

The Constituents of Successful Group Musical Improvisation:
Insights from within the developing practice of the Cold Bath Street band.

by

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Abstract

What do musicians need to know and do, beyond applying a base vocabulary of technical music knowledge through their instrument, in order to undertake successful group improvisation? This research lives within music improvisation and music improvisation pedagogy. Specifically, it contributes original insights of use to developing improvisers and educators working with musicians from rock and pop backgrounds. Existing texts offer advice on the theories and practice of free improvisation but beyond genre guides giving stock phrases there is little provided to articulate functionality in these fields.

Building on approaches proposed by Stephen Nachmanovitch and David Borgo, operating under a self-determined definition of successful group improvisation, the researcher worked within the same group of developing improvisers for three years utilising a method combining practical workshops, recordings, discussions, interviews, contextual research and researcher reflection. Linked audio recordings serve to inform and illustrate the discussion. The study illuminates from within the practice, leading to an answer proposed in the form of constituent factors. Though specific and subjective, its findings provide an expectedly complex constituent makeup: A supportive working environment and broad agreement on remit were foundational. Active-listening, rapid and continuous creative and compositional decision-making operated in tandem with the ability to control the instrument to a high expressive level and to a point where it is second nature. After identifying points of clear commonality and differentiation with the act of pre-composing, the research further states that working with pitch was particularly difficult for the players and introduces a six-step '*Offers System*' designed to aid their development.

The research concluded that to be successful the players must thrive within the nature of the activity, valuing communal creative interaction in the moment over the importance of any resulting product, navigating the unknown with confidence built through experience, embracing the flux, risk and 'mistakes' inherent to the form whilst guiding their imaginative explorations with the musical-thinking of Edwin Gordon's audiation.

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Glossary of Terms

A number of terms that are used are either specific to, have been defined by, or are being used in a very specific way within this thesis and are defined here to aid clarity for the reader.

Active listening – Consciously listening for sound in a ‘switched on’ manner. This is an ability acquired and developed through practice. The player is required to combine active listening, decision-making and producing sound simultaneously within the moment in order to conduct the improvising activity.

Agreement – Where the group work with specified musical parameters e.g. a mode or timbral approach ‘*we’ll do ten minutes of loud and harsh*’. Sometimes agreements are specified or arrived at in advance; at other times they can be found during playing.

Audio Space - The available room within the sonic frequency spectrum (of an improvisation). If music is comparable to a picture, it is the empty canvas between the areas occupied by sound.

Big Idea - Major compositional idea that is then used to build an improvised musical section or place around. Usually pre-specified and used within type 1 improvisation (see chapter 5 and also ‘Cue’).

CBS – Cold Bath Street - The improvising band who are the participants of the study. The researcher also plays within the group. All members are either current students or graduates of the UCLan Music undergraduate course on which the researcher teaches.

Composition – Unless specified, this refers to the verb, or act of composition, the making that the group were engaged in, as opposed to the noun (see chapter 5).

Constituent - These are the constituent factors that the research seeks to both identify and probe in terms of functionality, in order to further understand the makeup of ‘B’. It may be that the identities of these constituents are very well known, but what isn’t known is how they manifest themselves within group improvisation.

Cue – A small fragment of music used to improvise around. Typically for CBS, it would be a short melodic and rhythmic phrase, this being a manner in which the group had operated previous to the study. As the research progressed the terms Big Idea and Type 1 playing were also used to further detail this approach.

Flocking - This is directly lifted from how it is regularly used within dance: “*A type of movement improvisation in which students mirror or shadow each other’s movement in groups... Students follow the movements of a*

leader and share leadership throughout the group... Participants do not necessarily need to be able to watch the leader, as long as they can see and follow each other.” (Council of Ontario Drama and Dance Educators)¹

Hierarchy – This relates to power and control and manifests in a number of areas: A distinction is made between the clear hierarchy that exists in the researcher’s organization and running of the project and the more complex relationships that take place within music-making, which are analysed in detail within the main text.

Interviews – The players are individually contacted either via the internet or face-to-face in order to talk about their improvisations. The format and length of these interviews is fluid and determined by the issues that are deemed of interest by the researcher or player.

Macro-Decision-Making - The larger scale decisions about the piece. These could be made in advance or during the playing e.g. *‘who is going to play in this one’*, or *‘we’ve done one idea for the first five minutes, should we now move to something else?’*

Micro-Decision-Making - The smaller decisions operative within the larger macro-decision. These could be made in advance or during the playing e.g. within a type 1 piece that is operating only around one musical idea, the larger decision of the musical material to be worked with has already been made, but the players will still have to make micro-decisions e.g. *‘should I put my distortion pedal on, or drop the volume at this point?’* etc.

Mining - Where the group or the individual dig into an idea in order to see what can be extracted from it. Musically exploring in order to see what can be produced.

Narrative – A series of musical events formed into the chronological journey that takes place within the progress of a piece.

The Offers System – Developed by the researcher from a creative system defined through use within improvisational comedy. It provides a way to discuss and work with musical ideas within the group in order to form successful musical narratives (see chapter 5).

Place - Section of the music with its own identity probably in rhythm, timbre and tonality. NB This could be longer or shorter in duration but for CBS was typically between thirty seconds and two minutes.

¹ <https://www.code.on.ca/resource/flocking#:~:text=Definition.for%20three%20or%20more%20people>. (Accessed: 10/06/22)

Point of Departure - An approach taken to group improvisation where a known cue is used as a stimulus to lead on to improvised content (see chapter 1 & 5).

Pre-composed – Music where the compositional decisions have been made in advance (see Improvisation as (Instant) Composition in chapters 1 & 5).

Researcher – Simon Benjamin Partridge, musician and music educator of thirty years' experience. This single individual is responsible for all aspects of the project except the playing and comments of the participants. Sometimes the project asks that he plays one distinct role, either as guitarist, (light touch) director or as researcher, whereas most of the time he is combining elements of all three.

Roles – The roles that are traditionally taken by specific instruments within the playing e.g., the drums playing a beat or the guitar playing chords. The role is often connected to the purpose of what the musician is playing e.g., the role of the bass was to outline the chords (see chapter 5).

Type 1 (Improvisation) - This is a broad definition produced by the researcher which incorporates improvisation which works around a given phrase, tonality or rhythm. These parameters are already in place at the outset of the improvisation and remain loosely in place until its conclusion. In this manner, music made in type 1 is in some ways, to some extent predictable. Within the popular music field such type 1 'jams' are often extensions of songs; The rhythm and tonality of the song creates the cue, a jumping off point from which the music develops (see chapter 1 and Big Ideas in chapter 5).

Type 2 (Improvisation) - This is a broad definition produced by the researcher which loosely equates to free improvisation, sometimes called 'non-idiomatic' music: A music where in theory nothing is decided in advance. In actuality, the understanding between the players is that it will not have consistent tonality, rhythm or a sense of repeated phrase. So, in this manner, paradoxically some decisions about the music have already been made in advance (see chapter 1).

Type 3 (Improvisation) - This is the type of improvisation defined by the researcher as his subjective aim for CBS. It includes the possibility of utilising any elements of type 1 and type 2 in any combination. Having this breadth of practice brought its own issues with it to the study (see chapter 1, 4 and 5).

(The) Unknown Music – This is what CBS make in attempting to improvise successfully as a group: Music largely unknown to the players in the moment of conception. In using the word 'unknown' the researcher is deliberately going further than some would understand by the term 'improvised' which could be understood as a fairly familiar journey through chords, scales and rhythms. Unknown says clearly this is a music, and SGI an activity, with an element of unfamiliarity, risk and of uncertain outcome.

Workshop or Workshop Sessions – Periods of between two and four hours where, guided by the researcher, the group meet and led by him engage tasks intended to improve their collective and individual improvisational skills. As well as music-making, these workshops include semi-formal discussions which are also used to inform the research.

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Introduction

"Meaningful improvising requires ultimate preparation, ultimate mastery, ultimate knowledge... as well as going beyond preparation, beyond mastery, and beyond knowledge..."

Marcel Cobussen (2014 p.16)

I started playing guitar and playing in groups when I was thirteen. Even at that early point, there was a divide between players who learned set material, people who 'made things up' and those who could do both. As a largely self-taught rock and pop player I fell somewhere between two stools: I could naively work out some basic elements of given material and I could perform some simple improvisations as part of a group utilising the minimal technical vocabulary available to me. Even then, I would sometimes get asked by players who did not improvise *'how did you know what to do there?'*²

In the twenty years I've spent in music teaching music professionally, versions of this question occur regularly when discussing improvisatory practice, particularly within groups, and I've never felt able to give a satisfactory response. *What do musicians need to know and do in order to successfully improvise as a group?* This research looks to interrogate this central problem - to better understand and thus be able to articulate what is taking place when musicians improvise. Having some technical knowledge of music and of my instrument has always felt to be important, but what else is at play? Seeking such insights is intended not only to aid my own improvisations and teaching practice but to benefit other musicians and music educators who lead and teach rock and pop musicians in group improvisation.³

The study's findings are taken from an extended period working with a single group all of whom I had worked with as students (detailed in chapter 3) and who broadly share my background in rock and pop. Accordingly, it is to music improvisation and the sub field of its pedagogy for rock and pop musicians that the research makes its contribution. Though there is a great deal written elsewhere concerning technical

² Connie Crothers interviewed in Schlicht (2008) *"I was a good player, I was a very highly trained player, and I could play big works. I could sit at the piano and a lot of music could come out of the piano... I sat down at my piano with the desire to improvise, and I sat there for, oh, twenty minutes, a half hour. I could not improvise one note."*

³ Bernhard (2013) brings together data on music tutor's lack of confidence when being asked to work with improvisation and also that some participants related it exclusively to 'jazz'.

components, the vocabulary of rock, pop and particularly jazz improvisation, also on the motivations and philosophies of what some label free improvisation, there is little that discusses everything else at play. The research will be especially useful to rock and pop musicians who have a basic grasp of their instrument and seek to further improvisation within their practice. It provides an overview of relevant contextual practice and underpinning theory, highlights practical approaches that have proven beneficial and provides examples for discussion. The music recordings linked and detailed in chapter 4 give the text's discussion concrete form, enabling the reader to hear examples of the practical, theoretical and contextual issues being discussed. These recordings are not meant to be exemplary examples of practice, rather a documenting of progress, as much pointing out problems and difficulties as noting epiphanies and successes.

As well as attempting to articulate and disseminate information about group improvisation, in establishing the research, I also sought to create space for and give focus to, improving both the collective and individual improvising of all of the musicians involved, including myself. In 'leading' the research the objective was by no means to find the means to take the participants to a perceived place of higher practice where I, the more experienced musician, was already operating. Playing within the group, I was on a musical learning curve with and to some extent as one of the participants, with a meta-aim of trying to better understand the subject and thus to improve my own improvisations. I should say our own improvising – as what was under the microscope was the conducting of a communal activity and not owned by any one individual.

The Project and the Equation

Work towards what would eventually become the Doctorate submission began informally for the researcher in 2013 with the formation of the Cold Bath Street band (CBS). A full discussion of the band as an environment in which to conduct this research is provided in chapter 3. It was first formally presented as research as part of his Masters in Music at the University of Central Lancashire (UCLan) in 2017, since which point the work has developed consistently through Doctorate modules DZ5001 Strategic Management, DZ5004 Practice-as-Research: Methodology and Methods and DZ5002 Diagnostic Pilot Arts Project (August 2020), alongside a programme of public performance and commercially released recordings from the group.

In order to seek answers to the broad issue of the makeup of the constituents of improvisation beyond technical knowledge, it was framed as a simple equation. This being carried over from the Pilot Arts Project, where initially it was felt to be overly broad and simplistic but was found in practice to provide a good balance in giving focus to the enquiry, whilst also allowing enough scope for it to encompass a wide range of contributory factors:

A + B = SGI

A = Knowledge of the basic physical parameters of music and ability to apply them to a given instrument.

B = What is not known and sought by the research.

SGI - Successful Group Improvisation = The intended destination. What the musicians are looking to achieve.

This highly subjective definition consists of three interlinked factors, all of which are essential:

1. Defining the extent of the improvisation: Cobussen (2014) lays out the position of ethnomusicologist R. Anderson Sutton who states, '*I see it makes more sense to reserve the word improvisation for more substantial choices being made at the moment of performance.*' (Sutton 1998 p.73)"The researcher adds that these choices need to be being made in the moment by all of the players."⁴
2. The organic emergence of content that the players do not know previously.⁵
3. Whether the group's improvisations function successfully as instant compositions.⁶

Thesis Structure

To attempt to clearly lay out the research for the reader the thesis has been broken down into the following sections:

Chapter 1. Context - Explores theory and practice relevant to both the research equation and the approaches to musical improvisation taken by the group.

Chapter 2. Method - Explains how the study was carried out, including the design and the interaction of the research tools and the impact of the Coronavirus pandemic on the study.

Chapter 3. Discusses the Cold Bath Street band - the specific environment for the research.

Chapter 4. Describes and gives links to three recordings of practical workshop sessions conducted, these having been selected as useful in helping define and detail constituents, their identity and interplay. These

⁴ Thus, within this definition, if one player is improvising and the other players are playing pre-composed material then SGI cannot be achieved. Rose (2017) references Miner, Bassoff and Moorman in using the term 'substantive' "Not - predetermined improvisation in music occurring in the present, through the ability to play successfully in a substantive manner, within immediacy, is what leads to interesting music."

⁵ The word 'organic' is used here to define (musical) content that occurs through the interaction of people. The improvising group is a larger collective organism, with music emerging from the interactions of the individuals within it.

⁶ Defining any music as 'successful' is obviously highly subjective. This subjectivity, its application and impact on the research will be returned to across the text.

workshop sessions are broken down into points of note, these being identified so that they can inform the analysis in chapter 5.

Chapter 5. Application of Methodology - Analyses and correlates what took place within the practical music-making, discussions, interviews and researcher reflection, in order to identify and define constituents. Introduces '*The Offers System*' established by the researcher within workshops in order to aid the development of practice.

Chapter 6. Presents a list of constituent factors in response to the research equation. Defines new knowledge in relation to previous works.

Evaluation. Examines the success of the study including the group's musical development through undertaking it and implementation of the method.

Appendices. Contains supporting information including the researcher's self-evaluation and individual player profiles for CBS members.

Chapter 1: Context

This is a practical investigation made by a musician, working with a specified group of musicians and its outcomes are intended to be of benefit to the practice of other musicians. As such, it uses the practical language of musicians throughout. Though the written texts introduced in this chapter are repeatedly returned to and others introduced throughout the thesis to frame, fuel and support the practice,⁷ much of the external context (information drawn from sources outside of working with the group) came from researching the techniques used by practitioners through analysing their music. It is strongly suggested that it will benefit the reader to listen to the music examples referenced in order to get the most from this chapter.

Internal context was brought by the players as detailed in chapter 3 and within the individual player profiles presented within the appendix. NB Quotes from the players made within the thesis may be amended for grammatical correctness without changing their meaning. Also, influential and of particular appropriateness to the Professional Doctorate, was the researcher's ongoing professional experience as a music educator and improviser, insights from which are integrated throughout the main body of the text and in the researcher self-evaluation and discussion of comparative practice included in the appendix.

Improvisation is a vast topic and though the clarity given by the equation helped focus the study, it still presented a daunting prospect in terms of the volume of contextual material that could be considered relevant to the practice of the participant band - Cold Bath Street. As such, a selective process was employed by the researcher in highlighting and incorporating musicians and approaches that he thought would be beneficial as the work progressed. Within this process, contextualising and locating the research was considered to encompass defining the subject area and the part(s) of it to be studied and briefly introducing and describing the relevance of the work of others operating in the field. This in effect, becoming a review of the improvising, the practical music-making, of select practitioners. Alongside this was a review of written

⁷ Schlicht (2008) notes "...scholarly texts were not perceived as helpful to the main cause, that is developing improvisational skills ... We recognized the potential conflict of studying advanced scholarly texts while reaching out for the opposite—to immerse oneself in a creative process, freeing the mind from reflection and intellectualization."

texts. Here, particular attention was paid to those discussing the nature and functionality of the improvising activity, the techniques being used and the skills that others might need to successfully engage it.⁸

Improvisation as (Instant) Composition Pt1.

"I write scores but I feel like I'm improvising with writing."

(Taku Unami interviewed in Denzler & Guionnet 2020)

In beginning this work, the researcher felt there was little in common between the isolated individual composer, sat at their desk, manuscript paper in hand, writing and rewriting over many weeks in the quest for the perfect piece and the slightly shambolic, sweaty faces of five individuals attempting to get a guitar improvisation together in a noisy club. Over the course of the study, the researcher has become increasingly convinced that in fact the two situations contain many common elements derived from within the broader activity of 'composing', even while acknowledging that the exact elements and how they are utilised is not the same (Schlicht 2008): Each sculpts in the medium of sound – working with sound as material, looking to make shape and form, to extend and elongate, to cut and edit, to compile and collage, to compliment and contrast. Each tries to impose their creative personality and intentions on the medium, whilst concurrently embracing its possibilities for self-development and expression. Each inevitably brings artistic influences and personal history to the creative canvas and attempts to create narrative and mood. Each relies on a combination of imagination, inspiration and a knowledge and experience of music and its workings... There is a lot of common ground between the two activities (Parker in Schroeder and Ó hAodha 2014).

