run extremely extensive programs, so even if I wanted to, and could, it would have been difficult and improbable, if not impossible. The simplicity of the virtual controls were also commented on, allowing participants to know what needed to be done in quite an easy way through interaction - an intended effect through the design qualities of an IMS. Furthermore, the participants also discussed gamification, and developing the system in a way that was more complex to allow for interesting and more engaging qualities, although noting that the programming of such a system would have been quite difficult. For the following illustration, on the next page, 'Figure 37: MusicBox Findings Outcome (TAPS)'13, please refer to 'Figure 13: TAPS Key'.

Outcomes

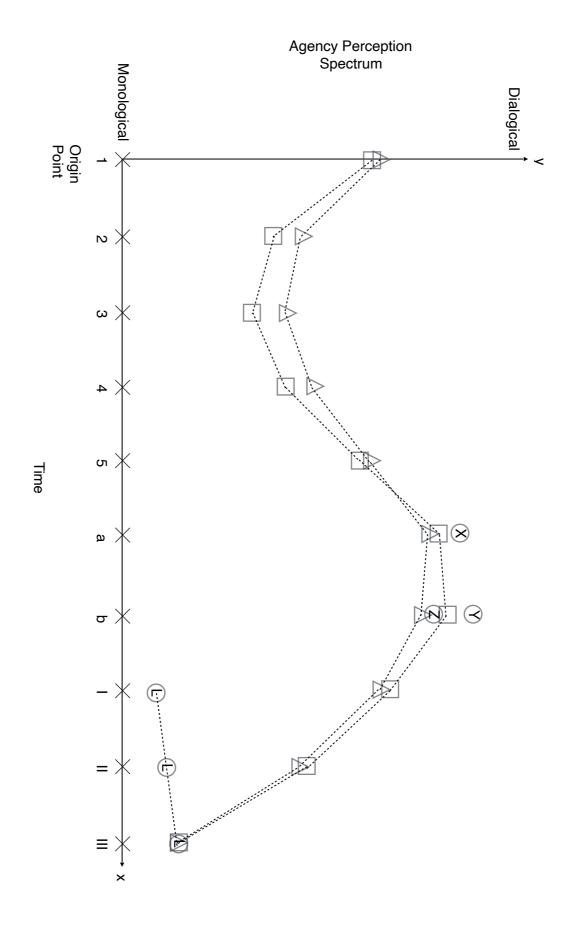
I will now examine the findings from 'Figure 37: MusicBox Findings Outcome (TAPS)', on the following page, with the preface that: the creation phase,

¹³As a reminder to the reader, explained in the Chapter 1: Introduction: Diagrams referred to as TAPS diagrams will be presented within each of the studies as visual representations of the qualitative experiences of participants, including findings on perception of dialogicality over time from participants and auto-ethnographically as the composer - this is used particularly not as a way of quantifying the data but as a more meaningful and engaging way for the reader to consume the data within each study.

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including concept and composition of the system, is indicated by numbers, the performance phase is indicated by letters with the addition of

Chapter 5: Study 3: MusicBox FIGURE 37: MUSICBOX FINDINGS OUTCOME (TAPS)



collectivised group of performers labelled as (X), an extrapolated outcome of a theorised group (Z) with additional performer with greater agency (editing the system operations) as (Y), and further extrapolated listeners labeled as (L). Both Y and L were not involved in this study, but have been formulated for the TAPS diagram at points b and points I-III to contextualise the study outcomes further. The performance phase is indicated by lower-case letters and the production phase as roman numerals. Moreover, the origin point will be considered as the point in which the conceptualisation of the signifier took place, at an intangible point temporality proceeding the genesis and the development of the expected results. Not all successive instances with the system have been plotted for each actor and also the system as this would create an illegible diagram. Additionally, the alteration and replication splinter indicators, which would have been many, have also been left out of the diagram and explicated verbally to retain clarity.

During the creation phase of the system operations, no other actor was involved other than the composer alongside the system through points 1 to 4. The decoupling of the composer and system at points 2-3 occurred through the pandemic completely usurping the perception dialogicality from the piece from the composer's point of view. Between points 3 and 4 the system began redevelopment, through new concept because of the covid impact, and lead to multiple iterations via coding, hence why the decoupling persists at point 4, since my programming skills were impacting on perception of agency although the dialogicality of the system and composer were increasing gradually. At point 5 the programmer was hired to complete the task of implementing the network feature, the final element to actualise the dialogical music system that was intended. At this point the system and composer merged in terms of dialogicality as the system was what was conceived, in its final form as an idea, wholly at point 3. At point a, other actors were introduced to the system as a group performance of the MusicBox, where the levels of perceived dialogicality of all actors and system increased to the point where expected outcomes were accurate to the final outcome. With regards to point b however, this extrapolation theoretically implies what could have occurred if one participant had decided to edit their

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version of the *MusicBox* program, or system operations, in order to increase their own levels of dialogicality, while the other performers did exactly what group X did at point a. In this instance the levels of dialogicality for group Z as well as the composer have decreased slightly, whilst the system is perceived slightly more so, and the performer who decided to enact agency on the system operations has a greater degree than the other participants. From this point, at point I-III, if the system had not been replicated then the dialogicality would have stayed roughly the same as points a and b, however due to the recording of the installation as required for examination for this thesis, the dialogicality of the replicant splinter and composer drastically decreases and merges with the theoretical listener participant, whose own agency slightly increases with successive instances of listening due to agentic orientation being theoretically and progressively more towards to future per instance. The theorised agentic orientation for group X, or the performers in general, is deemed to be present and the same of the composer.

Reflection

To conclude, what could have been done differently must be explored. First of all, more performances would have highly benefitted the data collection. The addition of more performances would have subsequently lead to a larger pool of performers and an increase in interactions with the system. This may have had the affect of more versed programmers to edit their own instruments and see how this could have affected dialogicality of the actors and system itself; theoretically raising the system and lowering other performers (bar themselves). The addition of listeners would also be beneficial to understand their real perspective, rather than just extrapolation. This could have been done through a physical (and still networked version) of the system as an installation, or by providing listeners with recordings of system interactions. The addition of data collection of different actors at different points, i.e. performers pre and post the performance, and listeners at all phases. Furthermore the utilisation of interviews for the performers past after the focus groups for in-depth data gathering to more accurately plot each participant on the TAPS. Additionally, a more accurate, and possibly

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interactive and digital version of TAPS, could have been created, which would have been able to show all splinter-types and individual actors rather than limited to one diagram. The core limitations and constraints of this study were as follows: time, budget, personal (programming level), and number of participants.

6.Conclusion

For many, music represents product, something to be created and consumed, and to merely function as aesthetic noise. I have often regarded this viewpoint as problematic, which is why this thesis provides an alternative perspective on music through the lens of agency, rather than musicology. This problematic viewpoint, alongside the situation provoked by the Covid-19 global pandemic, which lead to the subsequent worldwide lockdowns, that made clear the possibilities of increased need for social engagement and interaction with others, specifically in the realm of creative processes, where the idiosyncrasies of interconnectivity between actors, and the systems they interact with, could be investigated. This is precisely why, throughout this thesis, I argue on the basis of the findings that dialogical music systems with a higher perception of agency encourage a greater degree of active engagement amongst participants and in turn facilitates the maximal capacity for individual creativity.

Summary

I believed it to be important to develop the working definition for the underlying abstract concept that was the underlying element of this research, that being of art and music. This was specifically important to create a foundation for the studies which followed. It was necessary to provide what the key aesthetic theories were that encompassed the meaning of art, from Formalism¹⁴ and its exclusion of all but that which possesses visual significant form, to Emotionalism's bias towards emotional infectivity that must be understood by all who interacts with it whilst pragmatically approaching art as all encompassing of every form, and the Intuitionist position which is an overly simple combination of the previous two (Weitz, 1956, p. 28). To Organicism, whose foundations for the definition are only within complex wholes, and finally, the Voluntarists who combine multiple elements from

¹⁴ Using this as a technical term, hence the capital letter, and continuing to use them as such because they are important for summarising the findings. The same will apply for those following: 'Emotionalism', 'Organicism', 'Intuitionist', and 'Voluntarist'.

other theories such as imagination of that which is transmitted, to social significance latterly deemed as socio-culturally locked, and harmony, another form of complex wholes (ibid., p. 29). Since all of these aesthetic theories were found to be fundamentally neglecting some elements, or lacking distinction to varying degrees, it was appropriate to approach the definitive qualities of art and music via its functionality or employment. In order to do this, the term art was initially reconsidered through the lens of the sign, which led me to consider two components: the signifier (meaning as being), and the signified (perceived meaning) (Derrida, 1974, p.11/12). The latter, the signified, being the insinuative quality of art as verb, as a process, rather than a noun, solely as a product. This showed that music, as a verb, was a much greater theoretical underpinning than that of the aesthetic theories provided hitherto as it encompassed all of the pragmatic qualities whilst not neglecting any forms, mediums, or genres respectively or combinations of such qualities.

From this, it was then shown that the hierarchical implications of viewing music only as that which is the signifier, or as aforementioned product, were elucidated through the flow of communications in a somewhat artistry of dialogue. The lack of distinction was made between a tradition and modern music situation where said communication flow was structurally homogenous; the voice of the signifier projecting the authoritative transmissions in one direction fundamentally, from composer, to performer, to listener, where the composer is heralded as genius and the masses become subordinate appendages of the machinery with no communicative elements in a draconian and archaic fashion. A hierarchical structure that is shown to permeate through socio-cultural models, like that of the nested audience model, found within the society segment of the model of creativity, which creates distinct ranks of general public members similarly to the whole, and the ridiculous nurturing of control retention by the composer disguised as collaborative methods in the creative processes, was dismantled with the elucidation of actor agency. Where actors were explicated as individuals who inherently and temporally engage within rhizomatic socio-structural environments with the capacity to reproduce and/or transform the structures interactively in an interconnected manner. A process which is always dialogical in nature. It was shown that the perfect dialogical, or total persuasive communication, and its obverse, monological, the total transmissive or utterance, were theoretical dualities and impossible to be entirely one or the other, leading to the development of the APS, a plotted point spectrum, in this case, for the composer, performer, and listener alike.

Additionally, the system was taken into account, coupled with the previous sections findings, which was initially defined as an element comprised of two concurrent abstract components, that being the modus operandi, its operations, and perceived agential boundaries, its boundaries. The former being fundamentally the signifier, the constructed artefact or product, which was outlined as being comprised of atomic characters in varying levels of compounded complexity with the capacity to enact agency upon, and be enacted on by, actors within its abstract proximity. Such operations may be as simple as basic orders or relatively unintelligible complexities which are both entirely empty signs without contextualisation. The latter, the boundaries of a system, were explicated as being created through actor interaction with the operations themselves, where the perception of dialogicality, in tandem with other actors, formed the levels of agential centrality of the system that could also be plotted utilising the previously developed APS. A dialogical system, one which is heavily decentralised for example, would allow from more free exploration of actor capabilities with little prerequisites and complexities which would omit them from the creative processes, as opposed to a monological one that is heavily centralised. Therefore, a system was found to be a constructed signifier that acts as the centralising point of a situation which facilitates successive instances of interaction where actors could dialogically engage with its operations to form boundaries.

The system operations themselves were finally understood in terms of mechanical reproduction, specifically identified as splinters of a whole. Where the operations of a system can be either replicated to produce an artefact with homogenous aestheticisms to the original, directly facilitating regressive interaction with the system which has been reduced to its primary

form, or altered by being transformed in some way whilst retaining its original qualities for the most part, a facilitation of progressive interaction. This splintering is an inherent quality possessed by all system operations where they are capable of being replicated or altered *ad infinitum*, unless destroyed, from and to any system-type, those being dialogical or monological, by any actor who decides to inhabit the role of composer and enact their agency in such a way. The boundaries of a system were shown to not possess this quality of splintering, as they are an intangible conceptual perception of dialogicality that is only held within the subjective conscious experience of the individual actors who interact and/or engage with the system. Such an intangibility was also found in the origin point of a system, the final point of the original process or actualisation of the signifier, and its relative the genesis, or its initial formation of the sign, both found as indefinable instances in temporality.

It was then shown that the dialogicality of systems and their splinters was a product of their temporal agency perception, where actors are considered to be continuously reconstruction their views of the past, whilst simultaneously understanding the present, and in tandem controlling and shaping their future through responding to such a present. This was the fundamental theorisation of agential orientation, where an actor within an emergent situation, such as whilst interacting with a system of creative processes will be oriented towards some point, or multiple points, in temporality; an extraordinarily nuanced and subjective alignment connected to dialogicality. Such a connection was theorised in hauntological terms as duality with the monological creating an orientation to the past, alike a spectre, and dialogical creating one towards the present or future; similarly to centrality but in a temporal manner. From this, the previously developed APS was contextualised in a temporal format, to produce the TAPS, in order to lay the framework for measuring the attitudes and thoughts of actor and system dialogicality in a pragmatic way.

Finally, the creative process structure was illustrated, and the definition of a dialogical music system was formulated in its entirety, to achieve the first aim presented by this thesis. The definition of which was finalised as a

constructed signifier which facilitates, and acts as the centralising point of, a situation and potential occurrences of successive situation in temporality, that can be occupied, determined, influenced, reproduced, and transformed by actors via engagement and interaction with its modus operandi, which is simultaneously limited dialogically by vary degrees of agentially perceived boundaries. Once this definition was created the three unique systems, in terms of theoretical dialogicality were produced, those being *Wordeater*, *LDV*, and *MusicBox*, achieving the second aim of this thesis. This lead to the investigations being undertaken, aim three, and finally the evaluation of importance of agency in, and decentralisation of, the creative processes based on findings as aim four, and are now to be synopsised.

As for Wordeater, the expected outcomes, although neglecting temporality and only included a single point of interaction with the system, hypothesised that the system and composer would perceivably have the most agency, the performer with very little, and the listener with almost none. The study was then undertaken and through the methods outlined in the study provided in terms of TAPS that during the creation phase, no other actors other than the composer and the system were present and through subsequent splinters there was a reduced dialogicality of the coupled composer and system. In the production phase, the introduction of other actors to the system increased dialogicality through progressive interactions, such as suggestions and delegation by the performers where dialogicality varied primarily lead by feel over the playing, and was somewhat absent by them over the composition of the operations themselves. The composer perceived less agency in terms of control over the outcome, but more in terms of communicative elements, and the system was perceived as less dialogical than the composer, a decoupling, because of performer perception. Nearer the end of production the system was viewed as less dialogical due to the less suggestions and delegations being required, which then drastically decreased, specifically for the composer and system upon replication. Listeners had little agency and were extrapolated as having an increase over successive instances based on agentic orientation due to interaction with similar systems. The composer was theorised as oriented towards the past, the creation, and the performers towards the past, the production. The splinters, which were too numerous to showcase not the TAPS diagram, showed that alteration splinters initially yield dialogicality but incrementally decrease it through successive instances, where the replication of a system operations fundamentally decreased dialogicality. Ultimately, more compositions, in various genres, at a range of difficulty levels could have been used with the prospect of a greater number of listeners and performers for more data collection to occur. These actors perceptions of agency could have also been investigated at different points, such as performers before recording and after release, and listeners before release, for further data collection. Finally, a more in-depth versions of the TAPS diagram (interactive and digital with all splinter-types and individual actors). The limitations were discerned as time, budget, and number of participants.

With regards to LDV, the expected outcomes also neglected temporality in a similar fashion to the Wordeater study, bu nevertheless provided the expectations that the system and composer have most agency and the performer and listener have substantial amounts with the performer having only slightly more so. When it came to the creation phase, where no other actor other than the composer was present with the system, showed that successive splinters reduced the dialogicality of the composer and the system. During he performance, when other actors were introduced to the system, the system increased in dialogicality, where the system was perceived as most dialogical through interpretation by the performers, who have a substantial agency perception which increased over successive instances. The composer however lost agency due to perceived loss of ownership over the sonic elements that were outputted from the performance. The listeners were an extrapolation here, and perceived as having little to no agency which also carried on through the production phase, and similarly was theorised to have increased alike the Wordeater report over successive instances. The dialogicality once again suddenly decreased at the point of production, specifically for the composer and the system. The agentic orientation of the composer was primarily noted towards the past, the performers to the present, and the listeners also to the past due to interactions with similar systems; particularly in regards to the final product. The splinters, similarly to Wordeater were too numerous to showcase on the diagram and the final replication splinter drastically decreased overall dialogicality. Furthermore, more compositions in a text-based format, as well as the potentiality of an editable system operations, alongside more performances would have produced more data. This would have again created more situations with a greater amount of performers and listeners for higher data collection, especially if in conjunction with collecting data from actors at different points - performers before and after performance, and listeners before release. Moreover, the use of interviews after the conduction of a focus group could have yielded more in-depth data. Moreover, similarly to Wordeater, a more complex version of the TAPS diagram would have been useful for data collection and plotting. Limitations were once again, time, budget, and number of participants.

Finally, the MusicBox study, which also neglected temporality in its expected outcomes, theorised that the performer and listener have the most agency, whereas the composer and system have substantial amounts, the latter more so, since the boundaries and heavily decentralised since the system operations are extremely editable. In the creation phase, where no actors bar the composer was interacting with the system, splinters seemed to reduce dialogicality of the composer and system until the new networked version was created, and the impact of Covid-19 and redevelopment of the system drastically decreased the system dialogicality until said new version was created. During the performance phase, the performer seemed to have the most agency, and the system and composer having substantial amounts, with the former have slightly more so. Extrapolations were made here where if a performer edited the system operations they would have a higher perception of agency whilst the other actors would lessen slightly. During the production phase, dialogicality once again dwindles, specifically for the composer and system, with the extrapolated listeners, similar to Wordeater, having little to no agency with slight increases over successive instances. The agentic orientation of the composer was thusly present alongside the performers, and the listener towards the past in terms of the system as product. Splinters, were also too numerous to showcase on the diagram, and the final one drastically decreased dialogicality. Comparable to the previous systems, more performances, and different kinds; a possible physical installation, and therefore performers and listeners, alongside conducting data collection of different actors at different points, such as performers before and after performance and listeners before release, would have produced more data. The addition of interview conduction post the performer focus group would have also yielded more data which would have, in conjunction with a more indepth versos of TAPS, formed a greater quality of data collection and outcome. The limitations were also comparable to the previous studies and included time, budget, and number of participants, but also included personal programming level.

Final Thoughts

I believe that through this research I have found that agency is directly related to dialogue, which is both verbal and non-verbal, and is inherently linked to social environments such as musical ecologies that I have described throughout this thesis as dialogical music systems. The research indicates that providing an alternative viewpoint of music, as dialogical music systems rather than only as products, can alter the perception of individuals taking part in musical situations and encourage more active engagement of both composer and participant alike in an agential manner. To align with the normative discourse in this area I will briefly utilise the dichotomy of composer and participant for clarity. For composers, this thesis is intended to encourage those actively engaged in the creative processes to create different types of systems to maximise engagement and encourage the creation of more dialogical music systems, rather than monological ones. For anyone participating in a musical system, whether listening to a recorded piece, performing, or participating in any manner, this thesis intends to encourage more active engagement with compositions through dialogical means to maximise individual creative capacity. Dialogical music systems, that are intentionally composed or designed to encourage greater levels of dialogue, such as LDV and MusicBox, facilitate the engagement of participants through decentralised means of composition. Wordeater, on the other hand,

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discouraged, to an extent, the dialogical voice of the participants involved. The importance of agency and decentralisation can also be clearly seen through the centrality of any musical system. A higher level of perceived dialogicality can facilitate subjective and individualistic capacity for engagement with the creative processes. Participating through compositional means was found to diminish such capacities.

This research can be built upon by exploring the implications of such findings, this could include work with other researchers to compare and contrast to other fields, such as education, and how more dialogical systems can be founded to further develop Temporal Agency Perception Spectrum (TAPS). My hope is that this research will encourage composers, and creators in other fields, to personally reflect on their creative processes and whether or not their compositional decisions will truly allow for the capacities of all participants involved to flourish, rather than stagnate or be trifled. Ultimately, for those interacting with musical systems to any extent, I pose these questions:

Can you fulfil your individual capacity as an actor in the musical situation you are part of?

To what extent are you restricting the agency of others within the creative process?

Are you being heard?

Are you allowing others to be heard?

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Dialogical Music Systems: The Importance of Agency in Creative Processes
Discography

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1. Wordeater Tools and Materials
Tools:
Personal composition tools:
Acoustic Guitar
MacBook Pro
Guitar Pro 7
Logic Pro X
Electric Bass Guitar
Tools utilised by performers:
Individual instruments (unknown beyond electric guitar, classical guitar
electric bass, and drum kit)
Individual means of recording (unknown)
Materials:
System:
GPX Files (Notation)
PDF Files (Notation)
MIDI WAV Files (Exported Audio from GPX)
Logic Pro X Files (MIDI WAV Files + Automation)
Documents:
Participant Information Sheet
Ethical Consent Form
Data Collection:
Interview Questions

Survey Questions

Auto-Ethnographic (Personal Notes and Memos)

Zoom (and Internet Connection)

2. Wordeater Survey Questionnaire

P1: Introductory Page (includes link to digital artefact and instructions)

P2Q1: How much control/influence do you feel that you had over the creation of these songs?

P2Q2: Is there anything you would have changed about these songs?

P2Q3: Would you have preferred more control/influence over the creation of these songs?

P2Q4: How much control/influence would you have preferred over the creation of these songs?

P2Q5: How much control/influence do you feel that you had over how the songs sounded based on how you listened to them?

P3Q1: How engaged were you with these songs?

P3Q2: Do you prefer listening to recorded or live music?

P3Q3: Would you have preferred listening to this music live?

P3Q4: To what extent has covid influenced how you listen to music?

P3Q5: Give details on how you listened to these songs.

P4Q1: How much would you pay for this album?

P4Q2: Does paying for music change how you experience it?

P4Q3: Any additional comments?

3. LDV Notation

L'appel Du Vide (LDV)

For any number of individuals.

Before entering the performance space, provide a word either verbally or physically to be taken into consideration by other participants. These word(s) may be inspired by a chosen theme, be entirely open, or limited according to

Appendix A

another strategy chosen by the group, or individual, prior to the performance.

These word(s) will be used as stimuli for the performance that will take place.