So, what distinguishes the pre-composed form of the activity (often referred to simply as 'composing') from the instantly composed (often referred to simply as 'improvising')? In bringing together the voices of numerous improvisers to discuss *'Process versus Aesthetic Result'* Denzler & Guionnet (2020) demonstrate that many players consider the activity of improvisation is not connected with the production of a successful end result or object, that that for them is not why the activity is conducted (Wells 2021, Rose 2017). Viewed in this light, improvisation isn't about making something, it is about *doing* something (Hall 2009). This distinction was extremely helpful in shifting the focus of the study away from analysing such finished improvisational 'objects', and rather onto seeking to understand the actions and interactions of the players i.e., what was happening within the doing of the activity. Secondly, in improvisation many of the compositional decisions are taking place in, or fractionally before, the moment of realisation – at the time

⁸ *It is worth noting here that, although there are non-practitioners who write about music, the written texts about the practice of improvisation have to be penned by practitioners as only they have the necessary experience of the doing (see Borgo, Nachmanovitch, Stevens et al).*

when the sounds are being made. Precomposed approaches do not have this intrinsic link between the devising of form and the moment. They allow the composer the option of time to add, alter and revisit the composition nonchronologically, making changes to the middle of the piece when the end has already been written etc. This reconfiguring simply isn't possible in instant composition: The moment is worked in and then the moment is gone, do the first bit first and then the second bit etc. (Lazro in Denzler & Guionnet 2020). The next distinction is that the group improviser and the improvising group must compose *communally*. Individual players devise their own contributory lines, but the larger decisions on the music structure, form and content evolve from the organism that is the group, directly depicting their communications.⁹ This gives the opportunity for the emergence of creative content that the individual could not produce outside of the group situation. Noetinger describes “...the possibility of finding that which I am not able to have consciousness of when I'm on my own.” (Denzler & Guionnet p.108, Schlicht 2008) that “...players came up with fresh ideas they would not have developed alone.” Alongside the importance of the musicians, acknowledging the ever-communal element of the activity, stresses the need to address dialogue and communication and to consider questions such as how material is passed/ conveyed/ processed amongst players. This also promotes what takes place in the space between players to being a key component, essential to the syntax of their language (Margulis 2019). Defining the type of improvisation that was being studied as a communal activity also brings with it a societal aspect to the composing that does not exist for the lone pre-composer. For example, compromises occur in the music-making, meaning that at points, one player's ideas might be more influential, or simply heard more, than at others. Of course, such authorship concerns would exist whether working in improvisation or in a pre-composed piece devised by more than one composer. Looking beyond compositional authorship, the workings of the group as a society were key to the study and as such are detailed in chapters 3 and 5. Finally, in distinguishing the improvised from the pre-composed and aligned to the second point, arrangement is approached in a different manner: The individual members are only creating lines for their own instrument where our lone pre-composer must tackle all instruments. Still, in common with the pre-composer, the improviser must be able to take a holistic view of the music and what that might need, rather than simply being aware of what their own instrument is doing.¹⁰

With these distinctions in place, owing to its importance this topic will be further developed in chapter 5 under sub-heading 'Improvisation as (Instant) Composition Pt2'.

⁹ In 'Sync or Swarm' (2022) Borgo warns “to envision an improvising ensemble as the simple addition of individuals also misses the dynamic, interactive, and emergent qualities of the performance.”

¹⁰ See the discussion of roles in chapter 5.

Extent

This research is not about a new phenomenon in music, nor is it about giving a detailed history of improvisation within western popular music. It's about working with CBS and through this attempting to articulate ways that musicians have been playing for many years. In providing artistic context, a number of late nineteen sixties reference points are used here as of particular relevance to CBS. This being the period when the version of improvised music and the associated techniques they base their practice upon surface and become prominent in the canon of popular western recordings. Of course, as Derek Bailey discusses in *'On the Edge'* improvisation in different forms has been around arguably since 'the beginning', predating pre-composed musics and ultimately this study has been limited in scope and only dipped its toes into what is available in other cultures, contexts and traditions.¹¹

To begin our discussion on the topic of extent, we need to paint with a broad brush: When musicians say they are playing jazz we would expect there would be improvising as it's a key element of the form. Breaking down that broader statement to attempt to understand how they are playing, if we as musicians were to engage in such improvisations, *how much of the music is improvised? To what extent is the music pre-known by the players?* In more traditional jazz pieces, we would expect an introductory theme or head and then a series of improvised solos over an agreed harmonic framework before returning to the head to close.¹² Modern forms regularly do not use this approach and will in many cases have no preset or pre-agreed content at all.¹³ Indeed, this lack of pre-agreed content could be said to be key to the definition of what constitutes free improvisation.

Continuing this broad brush into rock and pop music, the term improvisation in the researcher's experience has meant different things to different people, particularly in terms of extent. In order to illustrate the musical possibilities that were available to CBS, it was felt useful to conduct a brief review of approaches from this starting point of the extent of improvisation. Though they are presented here in a single and brief overview, working through from the least to the greatest extent, this information has actually been gleaned over a long period from a variety of sources: NB The numbers at the start of each paragraph are provided for later reference.

1) Playing around a given part: It is firstly worth noting that most pop groups when playing together are using improvisation even if it is to a smaller 'micro' extent: When popular musicians play, they are often not

¹¹ Derek Bailey's *'On The Edge'* gives a good introduction to the widespread use of improvisation across cultures. Currently available here <https://www.youtube.com/watch?v=w3aaHMMUJog> (Accessed: 12/08/22)

¹² See Townsend (2000) or Sudnow (2001) for a discussion of traditional approaches.

¹³ This piece *'Sympatico/ Trade Winds'* capturing the last live recording of improviser Keith Tippett (1947-2020) working with Matthew Bourne is a very good example. https://www.youtube.com/watch?v=ETHT8_8ZiR8 (Accessed: 08/08/22)

working from an exact set of notes that they have to deliver, a precise score, rather they play around some pre-known content (Cobussen 2014): In doing this, they deliver a version that is roughly the same e.g. they softly pick open chords of Em, G and A within the verses of the song. This always happens, though the exact order of the notes is not known. So, this level of interpretation, of improvisation at a micro level within the pre-composed macro of the song, is an expected part of the pop music form.

2) Improvised soloing over a set pattern: Jimi Hendrix's recording of '*Day Tripper*' is a typical example to reference here:¹⁴ The intro, verse and choruses, which make up a majority of the recording, are known to the players and directly reference the Beatles' recorded (original) version. For the solo section, which in structure and exact content differs from the Beatles' version, the bass moves to B (as the Beatles do) and Hendrix improvises over that.¹⁵ If we consider Redding's bass and Mitchell's drums to be 'playing around' as described above, then, as only the solo is being improvised in content and length, what we are hearing is not an improvised composition, rather an improvised element of the arrangement. This, for some musicians, is as great an involvement in improvisation as they will say they have.¹⁶

3) *"Eric's guitar was used to build up a crescendo of noise on a long version of 'Smokestack Lightning' in a style known as a rave up, a precursor of the freak out, when all inhibitions are lost in a maelstrom of noise and rhythm."*

(Welch 1994 p.74 discussing the Yardbirds in a live setting pre-Clapton's departure in 1965.)¹⁷

Though the Yardbirds short dynamic builds around the single riff of '*Smokestack...*' may sound mild and fairly inhibited to our contemporary ears, those live performances provide signposts towards what within a few short years would become a marked development in form, initially within live performance and then translating to studio work. In 1967 a number of landmark recordings appeared demonstrating clear developments in recorded western popular music in their encompassing of improvisation to a much greater extent. Concisely, this is the point where a group using a small amount of known material – a short song, or

¹⁴ Recorded for the BBC 15/12/67

[https://en.wikipedia.org/wiki/BBC_Sessions_\(The_Jimi_Hendrix_Experience_album\)](https://en.wikipedia.org/wiki/BBC_Sessions_(The_Jimi_Hendrix_Experience_album)) (Accessed: 12/08/22)

¹⁵ Most likely until an agreed visual signal 'nod' was given to signal a return to the known material. The evidence of this being that the solo is an unusual, and differing from the Beatles version, eighteen bars in length. Working with visual signals in improvisation, particularly in noisy environments or when making audio recordings is an effective device and widely used to direct the players.

¹⁶ This claim is based on the researcher's experience of working with popular musicians, many of whom have stated they are not improvisers, or that the only improvising they do is in taking solos over pre-composed frameworks. It does not take into account that if such musicians were involved in writing and performing their own pre-composed music, then arguably they must have improvised to a more substantial degree in order to write the parts, as at the outset of the writing, these parts are not known. See discussion of the relationship between improvisation and composition in chapters 1 & 5.

¹⁷ 4:50 Could be the kind of playing Welch is describing here. <https://www.youtube.com/watch?v=w83Q110GtDQ> (Accessed: 12/08/22)

possibly even just a riff – to go into a longer improvisation, becomes established as common working practice.¹⁸

"You can leave if you want to, we're just jamming that's all"

(Jimi Hendrix at Woodstock 1969)

In discussing this kind of improvised playing, musicians often talk about 'jamming'. In the researcher's experience these words imply a value judgement, that the activity that is being conducted is somehow not as serious as an 'improvisation' (Rose 2017). However, Lucy Green (2002) notes: *"Improvisation has no clearly defined boundaries marking it off from jamming."* Going on to discuss extent, and effectively comparing approaches numbered 3 and 9 given here, she states:

"The two activities are distinguishable mainly in terms of the degree of freedom accorded to players, as against the extent to which they are playing over pre-arranged patterns. Free collective improvisation, as the most extreme or 'pure' type of group improvisation, tends to be based on agreements that are minimal and idiosyncratic to the group. By contrast, jamming tends to occur on the basis of high levels of agreement as to the harmonies, rhythms, structure and other elements of the music, and is based on patterns that are not peculiar to the group or the particular piece in question, but that are on the contrary, well-known and frequently employed in the musical tradition from which the musicians are drawing."

The research very much utilized this notion of agreements. As Green has stated, there is much less worked out in advance, theoretically nothing, for a truly free improvisation. In contrast, commencing an improvisation that already has some musical parameters specified markedly changes what is being asked of the musician in order to engage the activity. Working within an agreed diatonic key for example, takes away some of the need to calculate what is occurring with pitch in that it steers the player to seven different agreed pitches, this arguably meaning that they can put more focus on the other musical parameters (see Nachmanovitch 1990 on the Power of Limits p.78).

4) In 1967 the Velvet Underground released *'European Son'* on their debut album. This incorporated extensive use of feedback, phrasing and timbral exploration, it also expanded beyond conventional pop music durations to 7:47.¹⁹ 1968's *'Sister Ray'* saw them go further again. Though the version on *'White*

¹⁸ It is beyond the scope of this research to speculate in any detail as to why this music emerged at this point in time. However, it is briefly worth noting the following factors: That the studio recordings made at this point could simply have been the bands bringing into the studio what they were already doing onstage. A wider availability of electric instruments, amplification and early FX inc. distortion and reverb. The spread of recreational drugs including cannabis and LSD and their impact on creative works. Finally, the impact of the move towards the album format most obviously driven by Sgt Pepper (May 1967.) The long play format providing more physical time for improvisations to evolve. MacDonald (1994) *'Revolution in the Head: the Beatle's records and the Sixties'* provides further reading.

¹⁹ Conventions of duration stemmed partly from limitations imposed by the physical format - most obviously what would fit on a 45RPM single, this linking on to what radio stations would be likely to play and what audiences would listen to.

Light/ White Heat clocks in at 17:30, live versions went well beyond this, most of the content being improvised.²⁰

"...Even the band's most explosive playing - the versions of "Sister Ray" that ran close to forty minutes, for example - amounted to recognizable, rhythmically intense jams, an element that was becoming common in rock shows generally, as the terse concision of rock and roll yielded to expansiveness and virtuosity..."

(DeCurtis p.119-120)

The song does have repeated lyrics and these combined with a loosely consistent dynamic and tempo provided by the drums, give a sense of structure. So, the music it is *somewhat* known, however it also has big sections where '*other things*' are going to happen.²¹

5) Also coming to prominence around this time were San Francisco based Santana. The documentary '*The Santana Story: Angels and Demons*' (Marre 2011) recounts how the band really came together at what it calls their spiritual home, the Fillmore West.²² The album '*Live at the Fillmore – 1968*' records a performance from this period and the thirty minutes and eighteen seconds track '*Freeway*' sees the band working off a single one-chord phrase in C. Using only this pre-composed content, they expand the piece by using dynamic and timbral changes, including keyboard, bass, percussion and guitar solos. At the conclusion of the track the listener feels to have been on a journey, that there has been a narrative of sound events. However, the main content, the musical material that the band are working from, never actually changes from that one single phrase. The band's origins are very much tied into the Grateful Dead who employed similar approaches.

"...Like the early Cream, the Dead in concert tend to use their regular material as a jumping-off point, as little frameworks that exist only for what can be built on top of them. In "Dark Star," for example, they give a token reading of the song itself, waiting patiently until the vocal drops and Garcia's guitar comes out front to begin the action. About ten minutes later, if you can manage to look up by then, you might realize that what is happening bears as little resemblance to "Dark Star" as all that rollin' and tumblin' stuff did to "Spoonful." But of course, by that time, it just doesn't matter, and when the Dead slowing bring the song back around to "Dark Star," each change made with care and a strange kind of tact, you can only marvel at the distance you've traveled in such a short period of time."

(Lenny Kaye 1970)²³

²⁰ The version on '*The Complete Matrix Tapes*' is 36:54, recorded in 1969 it was unreleased till 2015.

²¹ "When Yule switched to organ, he often used the instrument as a sustained drone, a simpler but still compelling version of the effect that Cale liked to get on viola. Reed called it "this all-enveloping cloud of heaven music." (DeCurtis p.120)

²² Run by Bill Graham who became their manager. Both the Fillmore East and the Fillmore West were welcoming of bands working with improvisation. See live albums from the Grateful Dead and Allman Brothers as good examples.

²³ Review of Live Dead by the Grateful Dead. Rolling Stone Review by Lenny Kaye pub Feb 7th 1970.

www.rollingstone.com

- 6) "A large part of this show was improvised. We had our usual repertoire of songs... most were chosen as vehicles, like 'Interstellar Overdrive', to act as a framework for constantly changing ideas. Everyone remembers Sid for his songwriting, but he probably deserves equal credit for his radical concept of improvised rock music." (Mason 2011 p.83)

'Interstellar Overdrive' by Pink Floyd (1967 *Piper at the Gates of Dawn*) goes further again in terms of extent and the balance of unknown/ improvised material. At the start of the recording, the band play the riff four times and so set the scene for the following improvisation. This meaning that they are at a point where a volume, tempo, instrumentation, tonality is established/ set up - a point of departure is created (0:50). They don't have to simply continue what they are doing as the music moves forward from that point, and the Floyd do not, but they have audio context to work from. Moving beyond the approach taken by the Velvet Underground, from that point of departure, anything goes. There is freedom for all of the instruments in all of the musical parameters (pitch, timbre, rhythm, texture).²⁴ This granting of freedom for all (players and composition) is a significant move forward in terms of the extent of improvisation. However, the composition is not ultimately free, as the players know that at the end of the improvised section (08:39) they will return to the riff to finish, to bookend, the number.²⁵

7) Such bookended structures are very similar from those prominent in earlier jazz practice: The piece has a known start and end but what happens between them changes in every performance. Two areas (useful to CBS) in which 'Interstellar Overdrive' and subsequent similar works are very different from these earlier jazz compositions are noted: Firstly, in the improvised section, the Floyd's content, what they play, can in theory be anything. It does not need to relate to any pre-composed harmonic or rhythmic framework. Secondly, the expectation present in jazz that the improvisation will showcase the technical virtuosity (phrases, notes, keys, chords, speed, dexterity) is removed and replaced by a different kind of exploration. Listen also to the Vox Continental organ on 'Sister Ray', this is electric playing, dare we call it sound manipulation. It is improvisation that would not have worked on an acoustic instrument. In that manner, such tracks from this pivotal period were part of a widening, possibly even changing, in what both players and audiences' interest in improvisation might be (see Toop 2016, Cobussen 2014 on Hendrix as a timbral improviser p.22) Sound

²⁴ This clip simply titled 'Improvisation' from the BBC in 1968 gives another good example of this kind of work and the complete programme a sense of the movement between fixed and non-fixed elements within the Floyd's early works. <https://www.youtube.com/watch?v=8zo-pg3ZTyl&t=488s> (Accessed: 10/08/22)

²⁵ It should also be noted that once you had the musical material to work with you did not have to take this structural approach in utilising it. See version of Interstellar Overdrive from Live at the Paradiso, Amsterdam August 9th, 1969. Here the riff (the musical material) is only gradually arrived at and is never played in the bombastic manner of the original.

was being controlled, or even let loose, in a new way, an approach that became established in practice and that is still very much in evidence today.²⁶

8) *"What he was looking for was the stuff that you didn't know"*

(Herbie Hancock 2019)²⁷

Of course, it would be incorrect to make out that while pop music broke new frontiers in the mid/late 1960s jazz music and the way it utilised improvisation stood still. The documentary *'Birth of the Cool'* (2019) notes that Miles Davis had first seen the potential of working with only fragments of pre-scored information when working to the film *'Ascenseur Pour Léchafaud'* in 1957. On *'Kind of Blue'* (1957) and in subsequent works he continued to explore the potential of this more open approach to composition. (Grella 2015 p.31)

"I didn't write out the music for Kind of Blue, but brought in sketches for what everybody was supposed to play because I wanted a lot of spontaneity in the playing."

(Davis and Troupe 1989)

Central to Davis's new approach was the move to modal improvising: This in its most basic form, involving the removal of set chord patterns and harmonic movements with their associated conventions of solo structure. These to be replaced with operating around a single core pitch and exploring through improvisation how other intervals could relate to that, creating, imposing, investigating, altering, possibly even resolving, in an intervallic game of tension and release.

"The challenge here, when you work in a in the modal way, is to see how inventive you can become melodically. It's not like when you base stuff on chords, and you know at the end of thirty-two bars that the chords have run out and there's nothing to do but repeat what you've done with variations."
(Ibid, p 215)

In conducting these modal improvisations Davis chose musicians who he thought were great individually but also that would have chemistry when brought together.²⁸ Also, centrally of relevance to CBS, he looked for the input of the musicians, he allowed them to play, for *them* to make the music.²⁹ By *'Bitches Brew'* (1970) he was simply guiding musicians, instructing that everything was recorded and then producer Teo

²⁶ Thurston Moore is a good example of a practitioner who employs timbral improvisation as a big part of what he does. This clip playing with Chris Corsano and Bill Nace in 2008 is a very good example.

<https://www.youtube.com/watch?v=5cVjhtXS4Q> (Accessed: 12/08/22)

²⁷ Interviewed in *'Birth of the Cool'* (Stanley Nelson 2019)

²⁸ See Chapter 3 which discusses the importance of the chemistry within Cold Bath Street to the research environment.

²⁹ *'Birth of the Cool'* is very useful here e.g. around 1hr 15 minutes:

<https://learningonscreen.ac.uk/ondemand/index.php/prog/15A821A0?bcast=133341429> (Accessed: 24/06/22)

Macero brought together much of what is heard on the album through the editing process (Grella 2015 p.58 & 62).

"Anyway, I told the musicians that they could do anything they wanted, play anything they heard... I would direct, like a conductor, once we started to play, and I would either write down some music for somebody or I would tell him to play different things I was hearing, as the music was growing, coming together. It was loose and tight at the same time. It was casual but alert, everybody was alert to different possibilities that were coming up in the music. ...the recording was a development of the creative process, a living composition. It was like a fugue, or motif, that we all bounced off of."

(Ibid p.289)

'*Bitches*' also witnessed a move towards an increasingly electric sound, most obviously in the incorporation of electric bass and guitar. This change and the subsequent success of the album, made a key contribution to establishing the template and move towards what some label jazz fusion or jazz/rock. "*Miles is the daddy of the whole thing*" (Chick Corea 1974)³⁰ It's worth noting that though these events/impacts/evolutions occurred before six of the seven CBS members were born, jazz fusion still definitely has contemporary relevance, a perfect example being Snarky Puppy, popular amongst a wide age demographic and regularly mentioned by the CBS players as of contemporary interest.³¹

9) *"One of the most important factors in these differences is the materials that musicians improvise on. Provided that improvisation is based on something..."*

(Townsend 2000 p.8)

Finally in terms of extent, we reach free improvisation. This is a much-loaded term and attempting to dissect its meaning or politics is not the purpose of this research.³² The practical interest CBS had in free improvisation focused largely on two areas: Firstly, that it proposed working without any pre-imposed structures - similar than the Floyd approach but without the need for the bookending. In earlier years, CBS

³⁰ Quoted in Bob Palmer's article 'Jazz/ Rock '74: The Plain Funky Truth' in Rolling Stone August 1st 1974. There are many references supporting the importance of Davis in the establishment of jazz/rock including direct links to groups including Weather Report, Tony Williams Lifetime, Mahavishnu Orchestra and Return to Forever.

"Selling more than one million copies since it was released, *Bitches Brew* was viewed by some writers in the 1970s as what spurred jazz's renewed popularity with mainstream audiences that decade."

https://en.wikipedia.org/wiki/Bitches_Brew#Reception_and_legacy (Accessed: 11/08/22)

<https://jazzineurope.mfmmedia.nl/2020/04/miles-davis-bitches-brew-a-brief-look-at-the-albums-impact/> (Accessed: 11/08/22)

³¹ Based on audience observation made by the researcher 15th Nov 2019 at Manchester Apollo. Also outlined in this brief interview. <https://www.rollingstone.com/music/music-features/snarky-puppy-michael-league-interview-immigrance-807718/> (Accessed: 10/08/22) Music examples here: <https://www.youtube.com/user/snarkypuppy> (Accessed: 10/08/22)

³² In case the reader is tempted, they could begin to chart its evolution in the UK by looking at practitioners such as the Spontaneous Music Ensemble, Evan Parker, Derek Bailey, John Stevens, Maggie Nichols and AMM. The episode '*Strange Brew*' of the 2008 Series Jazz Britannia provides an insightful overview.

<https://learningonscreen.ac.uk/ondemand/index.php/prog/0050D94F?bcast=31178752> (Accessed 08/08/22)

had delivered most of their improvisations using the 'point of departure' technique outlined in point 6.³³ Members had expressed interest in going beyond this and to see whether the group could operate successfully without any pre-set agreement, structure or cue.³⁴ Also of interest was the breadth of palette, the notion that any sounds could be integrated and explored (Hopkins 2009) and the importance that key practitioners within the field placed on elements such as dissonance, extended technique, timbral and gestural work (Borgo 2007 p.76). Whereas Floyd were representative as leading figures in acid or progressive rock, which did include improvisation as an essential ingredient, such elements of practice in these genres were 'other' - the exception, something they did (particularly in the studio) only within small sections of the music-making. Free improvisors do these 'other' things all of the time, that is their practice.³⁵

"Many people use the term 'improvised music' to designate a relatively precise aesthetic..."

"...I believe that all improvisers who devote themselves exclusively or principally to this music are instantly recognizable..."

"When I'm in an 'improvised music' type improvisation situation, it wouldn't for example, occur to me to play a melody..."

(Benoit, Badaroux and Charmetant in Denzler & Guionnet 2020 p.116)

Finally, it is important to mention that this so-called 'non-idiomatic' music (Bailey 1993) by the time CBS came to look at it many years later, *did* have an identifiable sound, this most obviously characterised by avoiding continuous pulse, diatonic melody or key (Bergerot p.181 refers to '*harmonic atheism*'). CBS did not want to limit themselves in this way, to *only* doing this. Their desired remit included within its core traditional pop music approaches. For this reason, they could never be considered purely as a free improvisation group, rather one that embraced the practical approaches that come from free improvisation as part of their music-making remit.

It may seem odd to have focused in so much here on the single element of extent. However, as is hopefully evidenced by the discussion above, this one element was something of a trojan horse in beginning to unlock the functional differences in the improvisational practices operating across a range of musics and

³³ See CBS albums '*Return to the Atomic Age*' (2016) and '*Sound Research Rebellion*' (2018) which both used the point of departure technique extensively. The musical approaches employed, including the extent of the improvisation were discussed at length within the researcher's MA at the University of Central Lancashire completed in 2017.

³⁴ This larger aim for the ensemble reflecting back to Ornette Coleman's collectively improvised piece '*Free Jazz*' (1960) which Charles Hersch described as "*Combining unprecedented individual freedom with group coherence.*" (Quoted in Townsend p.88.)

³⁵ Toop 2016 provides extensive background to the evolution of free improvisation and p.166 quotes Terry Holman "*There was no attempt at tunes, structure or plans of any kind... I developed a pulse, a texture, a wash, a dialogue form of drumming over which a soloist could ride free from the restrictions of time and metre. We did not attempt to emulate any other musicians, style or genre.*" see also Rose (2017) p.138.

musicians.³⁶ It gave the researcher options in terms of deciding how CBS would approach their music-making. The researcher then made his own choices about which of them he wished to follow within the study. This process involved considering what the group had (informally) said they wanted to do and what he felt to be in their best interest, but it was ultimately his subjective decision and preference. Doubtless contextual listening coloured his expectations of what to expect, what might be possible, what it might sound like and what might be 'good' or desirable (Cobussen 2014 p.26).

In summary, the study of extent established, or help shape, the following elements of working practice for CBS (numbers refer to those used in the text above):

- It was expected that as popular musicians, the CBS players would 'play around' whatever they were doing. (1)
- Players would not simply improvise over a set pattern as this did not fit with the researcher's definition of SGI - which specified that the music must be unknown to all of the players. (2)
- Some of the workshops did use the point of departure approach with the band working from a small fragment or cue, though this became increasingly less as the study progressed. (3, 4 & 6)
- It was desired that the music had an evolving narrative of sound events, even if the ideas that were being worked with or from stayed similar. (5)
- It was important that there was freedom for all instruments in all parameters. (7 & 9)
- Though there was space for technical virtuosity to occur, this was never really perceived by the researcher as being central to the identity of CBS in the way that (electric) sound manipulation was. (7 & 9)
- Focus was geared more towards modal improvising as opposed to working over chord progressions. (8)
- Using Davis' example, the researcher sought to steer the musicians, as opposed to instructing them, with the intention to bring out their best in a music-making which allowed them to express themselves, rather than replicate given styles, and in which they felt to have a good degree of ownership. (8)
- Space was made both for traditional musical exploration and also the clashing, dissonance, extended techniques, timbral and instrumental explorations and gestural approaches of free improvisation. (9)

³⁶ See Cobussen 2014 p.21 who discusses the use of *"a broader conceptualisation of improvisation goes hand in hand with the obligation to name and emphasize differences between various acts of improvisation."*

Types of Improvisation

"Musicians or pieces that I listened to seemed to fall clearly into taking one or other of two types of approach: Pop musicians jammed around a riff or worked off the song, free improvisers made the whole thing up as they went along. I didn't want to limit the group to either one or the other and I don't think they wanted that either..."

(Researcher Self-interview November 2021)

Study of existing practice relevant to the music of CBS, including through the lens provided by extent, led the researcher to view approaches to the improvisations that he was witnessing as usually fitting within two stereotypical types.³⁷ These types becoming known as type 1 and type 2, had some shared musical approaches and techniques but also had clear distinction from one another. This distinction was vital to the study, as according to the researcher's determination of the type of improvisation appropriate for CBS, it would stipulate that what was being asked of them, the musical challenges and skillset, rules and expectations, would be different.

Ultimately, the band's interest in not wanting to limit themselves and to have the freedom to perform either in type 1 or 2, or in combination, effectively led the researcher to create the hybrid 'type 3' as an umbrella term (incorporating 1 & 2). This also allowed for the possibility that there might be approaches, techniques or practitioners operating in type 3 that did not occur in type 1 or 2, although in practice no such factors were detected.³⁸

The following table lays out two stereotypical types of improvisation observed by the researcher in other groups using improvisation with a very brief description of their regular characteristics as well as the third (hybrid) type of improvisation set by the researcher to be the area of operated in by CBS.³⁹

Table 1. Improvisation Types

Type of Improvisation		Characteristics of Approach
1.	Point of Departure	Based around a given fragment or cue (chord progression, riff, rhythmic phrase, tonality etc.)

³⁷ Although the researcher was experiencing a good deal of improvisation, most of it could be classified as living within the same albeit broad headings. It may be that improvisation within other musics would not fit within types 1 and 2.

³⁸ Schlicht (2008) raises an important point that did emerge working in type 3 relating to the challenges of incorporating elements of type 1 and 2, particularly within a single piece. *"The main focus became how, as a group, to get out of a groove once it is established and the challenges faced when deciding not to go with it as a player."*

³⁹ Type 3, Free Play is named after the Stephen Nachmanovitch book discussed on the following page.

2.	Free Improvisation	No given fragments or cues. Nothing pre-determined. In theory anything can happen but in actuality it's very unlikely the music will maintain a constant pulse, repetitive rhythm or standard diatonic key.
3.	Free Play	Being able to move between point of departure (type 1) and free improvisation (type 2) techniques or to use them in combination.

Theoretical Base

If one Googles 'books on music improvisation' a long list appears. Many of these are technical training manuals aimed at particular instruments, '*So and so's approach to guitar improvisation*' etc. Our generic manual then contains scales to use against example chord progressions, how to build the phrases of a solo through rhythmic development etc. Such texts, though providing technical information, thus informing 'A' and aiding the musician's wider quest to improve knowledge of all components, are not directly relevant to the research's quest to further understand 'B'.⁴⁰ Steering away from the generic manual, the researcher's quest for useful context ran headlong into a canon of material aimed squarely at one end of the extent spectrum; the free improvisation player (Nunn 1998, Rose 2017, Hall 2009 et al.) Such material regularly moved far away from the practicalities of making music, centering on philosophical debates or "*Some political issues*" (Denzler & Guionnet 2020.)⁴¹ The researcher attempted to survey these sources for input that would be useful for/ relevant to CBS, whilst trying not to let himself become fixated or sidetracked with issues outside of the scope of the research.

"It is possible for an artist to have stupendous technical prowess, to be able to amaze and delight audiences with dazzling virtuosity, and yet there is - something lacking"

(Nachmanovitch 1990 p.119)

The underpinning philosophy, approach and research question chosen for this work were all heavily influenced by reading '*Free Play: Improvisation in Life and Art*' (1990) by Dr Stephen Nachmanovitch.⁴²

⁴⁰ Relating to the interest the players had in technical playing approaches: When CBS were asked to nominate tracks for an 'improvisation we like' playlist for the CBS YouTube account, Javon came back with four videos all of which featured very technical, fast playing. This isn't at all what he does in his practice in CBS but shows his interest in it. It also serves as a reminder that the interests of the research are not the only interests of the group.

https://youtube.com/playlist?list=PL8dSdhHmrj12HByg4KHrVq_lq4lO47lO (Accessed: 12/08/22)

⁴¹ The researcher acknowledges that this section of Denzler & Guionnet's book provided useful insights. However, re:analysis becoming fixated or sidetracked; the researcher is probably biased in wanting to stay away from such discussions in that in his previous experience e.g. conducting workshops with Philip Morton of the Improvisers Network, within discussions players very quickly resorted to posturing, name-dropping and reciting quotes in order to impress their peers, which the researcher felt were highly damaging to what could have been useful debate.

⁴² Nachmanovitch's 2019 book '*The Art of Is*' builds upon the approach set out by '*Free Play*'.

Though thirty years old, 'Free Play' remains wholly relevant to current practice and was essential to the study, providing an approach to improvisation that talked about everything *but* technical elements. Though not expressed in such terms, it offers strong suggestions as to what 'B' consists of and how to get there. It seeks to understand the nature of the task, offering mental approaches that Nachmanovitch proposes will lead not only to being a good musical improviser but to being a good artist. Even the title was useful - moving the researcher away from the term 'free improvisation' and all of the knotty entanglements that come with it.⁴³

"I meet my material, encounter the instrument, encounter mind and body, hand and eye, encounter collaborators and audience. Practice is the entry into direct, personal, and interactive relationships. It is the linkage of inner knowing and action.

Mastery comes from practice; Practice comes from playful, compulsive experimentation... and from a sense of wonder... The athlete feels compelled to run around the track just one more time; the musician feels compelled to play that fugue just one more time..."

(Ibid. P.72-3)

Along with approaches to practice, Nachmanovitch also discusses the importance of the removal of blockage – physical or mental factors that block the path of the playing, disrupting or stemming its flow "... *keeping open an unrestricted pathway for the creative impulse to play its music straight from the preconscious depths beneath and beyond me.*" (Ibid p.141)⁴⁴ This was used directly by the research, with the approach taken in working with CBS being to build confidence through experience, a large part of which was to attempt to work through and remove issues that might be creating blockage for the individuals and group (see chapters 3 and 5).

Though Nachmanovitch's words felt to resonate with the researcher's professional experience - *none of it felt to be wrong* - at the outset of the study there did feel to be a large gap between the general guidance of 'Free Play...' and its practical application to a specific case i.e. what would be the actions needed on the ground in the workshops to test his theories in attempting to aid and further understand the improvisations of Cold Bath Street? Central to the research methodology, what would be the constituents of 'B' when taken from work with a specific group? Would this be different than in Nachmanovitch's general overview? These questions remained present throughout the study.

Borgo, Cobussen and the Complex Ecologies of the Unknown Music

⁴³ Acknowledged in the name given to type 3 improvisation in the table above.

⁴⁴ See also 'Flow: the Psychology of Optimal Experience' Mihaly Csikszentmihalyi (1991) Harper Perennial Modern Classics and Borgo 2007.

In his chapter *'Steps to an Ecology of Improvisation'* Marcel Cobussen (2014) discusses whether improvisation is actually possible, referencing the differing standpoints of a number of scholars including Derrida who "...regretfully concludes that improvisation is impossible because one is always condemned to repeat, at least to a certain extent, the schemas and language that are already there." As indicated in the discussion of extent, the researcher would agree that not everything in the music is being improvised every time: Sam, the drummer will put his kit up in the same way, use his right foot to move the bass drum pedal, at some point in the music-making move around the toms from left to right, look to the bass player in order to 'lock'... What will be done by the players in conducting the activity is *known* in some way and to some extent. However, to meet the definition of SGI given in the equation, for CBS to be conducting successful group improvisation, this work insists that at least to *some* level, parts of the music 'previously unknown' to the players must occur.⁴⁵ So, whilst acknowledging Derrida's pre-existing '*schemas and language*', it is the unknown constituents of the activity that are the focus of the study.