Collectively, by some means or other, the group should determine which

word(s) to engage with.

The participants can now enter the performance space and begin reacting to

the chosen word(s) in a non-verbal manner.

If an individual did not experience an initial reaction, they must not

participate (initially at least) and may choose to leave the performance

space.

During the performance, if an individual feels that they have run out of

material or have lost touch with the initial reaction, they must stop and may

choose to leave the performance space.

If an individual remains within the performance space, they may become

convinced by another's reaction to the word(s) and may join that individual in

their performance.

The piece ends when all participants have left the performance space. The

group, prior to entering the performance space, might like to establish a

signal or cue which compels them to leave the performance space.

4. LDV Tools and Materials

Tools:

Personal composition tools:

Pen and Notebook

MacBook Pro (Pages)

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Dialogical Music Systems: The Importance of Agency in Creative Processes Appendix A Tools utilised by performers: Individual instruments (specificity unknown) Individual means of recording (specificity unknown) Materials: System: PDF Files (Notation) Documents: Participant Information Sheet **Ethical Consent Form** Data Collection: **Focus Group Questions** Auto-Ethnographic (Personal Notes and Memos) Zoom (and Internet Connection) Interface 5. MusicBox Tools and Materials Tools: Personal composition tools: MacBook Pro

macOS Catalina

Max/MSP

Tools utilised by performers:

Individual computer (specificity unknown) Individual operating system (specificity unknown)

Dialogical Music Systems: The Importance of Agency in Creative Processes Appendix A Max/MSP
Materials:
System:
MusicBook Application (Patch)
Documents:
Participant Information Sheet
Ethical Consent Form
Data Collection:
Focus Group Questions
Auto-Ethnographic (Personal Notes and Memos)
Zoom (and Internet Connection)