Though the study was not about teaching music as such, pedagogy and the learning environment was never far away, as all sought to progress their practice, their doing and their understanding of the doing. Another highly experienced musician, educator and scholar on improvisation, in his 2007 article *'Free Jazz in the Classroom: An Ecological Approach to Music Education'* David Borgo provides a wealth of useful advice centering on encouraging a more holistic approach to music learning environments. Much of this was directly integrated into the method and will be further referenced in chapters across the thesis. Borgo's guidance warned against the dangers of traditional jazz education, approaches that ask that students first "*master lower level features*" (Ibid p.76) and suggested rather, taking approaches that avoid "*always reducing music to its component parts, and ultimately may benefit their ongoing development as artists.*" The research heeded Borgo's reiteration of the advice that "*the map is not the territory*" and that problems occur when the "... "*what*" and "*how*" to improvise is conceived of as occurring prior to, and separate from, actually "*doing*" it." (Ibid p.65, Schlicht 2008)⁴⁶

Borgo's discussion of information processing models led the researcher to pivotally re-frame his understanding of improvisation, defining it initially as a process and later an activity. In combination with Cobussen he defined the workings of the improvising group as a complex ecology: Though it will be discussed at length in chapter 5, initial thoughts in response to Borgo on the work carried out with CBS can be briefly summarised: The musicians brought 'musicality' to the table, they also brought understanding and fluency with their instruments. These previously developed skillsets then interacted with the 'now' or current

⁴⁵ In his 'full unedited interview for the History of Rock 'n' roll_' Jerry Garcia refers to "*experiencing authentic inspiration*" to describe this <https://www.youtube.com/watch?v=QAhfVmhONU> (Accessed: 07/07/22)

⁴⁶ See also Rose 2017 on the dangers of overly-defining and overly-prescribing and the importance of situated context.

situation (aligning with Nachmanovitch). In this moment, the musicians put existing processes and understandings into action. They also cope with, in fact relish, the challenge of the unexpected. Simply put, through the previously existing musicality interacting with the now, they make choices about what to play.

The researcher began the study presuming that the makeup of 'B' was likely to be complex, involving (the interaction of) many elements or factors and to an extent personal to the players in question.⁴⁷ This again agreed with Borgo who gave further clarification that rather than a complicated task, improvisation should be engaged as a *complex* one involving "*bottom-up or "self-organizing" dynamics that rely on extensive communication throughout a network of highly interconnected parts...*" (*Ibid p.86*) This is seconded by Cobussen (2014) who reminds "*neglecting this complexity would do an injustice to the richness of this inextricable part of all musicking.*" In his closing words Borgo advises avoiding the philosophical stance of dualism and that "*a pedagogical approach that views musical creativity from an ecological perspective can help to overcome the tendency to separate musical "materials" (the tools and theory of music) from musical "behaviors" (the application of those materials in context).*" (*Borgo 2007 p.87*)

(Influences on) Workshop Session Design

Chapter 2 will propose that workshop sessions were a key part of the method. The design and facilitation of these workshops came largely from the researcher's eighteen years of experience working with developing musicians in the University of Central Lancashire. There wasn't a specific theoretical model employed or learning pathway followed, as it was key both that the sessions were built in a bespoke manner in order to meet the needs of the group and also it was unknown at the start of the study exactly what would need to be covered. There were however a number of key influences on how the workshops were approached. John Stevens' *'Search and Reflect'* (1985) is the iconic text in the area of musical improvisation workshops.⁴⁸ It sets the tone for others that have followed, offering short exercises for individuals and groups to help build technical musical skills ('A') alongside more open stimulation designed to allow individual expression. *'Search and Reflect'* collects together exercises that Stevens had developed over many years. He was himself a highly successful improviser and performer and this model of writing/ facilitating from a place of (ever-developing) practical experience was influential and central to the researcher's approach: Having some knowledge built in previous personal experience whilst acknowledging that there is a great deal more to be

⁴⁷ Cobussen 2014 p.21 states "*It is inappropriate and even impossible to investigate its working in a general sense.*"

⁴⁸ Traditionally known as a standalone written text, early in the study it was found being offered as an online course. There has also been a face-to-face workshop event detailed here <https://www.cmsounds.com/news-article/search-and-reflect-weekend-course> (Accessed: 10/08/22)

learned and that facilitator and group will work on this together through their interactions. In this way, 'Search and Reflect' is also an excellent example of musical exercises that are not intended to lead to a predetermined goal. This openness in aim was key to the research, partly as it helped counter the researcher's subjective biases. Also, that it meant there was more potential benefit for the musicians in being involved in the study, in that they could improvise their own personal responses to the stimulus given and thus have a greater sense of ownership of the musical results.

More directly influential on the study was the work the researcher had done with Philip Morton of the Improvisers Network, who the researcher ran workshops with at UCLan prior to the start of the study.⁴⁹ What was brought from the earlier work with Morton directly to this study is best illustrated through direct quote:

"We felt, and Phil had a lot more experience on this in terms of improvisation, that there needed to be a balance between open playing and exercises that gave more particular stimulation. The workshop needed to be both, offer something to think about, or some input and also be a place to experiment, to try out, to do the thing i.e. the improvising. Even at that point I was trying to listen to the work of that group and to think what might help them in terms of making 'better music.' Though Phil very much knew exercises like those of John Stevens, we were also keen to come up with our own and to experiment..."

In these sessions there was an excitement and a joy in coming together to create which I felt was important in contributing to the quality of the playing, its success as a creative product, but also more obviously in taking risks... being playful etc. Of course, there was also a balance to be kept between the sessions being serious, positive and productive. Though I really enjoyed the free improvisational playing, which is what Phil does, I didn't feel those workshops were a place for improvisations that included traditional musical content such as regular beats or diatonic harmony and I really missed that. So, in some way those sessions were telling me what I wanted in a musical improvisation and shaping what was to come."

(Researcher self-interview November 2021)

Context Evolving

Context, both practical and theoretical, continued to be sought and to evolve throughout the period of study. Of particular interest were the breadth of practice and approaches currently employed by improvising groups.⁵⁰ Though there was frustration that due to the Covid Pandemic the number of concerts/ talks/ festivals/ sessions taking place was extremely limited, a good deal of material was accessible online. For example, it was useful to attend a virtual conference from the Glasgow Improvisers Orchestra in November

⁴⁹ Philip runs this web resource as well as facilitating his own sessions and performing as part of various ensembles over many years. <http://www.improvisersnetworks.online/uk/north-west-start-page/item/110-jigsaw-workshop-preston-introduction> (Accessed: 12/08/22)

⁵⁰ An example would be improviser Matthew Bourne who the researcher was able to meet with and discuss his improvisations with Keith Tippett in October 2021.

2020.⁵¹ In terms of music-making, the work that was witnessed here reaffirmed the researcher's presuppositions that though instrumentation may have changed slightly since 1968, for example the Ableton Push controller introduced in 2013 which is currently popular, the core of the activity as far as musicians go, is still very much the same: We make sounds, we respond, we interact, we control, we play.

Summary of core topics addressed in this chapter:

- Acknowledgement that a great deal of context for the study would be taken directly from listening to the music of leading practitioners.
- Assertion that the activity of improvising contains many skills that are found within the activity of composing.
- Highlighting of the importance of extent in defining the musical decisions that need to be taken by the players within the activity, this then leading to a definition of the type of improvisation with which the group would engage.
- Acknowledgment of the work done by contemporary theorists Nachmanovitch, Borgo and Cobussen on the complexity and ecological nature of the group improvising activity and the necessity to study it beyond technical concerns, as an entity consisting of complex interlinked relationships between people, theory and practice.
- Acknowledgement of the influence on workshop design of facilitator-practitioners particularly Stevens and Morton. Their frameworks being suggested as useful in providing a means through which key practical topics could be taken forward to CBS.

⁵¹ <https://www.glasgowimprovisorsorchestra.com/giofest/xiii/> (Accessed: 01/11/21) Though concert footage is no longer viewable the artist links are still live at this point. Though by the close of the study in August 2022 many face-to-face events have restarted, this process has been slow and there was little first-hand work that could be safely witnessed (adhering to govt guidelines) during the time of active practice for the study – loosely equating to the calendar year 2021.

Chapter 2: Method

"The search is conducted in the medium of sound and the musician himself is at the heart of the experiment."

(Cornelius Cardew quoted by Evan Parker in Bailey 1993 p.130)

This study examines qualities in improvised group music-making. It does this under the broad heading of practice as research as defined by Nelson (2013). The enquiry is entirely qualitative in seeking to engage and illuminate creative qualities and processes. To do this, it combines conventional tools used to look for qualitative data; music-making workshops and discussion, contextual research, player interviews and researcher reflection with approaches taken within ethnography and autoethnography:⁵² In keeping with Sughrua's conception of autoethnography (2015), the work is driven by the researcher's desire to better understand the functionality of the music practice that he is engaged in and to study this subject through his own practice. As such, he is a key source of data for the study and to an extent is observing himself. Sughrua defines ethnography as *"(Reflexive) account or description of a social world on the part of the author-researcher who makes a physical and/or effective presence in the social world."* Study here takes place through the researcher's analyses of his experiences within a society that he has created, a group of improvising musicians, whose creative journey is also at the heart of the research.

This research collects and combines data of different types. These data sources are individually detailed later in the chapter. In collecting data, the researcher wasn't only observing other players as participants, finding answers to the equation in what they were doing: he was also very much attempting to observe and document *himself*; his own experience of practice and the epiphanies that occurred within that. His position *within* the music-making, within the doing of the activity, is one of the more unusual aspects of the method, this facilitating experiential and embodied observations (McRae in Bartlett and Ellis 2009 p.142). It allowed him to report on his understanding of what was occurring, being not just in those sessions, but inside the creation of those particular sounds, conducting the creative activity with those people at that time. Consequently, the research has an ever-present sense of self-analysis and introspection – a questioning of

⁵² A variety of presentational methodologies at 'The Autoethnography of Composition and the Composition of Autoethnography' conference (University of Glasgow & University of Surrey) 17/06/20 demonstrated that what autoethnography is and how it can be applied to music is still very much in flux. <https://www.gla.ac.uk/schools/cca/events/eventsprogramme/index.html/event/11797> (Accessed: 11/08/22)

the self and a quest for reasons. As such, though the traditional academic devices of introduction, context, method, discussion, analysis and results are utilised, the text also regularly incorporates the researcher's direct commentary, words, thoughts and feelings. He is reporting the group's journey including his own, as he believes it will be of use to the wider community of musicians (Bartleet & Ellis 2009). Indeed, this document centres on the story, thoughts and opinions of all of the participants, appropriately to the Professional Doctorate, combining them with the researcher's own professional experiences and knowledge.

As will be discussed in chapter 3, within the research all of the participants were engaging in an activity (group musical improvising) that they would have probably been regularly undertaking regardless of the study. However, they were being asked to approach and consider it in a somewhat different manner and to be observed and recorded doing this. It was intended that in this way, undertaking the (same/similar) activity for the (different) purposes of the research would further illuminate its functionality to the benefit of both researcher and participants.

Data Sources

In its method, this research put into practice experience gained within the pilot project. This successfully trialed a combination of the following sources to produce an initial list of what the researcher labelled as Constituent Factors:

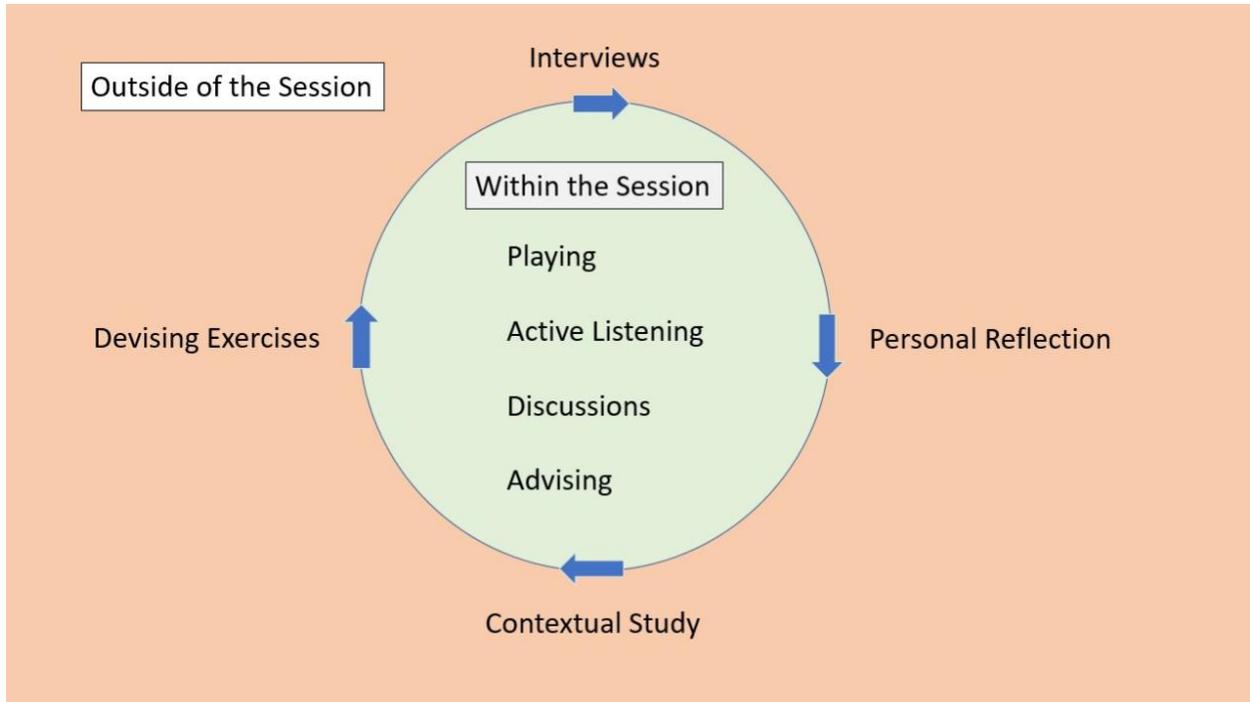
- Workshops: Music-making and Discussion
- Individual Interviews with the players
- Researcher Reflection and Analysis
- Contextual Study

The researcher explains how the data sources were worked with as a 'Developmental Continuous Feedback Cycle.' This to reflect the manner in which sources both inside and outside of the workshops fed into each other on an ongoing basis, this cycle to include:

- The researcher's personal experience within the workshops or reflection outside of the sessions including when listening to the workshop recordings.
- What was played by Cold Bath Street in the workshop sessions.
- What was verbally articulated by the players in both the workshops and interviews.

- Contextual research: Identifying successful or extensional elements of practice observed in the work of others for possible trial and adoption by CBS.⁵³
- Devising exercises: As indicators towards constituent factors in answer to the equation were identified, these were integrated into subsequent practice.

Figure 1. Diagram: Developmental Continuous Feedback Cycle v2.



Objectives

This study ultimately sought to produce a list of constituent factors and to discuss their implementation within SGI in order to inform 'B' within the research equation.

The stages of the study can (over)simplly be summarised as follows:

Table 2. Objectives – Tasks and Dates

Tasks	Dates
Contextual Study	Oct-Dec 2021
Music-Making, Discussion & Interviews	Jan 2021-Jan 2022
Reflection, Analysis & Write Up	Feb-August 2022

⁵³ See Select Discography and Film and Visual materials for examples deemed of particular relevance.

Though in presenting the research every effort has been made to present a clear journey through these stages for the reader, the method reflected the subject matter in being necessarily complex, layered and non-linear, sticking determinedly to its subject matter whilst being adaptable and fluid in its execution (Borgo 2007).

Workshops

"Things take time, you know, you just don't learn something new and do it overnight. It has to get down inside your body, up into your blood before you can do it correctly."

(Miles the Autobiography p.306)

Aims – The aims of these activities differed for the researcher and the band.

- Researcher: An immersed, diagnostic process offering insight into how the practice of improvisation functions at basic and higher levels.
- CBS: How to make subjectively better improvised music – of higher quality and improved functionality.
- All: To develop their understanding of practice through practice and discussion.

Workshop Environment (see also chapter 3): Before considering what would be done in the workshops, what musical instruction and topics would be covered etc. the researcher considered the environment that would be most productive to conduct the work. Borgo's comments here were highly influential and worth quoting at length:

"Rather than insisting on a prescribed plan and a tightly controlled environment for learning, instructors adopting this contemporary orientation must focus on creative ways to facilitate learning in a dynamic context that is shaped and negotiated by all of the participants. Instead of creating a situation in which there is a predetermined outcome, instructors must be comfortable presenting unpredictable situations and exploring open-ended possibilities. Rather than simply imparting problem-solving skills in the abstract, they must encourage students to develop problem-finding approaches and create a context in which everyone feels comfortable exploring new ideas and experimenting together. The notion of teachers as experts and gatekeepers must ultimately give way to the more engaged and interactive role of mentors or facilitators."