Appendix B

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List of Materials:
Commentary
RD15
ReadMe
Portfolio:
      Wordeater:
                   01 Dear, I:
                         Dear, I.wav
                         DEAR, I (1) [master notation].pdf
            Aphasia:
                         02 Aphasia.wav
                         APHASIA (2) [master notation].pdf
            Wordeater:
                         03 Wordeater.wav
                         WORDEATER (3) [master notation].pdf
      LDV:
            LDV/1BLOOM.wav
            LDV/2FROST&DIVISION.wav
            LDV/3NOVELTY.wav
            LDV Notation.pdf
      MusicBox:
            Program:
                   MusicBox.maxpat
                   client.js
                   licence.txt
                   package-lock.json
                   package.json
                   README.md
                   server.js
            Recordings:
```

MusicBox 2021-05-14.wav MusicBox Demo.mp4

Study Transcripts

1. Wordeater Interview Data

1. Samson Interview

Samson Interview

24/11/20

14:00-14:30

Gordon: How's it going, man?

Samson: Not bad, how's yourself?

Gordon: Yeah, not too bad, trying to see how this is going to go [jokingly].

Samson: Ach, aye.

Gordon: Bit terrifying, not going to lie [jokingly].

Samson: Terrifying?

Gordon: Yeah, interviewing people is a weird thing, man [jokingly].

Samson: Yeah, I can imagine that, I've never done such a thing before, but it

should be interesting [jokingly].

Gordon: Yeah, I hope so. [jokingly]

Samson: Don't go too hard on me, okay? [jokingly]

Gordon: Yeah, same goes for you [jokingly]. Alright, sweet, let's just kind of go over some of the general housekeeping stuff that I need to go over just to kind of make sure everything's ethically fine.

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Study Transcripts

Samson: Okay.

Gordon: Perfect. Right, so, just making sure that you know that this is being

recorded for research purposes, so basically you're going to be completely

anonymised, and this recording isn't actually going to be released at all, so

don't worry about that at all. You can stop at any time, you don't need to

answer a question if you don't want to, you can take a break if you want, and

it should be maybe like half an hour but we'll just see how it goes. So are you

still okay with continuing knowing all of that.

Samson: Of course, yeah.

Gordon: Grand.

Samson: I mean, ehh, no [jokingly].

Gordon: Fine [jokingly]. Right, so, you know that the point behind this

interview isn't necessarily to kind of get your opinion of the music itself. It's

more about how you felt during the creative processes, and specifically in

regards to how much autonomy and how much agency you felt that had over

the process itself. So, just to kind of make that super clear, it's just checking

to see how much influence, or how much control, you feel you had.

Samson: Okay.

Gordon: So, yeah, I mean, I think the only thing I really need to do now is to

disclose that we've known each other for a good few years now.

Samson: Yeah, yeah, a good few years indeed.

Gordon: I would normally, probably, start off by asking what sort of music you

normally play?

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Samson: Okay. Yeah, yeah, we'll go for that. Em, it's kind of, what, like, recently? Cause it always changes like, so, like I have, I do like and enjoy playing the prog stuff, kind of like the stuff you've written as well. But more recently over the last couple of years it's been sort of blues, funk, jazz, fusion, all that sort of stuff. Kind of moving a bit more away from prog, but at the same time I'm still writing stuff that's in the progressive genre, but, I just, I play a lot of different stuff really, it depends who's paying as well. You may find me playing covers as well if the pay check is good enough [jokingly].

Gordon: Well, I hope this pay check was good enough [jokingly].

Samson: Ach aye, man. Ach, aye.

Gordon: Grand. So you're used to playing prog, pretty much, so it doesn't seem to be something that would really phase you, kind of being sat down in front of odd time signatures, and you know, weird things, so do you think your style kind of meshed with that then?

Samson: Yeah, definitely. I mean, from the stuff I've written, and you know being a part of playing over the years, the odd time sig stuff is, I don't know, I don't really think about, like I'm not sitting down and I'm not counting all the way through it, I'm more like listening for, like, just the motifs, do you know what I mean, like, that's always a better way of doing it. It wasn't anything outside of my, like there was a few sections that were like 'fuck' [jokingly].

Gordon: Yeah, we can go over that in a minute.

Samson: Of course, of course, yeah. But, no, no, nothing that was outside of you know stuff that I've played, or played in the past, yeah.

Gordon: Sweet, I mean, yeah, great. I mean, so let's just go over some of the songs then and see what you thought about, or how you felt about, like, doing specific things then, because you're a guitarist generally speaking, but for this

album you were playing bass, of course. So, yeah, how was that experience for you, just in general, first?

Samson: It was, it was, you know, I kind of played the bass over the tracks, as i would guitar, because as much as I can do finger style on bass for simpler stuff and maybe some more jazzy, funky stuff, it's like the kind of stuff that it is like, I'm not, my technique's not good enough for that, so it was very much just playing it like a guitarist would play a bass, do you know what I mean, it's kind of as straight forward as that really.

Gordon: Definitely, so, yeah, let's go through the songs. Are there any songs that particularly jump out as you as kind of causing issues, or, like, any sections in particular?

Samson: Dear, I was very much nice and straight forward for the most part, there were some bits because like I don't have the biggest hands and when you translate that onto bass, it's like, some of the stretches were, you know, quite, quite far, but it wasn't anything outside of my capabilities. I think Wordeater is definitely the one that was the most challenging for sure, and there was some bits in Aphasia as well.

So for Aphasia, I'll just load it up here, once I get the section letters and all that sort of stuff

Gordon: Thanks!

Samson: Yeah, I mean the like, do you know what, I struggled most, like, with the ghost notes in some of the sections, was some of the bits I struggled with the most, like for section B in Aphasia, the triplet 16th sort of ghost note was quite challenging to maintain that over the whole section it was required for. Just with the speed as well some of the bits were tricky, but, you know, we got there in the end. I think there were points as well where I had to omit some of the ghosts notes just to make it playable for me. But, I mean, it wasn't an issue in terms of the time signatures or anything like for aphasia,

definitely not, because even though, you know, there were some bits with 23/16, 22/16 and all that sort of stuff, it made sense to my ear, the motifs made sense, you can listen to it and go, you could tell where everything's landing, it wasn't so much that I was counting through each 16th very precisely or anything like that 'cause that's more just like a put off than anything else. Even some of the like, your section F as well, although that's, if you put the metronome on it sounds horrific, it's actually more feels like 4/4 in groups of 5 which I'm sure was the intention as well. So, yeah, I mean, there wasn't, Aphasia was fairly okay, it's just that section B that caused a little bit of grief [jokingly]. But, no, Wordeater was certainly the most challenging, for sure.

Gordon: Yeah, It was kind of written to be the most challenging, I think, but it's really cool I'm kind of interested a little bit more about sections that you particularly had to change. Like, you said that you changed the section for the ghost notes, and I think there was also a section we talked about where there was slap/pop sections on the bass that you kind of just completely disregarded in some senses and played it how you wold normally play it, is there anything else like that?

Samson: Well, even then with the slap/pop section, I still tried to, I still had to, I tried to like accent it, almost like when you know, when you're playing closer to the bridge with a plectrum you get that bit more attack, I was trying to mimic it at least because I can't slap nor pop - man is incapable of that [jokingly]. For ghost notes and such that had to be omitted that was mainly in Wordeater. Section E, I had to omit the ghost notes, I found that section was like the most difficult to feel over the whole three songs, is the bit in 15/16, there was many takes had on that particular section [jokingly]. But that section, yeah, the ghost notes had to be omitted a little bit, and for section H of Wordeater as well some of the ghost notes weren't actually ghost notes they were more, you could say, palm muted open strings, because I felt that my technique for muting on the left hand wasn't quite there to get those ghost notes in time, either. I think that was really the only bits that I had to actually take out some of the ghost notes that were written in. Yeah, section

D was okay as well, although if you're going off the tab the ghost notes weren't played, they were played on the same string, they weren't played on different strings, just for simplifying it a little bit. It works if you're playing it finger-style, but for me it's like, if I was picking all of that, to go between strings just for like a muted note, doesn't quite, it's just a bit more difficult than it has to be.

Gordon: I mean, that all makes sense, like, there's certain sections that I obviously wrote particularly for myself, and I think some participants had similar issues. But It definitely is interesting cause there's sections that I would of kind of thought that were kind of difficult for myself too, so it's interesting that you've changed them to correspond with your play-style.

Samson: Yeah, yeah.

Gordon: Is there anything that if you had kind of control over what was written you would have changed, just for you?

Samson: I would say there was a section in Aphasia which I think I eventually put the bass solo over, which I would have maybe changed some of the voicing cause the voicing for the major 7s, what was it the major 9 but with no 3rd, I think, was the voicing you were going for? I would have maybe kept the quality of the chord the same, like, have it a major 7 but maybe alter some of the notes for some sections, just to kind of, although your modulating so much you could have some common tones that go between the keys just to kind of tie it all in a bit. For the improvisation side of things as well I felt it kind of restricted the scale choices that I could use over that given section, cause you know you've got like 1 5 7 and 2 as you're chords as the note intervals in the chords, it kind of rules out you know some sharp 5 lines that you could put over that or some stuff from the harmonic minor scale as well which works very nicely. It was just a bit too much of a clash to put it over those particular voicing. So, I would have, I don't know, in that kind of situation, I maybe would have used more of a shell voicing like a 1 3 7, omit the 5th, gives a lot of space to it, or maybe alter some of the qualities of the

chords. So some of the chords could have been a wee sharp 5 in there or something like that. I suppose It is difficult really to say, because that section, it is your music as well so it's difficult to say if you were going for the quality of you know these chords are the same but moving through the keys and the key change sort of differentiates it. But that particular section is one of the bits I would have played about a little bit in terms of chord voicing. I think it was the same with some of the other sort of chordal bits where you're using 1 6 2 5s all that sort of thing, I would have maybe snuck in some secondary dominants, which is something that I like to do when writing as well, so instead of using you know all the diatonic voicing, it's just maybe you know when you're going to the 6th you make the 6 a dominant, something like that, or some inversions as well I maybe would have put in as well, or approach notes.

Gordon: So, what about those parts on bass, particularly, did you find them okay, and especially talking about Aphasia sections C, because you got a solo over that section. What was your though process?

Samson: For the Solo?

Gordon: Yeah.

Samson: I didn't write anything down for it, per say, but it was very much like I would, I kind of approached it where I would play through maybe 4 or 8 bars of it, find a motif that I quite enjoyed, and then I would keep that motif for the first 4 bars and then experiment with other things for the next four bars, and try to build it like that. And some of the bits were definitely just improvised. I think that solo was maybe split into like two different recordings... I didn't do it all in one take because there, when I did record it all in one take there were like half of it I though 'really like that, spot on', but then when I moved more towards the, it's more like the bass line that's changing with the add9s that bit I thought after the fact when I recorded it I'm like 'that would be a really nice section to bring back a bass line into that with some sort of rhythm displacement'. Kind of trying to hit the target tones

of the chords, making the resolutions from he key changes kind of fit in the solo, and then mix up the ideas as well, that was kind of the thought process. And you know, whenever I'm playing bass I always try to think what would Jaco do, or like, what is this kind of, what do bassists, cause there's certain kind of motifs that bassists use in there improvisation from you know the great bassists that I tried to integrate a wee bit as well.

Gordon: Yeah, you could definitely hear that. It's interesting though with how you recorded it, did you, I'm guessing you didn't record everything straight through for each song, it was probably spliced together?

Samson: It was spliced together, for sure, there was some, I don't know if that was necessarily, because you know as well I was kind of operating on limited time, so it was, you know, because you had your guitarist and bass player drop out and it was very much last minute trying to arrange a whole new band, it's like, but if I was in it from the start I probably could of played it through in sort of one or two takes, but because I work as well I was trying to just get it all sorted in that small timeframe. There were some sections, like the more difficult sections, required more sort of like splicing up, but some of the, you know, more laid back bits were less so, you know, as you would expect.

Gordon: Definitely. Do you feel that that gave you a bit more control over different aspects of how it sounded? So, like, splicing it together, it actually gave you control over tone, it gave you control over what takes you wanted, things like that?

Samson: Yeah. There was one particular bit, I think it was maybe in Wordeater, where I did a take for the whole section, it was maybe, it think it was the letter H and I. There was sections of that where I tried to do it in one take, and I got it, but I realised that I think when it repeated, I wasn't quite on the pulse the same way I was though the first sort of repeat, so when I went back and dropped in after that first repeat I felt like I was much more on the beat and could really focus in on it again. Whether it's a stamina thing for my bass playing, or something, I'm not sure. It definitely did give me a bit

control over you know how the notes sounded or came through or how on time they were.

Gordon: I mean, do you think like that maybe recording in a different way, so recording with music's in a room or in a studio, do you think that would have gave you a bit more, or do you feel like it would have changed anything, really?

Samson: Yeah, 100%, yeah. In my experience it always does. When you take it from where you wrote it into guitar pro and when you get the musicians together you really hear like what bits work better than others, and the bits inevitably do change, because of that. So I think there would be quite a few changes if we were able to, you know, get together in a room and actually, you know, go through the sections and all that sort of stuff. It always seems to be that way when you bring people into the same room and it's more of a, it almost becomes a collaboration over the certain parts, more of an open forum.

Gordon: Do you think that's probably something that's good, or? Just for the creation or the creative processes, do you think that communication between each of the people involved and this open forum, do you think that's a good thing?

Samson: I suppose it depends on the composer, really. I mean, I find as well that when I'm writing stuff and someone listens to it you kind of get an outside perspective that you might not have otherwise had it's like 'oh that bits really cool but what if you added this bit', and then you're thinking 'oh I never thought about that', and it gets your mind kind of jogging, and thinking 'oh I could actually do that bit' and then you know, it just always happens when you're bouncing ideas off of other people in any given field, I think is like your perspective is only so much, you cant think of everything, so if someone brings up something that you haven't thought of and you consider it quite a good idea I think it is quite a healthy process, yeah.

Gordon: Interesting, so what if the, in this situation, how I've basically just given you the notation to play over, do you think the having some sort of opening dialogue or communication with me helped you or do you think more communication was needed?

Samson: Hmm, good question.

Gordon: Just in terms of how much influence or how much control you had over, over the pieces.

Samson: It's a very tricky one to answer because there's some things that only the composer will know if you've got something in there for a very very specific reason, and even if you do get that feedback of it's like 'I'm not too sure about this', you're like well 'I definitely want that'. I suppose it's trying to gauge as well how much, maybe it's a product of the time I'm not sure, but it's like how much is the composer willing to kind of like take in terms of suggestions or anything like that or whether... I think I remember when we first spoke before I started recording, I was very much like, you know, 'what are you kind of looking for here?', 'what is it exactly as written or is there some leeway in terms of how it's played?', and it was very much like, you know, 'in the spirit of how it's written but if you need to make changes I understand that as well'. I think it's easier when it's in the composition stage to go for those sorts of, make suggestions and that sort of thing, when it's all kind of there in front of you and there's three tracks, and its all written out, it almost seems like it's in it's finalised point, so making suggestions at that point with the timescale as well would have maybe been a bit redundant. I don't know. That's kind of my thoughts around that. But, I mean, I didn't really encounters many bits that were, If there were bits that I encountered that were too difficult I would have contacted you and said like I'm really struggling this bit and I was thinking along these lines. Thankfully that didn't really happen I was able to play most of the parts, and even with some of the ghost notes that had to be omitted, it's like, the spirt of the part was still there, do you know what I mean, it didn't change an awful lot.

Gordon: Definitely yeah. I mean, you pretty much nailed it for most of the songs, so honestly, that's the best thing. Like, if you were trying to play everything exactly as written it probably wouldn't have came out sounding the same.

Samson: It wouldn't have been as tight for sure, yeah. Yeah, definitely.

Gordon: It's interesting, because those sort of little things, although you said trying to keep to the spirit of the songs, you seem to have control over certain little aspects, just by one quick little 'record in the spirit' phrase, that's interesting. Great, I mean, yeah, that's fantastic. Just a couple of quick fire questions, to see what you think.

On a scale of 0-10, so 0 being like no control or no influence at all, to 10 being complete and total control, how much control over your parts do you feel that you had?

Samson: Is this including both composition and how the notes are phrased?

Gordon: Yeah, over the entire process.

Samson: I'll go for a good like, 5 or 6. Because I had, I would say, almost complete control over how the notes were phrased, because there were no, there were very few sort of articulation bits that were written in, so like I could decide to slide down to a note or re-fret it elsewhere on any given string which gives it a different timbre. The composition side of things less so because it's already there and I was trying to keep to the spirit of the tune, but I suppose you could also add the caveat that if I felt there was a bit that needed changed, I could have changed it, you know what I mean, so maybe upgrade that to a, between 5 and 7. I don't know an exact number for you, cause It's tricky to say.

Study Transcripts

Gordon: So what about the actual notation side of things, the actual creation

of it, do you think you had a lot of control over that, a 5 or 6 as well, or? Do

you think that would be lower or higher?

Samson: The creation of the lines?

Gordon: Yeah. The actual composition.

Samson: Probably a bit lower. Yeah. So like phrasing it would be more control,

composition less control, I would say.

Gordon: Okay, so no number on that one [jokingly]?

Samson: We'll say composition maybe like a 3, and if you're going purely on

phrasing I would say maybe even an 8 because there's a lot of space on how

you can phrase with vibrato, and whether you slide into the notes, slide out of

the notes, all that sort of stuff, and as well that I could actually play with the

pic, as well, that gave me control.

Gordon: Okay, last one, how much control over the whole process do you

think that I had as the composer?

Samson: From 0 - 10 [pause] 8. because you've always, as much as you've

composed the whole thing you were leaving some leeway in terms of like, you

know, the parts and they could be changed, but you also didn't have control

over how the parts were played because you delegated it to other musicians,

so I would say a 7 or and 8 there.

Gordon: Interesting.

Samson: How much control do you think you had [jokingly]?

Study Transcripts

Gordon: Probably about that as well, I think you're right on the money, I think

probably like a 7.5, 8. Yeah, I mean, I think it's more interesting to see what

your perception is though on this these things [jokingly].

Samson: I was just curious [jokingly].

Gordon: Do you feel like you would have preferred to have more control, just

in general, like?

Samson: Aye, always [jokingly]. I love collaborating with musicians, so even

when I'm writing my own stuff I always like to bounce ideas off of folk and get

other people's inputs. I like to have a hand in little projects like these,

however small, you know. But, I do enjoy that, and I'm more than happy to be

told like 'shut up, no it's not changing', but to be able to voice my opinion as

well I do like that.

Gordon: Definitely, well, It's kind of like your creative voice coming through?

Samson: Yeah.

Gordon: It's always good to hear musicians kind of bringing themselves to the

table, you know. Maybe just a couple more questions, I think you already

know the situation with the previous bassist and guitarist kind of not being

able to do the project. So it's very strange because in this situation you and I

know each other but you also know C who is the other guitarist, so do you

think knowing him would have, or has, changed your thoughts on this whole

process?

Samson: No?

Gordon. No?

Samson: No.

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Gordon: Okay.

Samson: Not really, no. I was kind of approaching it as like 'my job is to do

the bass', it's like, almost like it didn't, I suppose it's nice that, you know,

since we do all know each other from the prior course, and we're all working

on the same thing together, but it didn't change the way I was working that

fact that C was doing the guitar at all.

Gordon: So I guess you would say the same for not knowing the drummer?

Samson: Yeah, yeah. It's for me, the drummer and guitarist were, you know,

the guitar pro file do you know what I mean, I was playing along with that for

the most part, and, yeah, it doesn't really matter it could be anyone really. It

didn't change the way I was recording at all, that's for sure, or playing.

Gordon: Sweet. Yeah, so let's go for the final question, big sort of finale

question.

Samson: Oh god [jokingly].

Gordon: On a scale of 0-10 how much influence do you feel you had over the

entire project. So this is going to include, every other part, it's going to

include the composition, it's going to include the actual production of the

pieces, mixing, everything?

Samson: We'll go for like 2 or 3. If you're going for the whole thing, if it's split

into influence over like all the given instrumental tracks and the composition

of it. We'll go with 2 or 3, yeah.

Gordon: Grand, well, yeah, that's everything I really need.

Samson: Cool, fantastic.

Gordon: Thank you.

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Samson: No bother at all.

2. Ronan Interview

Ronan Interview

25/11/20

14:00-14:30

Ronan: Hello?

Gordon: Hey, how's it going?

Ronan: How you doing; can you hear me?

Gordon: Yeah, yeah everything's great. Awesome, great to finally meet you.

Ronan: Yeah, nice to see you in person.

Gordon: Aye.

Ronan: Well not in person, over zoom as everything is, it feels like person now

though.

Gordon: Well, it's the best we've got right?

Ronan: Yeah, I know, I know.

Gordon: Yeah, man, the parts were amazing, like, thank you so much, like,

that was fantastic.

Ronan: Thanks

Gordon: I'm just going to kind of go over some housekeeping stuff just to make sure this is all kind of like ethically above board. So we can stop at any time, you don't have to answer a question if you don't want to, if you want to take a break we can can, even though this is probably only going to last maybe like 30 mins tops you know we'll just see how it goes. And that this whole interview is for research purposes, so every single instance of your name will be completely anonymised - so there's no worry about that. Just knowing all of that are you still okay with continuing?

Ronan: Yeah, of course

Gordon: Grand. that's perfect. Yeah so basically the reason behind this interview isn't necessarily to kind of get your opinions on the music itself, but more to kind of get your attitude on how you felt about the creative processes, and how much autonomy, how much agency you felt you had - so basically how much control, and how much influence, you felt you had over everything that happened, pretty much.

Ronan: Okay.

Gordon: Yeah, have you got any questions just before starting?

Ronan: No, happy to go ahead.

Gordon: Great, so, yeah, what sort of music do you normally play?

Ronan: Ahh, loads. So, I'm in a jazz fusion band which mixes like jazz and prog and heavy rock, but it's like tonally based around jazz, I guess, but rhythmically, like loads of time signatures and all that jazz, pardon the pun. Also in just like a standard rock band that we do some gigs in Glasgow, not any more now but used to do gigs in Glasgow. also play in some, funnily enough some like, classical ensembles, I play like percussion, like tuned percussion, and I used to be, not anymore, in like just a quite a heavy rock

band, I was in quite a heavy rock band in school. played like, don't know, alter bridge sort of music I guess - quite a varied range of stuff.

Gordon: Yeah, you could definitely tell just by your playing you felt, it seems like you felt comfortable with time signatures and things like that.

Ronan: Yeah, comfortable to an extent. There were some of them in there that were blowing my mind but I understood it in end.

Gordon: Yeah, well, I mean, let's kind of go over that. Is there any songs or any sections in particular that you kind of had issue for, or difficulties with.

Ronan: Well, upon like, the one that I knew was going to be the hardest to get was Wordeater. The groove at the start when it's going between, what is it,14 and 19? Yeah, when I first heard that I was, kind of like grooving in my head, but the more I read into the music I was like, 'jesus, that's tough'. So, that's the one that I had to take the vary speed down to 5% just to get the high hat patterns nice and precise, because it was really fast. But once I figured out the sticking, I didn't have to think about the groove it just kind of happened once I knew what stick was going where, and what point, and it kind of worked itself out. Other really hard parts... there was a groove in, yeah, that whole section in Dear I, where it's like stopping and then playing like the triply fill, like without reading the music I can kind of like play along to it in my head, but then when it came to sitting down practicing with the click it was pretty tough, but I think I simplified the fills a bit and I kind of worked it out and it wasn't too bad. But, yeah, it was all quite challenging which I enjoyed, and really cool how, what bit was it, how is it pronounced, 'Aphasia'?

Gordon: 'Aphasia', yeah.

Ronan: 'Aphasia'. What does the mean?

Gordon: It's when someone with dementia finds it difficult to find the right words.

Ronan: Ahh, cool. So, yeah, there was a bit, I think it was in 15, it was like [da da da] and it goes on for quite a while, like, first time I heard that I thought that was in 4/4, just sort of [da da da da]. And then when I heard click track [Dogodogodogodogodogodo], it was crazy. But, like, those sort of bits I kind of just felt instead of listening to click, I still had the click on when I was recording just to be sure, but I didn't rely on it, do you know what I mean?

Gordon: Yeah, it was more like, listening for the motifs rather than every note in particular?

Ronan: Yeah, yeah.

Gordon: That's really interesting. I mean, you just said there that there was a couple of parts that you changed, obviously you asked if ad-lib-ing some of the fills was okay but was there any other parts that you specifically changed to make your playing a bit easier?

Ronan: Yeah, so there was a few bits where you had 16ths on high hat, so like, I can't remember what piece it was, and you had like, it was quite fast, and you had like going to the snare at same time, but without like doing it incredibly fast double left that's not really possible, so I just missed out the high hat part, which normally would in disco groove, you would go [dogodogodog], it's rarely that you would put high hat with the snare. So, that sort of stuff I took out to make my life easier, and, yeah so it didn't sound like I was trying too hard to get that high hat. Other parts... the whole section in Aphasia where it's like [da da da, da da da dadadada], that's another section that I didn't count, I just listened to it over and over again, and knew what it sounded like and played it, because the time signatures and the way it's notated was really confusing, but i got it, but i couldn't really like, I couldn't of sight read that at all. But from listening to that i found that part quite easy to just sit down and play.