(Borgo 2007 p.69)

Through previous experience, the researcher felt it was pivotal to define the workshop as a supportive, non-pressured and non-judgmental environment. To use affirmation, minimal direction, noting when things were good and really worked (musically and verbally) and to only point out perceived problems when he felt it was absolutely necessary. Though it was clear that they were being observed, it was felt vital that participants did not feel they were being judged, but rather could grow and develop in an environment in which they were supported and valued.⁵⁴

Workshop Content and Approach: At the start of the study the researcher felt the group could already make interesting versions or arrangements when working from given phrases under direction. This is heard on the CBS album '*Return to Earth*' (2019).⁵⁵ Attempts to improvise without a given start point had been less successful. The group's informal comments mirrored the researcher's thoughts, that addressing how to do this was a desirable next, albeit large, step. In accordance with the approved doctoral research programme, the agenda in the sessions was thus twofold with both elements mutually supportive: To further develop the abilities of the group and to research constituent factors of SGI. Initial workshops were built around key themes identified within the pilot project. The workshop exercises deliberately simplified points, to spotlight substantial, vital techniques, in a clear, concise manner. These techniques were then explored, with the aim of being personalised and integrated long-term through actual practice both inside and outside CBS. The terms *explicit* and *implicit* were useful: The early sessions explicitly discussed practical music-making elements that were then implicitly understood within subsequent work. A good example of this was the focus in the first two sessions on narrative structure and development. Improvised pieces always engage some way of laying out sonic material and thus address narrative, but it would be rare that players would *explicitly* be asked to focus on it. Once the practical topic had been brought to the project through a workshop, it was then expected that that would enable the group to better deal with it within subsequent music-making.

As the study progressed, topics and exercises responded more to what the researcher had witnessed in previous workshops and sought to challenge and extend the players' musicality beyond basic functionality, including addressing what had been observed as their habitual musical behaviour (Nachmanovitch 2019). These musicians were not beginners, they were not working from a standing start and already had their own ways of conducting this activity. In trying to understand this, the physical aspects – how it sounded - were much easier to pick up on than was the way the collective group and the individuals within it were thinking. It

⁵⁴ This connected strongly with the identified need to build confidence and for improvisers to take risks - discussed at length in chapter 5.

⁵⁵ <https://open.spotify.com/album/3bJFRXSe1tuZSDsB7ZUwOd?si=S9w4Yv5USVmXsG1GUcRnOg> (Accessed: 12/08/22)

was here that the discussions and the recordings of the discussions, proved extremely useful: The researcher often found it difficult within the moment of discussion to immediately make the jump to the other person's perspective, particularly if it was far from his own. Here, possibly his years of previous experience and developed personal understanding went against him, making it a longer journey to understand how someone else might see it differently. As will be referred to in chapter 5, this issue also had strong connections with the way that self-taught musicians learn, establishing over many years an unwritten and unspoken understanding of practice, which they themselves struggle to articulate. As the researcher had prior knowledge of the participants playing, this aided the process of identifying group and individual need and thus topics and workshop exercises chosen. However, rather than using what Sawyer (1999) discusses as the "*reductionism*" in process, of first working on topics with the individual and then bringing them to the group, the workshops stayed focused on the group's music-making using what Sawyer suggests as studying at simultaneous, multiple levels the "*micro processes of interaction during specific events*".

Appropriately for an improvising group, the devising of workshop content was a live, fluid and adaptable process (Schlicht 2008). This is seen by the researcher as a key strength in meeting the aims. The research initially asked artistic questions relating to the workings of improvisation and emerging from what the group were playing. As possible solutions to 'B' began to emerge they were probed and allowed to evolve. By the later workshops, the researcher didn't feel there were any new specific topics that needed to be brought in and rather carried out further exploration and detailing through open playing, bringing in only light-touch steerage to gradually explore evolving themes.⁵⁶ Another element that became standardised, that stemmed from a discussion point made by the pianist, was that players needed to warm up. They couldn't just, possibly mentally and definitely physically, go straight into their best playing. Resultingly, every session began with a period of open playing (fully discussed in chapter 5).

The following tools were typical of those used by the researcher within the practical, ongoing analysis of the music-making in the workshops:

- Remedial – Identifying and dealing with problems: *The whole does not function as well as it could, why is that?*

⁵⁶ Borgo (2007) p.77 discussing Clarke describes a similar process of self-tuning occurring through a feedback cycle of action and perception. "*Directed perceptual learning, in Clarke's formulation, describes a situation in which others model a behavior, either through a demonstration or by offering verbal instruction or emotional support in ways that encourage the learner to try out certain actions or to pay attention to specific aspects of the resulting sounds.*"

- Symptomatic – Indicators of larger issues seen through smaller details: *That phrase in the bass part of that short jam possibly points out that you are having a problem with X.*
- Causal – What changed in *that* thing to make *this* thing happen?
- Developmental – *This is something that could be added that could make this better.* Such developmental ideas largely came from contextual study in observing the work of others.

It is important to stress and will be reemphasized at a number of points, that the development of CBS's music-making was by no means the researcher leading the group to a known destination via a pre-determined route. Though an initial set of possible constituents had been identified by the pilot, a full answer to the equation was by no means present at the start of the main study. The reality was that *everyone* involved was exploring new territory (Shevock 2018).⁵⁷

*"I wanted the sessions to feel like a guided rehearsal. Drawing attention to a possibly pivotal topic and then trying it out. To fully observe the possibilities of improvisation at work, I felt the creativity needed to be inspired not crushed. I was influenced in the approach by other workshop sessions including those of Phil Morton of the Improvisers Network, where he'd get the group to play first and then discuss afterwards... see what happens and then discuss it... don't try to pre-judge it."*⁵⁸

(Speaking about initial period) I devised sessions about topics either that I felt were emerging as pivotal to the workings of improvisation and thus needed to be absolutely functional, I suppose you could call these fundamentals, or where there were things that the group didn't seem to be so good at, to address them. Two hours is a relatively short time and really only served to introduce topics that were then regularly referenced."

(Researcher Notes Sept 2021)

Practicalities, Planning and Flexibility: In setting out to plan the sessions, a balance was struck between what was desirable/preferable and what was practical/realistic. Informed by previous experience, regularity of the workshops was the desired intention, with ample notice to be given as to dates and times. However, the study began in less than desirable conditions and there was discussion as to whether it should be postponed due to restrictions that were in place due to the Covid pandemic making it impossible to lawfully conduct face-to-face workshops. At that time, it was unclear how long such patterns of restrictions would continue. The researcher strongly felt that following the success of the pilot study, momentum was with the project. He also felt that it was very likely that without any activity the CBS members would simply leave the project, this setting the research back considerably. Thus, the decision was made to continue, using the initial period of the project (Oct 2020 to Jan 2021) to conduct contextual study and ready topics for the workshops with

⁵⁷ This point very much aligns with Rose (2017) p.136 discussing Lewis *"we're self-teaching, we're learning from each other ...teaching ourselves to do something that we don't really know what it is..."*

⁵⁸ Discussed in Rose (2017) p.137 quoting Oliveros and Lewis.

the hope that they could be conducted through 2021. In practice, the level of restrictions and how UCLan responded to them varied during the study period. This led to batches of workshops being possible at points, rather than a regular timetabled routine occurring throughout the period of study as was initially desired. The university rejected the researcher's request to bring the participants onto campus in order to conduct research work on a number of occasions. He was consequently forced to use a commercial rehearsal room that was open at points in line with government safety guidelines. This space was relatively small for band work and this combined with members' availability meant that not everyone attended the same number of sessions. This did lead to issues of parity, most obviously when trying to systematically work through what is detailed in chapter 5 as 'The Offers System', with an element of repetition and some participants getting more information than others which was considered unavoidable in the circumstances. Though the lack of regularity was at first very frustrating, with the perceived likelihood that it would severely damage the study, it quickly became clear that each individual workshop was producing so much material for analysis that in fact the researcher would easily have enough to work with by the end of 2021.

Elsewhere, the researcher and group's professional activities were markedly impacted on, and this also doubtless did affect the study to some extent: Usually CBS would be bringing in new members from the UCLan undergraduate music courses and performing external concerts regularly. Very little of this activity was able to be carried out.⁵⁹ With the limitations imposed by the restrictions to work around and considering the value and emphasis placed on external professional activities by the Professional Doctorate, experiences had within these events are specifically referred to within the text more than would probably have been the case had the study taken place under normal conditions. The most obvious example being that a recorded audio extract from one of series of open improvisations run by the researcher called the GRID sessions, played solely by four of the CBS members, has been used as one of those presented and analysed.

Music Recordings

Fifty percent of this submission is recordings of music made by the participants including the researcher. These are provided as online standalone audio files linked within chapter 4 and also as illustrations of specific, key moments through hyperlinks within the text of chapter 5. As the workshops regularly ran beyond three hours, a large amount of audio material was generated. Following discussion with the

⁵⁹ Exceptions being a livestreamed concert from the New Continental in December 2020, Harris Museum March 2021, in person concert at The Ferret June 2021, monthly GRID sessions at the Continental (October 2021 - May 2022) and a workshop and performance at Gisburn forest as part of the '*Bleep of Faith*' event in August 2021.

supervisory team, the researcher selected musical examples where information was brought to light through practice that was particularly useful in identifying constituents. These sections were taken directly from the recordings and weren't edited or manipulated other than to choose an in and out point.

A matter-of-fact identification of key points identified by the researcher within the selected recordings, giving a chronological account of what he perceived was occurring, is presented as chapter 4. This was then combined using the Developmental Continuous Feedback Cycle with the other data sources in order to produce the analysis provided in chapter 5, finally leading on to the table of constituent factors presented in chapter 6.

The researcher aimed to record all of the workshop sessions in their entirety on a Zoom recorder in order to inform reflection and analysis both of the playing and discussions, the Zoom being practical to transport and quick and easy to use, so not interfering with the researcher's concentration on the music-making and progress of the workshop. Not every single minute of music-making was recorded due to technical issues and some elements of the music aren't as clear as they would have been if the sessions had been multitracked. However, these recordings still provided an extremely fruitful central resource.

Interviews and Discussions

Set up and delivery: This also was a case of not being able to conduct the research as regularly and routinely as would have been desired. Due to the restrictions, it was more difficult than expected for the researcher to spend any amount of time with the participants. As such, when they did get together physically, the researcher prioritised music-making, reasoning that the interviews could be conducted remotely. To aid rigor, a number of approaches were combined: Questions were asked individually via the Microsoft Teams software (June 2021). Individual questions were sent out via email (October 2021). Individual player profiles were sketched out by the researcher and the players asked to edit/ add/ correct as they felt appropriate in order to give a more accurate picture in portraying their perspective and voice (February 2022).

Within the workshops, regular discussion and individual questioning were given differing amounts of time. This variation of format was in part employed to avoid the discussion becoming formulaic, to allow it to happen when it felt useful but not to force it when it was unnecessary. The points that were discussed were seen by the researcher either to be of direct relevance to what had just been played (enquiry emergent out of practice) or that they would help what was about to be played (context to aid practice) or to help inform or test the emerging picture on the identity and implementation of constituent factors. The researcher tried to ensure that all of the group members got regular opportunities to speak and gave them the opportunity to

contact him via email should they wish to at a later point, add or alter what they said. Asking questions at differing distances of time from the playing helped both reflection and immediacy to be valued and encouraged cross-referencing. As the small number of group members had all worked with each other over a sustained period, it was felt appropriate to ask searching, individual questions in a group environment in which they all seemed comfortable.

Qualitative Data Analysis

The methods used for assessing the qualities of the data were:

- Reference against previous personal & professional experience.
- Lived Experience - How it felt to players including the researcher.
- Musical Analysis – Noting the use of conventional popular music tools - form, melody, harmony, rhythm, arrangement, phrasing, timbre.
- Contextual Referencing – Introducing and cross-referencing with information and ideas drawn from the work of other practitioners and theorists.⁶⁰

These methods were continuously applied and used to inform the developmental feedback cycle with sources being considered independently but also cross-referenced to look for correlation, triangulation or disagreement. Centrally, the research looked not only to identify what are defined as constituent factors but also to address their differing qualities, levels of presence and applications within the practice. In this way, the analysis looks to highlight not just what is essential for the basic functionality of Cold Bath Street's improvisations, but also to engage the higher functionality of their practice. It was presumed from the outset that the constituent factors of 'B' that are sought are not necessarily unknown in their identity but rather their role within SGI. Therefore, the new insights offered by the research could largely comprise of further information on how constituent factors previously known manifest themselves. As such nuance, detail, slight change or combinations are highlighted in the discussion and analysis and are highly valued by the research.

Subjectivity

⁶⁰ Discovered during the research or already known to the researcher. See Bibliography, Film and Video Materials and Select Discography.

"... Of high importance to the project is my continual study of the "correct" aesthetic: When I direct the musicians, it would seem to be consciously or subconsciously towards formulas and structures that I've heard work or enjoyed hearing before."

(Researcher Notes 2020)

Ultimately and expectedly, this research is highly subjective in that not only is it built from personal experience of events, but it also relies upon the researcher's tastes and preferences to determine what constitutes good practice. The contextual references utilised to an extent set the researcher's expectations of what this music should be, in that they determined for him how a successful version of this activity *should* sound. Merely conveying/teaching this analysis, would likely have led to the players doing their own version of this music, using the same devices, leading to similar results. This did happen to an extent and was not extremely problematic, as the research was not claiming to generate anything new in terms of ways to improvise but rather to understand and articulate what already occurs. In defense of the research though, it should be clearly stated that the players were not being dictated to in terms of exactly what to play and they did not have the same contextual reference points as the researcher (see Appendix 2: Player Profiles). This put the responsibility firmly back to the researcher, asking that he be able to adapt and learn from the group, integrate their interests and suggestions to further inform the work. Possibly this has influenced the findings, making them less specific to the researcher's contextual sphere and more specific to the interests of the participant group. Rather than attempting to give a blow-by-blow account of all of the music-making that took place, the analysis and discussion looks for critical incidents and to highlight key performative moments – epiphanies that emerged through the doing. This considered not only from the three selected pieces, but also encompassing a broader examination of the group's work across all of the sessions. Here again, the research was subjective in its reliance on the researcher's skills in interpretation of data. Finally, there was a strong subjective bias in the researcher's steering of the workshops and the direction of the project as a whole. The constant reflexive presence of the researcher is intended to be a positive factor, with the amount of time he has spent within this area of practice being used to the study's advantage.

Research Dissemination

In assessing to what extent the research's findings are transferable there are some expected limitations. This is due to the small number of participants involved and the specificity of their music-making. What Cold Bath Street do is one, albeit broad and through its popular music roots accessible, approach to improvisation and the bespoke nature of the developmental solutions suggested in this document is exactly that; built around and designed to meet perceived individual and group need. However, it is expected that the broader

understandings and information on the constituent factors of 'B' will be transferable to some extent to other musicians, an expectation already being fueled and given wider context through the researcher's other activities as a music tutor and practitioner.⁶¹

⁶¹ A good example of this was the workshop given in August 2021 at the '*Bleep of Faith*' at Gisburn forest. This was based largely on The Offers System detailed in chapter 5. The attendees were young children, but they still found some of the material useful based on their engagement and feedback given after the session, this suggesting the possible successful transferability of some of the research's findings. <https://gisburnforesthub.uk/bleep-of-faith/> (Accessed: 12/08/22)

Chapter 3: Cold Bath Street - The Research Environment

"It is not the individual's instrumental ability alone but the additional facility to work musically with diverse others that creates this successful approach to making music..."

(Rose 2017 p.144)

This chapter gives a brief background of the group, its formation, evolution and reorienting as a vehicle for this research, the creation and importance to the research of a supportive and non-judgmental environment and discusses issues of hierarchy. The musical identity of the group with regard to the kind of music made, the points of interest and roles within it, are discussed at length in chapter 5. Individual player profiles are included within the appendix.

Background and Formation

Conducting research with and as part of CBS was to work in a very particular environment: Most obviously, the group members and researcher had a pre-existing relationship. In briefly detailing that, it is worth stating how the group came together: The researcher teaches at the University of Central Lancashire and all of the participants had previously been his students. Though the practical guidance and facilitation given to the band members within their studies did not focus solely on improvisation or band work, they were central elements on several projects. These projects and subsequent rehearsals, recordings and local performances laid the foundation of the band's identity with their practice consisting of loose jams around pre-decided short starting points or 'cues'.⁶² The improvisations of CBS then became the topic of formal study at Doctorate level in 2018, at which point sessions began to be much more structured.

The band members were chosen by being offered places in the group by the researcher. The process was part subjective preference, part practicality and part professional judgement on his behalf. Players were not chosen because they were experts, they were chosen because the researcher thought they had potential: They were already playing their instruments proficiently,⁶³ seemed to enjoy and have an interest in

⁶² See Green's points on jamming and agreements and the discussion of improvisation types in chapter 1. The topic of working with cues was discussed at length in the researcher's MA submission University of Central Lancashire 2017.

⁶³ Proficient is a broad-brush term: There was, and is, a marked difference between the improvising abilities of the individuals within the group, their subjective tastes and individual character. The project in no way seeks to homogenize this.

improvisation and also he thought, would work well together in the group environment. So, they were selected not merely because they were thought proficient technical individuals, but potential components of a functional whole.⁶⁴

"I take it as important that you have good abilities to estimate likely outcomes, in the broadest sense that this chemistry will work ... the outcome that is unforeseeable in detail but you know that the chemistry is good."

(Evan Parker interviewed in Hopkins 2009)

In extensive professional practice, the researcher has observed that social functionality is more important than the presence of technical musical qualities in whether the band 'works out' in the longer term. Thus, none of the players chosen had demonstrated themselves to be ego-centered, difficult to be around or unreliable. Of course, working together over an extended period, with complex and highly subjective artistic subject matter, there was some level of difference in opinion, or simply more interest from some players in some elements of the subject matter. In this way, the extended study period was helpful in that it gave time for a variety of issues in the music-making to be addressed and worked through and through this everyone felt as though their interests were incorporated and followed up to some extent.⁶⁵ In terms of suitability for the study and its focus on the developing qualities of improvisation through regular practice over an extended period, it was essential that all participants, including the researcher, could improvise to an extent but felt that they were still developing and had the desire to further that development (Nachmanovitch 1990 p.66-77 for underpinning developmental approach to practice and practicing). For the researcher, witnessing this developmental journey, its difficulties and epiphanies and the progress of CBS, was at the heart of the study.