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Gordon: So, are those the only parts you that you would have, kind of,

changed at all?

Ronan: Hmm. I have to think. Can I get up the sheet music.

Gordon: Yeah, go for it, man.

Ronan: Open up my hard-drive. In here somewhere [jokingly]. Got so many

files. Right, so we look at Aphasia. So you're talking like orchestration of parts

not like the actual music?

Gordon: Yeah.

Ronan: So that whole section in, is it Aphasia, towards the end, so yeah, it's

bar 201, I think, and the groove that was [untis catis], it goes into the

triplets, there's like a few bits where it's like just high hat and bass drum, I

would have like probably maybe added in some toms, or something along with

that. There was a lot of high hat stuff that, in general, I thought could have

been put somewhere else, but it's not a criticism, I think it works but if it was

me writing the parts I probably would have not had as much high hat/bass

stuff in there. But apart from that it all made sense apart from some like

trying to actually understand how to it's meant to play from looking at it, but

from listening to it it all made sense, and following parts, yeah, I don't think

there's anything else except the maybe the overuse of high hat.

Gordon: Fair enough [jokingly]. I mean, yeah, it's really interesting. I mean,

you, it seems like when you were recording this you, kind of, for the most

part you listened to the motifs rather than, just kind of precisely reading

every 16th, every triplet, you know?

Ronan: Oh, 100%, yeah.

Gordon: I think that's quite interesting. But, do you feel that maybe recording in a room with other instrumentalists or even myself, do you think that would have kind of changed anything?

Ronan: Would have changed something, because I probably wouldn't have had as many chances to get it wrong. Because, you can tell from Wordeater the snare is actually tuned lower at the end of the tune, because that took a lot of takes, like I made sure I got the intro up until I was out of that groove, I wanted to get all that in one take, so I don't that probably more than 15 times. And then just to make sure it was perfect, cause I didn't want to do any cuts in there, that's why you can hear the actual tonal change in snare from going into the end section, because I done it chunk by chunk. If we were in a room together probably wouldn't have had that option. So, but it would have actually, probably, helped because, you know, you've got that interaction with other players, you can look, give cues, it's always nice when the bassist goes like that [gestures] and you know where you are in the tune. Not that I didn't know where I was because I'd listened to them over and over again in my head. But, yeah, having other people in the room always helps, but then you don't get to dive into your own part as meticulously as you could do, I think.

Gordon: So, do you think that communication or dialogue in a studio or in a room would have been just more helpful or do you think it would have been a detriment in this instance?

Ronan: I think it would have been helpful having someone there, maybe someone in the studio on talkback, someone like yourself, that like actually done the music. But, I'd probably say detriment having people in the room, like other players.

Gordon: Okay, why is that?

Ronan: Just from not having the ability to think about your own part as much as you can when your solo'd, so when I've got my in ears in and I've got the

click, and the backing track. Cause I actually used the midi that you sent me in logic and kind of mixed it so I had a lot of bass, not a whole lot of guitar, and a whole lot of click. But I probably wouldn't have had that option if there was other people in room. And I also wouldn't have had the option to slow down the intro of Wordeater 5% just so I could get it perfect [jokingly].

Gordon: Do you think doing those sort of things, like splicing it together, kind of slowing things down, and recording it in your own way, do you think that that kind of gave you a bit more control over how it sounded?

Ronan: Oh, 100%, yeah. If I had had to play that intro at full speed it would have probably been quite messy, cause the high hat pattern on it's own at the start is fine, but it's when you start having to cross over your hands to get to the snare, and when you've thrown in those toms, open high hats at that tempo it was quite, very difficult. But I could have done it, but I think it just sounds cleaner. Much cleaner just 5% slower, when you listen back is not that much slower, but it just, gives it that, takes the edge off it, for me, I think. You wouldn't have that option if there's a guitarist or bassist, cause they'd be like 'no, I want to play at full speed' [jokingly].

Gordon: Yeah, trust me, I know that feeling [jokingly]. Right, I mean, yeah let's just have some like quick fire questions, just to kind of see what your thoughts are. On a scale of 0-10, how much control over your parts do you feel that you had - just in general?

Ronan: Probably... so 10 being 'I had loads of control', 0 being 'no control at all', probably a 6, I'd say.

Gordon: Okay.

Ronan: So, coming form someone that's played in a lot of ensembles, especially a brass band, when I get a part given to me, half of time its someone that doesn't know anything about drum notation, and they've just said 'ad-lib'. And that's when I make it up. But then I get a part like this

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where I can clearly see that there's parts there for reason, then I feel like I've

still got control but not as much as I would if it just said little lines, and said

'make it up'. So, probably a 6.

Gordon: Alright, that's interesting. I mean, that kind of leads into the

question of how much control do you think I had, since I was composing the

whole thing.

Ronan: I mean, you had the most control over like obviously the piece, the

time signatures, but, rhythms, but I probably had more control over like the

timbre and the dynamics. There was some dynamics that you had written in

there (crescendos), but the internal dynamics, like, on like drum notation

that's written for a drummer, by a drummer, have all high hat accents in

there. Like for instance, that groove in Aphasia [du dah du dah] there's no,

like, internal dynamics written, so I was interpreting like, obviously bringing

out the snare [doo ba, du du, doo ba], cause I could have played them

quieter. But, yeah, I'd say I had more control over the internal dynamics, but

you had more control over overall feel.

Gordon: Okay, so if you were giving yourself 6 for internal dynamics, 6/10 for

control, what would you say on a scale of 0-10 you had on the feel?

Ronan: The feel?

Gordon: Yeah.

Ronan: Probably, hmm, that's hard. If I take the Wordeater groove at start, for

example... was it just Sibelius drums that was in the original demo?

Gordon: It was actually Guitar Pro.

Ronan: Was it? Cool. So there wasn't much dynamics in that, so I kind of made

the dynamics, so I'd probably more, probably an 8.

Gordon: Interesting. So, you would say potentially you would give yourself a little bit less over those parts.

Ronan: Yeah.

Gordon: Interesting. That's great, yeah, would you have preferred a bit more control, over that, or?

Ronan: Well, it wasn't really specified so no, but, I guess in retrospect I could have not stuck to parts as much dynamically, for what there is anyway. The starting dynamics in aphasia, it just says mezzo forte but I don't see it getting any louder, so I obviously interpreted it to get louder as it crescendos, cause you didn't specify a dynamic to get to. But, I think it was fine the way it was. It was concise enough parts, that I got the gist of what you wanted but it gave me enough leeway to interpret them dynamically and 'timbre-ly', if that's a word [jokingly].

Gordon: Yeah, that's fantastic, yeah, that's great. So, do you think that communication with me or any of the other musicians, do you think it would have gave you more control over the whole process?

Ronan: I quite would have liked to have spoke to guitarist and bassist, but I don't think not speaking to them was too detrimental. Like, we probably would have just chatted, 'ahh, that bit's hard isn't it?' [jokingly]. But, no, I think having my own part to concentrate on and having the midi demos obviously really helps to get an overall feel for it. But obviously if you were doing this with a band you would probably record the drums first anyway so you might have a midi demo, then the guitarist would play to the drum track, sorry, the bassist would play to the drum track and a click, guitarist would then play, and then any overdubs would go afterwards. Drums are usually first anyway so, not too different.

Gordon: Interesting. I mean, yeah, I think, who was it, the previous guitarist and bass player, I think, you possibly knew?

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Ronan: Yeah, yeah, they're in the year above me, I think.

Gordon: The year above you, yeah. So, do you think that would have changed

anything, like, being able to talk to them if they were part of it?

Ronan: It would have changed something, I can't put my finger on what I

would have changed, but not too much, cause I said, I'm used, kind of,

drummers are always used to playing to a pretty rough guide because it's the

basis of a band, it's where the rhythm all comes from... it kind of lays down

the groove.

Gordon: Yeah, so you would probably say the same about not knowing the

current guitarist and bass player?

Ronan: Yeah.

Gordon: That's fair enough. Yeah, I mean, I think the only other thing would

be that in Aphasia section C, I think I gave you an option of playing a solo over

that?

Ronan: Did you?

Gordon: I think I emailed you, yeah.

Ronan: Oh, I didn't see that.

Gordon: Oops [jokingly]. Do you think if you took that option for doing a solo,

over Aphasia, do you think that would have changed your opinion over how

much control you had over it?

Ronan: Yeah, but I hate doing drum solos [jokingly]. I really do. I'll do them,

but I don't like listening to them that much either. I don't know, I just don't

think it's the most solo-istic type of instrument. I love guitar solos. But, I

didn't see that. I'm looking, I just searched up solo on my email and I don't see it, so I don't know, maybe it didn't come through.

Gordon: Not to worry.

Ronan: But, yeah, I would have gave me more control, yeah, cause I would have complete made it up. But, it's quite a slow section, is it, goes down to 90. Trying to think what i would have done. Probably just played random fills and done flashy stuff, I guess.

Gordon: That's cool, man. I mean, yeah, okay, let's go for one last question, just kind of a big finale, I mean. How much influence do you feel that you had over the entire project. So, this is going from the composition side, to the other instrumental tracks, to the mixing, to the production, everything, on a scale of 0-10?

Ronan: Well, so I could have recorded it really badly, which I chose not to [jokingly]. I went into studio 1 and recorded it, well I hope, so that has quite a big influence in the drum's sound. So 10 would be 'I had loads of input', 0 would be [gesture]. This is like the overall of all these tunes put together? Probably 5, because drums are really important, but I don't think I had any influence on the composition cause that's already done, the arrangements are made, so I think that takes down the score down quite a bit. But, I did have a whole lot of control over the way the drums are going to sound in the end. Cause if I recorded it in a little room, with a little awful drum kit, with 1 mic, it would sound completely different in the end, unless whoever's mixing it replaces them all with samples and just puts in the midi drums. But, nah, probably a 5, because the drums are important to the whole overall sound, but I think it takes the score down quite a lot due to the fact that the parts already written out, the arrangement was already written out, and there was no rehearsals with a band, I guess.

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Gordon: I mean, yeah, that's really interesting. Great, well, yeah, I think that's everything I really need. That's fantastic. Is there anything else you

want to add?

Ronan: When will I be able to hear the final thing, cause that'd be interesting?

Gordon: I think the mixer is on it just now, so probably in the next few weeks.

Ronan: Cool, yeah, just send it, cause it would be quite interesting to hear.

Gordon: Will do.

Ronan: I also need to still claim the fee for it, and I'm not sure how to go about that. I got your email from procurement, or something, I hate dealing with this sort of thing. Do you have any idea how to do it?

Gordon: No, I don't know. I think you've got a number, and I think you just send that back to them, I'm not usre, honestly?

Ronan: I've got a purchase order.

Gordon: Yeah, but I think if any problem just give me an email and I'll try and chase it up for you.

Ronan: Cool, cheers. I'll try sorting that out at some point. Yeah, I really enjoyed helping out. It's been interesting to try and interpret something when cant meet up with people and everything's online. Really cool.

Gordon: Yeah, just Covid. Fun stuff.

Ronan: Yeah, so you're a guitarist, or?

Gordon: No, I'm a bass player, actually.

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Ronan: Bass player, yeah, I liked the bass parts.

Gordon: Oh, thank you. The bass player actually took a solo over Aphasia,

cause I kind of offered it out to everyone, and yeah, the bassist came back

and kind of was just like 'yeah, I'll do it' and sent over files, so. But, yeah

thanks so much for taking part in this, like, it's been great working with you,

honestly.

Ronan: No worries, cheers, I've enjoyed it...

3. Callen Interview

Callen Interview

25/11/20

16:00-16:30

Gordon: Sweet, there's the recording started. Okay, yeah, so, do you want to

just kind of get this out the way and go for it?

Callen: Yeah, I don't mind.

Gordon: Right, so let's just kind of double check the sort of ethical stuff, just

to make sure everything is kind of above board: we can stop at any time, you

don't have to answer a question if you don't want to, you can take a break if

you want to even though this should only take about half an hour...

Callen: Break for a cup of tea? [jokingly]

Gordon: Aye, you can do that if you want [jokingly]. This is basically just for

research purposes, so every instance of your name will be anonymised and

this recording's not going to be public, so is everything still okay with you?

Callen: Yeah, I really don't mind.

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Gordon: Great, perfect.

Callen: It's all good.

Gordon: Yeah, so, this interview isn't necessarily for the purposes of finding out your opinions of the music itself, it's more about understanding your feelings and your attitudes towards the agency and autonomy you had throughout the actual creative processes. So, in other words, basically, how much control, and how much influence you have over the pieces themselves, and the processes.

Callen: Okay

Gordon: That make sense?

Callen: Yes.

Gordon: Great. So, the only thing I really need to disclose it that we know each other, we've known each other for a few years now and that's about it. So, let's just jump into it. If you've got any questions feel free, just before we start.

Callen: Oh, before we start. No, I don't think so.

Gordon: Great, so, yeah, I mean, what sort of music do you normally play?

Callen: Normally, like, the sort of stuff you've written, really. If not, then finger-style stuff on the classical guitar, usually. Progressive rock, progressive metal, those sorts of things.

Gordon: So do you think your kind of style meshed well with this then?

Callen: More or less, but I haven't, cause I haven't played too much guitar in the last couple of years, so I don't know, like, it was my own band's stuff, you

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know, it was Avant, that I was playing for mostly, which was the prog stuff.

But it's been a while and I haven't played that in ages. I did enjoy this, but

I'm not sure if it's the style I would want to continue doing, but it was fun,

regardless. So it did mesh, it did mesh well, at least it was familiar, it was

familiar territory.

Gordon: So do you want to maybe just go over some of the songs and just kind

of see if there was any that gave you any particular issues, or any sections?

Callen: They all gave me issues [jokingly].

Gordon: Well do you want to go over them, so like, Dear, I was probably one

of the easier songs so let's just start with that?

Callen: Okay, ask away.

Gordon: Well, is there anything that you, that caused issue for you, anything

that you would change at all?

Callen: Like, what caused issue with, with it for me, was that the flow of the

songs and being able to actually record it authentically without dropping in

every other bar to keep it clean [jokingly]. Because of the amount of time I

actually had, it was quite, I wasn't able to learn all of the songs verbatim, as

it was written, and you know, play it fluently where I couldn't be dropping in

every other bar. That was a bit of a hard one. It wasn't so much that this song

itself was hard but it was my own method of recording it and the amount of

time I had to learn it.

Gordon: Do you think that was the same for all of the songs then?

Callen: Oh yeah. Oh, definitely. A lot of the recordings were done the day

after the same day that I learned them.

Gordon: So really, not much time?

Callen: Not much time. But, it was enough to sort of to go through and think, well, 'that wasn't good enough, so I'll retake that', you know, I'd get to the end of the track and go through it and think, well, 'I've warmed up now, by the end of doing this, you know, it's been an hour of recording, I've been playing guitar now for an hour', whereas when I was recording to begin with I hadn't really been practicing for too long, I wasn't warmed up. So, a lot of the takes that are in there, they're a bit of a warm up.

Gordon: So, do you think that kind of control over being able to drop in where you want and splice together the tracks, do you think that that gave you more control over how things sounded?

Callen: Of course. You mean, like, how it sounded for myself or for the whole thing?

Gordon: Just for yourself.

C: I mean, yeah, of course. It's like, it's not like I'm on stage and I have to get it right, or you know, folk will notice that I'm making mistakes, or whatever. It's like, I had total control, because I can say 'that one note half way through that riff needs to change' and I can do that, I have that control, cause I know how to use the DAW. So, yeah, I had a lot of control over it. More or less. Where I stop having control is where my ability to actually play it as well as I want to if I can't, then I don't really have control over that, I can just give, I wouldn't even say it's the best that I can do, cause again, you know, I've been kind of rusty 'cause I haven't played so much in a while and i was a bit out of practice, so you know.

Gordon: So you kind of had control over the actual playing side but what about the writing side, did you feel you had much leeway there?

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Callen: Right, well, no, because I was essentially a session musician, and I could only really change what was unplayable or not formatted for guitar. As

such.

Gordon: Is there any parts in particular that come to mind?

Callen: Well, yeah, the lead part for Aphasia. Obviously, trying to follow the music for that was, that was not going to happen. Cause I wonder about yourself actually when you were writing those parts, because some of it's

obviously actually written on the instrument and some isn't.

Gordon: Interesting, well, for Aphasia, I mean, that part was written for the general guitar but we kind of chatted about changing that to classical guitar...

Callen: [melody's sake]

Gordon:... and also rubato, as well, which was by your request.

Callen: Oh, the intro, yeah, yeah.

Gordon: Yeah.

Callen: No, the intro, that's not what I mean. I mean the electric guitar 2 part

for when the intro's finished.

Gordon: Oh, right, okay.

Callen: That's clearly not written on guitar, just based on the fingerings. And I wasn't about to change it because I didn't really know what to do with that, so I didn't feel like I had too much control of that, it was just, 'I can't play that' [jokingly]. Like, it's absolutely bananas, but no, I guess I could have, it was just a question of how much time I actually had to do it and it's also your song. And if it's about agency and what we do with what you've given us and the way I see it is, if you've written it, if you've written that section like that

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on the computer and you haven't played it, that's kind of good for you for

gather research I think, because well 'what will they do with it?'. You know,

'I've written this thing and not said whether or not it's played on a real

instrument and I'm expecting them to play it and record it, so are they going

to change it, or whatever? What are they going to do about it, because I know

it's unplayable or something like that.' You can't play that [jokingly]. You

can't do it [jokingly].

Gordon: I mean, yeah, that was something I thought about when I was writing,

but I think it's definitely interesting that you have looked at this and went, 'I

could have changed that if I had agency over it' and in this case you didn't.

Callen: I chose not to.

Gordon: You 'chose not to'?

Callen: Because you offered a much simpler solution, which was, 'it could go

on synth', and I hear it with synth and I think, 'actually it would be better

with synth', it wasn't the intention, the intention was for that to be played on

guitar. I could have sat and formatted it, and simplified some of it so it was

playable, but I didn't have time. If time wasn't a factor, I think I still would

have gone with 'nah', because you suggested the synth. It just, that kind of

melody, I think, would work better on the synth anyway.

Gordon: I mean, just with that all in mind, do you think that you would have

preferred to have more influence or control over your parts?

Callen: Hmm. No, I was satisfied.

Gordon: Why is that?

Callen: Because it's not my music.

Gordon: Okay.

Callen: It's just you know, there's an exchange of money here too, I am being paid to play the parts even though there's 2 parts I didn't play, but that wasn't part of the agreement with being paid was it, so. There's also the, the factor of being friends for the last may years, where I want to do more with it, but you know, it's also your stuff, and I don't want to feel like I'm imposing my thing onto it. You know, if I sent my music off like, 'this is it, I want you to record this, this is what I want it to sound like', and someone else said to me, 'actually I want to do this with it and you should change this with bit, and this bit...', a bit like what I was doing with you, actually; 'oh that circus thing doesn't need to be there' or whatever, you're like 'yeah, but it is there, so play it because that's what you're being paid to do', you know, if someone did try to put their thing on it when I'm asking them to record it, I'd be like 'dude, I'm fucking paying you to do it' [jokingly]. 'Stop trying to impose your ideas in' [jokingly]. Obviously I'm not against that but once it's written and there's a deadline, it's just like 'fucking do it'.

Gordon: So, I mean, you kind of touched on the fact that we have known each other, and it kind of makes it easier to make those suggestions, but you still weren't really willing to. I mean, do you think that maybe recording and being together in a room, or a studio, would have kind of changed that?

Callen: You mean, if we were collaborating in person? Would it have changed? I feel like I could have controlled your music?

Gordon: Yeah, having that open dialogue...

Callen: Yeah, cause you're right there, there's no barrier in between me with my instrument sitting in from of you like 'but we could just do this instead' [jokingly]. And then, obviously, theres a social thing there too, if you're there to maybe go, and there's other people around, not argue about it. You could just be like 'yeah, that could work! Done', you know, once it's done, it's done. I think it would be very different. Whereas we can sit and

talk online or whatever, but in person there's different social cues and other things to think about as well.

Gordon: And do you think maybe knowing S kind of changed some aspects as well?

Callen: Of?

Gordon: Of, how you interpreted the pieces? Or, how much control you had over them?

Callen: Well, yeah, because originally I was listening to midi files that I'd added plugins to to make it sound more like I was playing with a band. Then of course, when S's was added all it really did was just make it more, it just humanised it a bit, obviously. And, it's more fun to play to, when you can hear a real bass, not midi bass. That's a pretty simple one really. It was just more fun. It's also that it's my friend, 'that's my mate playing bass on this too, he's doing this as well, it's cool', you know.

Gordon: So what about not knowing R, the drummer? Do you think that changes things?

Callen: I felt like I was more like to be like [gestures] a bit direct about the fact he hadn't messaged you, or we hadn't seen the drums yet, and I'm like thinking that he's going to drop out last minute, because, you know, everyone else did. I don't know him, so it's very easy to just say 'ahh, he's a dick, he's not going to do the stuff, he's just going to drop out last minute', like I'm more critical thinking about his drums before I know anything about him.

Gordon: Do you think that influence how you played, at all?

Callen: Well it will have, I'm not playing with a drummer at that point, it can be more robot, i think. I'm playing to a very steady pulse all the time, there's no, you know if you listen to old music, like I think it's Rosanna, I seen a video

where someone put a tempo map to that and around the second chorus the drummer starts speeding up, he's not set to a click, he's just obviously getting excited 'it's away to be the chorus again' and he loves the chorus. So it goes up something ridiculous like 9 bpm and the rest of the band are playing along to the drums, they have to speed up too, and it just gives it this really human element; they're all having fun with it. Whereas, I'm not saying I wasn't having fun, I kind of wasn't in a lot of ways 'cause Cubase is a nightmare, but there's none of that. You can't get excited and speed up, cause then you're off, you're off the grid. You know, it takes away that human element for sure, when you're playing to a click.

Gordon: Do you think that human element is important?

Callen: I do. You see it anywhere, I mean, like Ihlo for example was the last example of a band I saw that used a click live, but I was mostly excited about it because 1, I guess my friends are in it, 2, I know the songs very well, whereas I go and see a ska band, right, ska bands aren't there to play to a click, they're not, they're just there for everyone to have fun, and go mental. And the vibe is obviously very different. I don't know, I forgot what you even asked now, just rambling.

Gordon: That's okay. I mean, let's kind of do some quick fire questions to see your attitudes on these. On a scale of 0-10, how much control over your parts do you feel that you had?

Callen: Control over my parts. It's not really quick fire, 'cause there's more to think about when you say that. There's everything we spoke about as well, so. There's so many factors that would contribute to how much I feel in control of the parts you've given me. Being that we know each other, and whatnot. I'm trying to imagine if I didn't know you and I was R. Then I would say 10. No, I'd say a much lower number, like, I don't know 2.

Gordon: Okay

Callen: 'Cause, 'I don't know you', It's like I was being paid to play this part by someone I don't know and don't talk to. So, I have no control. Whereas because I know you, obviously, you see where I'm going with there, there's a lot of other factors that would contribute to me thinking I've got more control. So, I'd say 6.

Gordon: 6? Interesting.

Callen: Yeah.

Gordon: Does that include both the compositional and the actual playing side of things, I guess? Just kind of amalgamated?

Callen: Yeah.

Gordon: So, what if I asked you to separate those, and I asked you about the compositional elements on a 0-10 and the actual playing side on a 0-10? What would you give them respectively?

Callen: Composition, obviously, no control, because I didn't want to have any control over it really, I don't think. So, a low number, like 2, for composition. Playing-wise, I kind of, I don't know, like 7, 'cause obviously we spoke about it and I said 'do you want this played staccato, do you want it played a bit more loose and rough?' for certain parts, and you said 'no, try it, but either that just try stick with what was in the midi files essentially, that kind of sound, as it's written' and so because I had to ask you, essentially, beforehand, cause it is your music, obviously, I have to ask you, I guess control-wise a 7. 6, 7, cause I took a bit of liberty with changing without telling you at all, like not changing the writing, but like how it's playing, because some parts you couldn't really feel it without changing, for example. Some of the mutes or ghost notes were, didn't make sense when actually played at 160bpm without practicing it for 2 months [jokingly]. Yeah, I'd say yeah, about 7.

Study Transcripts

Gordon: Interesting. Great. Do you feel like you probably would have wanted

more influence or control over that, or?

Callen: Like I said earlier it is your music. I don't feel like I'd want to put that

on you, and try to change what you yourself are wanting to hear. But, I feel

like I made suggestions actually. I feel like everything I wanted to say to you

about it I did.

Gordon: Is there anything that comes to mind?

Callen: Just with the style of playing, mentioned the rubato for the intro for

Aphasia, or how you wanted to play certain riffs in Wordeater, yeah. I wonder

actually about S's bass solo, because there was nothing supposed to be there,

and I don't know if he actually spoke to you about it before or he just sent

you it?

Gordon: I think he just sent me it. I asked him to do a solo and he just went

ahead and did it.

Callen: Cause I said before, 'can you do this, please?', like a few days before,

'he needs something just put a solo over it', he said 'yeah if I've got time'

and then he did, so. So we can, we are allowed to do that?

Gordon: Yeah. Would you have liked to have your own solo, like, the section in

Aphasia where the lead guitar does something that you said shouldn't, or

doesn't sound like it should be played on a guitar, would you have changed

that, would you have made something yourself?

Callen: Are you talking about the sweep?

Gordon: Yeah.