"Cold Bath Street offers a creative environment to make original music with an ensemble without the shackles of having to write and learn material, and without the commitment to a specific set of sounds, style or instrument. This makes it both easy to commit to due to a minimal amount of homework, but also makes it a space that accommodates whatever particular style I might be feeling at the time. Improvisation is also fun. I enjoy being around and playing with the people in the band. As the band has progressed, it is exciting to witness and be a part of a group that are increasingly capable of spontaneous music making without cues, and the growing ability to move the music and develop narrative is exciting to see."

(Josh Interview September 2021)

⁶⁴ In some ways the researcher was pre-empting the findings of the study at this point, in deciding based on previous experience and guesswork, what he thought were the necessary ingredients for a successful improvising group.

⁶⁵ Javon's brief description of the breadth of CBS's practice in the Player Profile supports this statement outlining "...from working off of pre agreed musical starting points, working in response to other performers (such as dancers), responding to film, responding to environment, free improvisation, individual conducted improvisation and working from pre-agreed limitations on playing."

Cold Bath Street members participating in the study:

Sam – Drums

Bench – Bass and Cello

Connor – Piano

Josh – Synthesizer and Keyboard

Maddi – Electric Violin

Javon – Guitar, Bass and Drums

Simon - Guitar

When CBS began, the researcher had expected that the membership would be a revolving door with players leaving the band as their studies and time in the geographic orbit of the university campus came to an end. In practice however, all of the members who have taken part in the study have all been involved in CBS for three years or more. Josh is actually the longest standing member, having been involved in the band since its inception in 2013. Possibly it says something about the complexity of the subject matter that he is still learning and discussing the band's current progress all this time later. The research design allowed flexibility for existing members to leave and other members to join during the study, this being thought to be of benefit to the research, both in bringing useful insight from different perspectives and ensuring necessary musical roles are fulfilled. Sadly, operating in this flexible manner was not possible due to the pandemic restrictions.⁶⁶

Evolution

"I think it (the research) has been a real benefit to the group. Personally, I feel like I've been receiving some PhD level education for free."

(Sam Interview October 2021)

Cold Bath Street was not conceived for this formal academic research and there has been a significant impact on the group's practice in being involved: Whereas previously this consisted of loose jams, possibly a discussion of technique or working with a given cue, now the 'workshop' environment was more formal, more a place of work. Sessions now each had a topic, a question or focus, there was an agenda which was

⁶⁶ See chapter 5 for discussion of roles within the music-making and chapter 2 for details on how the pandemic impacted upon the Method.

beyond just enjoying making music. Players knew that they were being recorded and analysed by the researcher and that what they played and said could subsequently be accessed and judged within academic documentation. It felt to the researcher as though the group, as players with some experience, were ready for this substantial step change, that they as individuals, and the band as a collective, were ready for this period of intrinsic self-analysis in order to keep progressing.⁶⁷ Indications of the player's positivity towards involvement in the research were taken from the level of interest expressed when the idea was first proposed. Demonstration that their interest was sustained was evidenced through their regular attendance, positive attitude within workshops and their comments and regularity of correspondence outside of sessions, including in some cases that they were considering the workshop issues within their own time. It should be acknowledged that over the study period enthusiasm for CBS, formal or otherwise, did diminish to some extent. However, in conversation the players attributed much of this to their growing work commitments outside of the band and complications arising connected to the virus.⁶⁸

Regardless of the researcher's positive intention for the group in making the change of bringing it to a more formal way of working, the researcher was still wary of disturbing or damaging an existing successful creative environment; simply put - making something serious that had been fun. In trying to some extent to preserve this aspect, CBS wasn't the ideal research environment: The researcher is compromised, taken away from purely seeking an answer to the equation in trying to keep the sessions enjoyable.⁶⁹ However, making the compromise of working with CBS brought many advantages (for the method) including not having to recruit participants, avoiding false starts, having musicians who can already operate successfully as a group and not having to put practical resources in place such as instruments or a rehearsal room.⁷⁰ Again, simply put, it was felt the advantages outweighed the drawbacks.

In the researcher's pedagogical experience, new musical ideas take time to be integrated into practice. In planning the study, it was felt that on balance it would be best for the health of the project and its core assets i.e. the players and their music-making, to keep things moving consistently, gradually forward, rather

⁶⁷ This judgement was made based on the researcher's previous extensive experience of working with other musicians. There was an element of risk in making this call. However, on reflection the balance of it feels to have been correct: Trying to keep the group operating at the same artistic point (with the same ideas, systems etc.) wouldn't have worked for either the study or the health of their practice.

⁶⁸ Most obviously this was an issue with CBS member Christopher, who through health concerns only attended Clouds and Continental sessions within the study period as the spaces were much larger and contamination risk deemed less. As his involvement was so brief, he was not able to be considered a participant within the study as had originally been planned.

⁶⁹ See Josh's comments in Player Profiles on this: He clearly is engaged in the practice but describes it as 'fun' and of wanting to escape the 'shackles' connected to his other practice.

⁷⁰ Though it was expected of the planning stage that the research would use rooms within the University, in actuality these rooms were not accessible for much of the study period due to the virus restrictions and most of the workshops had to take place within a rented private rehearsal space. See chapter 2 for further detail.

than looking for rapid shifts or fast tracks in an intensive quest for direct answers. *"It doesn't come overnight, it's a series of very, very small discoveries that add up to something over a period..."* (John Russell in Toop 2016 p.175) Gradual evolution also gave more time to observe progress, even if this was possibly harder to perceive as the changes might be smaller or subtler. Though clear in its original rationale, this way of working was extremely difficult to achieve in practice, operating in an environment where (unexpectedly) it was rarely possible to get all the players in the same room at the same time.

The Creation and Importance of a Supportive and Non-judgmental Environment

The following quotation illustrates how bass player Bench perceived the working environment and its 'unintentional' side effects and through the researcher's response, what his deliberate intentions were in designing that environment.

"Bench: You know it's just pure, no matter what happens I can always show up to a Cold Bath Street rehearsal and just be free of all that stuff and just purely focus on the music. Purely focused on an intellectual curiosity, and it's a friendly environment and it's a safe environment. And that is, I think it was an unintentional sort of side effect of what we do. But I feel like it's something that's just great about what we do..."

Researcher: I've done lots of bands over the years... I think there is a deliberate distinction in this one - in the organisation of it. It's evolved in an unusual sort of way. It isn't four people who met in a pub and agreed to do some tunes the next week. ...you mentioned a couple of times in the interview there about ego, and it's really, really important that people are fairly treated in the group, musically as well as in other ways, and that when they arrive, they don't feel like they're being judged. Again, you've been at that rehearsal where everybody scowling at somebody who hasn't learned the song... So, it was important to set it up and progress it, and I think this is one place where the discussions really helped, in a way that is inclusive, and isn't really in a hurry to get somewhere, it's just a case of gradually working on it and making it better and better..."

(Bench Interview September 2021)

"Another thing that I see as important, in relation to working with groups of people, is staying in touch with the whole group of people all the time. Keeping watch for the equivalent of the little kid at school who is shy - who feels the more things are going on the more he is excluded. And the way I would set up something would always be in direct relationship with that person feeling comfortable. That's a priority."

(John Stevens quoted in Bailey 1993 p.119)

The need for the right working environment was eventually recognised as the first constituent. The irony that it was already established before a single note was played and that one of the main tasks in facilitating the study became simply to maintain it, is not lost upon the researcher, though he was not aware of its pivotal

importance when setting it up. At the conclusion of the study, the research considers this first constituent as foundational as having it in place underpins all of the other constituents, enabling their functionality, supporting and making more likely the group's chances of achieving SGI. Discussion of the importance of the working environment was referenced repeatedly in interviews and researcher reflection and could be heard and experienced in action within workshops, where it was clear that the design of the working environment was allowing the group's practice to grow and develop, thus aiding the music-making and consequently the research (Shevock 2018).

Within this first constituent CBS participants were working within an environment effectively governed by an unwritten set of guiding principles. These were derived from the researcher's considerable experience of working with music groups and students. Indeed, these implicit shared principles could be deemed to define Cold Bath Street. They are designed to underpin the creation and maintenance of a strong, yet flexible, long-term working relationship.⁷¹ Crucially, these principles are artistically open enough to allow all members to bring their own practice into the band and to express themselves individually, whilst still producing successful group music.⁷²

Principles of a supportive and non-judgmental environment as used within CBS:

- Everyone feels valued (as an artist and as a person)
- Encourage honesty and openness in discussions of the music
- Be consistently supportive of the music, the project and each other
- Within the music-making that members try to control ego, engage active listening and give focus to their interactions with the other players⁷³

Though CBS players could of course have refused or fought these principles, in practice they rarely if ever did. Possibly the most rebellious behaviour displayed during the workshops was Josh questioning whether extracting elements into their own exercises for The Offers System was in some way artificial and inhibiting the music-making. This was taken as constructive criticism and following consideration, changes were made to the session design accordingly.

⁷¹ Though decisions around how to work with the band weren't purposely built on any recognised model and rather based largely on previous experience, they do fit with the generic principles laid out here <https://www.liquidplanner.com/blog/build-good-relationships-project-stakeholders/> (Accessed: 12/08/22)

⁷² During the period of the study all of the players were working on other projects, listening to their own music and following their own interests in terms of practice and technique. This simply points out that they were in no way working in isolation and that their contributions to CBS doubtless in some way reflected those influences.

⁷³ See chapter 5 for how The Offers System built on these principles, particularly this final one.

Hierarchy

As the musicians were previously the researcher's students, this provided a clear pre-existing hierarchical relationship. This hierarchy relates to power and control within the group and manifests in a number of areas: A distinction is made between the hierarchy that exists in the organisation and running of the project and that that exists within music-making.⁷⁴

In the organising and running of the project: By putting his name on the research, separately classifying himself as the 'researcher' and carrying out organisational tasks, most obviously booking sessions, the researcher is distinguishing and elevating himself. This to a great extent continues the level of hierarchy expected within a tutor-student relationship. However, this differentiation in terms of power and control within the organisational roles was not viewed as damaging to the project as it was not these roles that were being studied. Rather, that the roles are purely facilitational, undertaken only to create a framework in which the research can be carried out. If continued into the music-making, this clearly lineated organisational hierarchy could have been an extremely negative force, with the musical limitations of the researcher and his subjective preferences shackling the practice of the group and their opinions and interests potentially undervalued or dismissed. As laid out in the principles outlined above, this clearly wouldn't have fitted with what became the first constituent and subsequently central to the study's aims. Ultimately, CBS were being mentored and guided (as opposed to being taught or instructed) but this was mostly light touch and subjective to their perceived needs.

Aligned with Bench's comments and the principles laid out above, the researcher looked to create an inclusive society where input from all is key. Discussing Cherry, Brinson (2016) acknowledges *"...that love, acceptance, and a sense of belonging drive humans to seek out group activities to satisfy social needs. Teachers/conductors play a major part in creating this sense of belonging by acknowledging every musician's role."* In many ways, the CBS society functioning in this manner, seeking and acknowledging contributions and with limited evidence of musical hierarchy, suggested it could be an ideal environment for the research: The players having a sense of ownership, both of the band, its music and musical progress both communal and individual. John Butcher's comments in Hopkins (2009) ring true here: *"...you have the situation where you all feel like any one of you could change the direction of the music at any moment by a very subtle change of your own direction..."* Though there was an element of musical steering in that the researcher brought in exercises or topics, this was minimal, usually consisting of just one or two within a three-hour session, which the group were then given ownership to explore within the playing as can be heard [in this extract](#) where only a focus on leading change was being highlighted. The researcher's role/approach then

⁷⁴ See also discussion of roles, leadership and conduction within chapter 5.

became to observe and respond to perceived need, letting the group drive through their input rather than enforcing pre-set content.⁷⁵

Further fueling this attempted dismantling of hierarchy, the broad remit given to the type of improvisation worked with was in part designed to allow the different members and their personal interests to flourish as the project progressed over time and to avoid them feeling restrained or under-stimulated. The group, including the researcher, seemed happy to work within the same broad musical ballpark occupying different parts of it within different sessions, pieces etc. This shared sense of broad artistic intention providing a sense of a common goal and the basis of what eventually became constituent 2. In the researcher's professional experience, individuals bringing incompatible agendas to a project, along with issues connecting to the manifestations of ego, are recurring problems within musical groups. To avoid these pitfalls, within the music-making, great effort was taken to attempt to ensure that all players could be audible, lead and put ideas forward if they wanted to. Where traditional roles would put the melodic instruments, guitar or keyboard continuously centre of stage, with the drums and bass as 'backing', CBS to a great extent removed this hierarchical stereotype giving all instruments chance to come to the fore, a rotation of roles that was actively encouraged.⁷⁶ This effort for a more democratic working environment even extended to changing places onstage or players sitting down or putting their instruments down to listen to each other.

The bottom line in terms of music-making in CBS and aligned with the principles stated above, is that the musicians are part of a group and they are advised/mentored that what they play needs to be for the group. That they are on a shared journey, not playing for themselves or their own egos but for the good of the music. *"Willing to be part of the group and for the music rather than only pursuing individual goals"* (Maddi Player Profile). Ultimately however, the hierarchy in terms of the research is largely taken down by a communal lack of knowing: The journey to discover the constituents of 'B' is made by researcher and musicians alike which goes a long way towards levelling the playing field.⁷⁷ The question for all involved remains the same throughout *"How does this activity work and how do we do it better?"* Of course, the

⁷⁵ A very good example of this was the setting up of the GRID sessions. These sessions brought in guest players for the group to interact with. This change largely came from an informal comment that Maddi made about liking the subgroups, but that she always seemed to play with the same people and that she'd like to change this. See chapter 4 for a detailed breakdown of one of the GRID system pieces. Also, an extensive archive of recordings here: <https://soundcloud.com/elmet5> (Accessed: 14/08/22): See also Shevock's (2018) comments on *"...surrendering musical control regularly"*.

⁷⁶ The John McLaughlin & the 4th Dimension concert witnessed by the researcher 30/05/22 was a useful example: Though the concert was billed under the guitarist's name, actually much of the featured material came from the other band members. A similar show can be viewed here <https://www.youtube.com/watch?v=CkiG-Ahzrsg> (Accessed: 12/08/22)

⁷⁷ It is worth clarifying here that the desired aim isn't that at the end of the study the researcher will be a skilled conductor ala Butch Morris who can direct the music of others, rather that it leads (to a group of) musicians who do not need a conductor and who can communally construct improvisations themselves.

researcher had more invested in finding an answer to this question, but the players suggested by their continuous involvement, interest and comments that this journey and the answers it proposed mattered a good deal to them as well.

(Not a) Summary

Rather than reiterating the key points made in this relatively brief chapter, to conclude here a quote is provided from Marcel Cobussen giving insight as to why having particular information about the specific workings of the (participant) group is so important, including in orientating the focus of the research as we move into the analysis of the music-making presented in chapter 4:

"Each improvisation consists of a different configuration of actors. Each improvisation will yield a different milieu of actors and interactions, a different assemblage... Besides mapping the actors, a more detailed explication of their interactions is needed; each improvisation works (or does not work) through particular interactions by particular actors...

Improvisation thus works as a complex network, as an ecological milieu, as a Deluzian assemblage. It establishes ever-changing relationships between the actual sonic material (including aesthetic choices, technical abilities, formalistic features, intermusical knowledge), the environment (technology, acoustics, spatiality) and the social (including the artistic and even the ethical) behaviour of the musicians mutually as well as that of performers and listeners. To regard improvisation as a network, a milieu, or an assemblage means shifting the focus from an overriding concern with isolated actors towards the fluctuating relationships between these actors: a shift from structures to structuring and from content to context. (cf. Borgo 2005:2)"

(Cobussen 2014 p.22-23)

Music Recordings

Guide to the Recordings

The recordings presented here have been selected from many hours' worth that were collected during the study. Though not encompassing every single facet, they were chosen as typical or atypical examples of the group's practice. Within this chapter each extract is chronologically broken down, with what the researcher perceived as the key moments flagged up in order that they can be further analysed within chapter 5.

As was highlighted in the Method, the Zoom recording though extremely useful does not provide the same experience as being there on the day, and the individual's experience of listening to a recording made at a different time is not the same as the individual and group's experience of making the music in the room in the moment.⁷⁸

To access the music online, simply click on the live link to the Soundcloud page.

(by) = Abbreviation for 'by this time.'

Music Analysis 1: GRID Session Nov 14th 2021

[Click here to listen to Piece 1](#)

This improvisation was conducted with Sam (drums), Maddi (electric violin), Bench (cello) and Simon (electric guitar).

Direction: An exact time duration of 10 minutes was available.⁷⁹ No other direction was given.

This is an effective improvisation in demonstrating the importance of the constituents of communication/ dialogue and musicality in practice including elements of what chapter 5 will define as 'audiation'. It shows understanding from all four players of how to work effectively together as an ensemble to form SGI. The first

⁷⁸ Rose (2017) notes "...your reflections about how something may feel later on may lead you to a different interpretation of what is or was happening..."