Callen: Well yeah, I thought about it, but then, you know, there's also the rest

of the melody so I was like, 'no, I'm not going to change it'. I also had the

pressure of finishing everything, and life, and restringing everything, and trying to record it, and not stay up to late trying to get it sounding good. Yeah. No, I probably wouldn't have changed it, given my circumstances. If I was in the right position and there was plenty of time, obviously yeah I would have liked to have worked kind of closely, or closer with you over a period of a few months, to sort some things out. Just as recommendations, advice, cause you're writing guitar parts.

Gordon: So, do you feel like it would have given you more control or influence, if you had the ability to actually change a section or if you had the time to do it, anything along those lines?

Callen: It's mostly down to time.

Gordon: Interesting.

Callen: Also, I think, time signatures too, I could have simplified them myself. That was a bit of a nightmare though, dropping in on a 25/16 is a nightmare [jokingly]. So, a lot of the time was spent avoiding dodgy cross-fades by starting with not count in a bar back and then waiting to drop in, it felt more natural actually, but it made things very difficult. That was pretty time consuming; doing drop-ins.

Gordon: So, when you were recording, were you counting each section or were you just feeling the motifs?

Callen: I just listened to the songs enough to know them, then it was just being able to play it. There was one part where I counted in Dear, I, bar of 5, and the part starts on the upbeat of that bar of 5 and it was just very strange, cause it didn't feel like a bar of 5. It was just something that started on a bar of 5, after a quaver beat. That's the only time I had to count. I was like, 'what is going on here?' [jokingly]. Otherwise it was very much like, the sort of claves you'd expect from 5s and 7s, and I'm familiar with them anyway, so it was pretty easy to get a handle on, a lot of the time signatures.

Gordon: Grand. I mean, let's go for one final question. So, on a scale of 0-10 how much influence, or control, do you feel that you had over the entire project, and that's including the other instrumental parts, your instrumental parts, the recording, the mixing, everything?

Callen: It was pretty... I felt like... Am I allowed to mention our producer?

Gordon: Yeah.

Callen: I felt like I took charge with some of that actually. I had control in terms of trying to help, like, beyond what I had to do, which was play guitar. Like, 'actually, I know someone' and 'actually, if I'm playing on it too, and you're my friend who's doing a project, I want it to sound as good as it can, within this space of time, so I know a guy, you should probably go with this guy' and then of course I spoke with him a lot. I'm still speaking to him now about how he's getting on with production. Obviously, I spoke to Samson, about which parts he struggled with and blah blah. Project sample rates, not that it matters so much, but, you know, how to export and things like that [jokingly], and trying to help with setting up markers in his DAW, and things like that. Obviously, talking with yourself, what I can do, what I can't do, what you want changed, what you don't want changed. I'd say it didn't feel too rigid. I felt like I had a fair bit of control, to be honest, overall, I'd say I had about 7.

Gordon: Yeah, I think you're in a unique position, with regards to this as well, just because you know so many of the people involved.

Callen: Yeah, of course, and vice versa, I guess, S doesn't know P, you don't know P, but it felt like more of a team, I suppose. Cause it wasn't just me, you know, being, say, R, who knows none of us, he could just go away and do the parts and give you it and never think about it again, you know. But we know each other, like we all know each other to a degree P's not part of it, so, you

take it on a little bit as your own project to, and you feel like you want to do what you can for it. Both for selfish and unselfish reasons.

Gordon: Yeah, I mean, yeah, so, do you think that's something you prefer? Do you prefer having dialogue with people, and that communication with people?

Callen: Yeah, of course. I think working closely is better than not, like if I was to just receive the parts I probably wouldn't even be interested. I'd probably look at it and think '[sigh]', maybe not. Not like yours in particular, but if I didn't know someone, and someone wasn't taking to me about their project or whatever, like 'here's the bits, go and do it, I'll pay you', I'd just be like '[sigh]', you know I kind of want to be feeling like I'm part of the project, or the project wouldn't work unless, like, I don't know. Yeah, I think close communication is important. You get the best sound product like that, I think, or maybe not. It depends on your level of expertise as well, if you can definitely trust that someone's going to do a great job you don't even need to say a word, 'oh, that guy, send that off, don't even think about it, it'll come back and it'll be fantastic'.

Gordon: I mean, another reason why you're kind of in a unique position is that you had two parts on this album, you were doing the rhythm and the lead guitar. Do you think that changed your feeling on this? Your thoughts, your feelings of control and influence over it?

Callen: I didn't think about having to do both parts, actually. No, because there wasn't actually much lead guitar that was too different from the main guitar anyway. So I didn't think about that.

Gordon: Okay, well, I think I've got everything I need, but is there anything else you want to add?

Callen: I don't know. What have I not thought of? I don't know. I forgot to mention, like, you'd written the intro to Aphasia on a different instrument and you were okay with it being recorded on an instrument that wasn't what

Study Transcripts

you'd written for. You know, you'd written it on an electric guitar, presumably.

I mean, it's in Guitar Pro as an electric guitar, but whatever, you know, it was

recorded on a nylon guitar. That's another thing actually, I bought strings for

this, you know, I got excited for doing the intro on a nylon guitar, enough to

buy strings for it, I think. That was, you know, and I didn't really ask you, I

was just like, 'do you think this would sound nice on nylon', and you said

'yes', and I'm like 'great', and I just went and bought strings. You know, I

didn't really liaise with you at all, so I guess that, yeah, it felt quite flexible

at lease, overall.

Gordon: Is there anything else, just before we finish up?

Callen: I wish I could have done the parts better; had more time [jokingly].

Gordon: Think we've all been in that position, man [jokingly].

Callen: Yeah.

Gordon: Anyway, thank you for this, I'll just stop the recording there.

Callen: Great.

2. LDV Focus Group Data

1. LDV 1 & 2

LDV 1 + 2 Focus Group Transcription

11/12/20 16:00-18:00

{introductions}

Gordon: Hello

Study Transcripts

Hunter: Hello

Gordon: How's everyone doing?

Hunter: Alright, you?

Gordon: Great, yeah, not too bad. We're just waiting for another couple of people, I think. [pause]. Right, once everyone's in I'll send over the notation in the group chat, so, that okay with everyone? [gesture: thumbs up]. Cool.

Jayden: Are you able to hear me?

Gordon: Yeah, yeah, I can hear you.

Jayden: Right, yeah, it's just not showing up on Zoom, that I'm speaking. Are you able to hear this as well [playing piano]?

Gordon: Yeah, everything's good.

Jayden: Cool, thanks.

Connor: Okay dokie.

Gordon: Hello.

Connor: Well, everybody's looking very professional, I must say.

Hunter: Hello.

Connor: Hunter, hello. Eh, Dino...

Gordon: [gesture: wave]

Study Transcripts

Connor: I haven't met you before, Dino. I wasn't quite sure how many of

these people, well apart from Hunter, were you.

Gordon: Oh, right. I think we have met before.

Connor: There around six other Dinos present of which I'm unaware.

Gordon: Well, I think we're only waiting for one more person, I think.

Connor: Righto.

Jayden: Are you still able to hear this [playing piano]?

Gordon: Uhhu.

Jayden: Right, sorry, I'm just checking that I can record and read throughout the same time as running this, cause you know sometimes things are a bit

fiddly.

Gordon: Uhhu, definitely.

Jayden: So this is still working, yeah? [playing piano]

Gordon: Yeah. Can everyone else hear?

All: [gesture: thumbs up]

Jayden: And I'll turn myself down.

Edward: Hi, can you hear me, alright?

Gordon: Yeah, everything's great.

Study Transcripts

Edward: I read your instructions, Dino. I guess I'm a little curious about if

there's any other context that you can give me?

Gordon: Any other context?

Edward: Are you expecting us to only freely improvise, is that what's going on?

Gordon: It's really up to your interpretation.

Edward: Okay, great.

Gordon: The whole point is for everyone to have agency over the processes so whatever you want to do, you can do. Right, if the last person doesn't show up in the next couple of minutes I'll just send the notation once he gets here, in the group chat, and then I'll go over a couple of things before we get started.

Connor: That's great, that gives me time to feed my dog.

Gordon: [laughing] On you go.

Connor: I shall return. [background chatter].

Hunter: This is entertaining isn't it [jokingly]?

Gordon: I think Chris has already started [jokingly].

Connor: [in background : jokingly] I've never stopped.

Gordon: Right, I'll just send it just now and we can get started. Great, that's it in chat just incase anyone's not got it. Right, so just before we start, I just want to go over some of the ethical implications of all of this. Well, I sent you the consent forms and everyone's signed them, but I just want to make sure everyone's okay with it: we can stop at any time, you can decide not to

Study Transcripts

answer a question if you don't want to, we can take a break whenever you

guys want; feed your dogs for example [jokingly]...

Connor: It's okay, that's already done. Don't need to do that until tomorrow

morning actually, well a bit later.

Gordon: It shouldn't take too long, I'm not exactly sure because this is more

of an improv piece so really it's dependent on how you're feeling, this is for

research purposes so any of you will be anonymised and untraceable

throughout the research, and just making sure this is all okay with everyone

can I get a thumbs up?

All: [gesturing: thumbs up]

Gordon: Cool. Jacob, is everything okay with you?

Jacob: Yeah, I'm fine.

Gordon: Great, perfect.

Jacob: [playing]

Gordon: Fantastic. Yeah, so, everyone's got the notation, you've all had a wee

read of it. What I'll do is, when we start, maybe we can have a quick sound

check and then we can do it properly, so does everyone want to kind of have a

wee play and see how it goes? Just for a minute.

[sound check]

Gordon: Great. Sounding good.

Connor: [jokingly] You should just use that, and I can go and have a drink.

Gordon: [jokingly] Could work; very authentic.

Study Transcripts

Connor: Always authentic in this house, I'll tell you.

Gordon: Right, so, can everyone hear each other okay? Levels seem okay for

everyone else?

All: [gesturing: positively]

Gordon: Great. Yeah, I guess I'll just unmute, sorry I'll mute myself and you

guys can read through the notation together and if you have any questions

feel free just to ask and I'll give guidance in whatever way I can. Yeah, just

one little thing, in the notation it does say to 'leave the performance space',

but please don't leave the call. Thank you. Well, I wish you guys luck.

Jayden: Okay, ehh.

Gordon: Sorry, one second.

Jayden: Do we just read through the instructions?

Gordon: [gesturing: nod]. Hi, sorry, Mila?

Mila: Hi there.

Gordon: Hi. Just making sure that you read over the consent forms and

everything seems okay?

Mila: Yeah, seems fine to me, thanks.

Gordon: Great, have you go the notation?

Mila: I do, yes.

Study Transcripts

Gordon: Great, so when everyone's ready, can we maybe just have a read

together and if you need to ask any questions I'll give guidance.

Connor: Yeah, right.

Gordon: Yeah, feel free. Good luck.

{performance: reading notation} = 10:00

Hunter: I've already taken down a wee list of some one like words, mostly like

one syllable, quite open to interpretation, I don't know if anyone else has

anything prepared yet already?

Connor: Fire away Hunter.

Hunter: Yeah, I've got words like: divide, flutter, flow, bloom, glow, frost, and

crush.

Connor: What do we think? [inaudible]

Hunter: Say that again?

Connor: Do we choose one of these? I mean, assuming that everyone's happy

with the array, are we choosing one of those, as a starting point?

Jayden: I'm happy to go with one of those.

Hunter: Cool, so it says, provide a word, either verbally or physically to be

taken into consideration. The words, yada yada yada, so yeah, the word(s)

will be used as stimuli. So, I wonder, can we choose more than one word, or

just go with one?

Connor: I think we can choose more than one, but we'll probably still be here

about midnight.

Study Transcripts

Hunter: Yeah, true.

Jacob: Just start with one word.

Hunter: Yeah, okay. I'm happy to go through the list again, or we can just

make a quick decision.

Jacob: Just pick one.

Hunter: Pick one.

Edward: Does the text not say that we should not each pick one when we

enter the performance space? Or, we're only picking one as a group?

Jacob: I think collectively decide, so what do people want to do? I think we

should just start with one word to get our feet wet and then after that then

we can stop and then decide what we want to do after that. That's my

suggestion.

Hunter: Yeah, good idea.

Jayden: What about bloom?

Connor: We may decide not to stop and just to keep working with that one.

Hunter: Yeah. I don't know who spoke, did they say bloom?

Jayden: Bloom, yeah.

Hunter: Yeah, that's a nice one.

Connor: As in, Eric Bloom, of Blue Oyster Cult, or [jokingly]?

Hunter: Whatever you want Connor.

Connor: I think we should do, Subhuman inspired by the Blue Oyster Cult

[jokingly].

Hunter: I take it we've started already then, this is the spoken word part

[jokingly]? Cool.

Connor: Yeah, you're on your own after this [jokingly].

Hunter: So, bloom.

{Performance starts - LDV-1:Bloom} = 12:48

[Order of reactions: Hunter, Joshua, Jayden, Jacob, Mila, Connor, Edward]

[Order of leaving: Mila, Edward, Jayden, Jacob, Hunter, Joshua, Connor* (did

not leave performance space)]

{Performance ends; intermission begins} = 27:57

Connor*: Right well, probably finish. Can keep going forever on this one if you

want, Dino. I think everyone else has signalled their satiation, as it were.

Gordon: Hello.

Hunter: Hello.

Gordon: Great, so, yeah, how was that for everyone?

Hunter: Cool.

Edward: [gesturing: thumbs up]

Joshua: [gesturing: nodding]

Gordon: Yeah?

Edward: My digital routing was off and so I think you guys couldn't hear what I

was doing in Max.

Study Transcripts

Hunter: No, I could hear you.

Edward: No, you could hear my vocoder?

Hunter: No.

Edward: Yeah.

Hunter: Oh, I see, that's a shame.

Connor: [inaudible]

Mila: I saw you flicking your microphone and I just latched onto that, and that

was fine.

Edward: Yeah, yeah, totally. It's all about that, but, yeah.

Gordon: If you guys want to run it one more time, feel free, it's up to you

guys.

Edward: I would try and, I'm going to try and restart Zoom, and make sure

that I can get the routing right.

Gordon: Sure.

Connor: Do you want us to do the same piece again, just exactly the way we

did it just now, Dino...[inaudible]... cause that won't be a problem [jokingly].

I'm sure we can just run it down again. Perhaps a bit faster, a different key,

it's up to how everybody feels [jokingly]?

Gordon: Well, it's easy enough for me, so [jokingly].

Study Transcripts

Connor: Exactly, you've got the easy job. Listening to us all racket on

[jokingly]. Actually, can I just say, I really enjoyed that. I thought, I really did

enjoy that, and I don't know to what extent - sorry I know you want us to talk

about it later on - but I don't know to what extent Hunter's choice of word

made a big difference, but what I can say is that the way people were, the

way people set it up, I thought was very profitable, actually.

Gordon: Okay, yeah, we can talk about everything a bit more in-depth, if you

guys are wanting to do one more. If you're not we can just go straight onto

the focus group, it's your choice.

Connor: I'm happy to do another one.

Joshua: [gesturing: thumbs up] Me too.

Hunter: Yeah, same here.

Gordon: Sure.

Connor: As long as nobody says, a blues in G, then fine [jokingly].

Jacob: Are we waiting for the other guy to come back.

Gordon: Yeah, we'll just wait. We'll wait for him, Edward, for a second.

Connor: Let's not bother, let's just carry on, and when he comes back he'll be

like 'oh no', he'll be discombobulated and wont know what to do [jokingly].

Jacob: He wont know what the word is!

Connor: What?

Jacob: He'll say, 'what's the word? I don't know what the word is!' [jokingly].

Study Transcripts

Hunter: Good point, yeah.

Connor: [inaudible]

Mila: I don't know what the word is.

Connor: It's always bird is the word. That's the only bird there is. Isn't that

right [jokingly]? Whose American here?

Jacob: [gesturing: hand up nervously - laughing]

Connor: Come on, that's it. That's it, that's all you need.

Hunter: Just nod politely [jokingly].

Connor: What?

Jacob: I'm ashamed to say I'm from America.

Connor: Why are you ashamed to say that?

Jacob: [laughing: jokingly] Well, who've we had in the fucking White House

for the last four years.

Connor: [jokingly] Well, you voted him in, don't blame us.

Jacob: [laughing] I didn't do it.

Connor: Ah, well that's what... [inaudible].

Jacob: That's what they all say [jokingly].

Connor: But the so-called Liberal Democrats always say that; 'Oh I didn't do

it' [jokingly]. [inaudible].

Jacob: Hey, I'm independent, don't blame me on any of this shit - I'm for

anarchy.

Study Transcripts

Connor: You started it Jacob, not me [jokingly].

Jacob: [laughing].

Jayden: It was the electoral college.

Connor: No, you didn't have to have the War of Independence. That wasn't our problem [jokingly]. Anyway, sorry, don't want to get controversial or

political.

Gordon: It's okay [laughing].

Connor: Music's never been used for political ends [jokingly].

Gordon: Oh no, never [jokingly].

Connor: No, never [jokingly]. Well, not in this house. So we just extrapolate from my house to the rest of the word, you see - and everyone's fine and dandy, as they say in America [jokingly]. Well, perhaps you don't Jacob, but, some people do, don't they? [jokingly]. Sorry, I shouldn't have asked you, should I really? Carry on. Has he come back yet? No he's not, has he. He's not with us. [pause]. Dino, while we're waiting for Edward to return, can you tell us all, but perhaps everyone else knows, but I don't, how, were people self selected for this or did you kind of put your feelers out to particular people.

Gordon: I just put my feelers out, and hoped for the best. It was through NowNet, NowNetArts.org, that I got Mila, Edward, and Jacob, and the rest were just putting feelers out as well.

Connor: I know Hunter, and I know Jayden. I mean, not intimately, if they're both worried about that. I don't know Joshua.

Joshua: [gesturing: waves]. I taught Dino at Perth, so he asked me to do this. I taught Dino bass at Perth College.

Connor: Oh, I see! Got it. So, Mila, Edward, and Jacob, are you all in the U.S

of A, then?

Mila: I'm in Canada, Toronto.

Connor: [jokingly] Same thing really?

Joshua: [gesture: joking gasp]

Mila: Nope [laughing].

[Edward re-enters call]

Gordon: Edward, is your vocoder working?

Edward: Yeah, I just, I'm doing the routing up, so it sounds, now I will try

routing it. [tests instrument]

Jayden: Like a distorted, echo-y, effect or is that just your microphone?

Edward: [gesture: shaking head] [mouthing: microphone]

Connor: I think it's meant to sound like that, Jayden. It's the modern way

Jayden.

Jayden: Well, you never know.

Edward: [with vocoder on] How about now? Can you hear my vocoder like this?

Yeah?

All: [gesturing: thumbs up].

Edward: Okay, great!

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Gordon: Sweet!

Hunter: Sounds funky.

Connor: Mila, are you using a no-input mixing desk, or have you got something

more elaborate than that?

Mila: It's a modular, modular synth.

Connor: Oh, right, I can just see... Oh, got it.

Mila: Yeah.

Connor: I could just a see a mixing desk with some wires.

Mila: Yeah, but I'm running my voice through it as well.

Connor: Oh, right. Very good.

Mila: Or I might be, we'll see. I don't want to be prescriptive.

Connor: You could run through Edward's vocoder if you want?

Gordon: Sorry to interrupt. If everyone's ready, do you want to just go for it

again and I'll mute myself and you can do your thing?

Joshua: Do you want us to record this, Dino, on Zoom?

Gordon: I'm recording everything on Zoom, but if you've got recordings

personally that would be great, so.

Joshua: Just letting you know I'm rubbish with technology, so [jokingly].

Gordon: Same here, it's fine.

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Mila: Yeah, actually, quick question about that, I guess. So I've been tracking

since before I got to the call so you'll line it up, I'm assuming? Like, you'll

handle that later?

Gordon: Yeah, that's fine. Don't worry.

Mila: Cool.

Gordon: Great, right, have fun.

{performance: reading notation} = 36:30

Hunter: Hello again. So, I take it we just do what we did before, but we

choose a new word? Or the same word? Choose a new word?

Joshua: [gesturing: thumbs up] Yeah.

Connor: Can you run us down your words, Hunter, again?

Hunter: Yeah, so we did Bloom there, just got a dictionary in front of me

[jokingly]. I've got: division or divide, flutter, flow, glow, frost, or crush, but

we can always add more.

Connor: Frost sound suitably Christmas-y.

Hunter: Yeah. Or we could do Santa [jokingly]. Yeah, frost is fine, yeah. Either

that, or if anyone has anything else?

Connor: I do feel, Hunter, that the choice of Santa might tempt some of us to

triviality, not sure if that's appropriate.

Hunter: The what now?

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Connor: [inaudible]

Jayden: I'm okay with frost.

Jacob: Can we use two words, can we use frost and division?

Connor: Yeah.

Mila: [gesturing: thumbs up]

Hunter: Yeah. Jayden: Yeah.

Jayden: Do we want to come up with some sort of way of moving between the

two or do we want to consider both at the same time?

Connor: [inaudible]... simultaneous performance, two at the same time.

Jacob: I think at the same time.

Hunter: Yeah, same time sounds good.

Connor: Oh, how pretentious is that, Jayden [jokingly]?

Hunter: And, yeah, we could do the whole mute and video off thing to signal we've left the performance area again. Yeah, sounds good to me. Alrighty then. So, frost and division.

Connor: Move my camera about a bit. There we go that's a bit more like the top of the pops [jokingly].

Hunter: 'Here's a little something I wrote today called frost/division' [jokingly].

Connor: We are taking this seriously, Dino, by the way.

Gordon: [gesturing: thumbs up + laughing]

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Connor: It might seem... [inaudible]... very very serious [jokingly].

{Performance starts - LDV-2:Frost/Division} = 39:15

[Order of reactions: Jacob, Edward, Hunter, Joshua, Jayden, Mila, Connor]

[Order of leaving: Hunter, Edward, Jacob, Mila, Jayden, Joshua, Connor* (did

not leave the performance space)]

{Performance ends; focus group begins} = 53:47

Gordon: Hello?

Hunter: Hello.

Gordon: That was interesting.

Hunter: Yeah that was great.

Joshua: I like to think that my part was very nice, it's like playing in a

wedding band to be honest [jokingly].

Hunter: Yeah, I mean, at that point I just didn't know what I could do to add

to it, I was like 'fair play', you know [jokingly].

Joshua: That's the closest I've got to gigging since March.

Gordon: Great, yeah, so do you guys want to maybe have a quick chat about

that?

Hunter: Yeah. Do we just kind of go into discussion, or are there any prompts

you have?

Gordon: It would be interesting maybe trying to get your feelings and your

thoughts on doing this in this way. So, doing text based notation, and also

doing it online.

Mila: Well, I can certainly say that it's a bit easier to, a little bit easier to, see people at the same time as looking at the score, or maybe appear that I'm looking at people while I'm looking at the score, as opposed to offline. Which is probably less important in a stage context than when streaming, but maybe people disagree.

Jayden: I had no idea what this was going to feel like in terms of, you know, being in, the difference between being in the room with people and that sort of free improvisation, you know, I thought that would be more difficult to do online. But yeah, as you said Mila, I can see everyone all at once, whereas in a context, like a physical situation you might not be able to see what everyone is doing at the same time and it's all being fed right into the headphones as well, so I'm getting what everyone's doing in stereo, almost like mixed together. So almost, it makes it slightly easier to pick up on what people are doing and trying to match, in some way, but it's definitely harder to pick out what individuals are doing. It's easier to have the whole sound palette but in terms of picking out what certain individuals are doing and trying to like, you know, that sort of non-verbal connection you get with a lot of people, it's sort of missing over this format, ironically, but in some ways it's better.

Hunter: Yeah, I agree about the whole, you know, picking up what everyone's doing thing, and like it's actually quite good it's in headphones cause at some points I was just like playing and I think it was like Mila making noises, but it was like hard right on my ear, like 'what the fuck was that?' [jokingly]. Cause you know everything else was like centre, and I was just like 'wow' [jokingly]. It would be much cooler to be able to pick out what individuals were doing. Yeah, and for this, I just chose guitar cause I knew it would be kind of like instant kind of improvisational feedback, you know, I don't need to think, you know, what could I do like settings on a synth or playing something on the keys, I can just make noises with it much easier I think. Which is much easier with this kind of interpretive notation.

Connor: I think Jayden makes a good point actually because I think there is that distinction between the getting the feel for the sound palette, as you put

it, Jayden, and yet the lack of, not so much visual clues but, sort of physically feeling cues that I would get if I were. I mean I've been, do you know, doing this kind of thing for a while, I don't know about, heck, blimey, thirty-five years, forty years, something like that, and I've never done it like this before. And I was surprised at how fluid it felt actually, you know, it did feel that it worked, but I think, as you said, it worked on that level of palette. You had a feel for the overall kind of landscape of it but you weren't necessarily keying in to individuals which you might have been doing if you were in a room together. But that's not to say that it was not possible, it just felt a little bit more limiting, but not as limiting as I thought it would be, actually, you know. And whoever played that bloody Fleetwood Mac thing, I mean, honestly, that's just completely ridiculous, I just thought that was outrageous and stupid, but then...

Mila: It came at such a great point though, it was...

Connor: ... one of the words that we chose was division, so, you know whoever did it was obviously thinking about division, and trying to say I'm going to do what I'm going to do, and I'm going to turn it up as loud as I possibly can on this pathetic little [gestures: holding small radio] ... oh it was me [jokingly]... pathetic little speaker in order to make life difficult for everybody else. And actually funnily enough that's something that would be quite hard to do in live performance cause you'd need the amplification for it, you know, that's not going to cut it [raising small radio] in a room. But I don't know what it sounded like to you, so I think there are limitations but there are also benefits to this in a weird kind of way, although it's not the kind of way I would like to work on an ongoing basis.

Hunter: It's funny because you playing 'Go You Own Way' is like, I immediately took it as, interpreted like division; go your own way, but then also even just playing that would divide people, and be like 'what is he doing?' or 'that's class', you know, 'that's a great idea'. So I don't know.

Jayden: I had no idea what was going on at that point. I was just confused.

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Connor: Well I did, it was [inaudible + gesturing: holding up radio]... on a

telephone. Who would have thought...

Mila: It almost felt like, I have a really dear friend in Toronto who's an

improviser - wow, okay, I'm going to remember her name - Diane [gesturing:

shrug shoulders], Diane. Anyway, Diane's great and she calls Zoom the dive

bar of online music making...

Connor: What does that mean, Mila?

Mila: Zoom is like the dive bar of online music making.

Connor: What does dive bar mean, sorry?

Mila: 'Dive bar', like a terrible terrible bar that you go to that like, but everyone knows where it is and like the PA system is so ratchet but it just

works. It's like where everyone, it's where all the like, it's like where

everyone wants to go hang out and kind of see a show and just, but there's no

like pretence or anything like that, right. But honestly when you played the

Fleetwood Mac it reminded me of like showing up to one of these spaces

plugging my guitar amp in and suddenly like the local radio is playing through

my amplifier and I cant, I just have to deal with it, you know.

Connor: Or a taxi firm [jokingly].

Mila: Sorry?

Connor: Taxi firm. Taxi's, you know, like [gesturing: turning driving wheel]

those cars that you...

Mila: Yeah, I'm not sure if I understand what you mean.

Edward: Like the radios.

Mila: Yeah, sure.

Edward: I'm thinking about your original question, Dino, with regards to the text-based score and how that engaged, and how, I mean, at the NowNetArts conference I played with Jonas Braash and for his Pauline Oliveros memorial and there we did some of Pauline's sonic meditations. I, To me it seemed to very much evoke, kind of, her work, or the imagination around her work. Even if it's in a different kind of space. And I mean I wonder, cause that was also a free improvisation, like, is this the thing that your thinking about, is this kind of conceptual practice; setting up space in a way, even if it's telematically or network engaged - the kind of thing you're thinking about when you're creating your scores?

Gordon: In this sense I would have liked to have it in a real space, but obviously because of covid that's something that can't really happen right now.

Edward: Right, so I guess if you're thinking about it being in a space, the way you describe it, it's like someone physically enters that space - what does it mean to you expropriated to an online format, generally? I guess this is something that we can all discuss.

Gordon: Yeah, I'd like to hear from everyone else about that. Maybe Jacob and Joshua it would be good to hear from you guys?

Joshua: I actually really enjoyed it, if I'm perfectly honest, I thought it was really good. I have no problems, I play, I teach at music college anyway, I hear music all the time, all sorts of nonsense [jokingly] all sorts of styles. This idiom and platform for making music it actually works really well. When you look at famous bands, say, such as, Fleetwood Mac, they're doing performances on things like Facebook through platforms such as Jamulus and stuff like that. It's becoming much more tactile; easy to use. I didn't find any problems with it because, the way I look at it is even if I can't see what you

all are doing, these things that hold my specs on [gesturing: pointing to ears] they're ears, I tune in to whatever I want to do and I take Hunter's point about like, you hear things separately [gesturing to (imaginary) headphones] and you've got one thing coming in and it shocks you. For me I use that as a pick up point where I react to whatever's there and that's what I liked about the improvisation element. I liked that to be a surprise, because I think if it was focused, there was a text there and we were all playing the same thing, everybody can do that. But it's this time to have a sort of improvisational space to it, and there's only twelve notes you can play on a bass guitar anyway [jokingly] so, really, to be perfectly honest you can't get it wrong. Sorry, I did really like it, I actually enjoyed it.

Gordon: Jacob, what about you, what's your thoughts?

Jacob: I'm used to playing with the ensemble and we're used to a certain amount of conduction, also there's a lot of free improvisation, so I tend to, because it's telematic, I don't really look at people so often, it's more that I listen and try to key in on things. And sometimes I also work in movement a little bit, so there's something called 'flocking' where you go together and there's certain things where I try to key in on something and play something similar but then we were doing 'division' so it's like, 'what's the opposite of that, or something else?'. And for me it's less about looking at people so it does differ a lot from being in a performative space, you know, live, because there I am looking at people and like you said, you feel people as movement. You can tell if they are going to play, or do something, and you can react to that. And then going inside and outside the space; I've done a lot of performances, live performances, where you're playing with the space and going in, on stage and off stage, and I like the way that we used the mute and stop our videos; 'now we're off stage', so I thought that was pretty clever, whoever decided to do that, and I just tagged along [jokingly]. But yeah, so I enjoyed it, but I think I also, because of the NowNetArts Ensemble, I also was thinking about well there are limitations on Zoom versus like using another platform for the sound where you really have to think about well if we all play at once someone's going to not be heard, and luckily you're recording

everyone, but if there was an audience listening to this, they might only hear three people at once and everybody else drops out. They wouldn't be able to hear them and you can't hear yourself through Zoom, unless you open up another window. So those are other considerations and I watched, you know, if I was, the box was around me too long, I said 'oh, I better shut up, because I'm taking over the Zoom space, and I should just lay out'. Then I could watch the boxes move around [jokingly], 'okay maybe I'll play something now and see what happens', so that's a visual thing but it's not like I'm thinking about people and what they're playing, it's almost like a little game, like, 'oh I'm playing too much, shut up', and then I'll stop and then watch for a while and say, 'now I'll play a little more' and then I'll stop. So, that was my experience, I really enjoyed this, I mean, I haven't played with any of you people before, so it was interesting for me to just like walk in and I like that we had something to focus on; the word or words and that just gave us something to just imagine and play with, however we interpreted it. Which I'm glad you just left it open to interpretation.

Connor: Actually, Jacob, I agree with you, I was pleasantly surprised - it sound so patronising doesn't it, 'I was pleasantly surprised' [jokingly] - at how easy it felt to play with people I'd, well I've played with Hunter before. Hunter and I played in an improvisation group at the university, but I've never played with everyone else before, and it felt very easy and I thought this would have felt very, regardless of your score, Dino, going back to the technology, you know, I thought this could feel very stilted actually; very tricky. You know, and quite unsatisfactory, but I mean, for me it didn't feel like that at all, it felt very easy, it felt very satisfactory, it felt very enjoyable. Interesting what you said, Jacob, about the little squares, you know, your kind of yellow thing [gesturing: about the Zoom outlines], I thought, unless my square was lit up I wasn't doing anything of interest. And I realise it's not a qualitative thing, I realise it's just about volume, but I assumed my square lights up I must be doing something worth listening to. I know that sounds ridiculous and probably isn't true. So my quest was to make my square light up as much as I possibly could.

Jayden: That's probably why my green square didn't light up at all, and it still isn't [jokingly]. Mine's not working. [inaudible] saying to Jacob about being too loud [square lights up], oh it's working now [jokingly.

Connor: I could hear everything you were doing, Jayden.

Hunter: Yeah, yeah, I think your levels may be a bit quieter so especially when you're talking like.

Jayden: Yeah.

Connor: But the keyboard was perfectly audible.

Hunter: Yeah, yeah.

Jayden: I'm running everything through like an audio box, so there's wires all over the place, even though it looks quite neat from this angle [jokingly]. Cause, yeah, everyone's using sort of different methods to record what they're doing.

Connor: Good point.

Jayden: I'm all wired up, I imagine Mila is, by what I can see [jokingly].

Connor: No, he's just got a lot of wires, Jayden, he's not necessarily wired up, he's just got a lot of wires [jokingly]. He's bought all the wires in the state in which he lives, I suppose.

Jayden: I thought we had to be wired from head to toe [jokingly].

Mila: There's nowhere to get the aux cables from [jokingly].

Connor: I'm just using the microphone that's built into my MacBook Air, but I have no idea where that microphone is, it's probably up here [gesturing], I

don't know where it is. How do you know what Apple do? You used to be able to work things out, but you can't anymore. You spend a lot of money to be confused.

Gordon: So, did anyone feel, I know a couple of people said they felt satisfactory, like satisfied by the piece, is there anyone that didn't feel satisfied? Or, that satisfied? Maybe with the score, or what they were playing, or what someone else was playing, or anything?

Joshua: I liked the freedom to be honest.

Edward: Yeah...

Joshua: When you're playing... On you go, sorry.

Edward: No, no, I was just going to say that, you know, it's more about like the expectations, right? Because you're not going to approach this kind of music on the terms of say, I don't know, classical concert art music; that makes no sense, right? So, whatever the value is you have to, at least from my perspective, I always approach it in a different way from anything else, and so in that way, you know, I knew what I was doing, or I what I was getting into, so I was thinking, If I think, 'oh, is this going to be satisfactory?', well of course it is.

Connor: Sorry, Edward, could you, sorry, you're going to hate me for saying this, could you say that again, but using some different words, because I'm intrigued by what you said but I wasn't, I'm not sure if I'm quite grasping what you're saying?

Edward: Yeah, I'm saying that if we approach that music or a kind of music with the expectations that it will sound the same way, that aren't necessarily on the music's own terms, so like, what I'm explicitly saying, if I say like, I'm going to this thing and I'm expecting to play Brahms, then of course we're going to approach this concert and it's going to be like 'oh that wasn't Brahms, my expectations were a disappointment', so that's silly, right? So,

what I'm saying is that I was expecting this to be a free improvisation and for the music and the sound so I approached the sounds on those terms, and therefore, in that way, it was a satisfying experience. Does that make sense?

Connor: Thank you, I'm sorry, thanks for being so patient with me, that's really helpful, because my, I mean, to go back to Dino's original score, is that, the word is the launching point. I mean, for me, the word was the launching point. I thought the second combination worked, for me, worked better. The two words that Hunter chose, which I've now completely forgotten; division and, I don't know, what was it, conservative party, or something, I can't remember [jokingly]?

Hunter: First one was bloom, and then it was frost and division. So there was three words.

Connor: I thought that the combination of the two words worked better, and yet, the playing, or certainly my playing, only occasionally sort of, it was a bit like - oh, no I'm not going to use, it's a pathetic analogy of us taking flight, I can't possibly say that, which sounds so embarrassing; not like anything I would say [jokingly] - but the words were the launching point and then the words got forgotten, for me, and then at some point later on in the piece the words came back to me and I thought, 'oh perhaps I should be focusing on those a bit more'. But it wasn't an entirely free improvisation, but I was say, for me, most of it was.

Jayden: I guess you could say it's free from the point of you, sort of, as a group trying to mediate what words you use, cause that informs, that gives you the sort of framework and that sets the expectations, like Edward was saying. You know that, right, I'm picking a word for the purposes of making some pretty abstract music with people I may or may not have played with, with instruments I don't know what everyone's necessarily playing, then that sort of narrows what immediately what you're going to do. I mean, for me, I'm playing on a piano, there's only a limited set of other sounds, so I'm very much constrained by, you know, cause it's not an acoustic, I can't dive in to

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the strings and play with harmonics or like beat it. Unless I put the microphone right over it and just smashed it with a hammer, which would

have been a very expensive mistake [jokingly].

Connor: Entertaining.

Jayden: Yeah, entertaining, but a mistake, from a financial point of view. My

point is that, you know, I've got a very limited set of sounds so my

expectation is always going to fit into this equally-tempered-twelve-tone

scale. So the way that I approach those expectations, is probably different to

say if you had a guitar, because you can bend the pitches, you can, there's

sort of luminal space between the tonality. So, I mean, I'd like to try,

obviously not now, but in an ideal world, I'd like to try the frost/division thing

again but play guitar. Also, right at the end of the performance I realised I'm

sitting on a piano stool that is full of like weird wind instruments.

Connor: Full of what?

Jayden: Like, you know, wind instruments, you know like recorders, and

ocarinas, and stuff. Which is why you might have seem me frantically moving

about picking up random bits [gesturing: holding imaginary objects from

performance].

Gordon: I think, sorry, I think it's really interesting that there's now a few

people that have actually mentioned the words, and particularly they enjoyed

the second one a bit more because of frost and division, is that the same for

everyone, or does anyone feel like those words, they didn't have a reaction

to? Something along those lines?

Mila: Well, my response might take us away from that question, so I'll actually

come back if that's okay.

Gordon: Sure.

Edward: I actually thought that the sounds and the play in the second one was better, but I kind of like the overall shape, so like the larger form, of the first one, better. I don't know if that's just change chance, we've only played twice together, and we happened on something that made more musical sense, as a larger structure. Just an opinion.

Jayden: Frost and form, the sounds I was using, and the sort of, for lack of a better term, the harmony as non-functional as it was, but division, when I heard division I immediately thought that would be the rhythm that I'm playing in. So, in my mind, I immediately created that sort of distinction. It wasn't so much thematic for both of them, I wasn't really approaching them from that sense, I was very much approaching them from a 'what do I physically do with this?', and not 'what do I do in hopes that it will be interpreted as something frost'.

Mila: I find as well, in the, I wonder, Edward, to your point of the first one sound, I don't want to put words in your mouth, but I interpret it as more of a cohesive piece. The word bloom, my initial reaction was that a bloom doesn't last very long, like it's a transient thing, you know, maybe periodic, if we think about through the course of the year, but it doesn't last very long. So, immediately I started thinking about 'how can I make sounds that are just injected, and just maybe are between three-hundred milliseconds to at most one and a half seconds', and I was just trying to stay in that. And I noticed, I can't think about everybody's but it seemed like most of us were doing short sort of little bursts of sounds, they might have been sort of collected together in a phrase, but there was quite a bit of transient sound. So that seemed quite, we seemed fairly unified in that approach, but I don't know what other people's interpretations of the word bloom were.

Gordon: I think it would maybe be interesting to hear Jacob or Joshua on that?

Joshua: I'll let Jacob go first this time.

Jacob: I guess for me bloom was actually kind of a difficult word, so I actually, I started thinking about the word as we were starting the piece and then I just kind of dropped it, but then I guess that's kind of what blooming is. So, and for the second one, I felt more while I was playing I was thinking about those two words constantly. So I, know you, whatever that means. So, I just kind of took those words and played with them, thinking about them, so I think division was more about groups of sounds and people, I didn't take it as rhythm, but I like that you did that, Jayden. And I think that frost, I just got Frosty the Snow Man stuck in my head [jokingly], so I played that at one point. Yeah, frost, I don't know, I was just thinking about what does frost sound like and being cold or something. So that was much more, I don't know, I think the second one was almost a motive than physical, how you think of those words, and bloom was just I know more cerebral and I wasn't really sure what to do with the word so [jokingly], yeah, that was just my take on it. I didn't think that one performance was better than the other, it was just different.

Joshua: Yeah. Taking it back to, obviously, choice of words, looking at it I used it in a context of the words were like the canvas, everything that you guys done that added to it. That was the thing, so the words were not as important to me, that way, I didn't try to, I don't know, I think about it more about the interaction with the players in between, so I really enjoyed that more. Listening to ideas bouncing off each other, but like all of us, we have approaches where common perception, like what do you do with frost, 'do you want to hear bells or do you want to hear a bit of a christmasy sort of thing?'. It's creates an imagery and your interpretation of that, and everyone's going to be completely different. That's the one thing I really liked, everybody played lots of different things; what these words meant to them. And as it progress, even into the second one, we seemed to get our footing; where we were, the words took on more meaning, and we actually just worked with that, I thought. I'll go back to my first thing I really, yeah I actually enjoyed it. It was a good experience of actually playing with people again, and actually hearing your interpretation of these words which was really nice.

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Gordon: I think it's interesting, why, Hunter potentially, why you had these

words, and you wanted to use these words specifically, and maybe why

everyone else kind of latched on to those ideas?

Hunter: The words I chose, I guess were, quite open ended, maybe apart from

frost is already a bit more, it's already a kind of thing, but bloom is sort of

like an action, you know? So, I don't know, it's something that could be

interpreted in a number of different ways, because if it's too specific it might

be quite limiting if you just said, you know, 'notepad'. Something quite, kind

of [gesturing: shrug].

Gordon: Why is that?

Hunter: Why is what?

Gordon: Why do you think that the word notepad would be less open ended?

Hunter: I don't know, it's a quite, kind of, fixed object. Only because I'm

looking at one right now. I thought about, like, words that I could actually

interpret myself and like play, so for something a bit more kind of abstract, in

the sense of performability maybe, that might have been a bit more stuck,

but I was able to think of something like frost much easier.

Jayden: I would say that notepad is actually more open than something like

bloom.

Hunter: Is that right?

Jayden: At least for me, because, well, mostly because of the way that I think

of a notepad as yeah, it is the same object, it's sort of the same function no

matter what size it is, but everyone uses it for a different thing. Some people

do mathematical problems on it, other people doodle, other people write

songs/lyrics, other people make them into paper airplanes. It's the same

object, yeah, but it's the number of things you can do with the same material is quite broad, and then from there it kind of branches out. Every single action that you can imagine with the different use of the paper can be used for something else, or at least that the way I'd imagine in.

Hunter: Alright, I don't know, maybe next time I could choose 'A Bug's Life' or something [jokingly].

Jayden: Yeah, even that's like...

Connor: No, I wouldn't have [jokingly].

Hunter: Okay [jokingly].

Jayden: Every extrapolation of a word is incredibly tenuous, so like, you can make something out of nothing, or you can make nothing out of something.

Hunter: Yeah, I guess you can really interpret any word then, I suppose. So maybe a good test: pick a word and improvise round it, but the word is something that seems simple like an everyday object, and then you kind of, you know, you just kind of broadened it out there, so, yeah that's a good test as well.

Connor: Could I just? This reminds me of, when you talk about interpretation, or interpreting a word, whatever it might be, it reminds me of - this is going to sound pretentious, Dino, but I'm sure you wont mind - It reminds me of Luciano Berio Sequenza V for Trombone. Which is something you may or not be familiar with [jokingly]. And there's a performance of the fifth sequenza by an improvising trombonist, English improvising trombonist, called Paul Rutherford. He was asked to perform this as part of a concert in Italy, I forget when, 1970s probably, and he was an unreconstructed communist in the time when communism was even less popular than it is now. And his approach to performing Berio's sequenza was to play the score for a little bit, i.e. not very much, and then just improvise as a challenge to the audience, all of whom

thought it was absolutely an amazing interpretation of this very challenging score. And, without, I don't want to draw parallel in the sense of being disparaging, I mean, he was trying to make some kind of obscure political point, was our Paul, nice chap but nevertheless ideologically deluded. Nevertheless, in a way, I think, to me, this wasn't about interpreting a word, it was about using the word as a way of beginning; it was a beginning to something else. And I thought that particularly in the first piece, and so, to be honest with you, once we'd got that word and we'd started I was playing with everybody else, I wasn't playing your score, if you see what I mean? But I don't necessarily think of that as a diminution of your score, or a failure of you as the composer, I think in a sense, to me, there's an inevitability about that, in the same way that you can take say Treatise by Cornelius Cardew, and you can play one page of Treatise and it could last an hour or it could last thirty seconds, and neither of those is to fail in it's performance - it's to work through it. Sorry, I don't know how much sense that makes. Perhaps if you play it back, say, at half speed it might be more entertaining.

Jayden: I'd say that's the main function of the score. It's to sort, pass the agency from the composer almost entirely to the performers. It's to say, right, 'here's a framework for making some music, and it's very broad and you know, everyone's going to go off and do their own thing', but then like, you know, it's, you have two sets of agencies; you have the agency of each individual then you have the agency of the group...

Connor: The group, yeah.

Jayden: reacting to each other. That might actually, I feel like, that this if we were all in the same room right now the way that group agency manifests would be completely different. Because the way that it's being facilitated is completely different. Even though, it's like, you can pretty much use the same equipment, everyone can be wearing headphones, for instance, so more like the zoom thing in terms of being able to hear everything, you'd have someone to mix it, the way it's sort of done, because of the way you interact completely changes it. So I'd say, rather than it being, sort of, an incidental

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thing that happens, you know, as a consequence of the score it's, at least

from the way I read it, it's purposely doing that. It's purposely saying, right,

'here's a very narrow set of instructions, but narrow in the sense that they're

slight, and they're not trying to restrict what the performers do', so then that

is the whole point of the score.

Connor: Yeah, in a way that says, some of Christian Wolff's text scores are

slight, but yet they are infinitely generative; of music making.

Jayden: Yeah.

Edward: I'm curious if we went back and we listened to the recordings we

could construct a revisionist history of sorts, but we don't want to do that

[jokingly]. The reason why I ask this is because...

Connor: There's enough revisionism in the world already.

Edward: Yeah of course.

Connor: Bloody statues of people who actually did important things in their

lives, so you know, sorry, carry on.

Edward: So, the, yeah, okay.

Connor: Sorry, please, carry on. It's interesting.

Edward: Yeah, no no, the thing that I'm thinking of is, you know, we talked

about setting up a framing and then it starting from there. Jayden, I think you

were commenting on that, and Connor you also made the comment that, like,

we started and the score kind of bled away and you were, at least in the first

one if I remember correctly, you were focussing on what you were hearing,

you were reacting to the sounds that were there?

Connor: [gesture: nodding]

Edward: You know, what like, if we were to construct the revisionist history and tear down statues and put something else up, who was the first sound, was it purely the function of the first sound's instrument that then became the impetus for the generation? Or, I think that there's some, obviously the ensemble and we bring our own choices to it, or the ensemble has a set of instruments and they have particular sounds they can make, and those impact what then goes forward. It's an interesting thing, there's a lot of things that go into this, and of course I think the text certainly has an impact on the way people are thinking at the start. It's interesting.

Connor: I think that's a really good point, Edward. I remember going to Huddersfield Contemporary Music Festival - Huddersfield is a place in West Yorkshire by the way, sorry, you knew that already, but not everybody knows this [jokingly]. There was a performance by an improvising group call AMN who had been playing since the mid-sixties, and this is in the mid-eighties, and they did two things they performed a section of Treatise by Cornelius Cardew and then after they'd played it and we all clapped politely, and say 'wow, very very nice' - we couldn't get too excited cause they were serious so we were serious, and it was a contemporary music festival, you're not supposed to jump up and down and whoop and whistle and take pictures of them on your telephone, or what-have-you [jokingly]. And, one of the members of the audience, I can't remember how this happened, one of them said, 'I've heard you before as improvisors, but I've never heard you play a graphic score before, can you talk to us about how different it is to play a few pages from a graphic score and to improvise freely?' and they said, one of them said, 'well, no, we can't, but I'll tell you what we can do, we can improvise freely for a while'. So they improved freely for ten minutes or so, as sort of an encore, and then the drummer, Eddie Prévost, said to the chap, who had asked the question, 'so there you go, so how was that?'. And the man who asked the question said, 'oh, I see what you're doing, so when you play a score, when you improvise, it's just a bit louder isn't it?' [jokingly], and I thought that was a really good observation, you know. 'Well, we're

interpreting a graphic score and we're sort of very careful, but when we don't have the score we can just make a bit more noise'.

Gordon: I think that maybe brings up, into question, experience, of things like this, and from what I'm assuming is that some people in this group actually have a lot of experience with, maybe not just text-based score, but potentially more generative art/contemporary music. Is there anyone here that hasn't done very much of this that wants to give their experience, first hand, or anyone that is very experience that would like to? I haven't heard much from Mila, or Jacob, or Joshua, or Hunter.

Mila: Well, I do have a tonne of experience with telematic music. I've been doing it for about nine years and I also produce my own show monthly, a Zoom concert called Exit Points, that has a very specific format of ensembles that plays a set, then another ensemble plays a set, and then all of the ensembles get together in the last set and we are also joined by members of the audience that are watching on Twitch or Facebook and wanted to play with us. So then we just very rapidly, in the chat, that everyone can see at once, rearrange ourselves into new ensembles for a series of five minute pieces for the rest of the hour. And, that sort of last bit is me, like, since the start of the pandemic, I started really trying to focus on trying to introduce, introduce musicians to playing online, but also in that last hour it's also trying to demystify improvisation, as well as demystifying playing online, so there tends to be some people who show up who have never improvised before, who can play an instrument who have never improvised before but liked what they were hearing and wanted to join, so. Again, kind of getting back to that term dive-bar I guess there's still like sort of an openness, compared with using something like Jack Trip where you have to be, not only a musician, but also an engineer, and suddenly a network technician, oh, and you need to know how to use the command line [jokingly]. You know, and if any of these words don't sound familiar to you, it's really great that we got to show up here and play on Zoom together because we really don't have to focus on how to get the tech to work beyond 'how do you turn on original sound?', right? Or you know, making your own, taking care of your own sort of instrument. So, I've

actually found, given though there are certainly compromises made with Zoom, and you know for the first six months I could get stereo audio to work, which was driving me crazy [jokingly]. But, you know, and of course there's the audio being mixed in the cloud versus being able to mix locally, yeah, generally I find that our current paradigm of every... most people being self isolated and having to play together online that the fact that Zoom is also a device that most people use in their work, most people already know about it, so it's, in my experience introducing musicians to play online, the fact that I don't have to give them like a two hour tutorial on how to use the command line or... so there's that. There's also the fact that when your not preoccupied with how your tech is running you can focus on playing, you can kind of focus on hanging out and playing, it's like having a sound person there for you, it's experience that can let you do that work. It's why a manger is important so you don't have to worry about administrative tasks, you can just focus on being a musician. Yeah, I've grown quite fond of the Zoom interface, for all of those reasons.

Connor: I like the idea, Mila, that those of us who work in academia don't have to focus on administrative tasks cause we have a manager; we have a manager so they can tell us how many administrative tasks we do have to focus on [jokingly] - that's a tangent.

Mila: I meant music talent manager, but touché [jokingly].

Connor: I don't have any musical talent so I don't need a manager for that [jokingly]. But actually, I think what you're saying is interesting because I don't have any interest at all in learning the technology. If I can't just switch it on, to me it's like an amplifier, you know, if, I mean, the improvisation group that Hunter and I play with I usually use guitar amplification and I cannot understand how a Marshal amplifier works. If I switch it on and it doesn't work straight away I have no idea what to do, right, seriously. So to me this technology, if it doesn't work when I switch it on I just forget it because even that effort interferes with the communication. Which is why today it seems really straight forward. I don't know what it sounds like

quality-wise, but in terms of the interaction, what I got out of playing with everyone in this virtual room today, regardless of what the output sounds like, in terms of audio fidelity, was very satisfying. I can't be doing with trying to learn, I actually don't even know what a command line is, Mila, and I hope I never will [jokingly].

Mila: Fair enough.

Connor: But as long as it works and you can just press a button that switches

itself on, great.

Gordon: Does anyone else feel that way?