⁷⁹ The 10-minute duration was specified by the researcher within the rules of the session. It was chosen as a length of time that would allow musical interaction to develop whilst still fitting within that session's rule of changing aesthetic.

five and a half minutes are a particularly good example of how a single musical idea can be offered and explored, forming a musical 'place' (see Glossary and chapter 5). The recording hears the group leaving a lot of audio space and picking up on subtleties of rhythmic emphasis. The lack of bass guitar means that the roles taken within the arrangement are not the same as in most other CBS pieces. In this way the group's improvisational skills are being tested in an atypical manner.

00:00 The improvisation begins with the cello making an offer. The other players are very respectful of what he's doing, they don't attempt to contradict him, they also don't attempt to directly dialogue with him, rather they offer supporting information - lines on their instrument that they feel are sympathetic to what the cello is doing in terms of mood and atmosphere.

00:50 (As there is no bass instrument) the guitar takes on something of the role of the bass, offering low notes and also spelling out clearly a sense of pulse. This gives the music a second layer, a complexity, in that there is a dialogue between the cello and the guitar. In this way the music at this point offers the listener distinct aspects to 'tune in' to.

01:30 The cello which has been leading up to this point starts to acknowledge the rhythmic pulse that the guitar is insisting on. The music at this time is very much working around a single pitch of G. The violin offers a short, plucked melody fitting in with the rhythmic and melodic framework set up by the cello part.

01:40 The drums start to obviously acknowledge the guitar's insistent pulse.

02:20 A new offer is suggested by the cello and drums. The drums at this point are not going along with the obvious emphasis being provided by the guitar and cello. This decision is likely either to offer further textural complexity or could represent a challenge to the offer that is currently in place – a request to move on.

02:30 There are some particularly useful melodic ideas contributed here by the violin. However, these are played in quite a reserved manner and do not dominate the music.

02:52 (by) The guitar begins to develop different pitches within the scale, stressing their importance suggesting other chords (D5 and A5). The sense of pulse here remains strong. The sense is that the guitar is insisting on it, drums and violin playing around it.

03:13 (by) The four players offer very different takes on the pulse. They are emphasizing and choosing different notes to build phrases, although all working with the same pulse and key. This means there is no clashing, but there is not a clear sense of hierarchy between the players or their contributions. There is a clear demonstration of rhythmic interplay between the violin and drums.

03:30 The drums are spelling out a different rhythmic emphasis, however, the music is still working to roughly the same sense of pulse & tempo. As the group look to expand the palette, the music loses its way a little. Some good suggestions are made by the violin but not really picked up by the group. This is possibly due to the relative volume of this instrument at this point.

04:00 The guitar is very obviously building loops: Working within repeated rhythmic phrases, looking to give a slightly different emphasis within the scale that is already being used in order to create musical interest and developing narrative.

04:20 The violin and cello have similar timbres, and it's very noticeable at this point that they are interacting as 'strings' whilst the guitar is playing something equivalent to a typical bass line and the drums are experimenting with emphasis within the pulse.

04:30 At this point the group pick up on another different emphasis, albeit of the same notes. It's very difficult to make out who does this first, as the other players pick up on it and instantly move to doing it themselves. In terms of confidence in creating arrangements, there is good clarity in the lines that are being played at this point. Each player is giving space whilst at the same time making a contribution to the music, resulting in a successful rhythmic interplay between the four ensemble members.

04:50 Sam in his conductor's role (see chapter 5) takes away the energy, the working base of the music, and the other players accordingly begin to back off – not committing or continuing as their 'conductor' is stopping. Had this been a precomposed piece, the researcher would have continued what had been set up here – the taking away of the energy feels like a compositionally incorrect decision.

05:00 The cello, guitar and drums are very much locked to the same rhythmic emphasis, creating audio space which enables the violin to be able to be clearly heard. The violin is noticeably quieter than the other instruments throughout. This may simply represent a poor balance on the recording, however the researcher would suggest it's more to do with musical/artistic personality and intention in the moment. Maddi does not wish to assert herself on the music and that is not what she normally does – certainly not in CBS.

05:22 The players realize that this initial idea has run its course. It's been worked in a number of different ways, now they need to leave it and stop the music to regroup.

05:32 Sam briefly suggests a different rhythmic emphasis, but this feels to be more a tailing off of the previous idea rather than the introduction of a new one. Finally, only the violin is left, playing emphasized notes that were part of the now deconstructed arrangement of the idea, the final time in this place. The guitar and drums play sympathetic notes to fit with the violin. Again, it's noticeable how much space is being left here.

05:45 (by) Very minimal music is being played, involving quiet contributions with lots of space. This requires a huge deal of confidence from the group, that this is the right thing to do for the music and that it won't fail due to its fragile nature.

06:02 The group are considering what to play now the initial idea has been exhausted.

06:40 The group are looking for another idea to work with. Possibly inspired by some of the cello phrases that are reminiscent of double bass playing, the guitar joins the drum's lead in playing something conventionally 'jazzy' - with a thick, dark, tone, however the (strongly emphasised) pulse is very similar to the previous section in speed. As the players are not jazz musicians, this is a pastiche rather than any attempt to make a convincing reference.

08:18 Again, a great deal of restraint is in evidence here. Subtle playing spelling out mood, tonality and pulse.

08:32 The guitar is percussive, dialoging with the cello in a call and response manner.

08:50 The violin points out the harmony and the pulse without committing to melody. Rather, delivering plucked notes, emphasising the rhythm and phrasing.

09:10 Still working off the same tonal centre, the guitar offers different emphasis and melodic content through partial and suspended chords all around the same core tone. The drums respond by upping the dynamic.

09:40 Hears a change of role as the ten-minute mark approaches. The guitar plays single notes and the cello is more chordal. The music begins to push away from the very diatonic approach previously employed to pitch within the recording and possibly in an effort to provide contrast or change, tries to introduce some chromatic notes. This also begins to move the mood of the music towards a new place however this is not established as this is where the group's time runs out.

Music Analysis 2 “That Chord Is Not Strange Enough” Extract from Workshop 11th April 2021

[Click here to listen to Piece 2](#)

This improvisation was conducted with Connor (electric piano), Javon (electric guitar), Bench (electric bass), Sam (drums) and Simon (electric guitar).

Direction: No direction was given.

This piece was chosen for inclusion because it was atypical. This session very strongly pointed out to the researcher that concerns with pitch inhibit the group in terms of committing to what they're doing. Removing these concerns by stressing that chromatic playing was allowed, nay insisted on, opened up new creative possibilities for the players. In the room on the day, it felt to the researcher that Connor was insisting that we do something different in playing chromatically and that that lead to a different musical place. It should be pointed out that this extract is taken from near the end of what had not been the easiest of workshops.

0:00 The piece begins with a fairly typical and tentative offering of a single, repeated pitch from the guitar.⁸⁰

0:40 Simon's guitar is very clearly playing minor phrases. Making such clear statements, with little surrounding material to work from, demonstrates confidence. Javon's guitar is though quietly backing up the statements with sympathetic playing.

1:00 Joined by the bass, the two guitars can be heard attempting to develop the music so that it moves on from the initially offered single pitch, exploring phrasing and harmonic relationships. Sympathetic playing begins to be added on the drums

1:30 The bass is working within the (tonal/mood/ rhythmical) guidelines laid out by the guitar. Bench is not just mimicking in making these lines, he's pointing out possible phrases that work with and within them. This approach leads to a successful ensemble sound.⁸¹ This playing is still very much around the same tonality as at the start of the piece but comes across as more coherent now, with an established sense of pulse and an agreed and fairly quiet dynamic.

2:00 The piano enters adding a clearly stated chimed chord at regular intervals. Confidence is demonstrated here in being so clearly heard whilst playing something that only he is playing.

⁸⁰ Such pitches often become the 'core' of the idea that subsequently develops

⁸¹ This comment is made on arrangement skills and could be applied equally to pre-composed music.

2:18 (by) The ensemble are playing together in a functional arrangement. It is not the most exciting music but it's up and running. The piano begins to craft melody – meaning to find it, to construct it, to see what will fit. NB The melodies made by the piano are noticeably stylistically and timbrally different than those made by the guitars.

2:50 All of the musicians are holding station, waiting for something to happen. What they've set up, though functional, isn't particularly interesting i.e. it isn't slow enough to be interesting, there isn't enough melodic or timbral interest, the bass can be heard wandering around the core notes.

3:00 Javon is playing what in retrospect is a very interesting melody here. However, the group aren't really picking up on it; it isn't affecting their playing, so it isn't really incorporated. This can be heard in that their playing doesn't change, but also in that this section or place is short and not developed.

3:16 Sam's drums can be heard to noticeably change what he's doing as can Simon's guitar - the pace changes, increasing slightly, and the rhythmic emphasis is different. This is referred to by some musicians as 'picking it up' - bringing the pieces together, playing more tightly and slightly quicker to give the music a bit more life/lift. However, this emphasis isn't taken on by the rest of the group and the music breaks up, stopping being cohesive and coming to a halt with only the central pulse and tonality really still in evidence.

3:40 The piece is in no man's land: A fairly weak idea has been played for a couple of minutes and no strong offer has emerged to take it somewhere more interesting.

3:53 Three sounds are heard in very quick succession; string rattling from Simon's guitar, a dissonant chord on the bass and then another on the piano. Could this signal a new section? There is a brief moment of confusion acted out between the piano and the bass as they look for a new diatonic resolution before Simon's guitar very clearly spells out that the diatonic playing is over.

4:19 Javon's guitar in particular, though the piano is doing it as well, is pointing out rhythmic stops, it's not committing to any melody but is clearly prioritising illustrating the pulse - putting notes that are short and non-committal in terms of pitch onto it.

4:30 At this point the group are demonstrating a particular approach learned by CBS in previous workshops and which draws partly from pointillism: The (unspoken) rules of this being as follows: A pulse is clearly established and all of the group know where it is. The player then does not attempt to create a consonant, diatonic melody or sense of chord progression on this pulse. Rather, they change the pitch, seemingly randomly, but actually avoiding obvious conventional changes e.g. a fourth or fifth and instead seeking less conventionally predictable intervals such as large jumps (more than an octave) or a flattened fifth. Using this approach to pitch, they then play confidently, making themselves heard but only with a brief phrase, the

notes of which are usually kept short. These notes are placed on the pulse but not in predictable patterns. This approach also welcomes and encourages playing utilising extended technique. This can be heard here for example, in the percussive sounds evident on Simon's guitar.

4:50 The piano can be heard playing a repeated dissonant chord. Though this appears to counter in some ways what has just been said about not establishing clear harmonic framework, actually this chord isn't offering clear diatonic harmony, instead it's pretty much insisting on dissonance, chromaticism or at best requesting that players use non-diatonic scales (whole tone, diminished, altered etc.)

5:08 Connor can be heard playing a repeated figure on the piano. Again, this continues the chromatic environment - insisting on the harmonically strange and drawing with unusual focus for CBS, on the outside components of their vocabulary. The piece is now in this chromaticism as a place to work. This section of music is unusual for the group in that it has clear elements of both type 1 and 2 improvisation: It's type 1 in that it's clearly the group settling on a rhythmic idea and playing around it, but it's type 2 in that there isn't any harmonic surety. Where, earlier in the piece, the group didn't sound convinced in what they were doing, at this point they're committing to it, this can be heard in that they're playing loudly and strongly, emphasizing notes. The chromaticism isn't just coming from one of the pitched instruments but is central to all, being mirrored on the drums by Sam's removal of any sense of constant pattern. The players maybe operating in a committed way partly because the environment is loud and busy, with all of the instruments playing lots of notes, hence it's very difficult to hear if any 'mistakes' are being made. It could also be because the environment is chromatic, effectively meaning there aren't any wrong notes that can be played in terms of pitch.⁸² This assessment was very important in terms of considering the regular pitched work of the group. Tempo is heard to vary, with speeding up and slowing down used regularly.

5:35 This is an extremely interesting moment as it points out the difference in harmonic vocabulary between Connor and Javon particularly. Connor's piano plays chords that sound as though they could be in a Cecil Taylor free jazz piece.⁸³ At the same time Javon's guitar is plucking out much simpler chords and bending them – an approach much more typical of his rock and pop background.

5:55 This again points to the strength of the group in not needing the surety of diatonic harmony to commit to what they're doing. There's exploration being made on all instruments and a good deal of dialogue around rhythmic emphasis. The drums have been freed of their conducting role and work in an open manner – not seeking to establish pulse. All instruments are being played clearly and firmly so they can be heard, spelling

⁸² Of course, it could be argued that even in chromaticism some notes are more interesting than others. However, technically the concept of the right or wrong note does not apply.

⁸³ Referenced by Connor within interviews and discussions as one of his main improvising influences.

out the group's confidence in playing in this way. Techniques relevant to pointillism and chromaticism have been developed within CBS through use within practice over a number of years. Though Connor largely provoked and engaged this skills base by providing a dissonant offer, by this point it has been withdrawn and the resulting music, the parts around it, are what is left. It could be said that what is being heard here is some of the more interesting music made during the study - pop and rock improvisers exploring 'outside' harmony or even attempting to combine chromaticism with rock rhythms?

6:20 At this point the crescendo of dissonant noise feels to have run its course and the bass and drums start looking for more consonant offers that might emerge as the next section. This is evident in the drums returning to a much more solid pulse. The group then develop one of their more interesting offers in terms of technicality and expression. There is clearly a pulse but also the dissonance from the previous playing still in evidence. Again, the piano puts chromatic chords into the music. As they've now warmed to it, the guitars are much more keen to play chromatically and this can be heard particularly in the confident statements of Simon's playing.⁸⁴ Again, Javon's role here is very interesting in that he doesn't attempt to overwhelm Simon's guitar but at the same time he is playing single notes within similar registers. He's using a much simpler tonality which is supportive of what the group are doing – effectively building tonal structures under non-tonal music. There is also well-linked dialogue (clearly effective communication) between the drums and bass as they create an unusual sense of emphasis together.

7:00 By this point the group are actually using a very similar way of playing than that demonstrated and discussed at 4:10. A pulse is established and adhered to, but the pitch elements are kept open and free. Possibly there is a feeling of a central pitch or home note, but that isn't agreed in the way it might be in a regular piece i.e. as a building block for traditional harmonic development. Simon's guitar is upper mid-range and percussive, supported more quietly by Javon's, Connor's piano confidently points out mid-range chords and the bass explores differing melodies and emphasis to sit under this. A compositional weakness that could be suggested of the group at this point would be that musically this section was effective and could have been further developed. However, for some reason the players withdraw their energy from it.

7:45 As the energy is withdrawn, the group goes into a much sparser section. The sudden change, the disappearance of the cohesive ensemble, seems to catch them unawares. Simon's guitar plays a quiet chord over the bass sounds to attempt either to ease the transition or to begin to build something new. Clearly realizing that he hasn't played the right thing – that his contribution has not had the desired effect - he actually says aloud "*That chord was not strange enough, strange chord needed*". This directly prompts/asks

⁸⁴ Possibly attempting to reference players such as Frank Zappa, Alan Holdsworth or Bill Frisell who have been confident to integrate chromaticism.

the group to begin to play strange and unusual chords. Again, this direct verbal request was not something that happened in any other session. It leads to a wonderfully dissonant interchange as players looked outdo each other in generating clashing and dissonant chords.

8:30 Again, at this point the harmonic vocabulary difference between Javon and Connor is very much in evidence. Connor quotes whole tone chords and scales, that could have sat very comfortably in a 1930's soundtrack, whilst Javon is bending the notes with the tremolo arm, more that might be heard on an 1980's rock recording. The bass guitar placing a consistent tapping phrase underneath the music gives an insistency (of the repeated notes) and asks the group whether they will join in to support this?

8:50 As the piece nears its conclusion, the group build to a noisy climax with rising volume, pitch and intensity of what is played, typical of the ending of a live rock performance. Continuing the agreement to use chromaticism, Simon joins in with Bench's tapping with a fairly loud distorted phrase ascending chromatically in pitch in order to build the crescendo. Bench's playing is also mirrored by the drums constant rolling around the toms and the piano, again playing constant arpeggios, which mirror the pitch gaps of the tapping.

9:10 By this point it feels like the climatic build is over and the players begin to slow down and to 'break' the music: The rhythmic phrasing is less regular, the underlying pulse such as it is, is slowing, and there is a lesser sense of all emphasising the same point. Note that even in 'breaking' the players are still confident to play and be heard – whether working together or working apart. Finally, they look to each other to provide some notes played together to bring the improvisation to an end.

Music Analysis 3: 'Meltin' Jam' June 13th, 2021

[Click to listen to Piece 3](#)

This improvisation was conducted by Sam (drums), Maddi (electric violin), Javon (electric guitar), Josh (synthesizer), Bench (cello and bass) and Simon (electric guitar).

Direction: Agreement was in place for the first section of the music not to have drums. No other direction was given.

This extract was chosen as it encompasses what are effectively two separate pieces, differing in approach but both utilising improvisational techniques and approaches typical of CBS's practice. The second piece shows a very fast evolution of ideas with the drums leading the group in using what the researcher named the 'Mischievous Drummer' approach. The recording captures the group's unusual combination of interests in bringing together what could broadly be described as experimental music-making, focusing on elements such as amplified timbral explorations, and conventional rock aesthetics, most obviously the way in which in the second section the music is constructed in blocks that change at bar lines. Also clearly demonstrated here is the group's ability to contrast restrained playing with looser sections where they 'let go'. Offers (as detailed in chapter 5) can clearly be heard to be made, responded to, overridden and moved on from.