Hunter: A little bit, yeah. I think that we get a bit frustrated if, you know, like, I've done like one or two Zoom gigs before over Skype or, you know, live stream and all that. And just trying to get everything hooked up if I'm using an electronic set up, it's a nightmare, but just being able to, you know, get a kind of, I've got a second hand guitar, I've got a classical guitar, and just being able to, kind of, like, use my hands on that straight away without using a mic it's like [gesture: shrug] instant. That's kind of what I like about it as well, so it depends really, because sometimes you might be limited by just the one thing, like that, not being able to kind of do any electronic stuff with it but it is pretty instant to give it it's due.

Gordon: Joshua, you seemed to agree with that there for a second {Joshua nodded}.

Joshua: Aye, as a medium this is great for such a context. However, for me, personally - I don't know how other people feel - it is a social thing; playing with other people, reacting to other's sounds, rhythms, any of these sort of things and I can totally agree with people when they say 'problems with technology'. When I'm gigging I use a Helix, stuff like that; in-ear monitors and stuff, I've no idea what it does, I just know it's an amplifier on the floor, I can't hear it unless I've got my in-ears on. I'm possibly the stupidest person in the world cause I don't know how to plug in to a tuner, when I first got it I

was like that 'what do you do?' [gesturing: holding an imaginary tuner + jokingly]. Somebody had to tell me, 'plug in to 'in", because for me music was always just like [gesturing: playing imaginary bass], like Connor was mentioning if the amp doesn't work, doesn't go on right away... now there seems like so many processes in front of you actually getting where you want to be, to actually arrive at the sound, so, I mean, I do like simplicity, but in the same regard today was very easy. The use of Zoom, I think that's a facilitation of obviously better technology than what we had; you couldn't run this, say, four, five years ago, probably, without massive technical issues. You know, connectivity, these sort of things, so, we're living in a networked environment, so it makes this much easier. So, yeah, I do totally agree with the problems with the technological interface; we fear change, so Connor I totally agree with where you're coming from. I would love to know how to do all of this, but...

Connor: I wouldn't [jokingly].

Joshua:... It would take away from... the music is more important than the process of actually getting to it, for me.

Connor: It's the same thing about, you know, I now have the capacity to record myself five-zillion times and re-mix everything. Well, why would I want to be able to do that.

Jayden: I feel personally attacked by that [jokingly].

Connor: What?

Jayden: I feel personally attacked by that statement [jokingly]. That is how I've made all of the music I've made this year.

Connor: Oh, alright, sorry.

Jayden: It's fine. Me in a room, yeah, about twenty times.

Connor: Yeah, since this bloody war started this is the first, apart from practicing, this is the first performance I've done since, whenever it was, March the 21st, when I moved from my flat in Edinburgh to my expansive estate in Nottingham [jokingly]. Where if one of our wings happens to be under-heated we can move to one of the many cottages that are prettily scattered among the many acres that we own [jokingly]. But you know, before that... that's the other thing, Dino, I know this is not the point of your work but in a sense because you've got to take into account online connectivity, because of the bloody war we're going through at the moment, I think it is important to think about how people relate to each other, especially during spontaneous improvisations, spontaneous composition, whatever you want to call it, you know. I've not done anything since March, and this has been a very, for me, it's been a very satisfying however long it was. Actually I've forgotten how long it was now, was it half an hour, forty minutes, perhaps we've been here for weeks, I've lost track of time completely [jokingly], but it's been satisfying. That surprised me actually; surprised me.

Gordon: Jacob, Edward? Haven't really heard much from you guys.

Jacob: I think for me, when the pandemic started, I was thinking about how to play with other people and I hooked up with a friend of mine who just like, he likes silly toys like I do, so we were just having fun. But as soon as we started trying to record ourselves and listen back that's when the fun went out of it. So I think it's more like, for me, using Zoom and if you don't have to think about if anybody else is listening to you and you're just enjoying playing together and you're not worrying about if you're getting a good recording or something then the anxiety is gone. But in my church gigs for example I had to figure out how to make the piano sound good so people could hear it and it wasn't like cutting out every five seconds through Zoom, and that was just, I don't know. Every time I have to do anything where there's going to be an audience I feel this whole level of anxiety that I didn't feel playing live, because when I went and played live it's like the church gig, I don't have to sing or do anything like that, and people aren't like staring me right in the

face. But on Zoom you're like agh [jokingly], I'm here and I have to fucking sing the songs for them because, you know, some of them are on telephone so they can't read the words, so I have to sing, and I suck at singing, so.

Connor: Jacob, Jacob, you can't say words like that in church [jokingly].

Jacob: Why not [jokingly]?

Connor: Well, come on, unless you have a very strange church [jokingly].

Jacob: [laughing] anyways, and then the NowNetArts Ensemble I really enjoy playing with them, but there's a lot of anxiety, like, every time it's like, 'oh no, we're going to have a rehearsal and we have to see if Jack Trip 1.3.1 is going to work and blah blah blah [jokingly], and how long's it going to take for everyone, and is there noise, who's making noise in the mix'. It's like an hour of figuring out, getting the sound levels right and then you perform, and you know, it's fun once you're performing but building up to it, it seems a lot more, I don't know, the intensity and anxiety, to me, I mean, it's also because of the pandemic obviously, like, you can't touch anybody or anything in person, and the anxiety level is just so high, to me. So something like this, where actually I don't care what it sounds like, I mean, you're going to get a recording and hopefully you can do something with it, but just playing with you guys was fun and as long as I don't have to worry about what it sounds like later then the anxiety is removed to a great extent.

Connor: Good point, that's a good point actually. Dino, are we moving too far away from your score or your compositional intent?

Gordon: No, no, this is all interesting. I'm just astounded that everyone has all of these opinions and these thoughts surrounding it. It just want to hear from everyone, pretty much.

Edward: So I guess performing over the internet, kind of became a necessity, it seemed like everybody has mentioned this in some way or another. I'm a

composer as my background, I'm doing my PhD in that, and I'm also a member of a kind of a technologically focused experimental music ensemble, and we had been performing in person back before the pandemic and before I moved here to Switzerland, but then when we started, when the pandemic started we started kind of writing works because everybody was forced to work in an online format. I don't think that, like, to kind of Jacob's experience, I kind of, I feel like my experience is the same I'm always terrified when a piece of mine is performed, and when I was a professional violist I was always termed when I would have to perform. Where there would be like a new work or some sort of solo repertoire. So, to me, this is not very different in my experience, putting on a concert online, and I think that the technological aspect, to me, is that it's kind of like doing the preparatory work, the practice, that I would put into anything else. So, if I have to warm up for an hour the day before well that's the same as me like setting up Max and making sure that the interface is easy to work with and that, unfortunately this was the case today, that my digital routing goes out to the ensemble correctly which didn't happen, and that's because just before I came on I reinstalled Zoom and it somehow, my internal digital router got uninstalled or disappeared. So in the interim between the two performances I went and reinstalled it and then it worked fine, but I guess that I see that as part of the creative practice, so it's just necessary, and so yeah, as much as learning to play the instrument is; building the instrument is also part of it. Something else, it's a productive process that goes into the creation of music anyways, I do it rather than an instrument builder, I think is, I guess it's important for a lot of reason, or interesting in a lot of reasons, I guess in the overall scheme of things that thing is still happening somewhere.

Gordon: I think it's definitely interesting how you described it as building an instrument and actually brings something to mind that during the performances that, I didn't know what anyone played bar Joshua, and most people came into it just with their own instruments and even some people switched between instruments during and between gigs, or between the performances of both pieces. I think the first person that I noticed actually doing it was Jacob and I saw a few other people doing it, do you think that

having this agency, or having this ability to do that in your own time, or your own way, do you think that was a good thing?

Jacob: [gesture: thumbs up]

Connor: I mean, for me, I would have done it anyway. I mean, the only reason I play steel string acoustic today and some samples on, what is is, Garage Band - some American thing that somebody's invented [jokingly] - and Fleetwood Mac is because I would do that anyway, and the only reason I didn't play my synthesiser or my other annoying instruments is that they're in the flat in a different county, because I'm not allowed to travel there, because the dictatorial government of Scotland has prevented me from crossing the border. So in a way, I mean I would do that anyway, so in terms of agency that to me is just, to me, it's like moving from a soprano to an alto saxophone ,or a clarinet, it's just that's the instruments I use. Sorry, I shouldn't have said the thing about Garage Band being American and [inaudible]. We have to do it, see, we're British, we have to make that point, you know [jokingly], it's part of our lives really.

Edward: Don't hate on garage bands...

Connor: We hate it, but we rely on it.

Edward: Lots of great bands that started out as garage bands [jokingly].

Mila: [gesturing: thumbs up].

Edward: Even coming from the U.K.

Connor: What, what? Say that again, Edward?

Edward: Even coming from the U.K.

Connor: What, like what?

Edward: Come on, you don't think that like the Mods and the Punks were garage bands, just in a different context [jokingly].

Connor: Like the Crash were a garage band because they has a song called 'We're a Garage Band and We Come from Garage Land', and they didn't, they didn't [jokingly]! You know, they were just as privileged as everyone else, they pretend. It's like Bob Dylan, they all pretend. It's all a myth of authenticity. There's not a problem with that because ultimately like Bruce Springsteen and Bob Dylan and all those people, they're entertainers and clearly they've got to have a persona in order to entertain us in a particular way, but they didn't live in garages and they didn't rehearse in garages.

Jayden: I'd like to say, it would have been nice to have a garage [jokingly].

Connor: You know what, Jayden, we have so many garages here, you'd be welcome to have one of our garages if we could move it to you [jokingly]. We've got stables, we've got garages, we've got cottages, we've got, god knows grouse mowers, and this is just in our back garden.

Mila: Can I just jump in for one second? Just to ask a quick question to, maybe everybody, about something that I noticed in the score that I didn't do and felt like really self conscious about at the beginning of the first piece, not at all in the second piece, but in the first piece I felt it: there's a part in the score that there's like a little paragraph, or sentence, that says, 'if an individual does not experience an initial reaction they must not participate,' but then, 'initially at least', and then it says 'they may choose to leave the performance space'. What's missing from this, at least as far as I could see, or maybe it was meant to be ambiguous, which is cool, is that there's nothing in there that says whether I can join back in, you know. I can mute myself or I can turn my screen off which is what I did, or my camera off, but to me that seems like well, 'if I don't have a reaction to the word then I have to leave the stage and then I can't come back, and so I better have a reaction to the word', and so, there's two things about that. One, it is kind of like a guide rail in the sense of like, 'hey, really stay in this until you figure out what to do and then contribute', as opposed to maybe kind of being off to the side or just starting to play without really thinking what the prompt is. But yeah, I sort of wondered if anyone else thought about that or had any sort of...

Jacob: Well, there seemed to be a way back in, so if you didn't actually quote 'leave' the performance space you could just not react, like say, bloom and you were like, 'I don't know what to do', then you could not leave the space, just sit there, and then there's a line that says, 'if an individual remains within the performance space, they may become convinced by another's reaction to the word(s) and may join that individual in their performance'. So that seems like a way back in, you could say, 'okay, I don't feel anything right now, but oh wait, what is Jayden doing, oh, I think I, yeah, alright, I'm going to come in now'.

Jayden: So...

Connor: I think for me, Mila, I think you've put your finger on it when you emphasised the word 'must', that was the word that I felt a little uncomfortable about, 'if we do not experience and initial reaction we must not participate', not, 'you might choose not to, hey, have a think about if for a while'.

Jayden: So I interpreted that as...

Connor: That's the only absolute direction in the score.

Jayden: So, the only absolute direction is that, well, the bits that say 'must', 'you must do this', and the bit that says 'and', that is, I think is optional because it doesn't, it says may choose, but you don't have to. You don't have to leave the performance space, and even if you did there's nothing explicitly barring you from returning, because it's not defined what that actually means. So that's sort of interruptive, and everyone has a different interpretation of it and you don't agree it before the performance then it's just part of the score. If it was intended to be explicit and say, 'you have to leave the performance space and you can never return', it could do with, well, one it could maybe do with the Oxford comma, it's always useful. So in the bit that says...

Connor: Where was that, Jayden?

Study Transcripts Jacob: [laughing].

Jayden: So, right, so the first bit that says...

Connor: Sorry, Jacob, but this is crucial stuff. Carry on, Jayden.

Jayden:... 'if an individual did not experience an initial reaction they must not participate initially at least', comma, there, I think.

Connor: Ooh, I wouldn't, no I wouldn't.

Jayden: 'and make choose to leave the performance space'. It doesn't change its meaning, you know, semantically.

Connor: Oh, come on, we're almost getting transatlantic here.

Jayden: So, it doesn't make a difference in meaning, but in terms of the way it's read, or interpreted, it's likely going to make it a little bit clearer; a little bit less ambiguous. Also, if you want to be more explicit, you say, you would, 'define at the start', or after the first time you said that, 'that leaving the performance space does not mean abandoning the performance completely'.

Connor: I would go for either a semi-colon or, my preference would be a full stop and a new sentence. Well you know what, something that strikes me actually, Jayden - sorry this is not -, is that almost regardless of anything we're saying today, Dino is doing this for a PhD and I think in the last two hours we've given Dino - let's pretend he's not here right now, right, he's not listening to this - I think we've given him so much valuable material, for his thesis, haven't we? Almost to the extent that when he walks across the stage to get his PhD I think we should be with him, holding his train, you know [jokingly]? Or in his garage, Edward, wherever he happens to be, you know.

Gordon: I guess that's fine, you guys can come if you want [jokingly].

Connor: It will probably be online anyway, It'll probably be through Zoom, so we can accompany you musically as you stride across the stage [jokingly].

Jayden: So, were the bits that say, 'and may choose to leave the performance space', is that deliberately ambiguous?

Gordon: Yes.

Jayden: Okay, and you're not just saying that [jokingly]?

Gordon: I mean, if you potentially look up the title of the piece L'appel Du Vide, it's actually derived from a concept called call of the void, and it's actually quite a dark concept and I would maybe implore everyone to maybe have a look at that. But fundamentally it's about the innate feeling of when you're potentially walking over a bridge or on a side walk and you see a bus coming and your mind goes, 'I could jump infant of that', you know, just that little instance, so that's why I wanted to have it as an ambiguous thing, 'you may leave the performance space', rather than saying, 'you must leave', because I wanted everyone to have the agency to do what they wanted to do.

Jayden: Yeah that makes sense, I think it works, I think it's better for that actually otherwise it would read as a rule set.

Connor: Gordon, can I just make two quick points, I know, I'm sorry I'm talking a lot tonight and you're probably already fed up of me, but, I do this for a living, so. I think L'appel only has one 'L' on the end of it, I know that's pedantic, but it's true. The other thing is you're quite right, L'appel Du Vide is a very, you say dark, yeah, it's quite a scary prospect, it's about making a rash decision and throwing oneself into an unknown situation, which is potentially personally damaging. I just wonder to what extent that is intended as a feeling for those, for the participants in the music, because, do you know, again I'm not trying to, to me, this didn't feel like an example of L'appel Du Vide. This felt like an opportunity for creativity.

Gordon: For me, as a composer, that was potentially what my intention was, but the whole point is that none of this is really my choice, none of this is up to me. I'm relinquishing agency for the most part and giving it to you guys.

Connor: So it's your L'appel Du Vide, rather than notre L'appel Du Vide?

Gordon: It's your L'appel Du vide. That's the point.

Connor: No, it's not, it sounds like it's yours rather than ours. Cause, I haven't had any Du Vide at all, but it sounds like by your relinquishment of the process that it's your leap into the void. I know L'appel's not leap that would be saut or something, wouldn't it, or something like that?

Jayden: What if it's both?

Connor: No, that's too much of a compromise, Jayden.

Jayden: No, but it's both, not simultaneously, it's one because of the other. It's his, in sort of, it is possibly after ours.

Connor: Or before.

Jayden: Or both.

Connor: No, it can't be both...

Jayden: No, it can.

Connor: You've got three states now.

Jayden: But it can, because, one, quantum mechanics [jokingly].

Connor: Oh, come on.

Gordon: Okay, guys, I think we might have wandered a wee bit off topic. Is there anything else anyone wants to say that they think is completely pertinent to say before we finish off, because I don't want to keep anyone too late; I just noticed the time, I'm sorry. [pause]. Anyone? No, great. Well...

Joshua: Thank you for the opportunity, it was really good, very nice meeting you all.

Hunter: Has anyone got a, maybe we can do this through email or whatever, but we could do this through here, if people, like, I don't know, have anything released we could listen to or anything they'd kind of like to plug; artist pages, whatever you've been up to.

Gordon: What I'll do is I'll make an email group and get everyone in touch with everyone else, just we can have a chat if we want. Can I just remind everyone to send over their recordings that would be absolutely perfect of you.

Connor: How does that work? Do I press a key or what do I do?

Hunter: Did you record in parallel to what you're saying in Zoom, for instance I've got a wee sort of mic here when I was playing the guitar.

Connor: I've got a recorder in the back of the room but I don't know what that would have picked up.

Gordon: That's okay. I'll figure something out, but yeah, if anyone does have anything just send it over and that would be perfect. Great.

Jayden: Quick question about that, so, I've got the tracks for microphone and for the piano, do you want them bounced as one track or as separate stems?

Gordon: Separate stems would be great. Yeah. Great. Thank you so much everyone for participating.

Connor: I've just found that there's a button here that if you press it it says, 'record', and 'please as the host to give you permission to record'...

Hunter: Yeah, Dino's been recording the meeting, but not your individual part.

Connor: I haven't been recording anything.

Gordon: That's okay, don't worry about it.

Connor: I'll tell you what Dino, I'll just play mine back, I'll just do mine again, and if you send me your post address I'll send you a [inaudible] with it on it [jokingly].

Hunter: [gesturing: conducting hand movement] An a one, two, three [jokingly].

Connor: I can do it... [picking up guitar jokingly].

Gordon: It's okay don't worry about it [jokingly]. But yeah, thank you everyone for coming.

[all waving]

Mila: I'm going to have to go. Bye, nice to meet you all. Hope to see you all again soon, thanks Dino.

Hunter: Nice to meet you all.

Some: [inaudible farewells].

Connor: It's been good, Dino, thank you.

Jayden: Cheers

Gordon: See you later, man.

Jayden: See you soon.

Study Transcripts

3. MusicBox Group Data

1. MusicBox Focus Group

[Pre-installation - 0:00]

Gordon: There we go. Right, so, I think both of you have sent in your ethics

forms, signed as well? I think I've got them, and that pretty much explains

what's away to happen. But just to kind of re-cap: If you don't want to take

part, you can just withdraw at any point, I'm not going to stop you. You don't

have to answer the questions if you don't want to, and you're well within your

right to do so. Yeah, so let's just go for it! Have you get any questions just

before we start, about the programme itself, how it works, or how this is

going to work at all?

Hunter: I don't think so, it looks pretty self explanatory with the instructions.

So, it's network based, can we all see the same things that happen to it?

Gordon: Yeah

Hunter: Alright. Cool.

Maya: So, I have two windows. One that's got the cubes, and one that's grey. I

assume that's what you're intending?

Gordon: Sorry, can you say that again? You cut out a little bit. You've got the

two windows?

Maya: I've got two windows. I mean, I have the main max patch window, but

then I have two smaller windows.

Gordon: Can you see the cubes though?

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Maya: Yeah.

Gordon: Okay, that's the main instrument we'll be using.

Maya: The one that's the same size and all grey?

Gordon: Yeah, that's the main part that's actually networked. So whatever

you do Hunter will be able to see and vice versa. Sure, you said that you were

working on the max patch as well? You did a little bit?

Maya: I decided not to go with that concept, so I'm not going to tinker with

that [jokingly].

Gordon: We can talk about that afterwards [jokingly].

Maya: I didn't want it to crash in the middle, that would be bad form.

Gordon: Right, so, yeah I guess let's just maybe go for it. See how it fairs? I'll

get everyone to mute themselves while the recording is happening - we can

maybe just play for fifteen minutes.

Maya: I'm getting a green 'nodescript, nodescript, not running, can't handle

message "cubesend", message' in the console. Is that anything to care about?

Gordon: Would you be able to quickly screenshare? That would work, and I can

maybe have a look.

Maya: Oh, you've disabled it, you'll need to let me in.

Gordon: Oh, sorry.

Maya: No worries.

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Gordon: I think that should work.

Maya: Okay, here I come. Which one am I on, this one probably. So you see my little 'greenies', let me get Max on top. So every time I highlight one, you see the little messages on the left side of the console?

Gordon: I can't your screen, sorry.

Maya: Oh, what do you see?

Gordon: I just see your faces [jokingly].

Hunter: Yeah, I'm not seeing anything either.

Maya: That's interesting. Oh, there you go.

Gordon: That's it. Hunter: Oh, yeah.

Maya: User error - forgot to hit the share button. [showing message on screen]. There's the message.

Gordon: Can you drag over the actual max patch please, so I can have a look at it?

Maya: Yeah. I have two of these, hold on a minute.

Gordon: Ahh, okay, that's the problem. If you want to close Max down and reopen the patch and that should help.

Maya: That's what I did, and I think what has happened is I was... I'm going to close one of the patches. I'm going to close them both before shutting down Max.

Study Transcripts

Gordon: Sure.

Maya: Cause I bet, I was goofing around with them. Let me quit Max here real

quick.

Gordon: Sorry, I've got someone else wanting to join.

Maya: Oh, and I'll get out of the share.

Gordon: On the actual Max patch if it says, at the very top left, it should say

you're installing. When you click on that, you should get a little message, and

the green network should say connected as well.

Maya: Alright, I'm just going to launch from the patch.

Gordon: sure.

Maya: Max, yeah, 'first time opening'. I'll re-click that. Okay, 'status

completed'. I was connected as I came in. I didn't get that message. Well, I

got it but... [clicks cube].

Gordon: There we go!

Maya: ... Yeah, and I'm not getting those messages anymore. I think that was

what was going on. Okay, sorry about that. The trouble with tinkering

[jokingly].

[short silence - Gordon typing to Scott]

Hunter: So, see when we're moving in and out with the camera, is that for our

point of view, or is that for everyone as well?

Gordon: The camera movement, that's just for you.

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Hunter: So, it's just like, the controls are just the cubes themselves?

Gordon: [nodding].

Hunter: Alright, cool.

Gordon: So, Hunter and Maya, are you seeing what's happening on the screen

just now? Are things changing for you both?

Hunter: I'm seeing a cube that's changed colour and a pitch/tone.

Gordon: Right, cool. I'm just going to wait and see what's happening with S. I

mean, feel free to just go for it, I guess, if you'd like.

Maya: I'm not really seeing much of what Hunter is doing?

Hunter: I'm not really touching much at the moment.

Maya: Oh, there you go, now it's moving. So, it's only one window that we

look at.

Gordon: Yeah. Just make sure to mute yourself when you're playing around

with things.

Hunter: Okay, will do.

[Installation - 7:54]

{communication with Scott}

[End of installation - 26:02 - 'Intermission' start]

Gordon: Hey everyone, can I get everyone to close Max down and then we can

maybe have a quick conversation. Looks like the meeting is going to be force-

ably ending in 10 minutes, but we could always just jump back into the call, if that works - I'll send everyone another meeting, cause, you know, technology [jokingly].

Maya: I have one that doesn't quit if you want?

Gordon: Yeah, sure. Whatever works.

Maya: We'll do what we need to do.

Gordon: Do you want to do that just now so we can actually focus on talking instead of stopping and starting.

Maya: Sure, just wait a minute, let me make sure that I know the password of it. The name of it's easy. Oh, yeah all of it's easy.

Gordon: Actually, it might be easier for me to do it, cause I need to screen record.

Maya: Ah, there's that.

Gordon: Okay, I'll just set up another meeting and send it to you guys.

Maya: Can't you just re-open it?

Gordon: Can you?

Maya: Yeah. Just re-open it after it closes. It's just annoying you to make you pay. I'm all about that kind of thing.

[end of intermission - 27:40 - focus group start]

Gordon: Okay, let's just jump right into it, I guess, what was your thoughts?

Hunter: I thought it was very cool and fun. I could have done that for hours. Really nice to have kind of like, make nice music together. That's my initial thoughts anyway - I liked it.

Maya: I liked the gizmo where - did you change some things during the course of it, or did I just discover things?

Gordon: Like what exactly?

Maya: Well, right at the end, I grabbed onto this little box and I got panning, I got motion, you know, in the sound field. I hadn't noticed that before. So I wasn't sure if Id just hit the right box and got sound field, or whether you were tinkering with it as we went - I suppose that you as the researcher you can't answer that question, anyway I thought that was pretty neat. I found it a really interesting puzzler, whether to just jam away on one device or try and cover the waterfront, and it would have been nice to have more people in the group, I think. I felt like I could have huddled over my two or three little thingies, and got good with them, I could have contributed more to the music. So, I was having fun with that. The other thing I thought was an interesting dimension was the tonal versus rhythmic stuff, you know, doing the cluster tones, stuff like that, the harmonics. Another thing I thought was cool was that you had a couple of really ugly sounds in there, and after a while we all agreed and didn't play those any more. We started hammering away and got pretty tired of those [expressing: bju] sounds. Those were pretty bad.

Hunter: Yeah, it's like we found that harmony and chords and stuff then just stuck to those, or something. Just kind of like drones.

Maya: The other thing that was cool, was that we got, we started making a story ark after a while. Like we got really busy, and I had to get all of them turned on, so I started frantically clicking things so I could get them all turned on.

Hunter: Yeah, I was wondering what that was, cause at one point they were all just flashing.

Maya: See that's where I was - I re-wrote the patch a little bit, and in the re-wrote version I had one button that would just [gesture: snaps fingers] turn them all on, then [gesture: snaps fingers] turn them all off. I figured that was a little intense, but the time before the session was fun because I sat and tinkered with it, sort of learned a little how to play it, stuff like that.

Hunter: I'm nowhere near good enough with Max to start re-writing patches. I'd just destroy everything.

Maya: I wasn't doing anything real complicated, but Max is great for that kind of thing.

Hunter: Yeah!

Maya: Lovely arrangement in the patch by the way, the way you laid it out. Your'e a much tidier patcher than I am, so Dino, I thought that was pretty cool.

Gordon: Thank you! Yeah, H, did you think the same about the whole story ark and finding what was right and wrong for you?

Hunter: Yeah, yeah, definitely. I think it's kind of an instinct as a musician as well, having ebbs and flows, and when it gets too busy/noise it has to come down to a quieter place and build back up again - peaks and troughs. I don't know if that's just me or more inherent instinct. It's all just a mutual agreement of that it has to die down at some point; it has to resolve, especially by the end it couldn't end suddenly, it turned off each one by one.

Maya: Yeah, I thought the ending was nice, it just kind of tip-toed out.

Scott [chat]: My initial thoughts were really cool, from a users prospect the controls were a bit odd for me anyway, with the sound at some points I just

wanted silence to compliment the sound in some ways. Sorry! My laptop is really bad.

Hunter: It's a kind of balance between just messing about with it and actually thinking about it musically. You're hearing it too, and want it to sound nice as well. I wasn't thinking too much about the improvisation, it was more just 'oh what does this do when I'm moving it about', rather than 'I know exactly how this works' and 'this is what this does'. Kind of learning as you go, which is quite nice.

Maya: I got tired of the sounds. You know, the... Oh Scott is here, who's S? Somebody's in the chat.

Gordon: I think S's microphone isn't working so I think she's just chatting.

Maya: No video, either. Hi S! Nice to meet you - in chat [gesture: wave]. Hunter: [gesture: wave]. Phantom of the Zoom [jokingly].

Scott [chat]: Hi Maya.

Maya: Scott, were you in the session as well? The Max session.

Scott [chat]: Yes I was.

Maya: I was wondering how we were doing some of those things with only two people, so, cool, well sorry to hear your laptop's really bad, but great job.

Scott [chat]: I'll try to fix it when the Zoom ends, I think that button would be useful.

Maya: Do you want to - let me read your thoughts now that I know what's going on. Yeah 'some silence'. My button that turns everything on turned everything off, but I decided that godlike powers like that weren't fair. I asked Dino before the session started what the rules were and he said 'no rules, go

for it', but I had this sort of ethical limit that I decided I bumped into with that.

Gordon: Sorry, I'm just worried that the Zoom call is just going to end.

Maya: We'll re-join. All you have to do is restart the call. This is your personal meeting, so just restart and we'll jump back in.

Gordon: I think it's a scheduled meeting.

Maya: Yeah, that's alright.

•••

[short intermission {before P2}]

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Gordon: Well that was easier than I expected [jokingly]

Maya: They just do it to annoy you, they don't actually destroy your meeting.

Gordon: I upgraded for a little bit last year, but I wasn't using it enough to justify, what is it, £15.00 or 20.00\$, or whatever it is - silly for meetings.

Maya: I've spent the last year and a half on Zoom, so it's easy.

Gordon: I think most of us have now to be honest.

Maya: Actually, for me it's been quite a fine year, I live way out in the country.

Hunter: [enters call] Hello.

Maya: Welcome back H.

Study Transcripts

Gordon: You live way out in the country?

Maya: Yeah, I'm just getting chat going so I can see Scott when she gets going.

Gordon: Yeah, I think she's just trying to fix what's up with her laptop. Oh

well, when she joins she joins.

[short intermission ends - 1:16 - back to questions]

Gordon: So, it was interesting what you said about having godlike powers,

what did you mean by that?

Maya: Well, you know, it's like a stage - oh, what's it call, when you pierce

the veil, between the audience and the actors on the stage.

Scott: [joins call]

Maya: Hey, S's here! [gesture: thumbs up]

Hunter: [gesture: wave]

Maya: Anyway, with the Max patch open like that, you can change it and I was

curious about whether that was part of the puzzler, cause Max is a great

environment for improvisational coding as well as delivering things to an

audience. So, it's like, well, we're the rats in the maze, we're helping Dino

with his experiment, but what if the rats could change the maze and mess

with the head of the experimenter at the same time. Is that legal?

Hunter: That's a good point, yeah.

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Maya: I decided that wasn't legal, so I didn't.

Hunter: Does that mean that the experiment was designed for anyone to participate, If you don't already have Max you just download it; you don't have to know anything about it. If it was open to people who do know about it and can do improvisational code and things like that, that's kind of the choice in participating. Is it open to people who only know Max or people who don't know Max at all, but because there was a mixture it was kind of interesting that you had that power over it.

Maya: Well, it's not like any musical instrument, in a way. What if the audience marched up on stage and started re-tuning your violin, just to fuck with you [jokingly + gesture: tuning violin pegs]. Trying to saunter your way through something and along comes the audience, 'oh, we're putting an amp on that and a little compression, on you go.' I like that, I think where we were headed, or at least where I was headed, was the sounds themselves I couldn't do much to, until the end where I found one where I could drag around in the sound space; I was pretty perky about that.

Hunter: Yeah, I didn't really figure out what kind of moving them did, like dragging them about. It might have been the panning thing - I didn't notice a significant difference - I thought it was just an illusion; the closer you were to it the more present it felt, but I don't know, it could have just been because you were looking at it.

Maya: I don't know, I think it was just starting to happen to me too, and I don't know if it was an illusion either. But it seemed like when they were further away they got softer after a time, and when they got bigger, closer, they got louder, but not enough for me to be sure that I wasn't just talking myself into it. But the left to right, that one was working for sure, cause I could see it on the VU meters on the mixer infant of me. That was for real.

Gordon: S, what were your experiences with it, messing around with it, having power over the music, I guess? If your microphone's not working just stick it in chat.

Maya: That poor laptop.

Scott [chat]: I'm not much of a musician, but the movement I felt was nice but couldn't go all the way left or all the way right. It kind of haunted the feeling of the project, slightly.

Maya: Yeah, I agree.

Hunter: Yeah, it's like a, there's also kind of the feeling of 'I didn't want to lose any of them.' If it was too far away, I couldn't move them all the way, but I want to keep it roughly together because I'd forget where it was or something.

Maya: I had to learn how to zoom out really quick. All of a sudden things had just flown off the screen, I had to frantically re-read the instructions to find the 'back up' button.

Hunter: I was wondering if there was any connection between the proximity to other cubes, or if they were further away did it make a difference, but I couldn't really see anything like that.

Maya: I thought whoever was moving around helped a lot with that, cause I sure couldn't hear a lot of interaction between the cubes. Some of the cubes did different things when they were rotated, and others didn't - again that's where I was sort of wishing for more people, so that you could observe something like that.

Gordon: Just in terms of having more people taking part, do you think that, say, if there was a larger group of people, do you think that would have impacted on how you experienced the piece, and in what way?

Study Transcripts

Maya: Absolutely.

Gordon: Just an open question to everyone.

Maya: I think it would have made it possible to be incredibly confusing at first, but it would be really interesting to see how the interaction got more complex and more nuanced. Sort of, as one person started just jamming away on a couple of cubes and doing a repetitive thing, and other people catching on to it, and either complimenting it or not. Having so few people it was hard to get to that place it felt like. I think it would have been possible to be fun or not, but a bigger one would be, I'd be interested in joining a bigger one for sure.

Hunter: I think it's like a delicate balance between having to few people and if it were too many people it would just be a bit too much going on. It would lose the kind of group improvisation thing, it becomes less about 'here's a few people doing a lot of things' and it becomes a free for all. I think that that wasn't as much of a thing there, because at first it almost felt kind of territorial, I was possessive...

Maya: 'This is my cube, I turned it on.'

Hunter: ... Yeah! That's what I was thinking. If someone else turned a cube on I didn't want to turn it off. It's like that my control over what you've done, it seems unfair, but you forget pretty soon who's doing what.

Maya: I actually was going after your cubes for a while, just to mess with you [jokingly]. It's just my nature, messing with Dino, messing with H, S, if I'd known you were there, I'd have messed with you too [jokingly]. I think that you get into an interesting question, 'what is musical?', especially with a group of people who have never met, never collaborated, you have to discover that. I think that discovery was pretty interesting.

Study Transcripts Hunter: I'd agree.

Maya: There were some things we tended to agree on as a group, some of the spots, it seemed like there were periods of agreement where we all sort of stood back and went 'this is cool, let's just let this roll for a while', and then there were periods where it got pretty jumble-y while we were hunting for new things and then we'd find another one and sort of stop - like, 'yeah, nice'. I really thought the ending was excellent, we sort of tip-toed out.

Hunter: I did like the choice of sound and tones, even though we said it was limiting as well, it's not a whole array of sounds to play with, it's kind of limited down to basic sin tones, which I liked. It's kind of soothing and meditative - don't say words I can't pronounce [jokingly] - and having the repeating patterns with the rhythmic and tonal stuff based around the same palette of sounds, there's nothing too crazy going on. So, you could do some stuff with it but not a whole lot, I suppose that keeps it, when you have a lot of control over it, it could end up just being a mess if it's not somewhat limited, I think.

Gordon: So, just in terms of the control that you have over the sound pallet and the actual programme itself, what sort of things would you add or change, or what controls were more important to you? Control over what you were doing, or over what other people were doing, or what the sounds were? That sort of thing - sorry, its two different questions, I kind of just threw them together [jokingly].

Hunter: That's alright. I guess maybe if there was more interaction between the cubes, maybe the proximity of them or something like distance between is the cutoff of the filter. That could create some nice tone shifting things. At this point I'm not really sure, maybe some effects, reverb and delay, for example. There's a lot of scope for that, a lot more potential. As it was I really enjoyed it anyway, it's not like it was not good, I thought it was great and could have done it for ages.

Maya: You know, I'm not sure what I think. I think the idea is entrancing of... one of the things I liked about it - I do a lot of work with musicians on JackTrip and latency - wrestling with latency - trying to play in time with good quality sound live, and one of the nice things about this live is that because it was computer mediated, because it was run from the patch on Dino's machine, there was at least in my impression, no latency at all. Things either happened or they didn't. So I didn't have the sense of when I did something I had to wait the 20 or 30 m/s to wait for it to get to Dino's machine and back. A lot of what was going on was local, and that meant it felt much more responsive than what we feel as live musicians, because when I play with folks in Europe we have to actually play with the latency, we can't play in time, we have to play deep in the pocket, so I liked that a lot. It's sort of a nice vacation from that sort of thing. I think I go back and forth on the pure unfiltered, un-enveloped, un-reverbed, un-effected sounds, were harsh to the ear, but in a way that meant that we worked pretty had. We found those closely clustered sounds that had nice beats between them and we found the little rhythms that weren't too intrusive, and we all tended away from the really ugly sounds. So in a way it was a nice voyage of discovery. I don't think there's a right or wrong, or good or bad, on that one, it's the sort of thing where 'Oh, Dino's throwing another party, I wonder what he's going to throw at us this time kind of thing, and go discover it and have fun with it'.

Hunter: I agree with the latency stuff, because this kind of style of music making, I guess - I'm not sure what to call it - the fact that it's not time-based, like struggling with network based performance where it has to be on time it really has to be within the free improvisational, non-linear, as opposed to keeping everyone one time, in the pocket, and factoring in latency, even if you're a bit off time it really wont matter. There's no time to keep to or even any key or something. And we figures out the pitches and you can just naturally hear it, and having the clusters too, that's the kind of nice part of it. You didn't have to be like 'well, that sounds weird, stop it'. It lends itself very well to the style too, the kind of open nature of it.

Gordon: Okay, one last question, because I don't want to keep you too long and said we'd stop at one. Just in terms of everyone being on the one instrument, with regards to a lot of people, or very few people, or even just one person, with the people that were here just now did you feel that the amount of control you had over the sounds was impacted by there being other people being able to also control those sounds? Like, I think, M, you were saying you were going after Hunter when he was clicking things on and off, do you think that impacted on how you felt, or how much agency you perceived over the sounds?

Maya: I don't know. I kind of felt like it was kind of a group of people thrown together who very quickly had to learn about each other in a lot of different dimensions and that we had sort of a voyage of discovery to get to that. I don't know how long we were actually playing, maybe 15 minutes? Some interesting kind of consensus started to emerge from that as we kind of crashed about, and we had no way of communicating, except through the events, and that we did a lot of that; there was a lot of communicating. So, I don't think it was so much 'control' as probing the limits so you could more quickly get collaboration.

Hunter: Yeah, I'd agree with that, I think. If I was just doing it by myself I probably would have went along the same kind of path as we did with other people, but that's also because there is so few of us as well. With a lot of people, probably not. With regards to the structure and knowing to turn things off and interaction with some things is just a sort of instinct that over time it gets quiet and less busy... I'm not entirely sure, sorry.

Gordon: I think Scott is typing. Just give you a second.

Scott: For me I don't think I communicated too much, myself as a person am just chaotic, so putting as much sound on at once. I was more working out the movement of controls and playing around.

Hunter: Yeah, that's true.

Maya: Yeah, I think one of the interesting questions would be how you prep people, prepare people for this. I spent an hour or so fooling around with the patch before the session, partly to know how it works, because I know how to programme in Max I also opened up the programme and peered around inside. Took note of the beautiful artistic coding and stuff like that, and so it would be interesting to explore whether to tell people to do that before the session or not. So that people knew going in or not. Part of the discovery is learning how the controls work, well 'when you turn the cubes, they turn into different things, sometimes really different things, sometimes a nice thing turns into something really nasty', and then I got the distinct impression that the programme would periodically scramble things and turn them into different things. I'm not sure if that was true or not, but I found them unreliable to return to sometimes. I'm not sure that a 75 year old plus brain does strange things so it could be that I just forgot what they did. The whole idea of whether to get people ready for the performance or throw them in cold is and interesting dimension to this.

Hunter: I can definitely say that I was pretty much the opposite, I had a little look at the instructions maybe 10 minutes before we started, I didn't re-read the ethics forms, or instructions, I just kind of went into it new and forgot what it was all about. It was more about learning it straight away which was quite fun as well. The kind of 'not being in control of knowing what's going on and not familiarising myself with it too much' I just saw cubes and controls and thought 'oh, right, cool', then figured I'd give it a go. That's the part I liked about it. I was the same as Scott I think, I was in it just playing about and figuring out, then afterwards thinking about it musically. I never thought of it like a piece or anything, more like a game, because it's so interactive: 'I input something, that does something that changes, it makes a sound, other things happen, actions leading to it'. It was just like an interactive gamemusic. It wasn't like an actual conducted thing or anything. It was more fun.

Gordon: But would you have preferred having those prior instructions having to prompt you how to use it, or?

Hunter: It depends. I can't say, because you did give us instructions before, there's instructions there. It really goes back to your preferred outcomes as the researcher. Do you want people going into it less aware or more prepared? Because it has different outcomes between us, people who read into it more and people who didn't. It kind of arrived at the same kind of outcome, but it's really up to you to be honest. Whether you want people doing that or not.

Scott [chat]: I enjoyed being thrown into it as well with no prior experience.

Gordon: It kind of highlighted everyone's prior experience with this kind of stuff. I think Maya and H, both of you have used Max in the past or know of it, Scott downloaded it about an hour ago, so there's various limits.

Hunter: Yeah, I'm nowhere near an expert, I'm not even that competent in it, but I had bought it and was like 'oh, cool, I've already got it'. It's the sort of thing that when you see it it's like 'oh that's really cool', and I want to get into Max more. It's encouraging that there's an infinite amount of stuff you can do with it is cool. I'm not going to endorse Max like an advert or something [jokingly].

Gordon: Sweet, I think we've covered pretty much everything there is to cover. If there's anything else you'd like to say before we finish things up, go for it - floor's open?

Maya: What's the focus of your research?

Gordon: Focus of the research at the moment is dialogic music systems, particularly. So, instead of having, in Western Art Music where you're given a sheet of music telling you to 'play these notes exactly', it's more about creating a dialogue between musicians and people to experience sound. That's kind of what I'm looking into.

Maya: I think this is a pretty good start, that's the sense that I got. That the journey is a big part of what you're trying to accomplish here. It is game-like, I think H's got something there. You know, okay, you're in a maze of twisty passages, all alike, you have to discover your way out of it, or into it. So I think there's a lot to explore there. Great start.

Hunter: I think in my experience, it was the - I don't have a long history of performance - but having done a few things with a band in a room, through JackTrip as well, being live-streamed to another band and other people playing in different parts of the world as well. Like last time, having the experiment over Zoom, so that again wasn't time based or anything; it wasn't about being 'all together now', but I think this is a really cool was of doing networked performance. It just worked really well just having a connection to a server happening in real time, like 'oh, there's other people here, they're doing stuff too'. It felt like a really kind of, other than the code that went into it, a really straightforward kind of collaboration, so I thought it was really interesting and rewarding. I mean, I didn't get any technical difficulties, I know Maya did and it was resolved quickly, but nothing really got in the way of just playing about. That was the biggest thing for me, it wasn't bogged down by anything too technical. Good fun, well designed.

Maya: Terrific.

Scott [chat]: From an art perspective I enjoyed the minimalism of this project, very simple and straightforward to use for everyone.

Hunter: Yeah I'd agree with that too.

Maya: There is definitely a nice clean minimal thing. I've watched a couple of programmes in the online performance space go from pretty cool/pretty simple - Sono-Bus is essential an alternative to JackTrip, is one I've been involved with and it's accumulated an awful lot of features and as it got more complicated it got harder for some musicians to use, so there's that whole delicate balance to explore. Too many controls; too few controls.

Hunter: I think you got the balance just right, using the mouse and keyboard that we all kind of have. We didn't really have to do anything else and a quite simple 'every kind of action you make has an outcome', a direct kind of feedback most of the time, I think. Other than parts I didn't really understand or just didn't notice a difference - I didn't see the panning thing too much like moving them about or like what kind of rotating them around did. I could see that each cube made a sound, yeah, but there wasn't a whole lot of... i didn't notice too much about dragging them around and rotating them too much, but that's just from memory.

Maya: Here's a great, very difficult programming for you, but it would be really cool, and that is: If you could drag the cubes into sections like choir sections, so you have 12 people and they self discover if they move their cube closer to another cube they hear that cube louder. And so eventually what they do is they kind of jiggle their way into three or four groups, and the groups can hear their sections like a choir can hear itself louder, and they start exploring how they interact in their little section. And they also explore how the sections interact. I could get lost in that for hours, that would be great.

Hunter: Yeah. I like the sound of that.

Maya: Would be a lot of fun. A lot of fun things to do with that.

Gordon: So, what I'm understanding is that you want unique features, but the simplicity of the controls?

Maya: Yeah, I didn't feel constrained by the mouse and keyboard, especially because you can kind of come in and learn it right away, and also I'm a keyboard person so I have an advantage over a non-keyboard person if you say, 'you have to play keyboard'. The nice thing about mouse and computer keyboard, everybody knows how to use it. So we're all on an even footing.

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Hunter: Yeah, that's true. I mean, using that you can expand to like instrumentally, or MIDI mapping; having all these knobs to play about with as well. I liked having the camera movement as well, it was nice having the visual display even if it didn't change the sounds or anything - it was a nice cinematic quality. I would zoom in and zoom out to focus on one or two cubes so even if it didn'tt have much effect over the music, it was a nice addition to it as well. I would have maybe got a bit limiting as well if you couldn't see stuff, if things were blocked behind each other, then you might stick to the same patterns as well but then if you completely change your direction of seeing things then you wont stick to the same things and forget where certain things are.

Maya: That's a whole different dimension. So now an analogy comes to mind, okay this is a town square, and being able to zoom in on part of it you get to hear that part of the ensemble and then you can wander around, you can hop over here, let's do another thing. You can still hear the first ensemble, but it's sort of in the background and then if you're really grooving on what the second one was doing you can get really close and you wouldn't hear any of the other ones. But then you could back out and get everybody - if you write that computer programme, Dino, you got something that you can chalk up as pretty damn cool, pretty damn complicated.

Hunter: Then it's getting into genuine video game programming, like proximity of the character to other...

Maya: Yeah, absolutely, proximity.

Hunter: ... stuff going on. Kind of blows my mind a little bit, probably because I don't know what I'm doing with programming at all. That sort of thing would be really cool.

Gordon: Maybe you could do that for your PhD, Hunter [jokingly].

Hunter: Yeah, sure!

Gordon: Anyway, yeah, so I think that's everything I guess. Thanks so much for coming and helping out and attending. It's great hearing everyone's ideas and thoughts.

Hunter: It's good fun.

Scott [chat]: Thank you!

Maya: Great time! Now it's off to the day. It's seven in the morning here.

Glossary

- Actor (n): a socially contextualised individual who possesses agentic orientation towards any given point(s) in temporality, and also holds the capacity to reproduce and/or transform structures in an interactive way through continual engaging with them.
 - i: *composer* (n): a facilitator of structures via signifier-means creation of operations.
 - ii: participant (n): an actor who is engaging with the structures, defined by constructed signifier, and actors within.
 - A: performer (n): a participant whose perception of dialogicality is rooted in musical voice, via instrumentation or physical voice, and interpretation of signifier through utilisation of operations.
 - B: *listener* (n): a participant whose perception of dialogicality is rooted primarily in interpretation of signifier through utilisation of operations.
- Agency (n): actors temporally engaging within dialogically structured environments that, through said engagement, have the capacity to reproduce and/or transform the structures in an interactive way.
 - dialogical (adj): a theoretical position of a perfect persuasive or communicative form of agency apparent in structures occupied by actors; used to imply as close to theoretical position as possible unless suggested otherwise.
 - monological (adj): a theoretical position of an authoritative utterance or transmission of agency apparent in structures occupied by actors; used to imply as close to

theoretical position as possible unless suggested otherwise.

Art (n): a sign, one which is signified specifically through some constructed signifier by an individual(s), where the meaning of the sign is always subject to transposition between voices from meaning, to being, whilst situated in an abstract proximity. This signifier can comprise of any conglomeration of forms linked inherently to the five main subjective senses of the aesthetic, any amalgamation of mediums, and any hybrid of genres. [see also: Operations (n)].

i: art (n): Art, specifically in the visual form.

ii: music (n): Art, specifically in the aural form.

Art[-ing] (vb): to take part, in any capacity, in the creative processes, otherwise known as the transposition of meaning to being or from sign to signifier, in any form (or conglomeration of forms), in any medium (or amalgamation of mediums), in any genre (or hybrid of genres).

i: art[-ing] (vb): Art-ing, specifically in the visual form.ii: music[-ing] (vb): Art-ing, specifically in the aural form.

Boundaries (n): the enactment of agency by actors utilising operations to create limitations on the operations themselves via perception of dialogicality.

Centrality (adj): the gravitational pull on individual actor's perceived dialogicality at the centre of a situation caused by the system operations. This can be either more or less centralised or decentralised:

i: Centralised (vb): a stronger gravitational pull on individual actor's perceived dialogicality towards the centre of a situation caused by system operations.

[see also: Monological (adj)].

ii: Decentralised (vb): a weaker gravitational pull on individual actor's perceived dialogicality towards the centre of a situation caused by system operations.

[see also: Dialogical (adj)].

Dialogical Music System (n): a constructed signifier which facilitates, and acts as the centralising point of, a situation and potential occurrences of successive situation in temporality, that can be occupied, determined, influenced, reproduced, and transformed by actors via engagement and interaction with its modus operandi, which is simultaneously limited dialogically by vary degrees of agentially perceived boundaries.

Operations (n): the centralised functions of a situation, otherwise known as constructed signifier created by a composer, which has the capacity to signify to actors within said situation what is meant to be signified via various means. [see also: Art (n)].

Progressive Interaction (vb): a product of enacting agency over a signifier's perceived agential boundaries via alteration of its modus operandi.

Reducing [vb]: the act of replicating a set of pre-existing system operations whilst removing all but its main aesthetic form.

Regressive Interaction (vb): a product of having less agency over the perception and engagement with a signifier's perceived agential boundaries via modus

operandi that have been replicated almost identically, but reduced to its main aesthetic form.

Sign (n): 'The written signifier is always technical and representative. It has no constitutive meaning. This derivation is the very origin of the notion of the "signifier." The notion of the sign always implies within itself the distinction between signifier and signified, even if, as Saussure argues, they are distinguished simply as the two faces of one and the same leaf. This notion remains therefore within the heritage of that logocentrism which is also a phonocentrism: absolute proximity of voice and being, of voice and the meaning of being, of voice and the ideality of meaning.'

(Derrida, 1974, p.11/12)

Situation (n): an emergent event in the present that requires the involvement of one or more actors to create.

Splinter (vb): the act of (i) replicating or (ii) altering a set of already preexisting system operations.

i: the act of duplicating, as closely as possible, a pre-existing system operations [see also: *Reducing* [vb]]

ii: the act of changing a set of pre-existing system operations without removing most, if not any, aesthetic qualities.

Temporality (adj): an inherent state of an object, structure, or actor existing in relation to time.