'*Meltin' Jam*' also demonstrates CBS's experience in mining a good deal of music from a very small amount of stimulus.⁸⁵ The group can also be heard to meet their limitations, in terms of fully exploring the potential of such stimulus, which doesn't always happen here. Arguably though, the individual and collective decision to move on (to new stimulus) was appropriate to the compositional environment that they are working in – a fast changing piece requiring quick decision-making and adaption from all.

0:00 (upto 07:13) The first section shows the group working without any sense of pre-set pulse and is driven by the interaction of the violin and cello as they explore held, bowed notes. This approach had previously been used by the group on the track 'Gravel Shrine' on their album *Return to Earth* (2019) as well as in live performance. Areas of particular focus when previously discussing this type of playing with CBS included considering where notes produced by the individual players start and stop. Rather than attaching these notes to any sort of framework of set beats or bars, the researcher encouraged CBS to play the notes whenever they felt was right and not to worry about overlap in these starting points. This creating multiple

⁸⁵ Clear examples heard of stimulus within this extract include pitch information, a rhythmic phrase or stylistic change. These are small elements which the group then explore.

strong beats, or no strongest single beat, effectively removing the conventional device of bars and their sense of traditionally emphasised timing.

If one did attempt to accurately transcribe/suggest a bpm for this early part of the music, and the researcher has not done so, it would likely be very slow. Another key characteristic of the playing from all of the members would be that there is very little going on in terms of the number of pitches or melodic phrases played. This minimal playing and slow bpm gives space for work with reverb and delay. These are time-based musical tools, generating a temporally 'big sound' from a small amount of carefully judged input.

Consequently, the musician's lines work better with fewer notes played, enabling the effect to be more clearly heard. To some extent when musicians play like this, they make a sound or provide a stimulus, and then wait to hear what the effect will do to that sound. They then alter the input stimulus that they are providing in order to further shape that sound. So, the playing becomes a responsive three-way interaction between the musician, the instrument and the effect.⁸⁶ As part of this approach, the synthesizer and guitars also use swelled notes - notes that gradually grow in volume - to mimic the effect of the bowing of the violin and cello.⁸⁷ The group were advised in previous workshops that harmonic clashing or dissonance when notes are placed/ played together within this type of environment were wholly appropriate and not in any way 'wrong'. Rather, that they create a variety of harmonic tension and unusual chords which may then be explored.⁸⁸ This section also emphasises microtonal work - bends, slides, overtones etc.- the notes between the strong pitches when they do occur. Such work is more easily achievable on the non-fretted violin and cello, but also accessible on the synth and guitars with practice. Working in the manner heard here requires a high degree of control of the tools, the instruments, FX and amplifiers used, and this, typical of working musicians, has been gained by CBS through experience. This experience also gives confidence to control volume – to work at different volume levels in order to give the music what you think it needs: To be *out* as well as *in*, to be loud or to be quiet, as necessary. Conscientiously avoiding overplaying and working for the music and group.

Typical of the group's music-making, the musical environment of *Meltin' Jam* builds over time: Textures, layers and phrases are gradually brought in in order to make it a satisfying composition (this complex

⁸⁶ Though it is felt worthwhile briefly outlining how players work with delay here this is by no means a new approach nor confined to use in alternate or free music. Examples of the playing process discussed have been widely practiced within pop music for fifty years and used many times in chart album tracks e.g. 'Brighton Rock' (1974) Queen/Brian May or 'Another Brick in the Wall, Pt. 1' (1979) Pink Floyd/Dave Gilmour.

⁸⁷ Again, this is part of the standard canon of techniques utilised by the electric player. Common ways of achieving the effect through interaction with the electronics include via the guitar's volume control or through an expression/volume pedal with a keyboard.

⁸⁸ These ideas and techniques were drawn from and developed through the researcher's professional practice. An early peer was Paul Bradley who can be heard using similar harmonic approaches here albeit with very different intentions. <https://www.youtube.com/watch?v=oVOQhDOhuKI> (Accessed: 30/06/22)

environment is evident by 02:01). The group here demonstrate their confidence to allow the music to stop or pause, to die down, or to work at a very quiet volume. At points in this first section, with the exception of the drums, it's extremely hard to tell which instruments are playing as all are being used to generate tones rather than to be played in their traditional manner. This utilisation of instruments, though not typical of most musics, is common in type 2 improvisation and regularly used by CBS.⁸⁹

Throughout the first section, ornamentations are evident, most obvious on the synthesizer: These are small sounds which aren't of structural importance to the development of the improvisation, they don't look to make a clear offer of a main musical theme or instrumental line, but merely to be the frills, the sounds around the edges intended to make the music prettier.

04:40 Simon can be heard playing his phone by placing it next to the guitar pickup and playing back sounds from YouTube clips through a delay. The words can't be clearly heard, rather this serves purely as another addition to texture. However, there was a deliberate intention here in making those sounds to fit with what, if obvious diatonic key, meter and melodic phrase are thought of as one stereotypical type of environment, he interpreted as the opposite – with dissonance and lack of meter or sonic clarity. Interestingly, Maddi at this point, within what many would consider a very difficult environment to make music, is heard to be playing particularly confidently. Discussions with her clarified that this is likely because she prefers this sort of environment, also that there is space for her to be heard, or exactly because there isn't the judgmental sticks of clear meter or key to be referenced against. Another contributory factor could be that this place in the music doesn't have the rock aesthetic that is regularly present in the group's work and Maddi finds does not suit her playing.

Dancers use a technique called 'flocking' (see also Glossary), this is presumably taken from observing the behaviour of birds e.g. attempting to describe the individual and collective movement witnessed within starling murmurations. The researcher observes this as evident in the music here also. In flocking, the group members come to, surround and support somebody's initial start or movement. They mirror, and to an extent align with what that individual is doing. They don't attempt to change it, rather to follow or work sympathetically to it. This is very apparent in the playing of the group here (e.g. around 05:10). They acknowledge each other's impetus to play, from this getting a sense of when they themselves should start and stop. In this manner, they work individually in the curves/motions/ sonic landscape that is being

⁸⁹ In keeping with the period of restrictions that the group were working under, two online examples are offered to support this point in the work of the Glasgow Improvisers Orchestra and also Phil Morton's Ensemble 50:50
<https://www.youtube.com/watch?v=UBeRvA1Pnlk> (Accessed: 15/08/22)
<https://www.youtube.com/watch?v=OF3UF0poljY> (Accessed: 15/08/22)

communally created, rather than attempting to individually impose new structures upon it. Who leads or shapes the creative act or flock is lost in the creative flux of the interaction.

05:50 (around) A transition begins as the initial section feels to have run its course i.e. the place that was created by the violin and cello's initial interchange, feels to have been well-explored. Using a conversational analogy, it doesn't sound like any of the group have anything further to say on that topic.⁹⁰ It may possibly be that if the music had kept on this topic, something else would have happened to keep it interesting. However, bearing in mind the earlier comments concerning the players not wanting to come in with strong content in attempts to forcibly steer individually, that would've been unlikely to happen. The ultimate indication of the end of the section is the cello starting to play stronger, clearer pitches.

07:13 Drums enter. As soon as the drums enter playing a solid beat, the music completely changes, the guitar clearly indicates this, acknowledging this new orientation by briefly mimicking the pulse set by the kit. There is a period of transition while the pitched instruments try to decide how they will respond to the consistent new input of the drums. This decision is made more complex by needing to be made communally: It isn't just a case of an individual player deciding what *they* want to do, they also have to be thinking in the moment, in the evolving dialogue, about what everybody else is doing, giving consideration to questions such as *'Is what they're doing better than what I'm doing...? Does what I think is going to work, fit with what they think is going to work?'*

Ultimately the decision on how to progress is creative and imaginative but also societal. Within CBS it is the case that sometimes there is a strong, almost directorial presence or single musical voice that comes forward with the confidence to make an offer and the other people in the group acknowledge that (Toop 2016 p.174). Maybe the other players had a different idea but choose to compromise and go with the other person's offer, maybe they didn't have a strong idea, maybe they didn't have time to think of an idea? More often the case, and accurate to this scenario, the offers regularly emerge from the interactions of two or more people. Successful emergence of an offer relies on the players recognizing developing potential, identifying that something interesting is present and developing it. This process also encompasses elements of chance, skill and risk (see full discussion of The Offers System in chapter 5).

08:00 (around) Though the instruments are reorienting their sense of rhythm, transitioning into the second section, they continue their understanding and incorporation of dissonance from section one. Thus, when strong pitches are brought in they could be considered to sound deliberately menacing or threatening. In order to give this effect, the players choose to emphasise intervals such as the semitone, to play phrases that don't resolve, or work with unusual emphasis or note groupings. This can be heard on the bass around

⁹⁰ Expanded upon under Dialogue and Communication in chapter 5.

08:30. This creates a complex harmonic environment that it takes skill and practice to sustain. Around 08:50 The bass and guitar can be heard to be looking for more consonance – more playing together in traditional pitch sets. As they push to move the music, their initial explorations are on different paths, both looking to suggest other ways the music can go without knowing what this is themselves. The players are taking risks, playing sounds out into the air, offering commentary and new proposals to see if anything sticks.

09:00 (by) The bass is heard to make a clear, consonant offer looking to take the music somewhere else. At 09:15 the synthesizer can be heard to be looking to find the notes the bass is playing, asking *'What key are you, and therefore should I, be playing in?'* Just after this, one of the guitars joins in and the new offer is fully instated. The synth plays a repeated melodic phrase – demonstrating that it is working on sure ground in terms of pitch and rhythm. Simon's guitar is then playing phrases working around that melody, these briefly become the focus before the section comes to an end.

10:00 At this point the drums change what they are doing. This has the effect of conducting the group and effectively creates a new section where the other instruments back off to an extent and the violin is briefly heard to come through much more clearly. As with other pitched instruments, whenever the violin is played high and hard it is much more likely to be heard. When it is played low and soft it's much more likely to blend into the other instruments. Therefore, if a player wants to be heard clearly on a melodic instrument, they don't only play hard, they also tend to move higher up the instrument's range.

10:30 Around this point the violin, guitars and synth are still backed off and playing less. The bass and drums are establishing a groove that could exist on its own. Bench is playing what for him is an unusually traditional bass role here. This is possibly in response to discussions with the researcher over the role of the instrument (see roles in chapter 5). As the group hear and realise that the music is successful just with the bass and drums, they accordingly make their contributions fairly minimal. As well as being an appropriate musical choice in the moment, this sitting back allows them time to see what should happen with the development of this bass and drum groove. This plays to the strength of Javon in particular, as from his comments in interviews and within sessions, he is happy adding textures and small sounds rather than seeing such a musical place as an opportunity, or even a requirement, for him to deliver high-mid melodies or solo type content. As this part develops, Simon's guitar is being played in a manner to articulate the pulse. This is a learned approach; short and clear notes, from the mid or low range of the instrument and coming from the scales or chords that are being used, are played confidently and tightly to the drums. This means that even in quite a complex audio environment, they will still be heard, it gives an overall effect to the music of clarity and consonance, whilst also re-emphasizing the harmonic framework.

11:15 There is effective rhythmic and timbral contrast here with the violin playing confidently, delivering its own take on the framework being offered by the sparse playing of the group. Being compositionally critical, this successful part could have been longer.

11:40 Simon's guitar takes its turn and tries to take advantage of the rhythmic framework and sparsity as the violin had done. He plays a few phrases but the texture is quickly filled and the opportunity evaporates. The call to move on seems again to come from the drums, although they are possibly only picking up on notes played by the violin and bass that suggests moving to a louder section.

12:00 Depending on taste, the structure here is probably overly busy with a number of different interpretations of the available tonality (centred around A) being made concurrently by the violin, guitars and keyboard. The overall effect being that the core musical idea is still the same but the version at this point is more filled out. The group are accepting of this complex environment, and whilst not playing deliberately clashing lines, continue to contribute noticeably different phrases that fit around the rhythmic emphasis from the drums and bass, which could again be seen as flocking.

12:27 At this point the group's shared acknowledgement of the aesthetics of rock and pop are evident. Rather than continuing the previous part, they play it only for a short amount of time and cued by the roll around the drums, stop and move to a new arrangement or version. Again, dependent on taste this could be seen as compositionally flawed in not fully exploring the possibilities of the place that they'd set up at 12:00. However, this rationale then poses the question *'should you always play a section until it's exhausted?'* and serves as a reminder of the nature of improvisation, in that by definition, you won't hear every version or bit of every idea, or indeed every idea at all. Two explanations for the swift musical change at this point seem most apt for CBS: First is acknowledging the requests from the researcher to create narrative - not to keep doing the same thing and particularly not to stay at the same dynamic level. Secondly and more particular to this improvisation, the group feels to be bursting with ideas and full of energy and that is essential to the character of the playing that is captured in the recording. As such, it's absolutely expected that ideas will be quickly shown, sketched out and then moved on from.

12:30 The group here uses a technique that the researcher has used regularly within his practice (see 10:30) and so possibly they've picked up from him: The key doesn't actually change, rather the root note is not obviously stated, with notes and chords being taken from the key and played sparsely, sparingly around the beat. They are played clearly and confidently but never past a medium volume. This restrained playing could be kept going for long periods but in this example is done for 16 bars. This is a technique the group has used many times previously and is commonly used in type 1 and non-improvised pop and rock

structures. The end of this part is conventionally signaled by an obvious increase in volume either from the director or by the volume of the drums ramping up, as happens here.

13:00 The overall dynamic has risen here – certainly the drums and bass have returned to a louder volume. However, rather than all the other instruments just constantly playing as loud as they can, they can be heard making loud, forceful sounds, but leaving gaps between these sounds. The most obvious of these lines at this point, being the mimicking going on between Josh's synthesizer and Simon's guitar. The preservation of audio space, even when operating in a loud environment, has been something the researcher has repeatedly encouraged in workshops. Of course, this is a stylistic choice and would not be to everyone's preference.⁹¹ The researcher asked the group to actively make decisions within the operating environment either to make sounds or not make sounds but not to passively be making sounds.

13:30 Again at this point the drums can be heard to make a conscious decision to take the music somewhere else, possibly inspired by the change in Javon's guitar playing heard around 13:20. Sam stops the rhythmic pattern he's been playing and begins with another, with a new emphasis, tempo etc. He was encouraged to play in this way by the researcher. This approach came from the playing of drummer Sean O'Hara (currently of the band Mobius Loop) who played with CBS previously. Sean had a habit of suddenly changing what he was doing in the middle of a section, effectively bringing the previous section to an end and creating a new one. Due to the drum's conducting role this 'mischievous' playing immediately made the band move what they were doing and thus forced what was a sometimes radical shift in the music. Subsequently, the researcher labeled this approach to playing 'mischievous drummer' and it became a device that could subsequently be called upon. It gives the drummer freedom to move around, making judgements about when they think the music needs a major change and looks to prevent stasis in the music i.e., musical places outstaying their creative usefulness. Of course, having this power to make change to the whole of the music brings a great deal of responsibility and hence mischievous drummer isn't intended for beginners.

At this point the group has warmed into their playing – they are fluid – quickly making decisions or finding their role in the current arrangement - and so very quickly slot into making the new section heard here. The instruments at this point are playing very conventional yet effective roles: Javon's guitar making driven, phased chords using clear gaps between them to create rhythm and maintain the audio space. Maddi's violin plays plucked notes in a high frequency spectrum, keeping them away from the other instruments, enabling them to be clearly heard. Josh's synth plays quieter delayed sounds fitting around the guitar but never

⁹¹ Many practitioners operate within a 'wall of noise' where the sound never finishes, there is never any gaps. Change here is witnessed in a very different way and the operating environment for the players is not the same. Witnessed here in this live recording of Moore, Corsano and Nace. <https://www.youtube.com/watch?v=5cVjhtXS4Q> (Accessed:13/07/22)

attempting to override it. Bench and Sam's bass and drums provide clear rhythm, tonality and a solid base, underpinning and pulling the music together. At this point Simon's guitar is withdrawn as it simply isn't needed.

14:25 (around) Again, compositionally the group could have stayed on this section for longer but actually the music transitions again here with a held low-mid note forming a new offer. This seems to come first from the synth and then be joined by Simon's guitar which can be heard looking for phrases around the new pitch. There is a brief overlap where Javon's guitar carries on with his previous pattern until finally deciding that the new idea has overtaken him. The violin can clearly be heard to join in at 14:35 and by this point all of the group are re-orienting, finding the tonality and building phrases that will work around the held F# note. Between 14:45 and 15:00 the drums again find their feet and provide a rhythmic platform for the guitar and bass - working with a quicker tempo and playing quite a lot more notes. The environment here has moved along way from 13:30 becoming a lot more frantic with rapid passages of notes being played and very quick interchange between the instruments. By the end of the section the tonality has clearly returned to A (possibly as F# was just the relative minor and it never really left A).

15:40 Again, the group keep the section very short and return to a more restrained playing, withdrawing the distorted guitars, leaving more space for the violin to be heard. The violin offers high and clear phrases for the other group members to respond to. The group begin to do this in a call and response manner but again move on very quickly before the full potential of the idea can be explored. By this point these short explorations and cyclical patterns of moving between sections where they are restrained and 'letting go' have become the character of this improvisation (see also 12:27).

16:00 The tonality changes to head somewhere much darker. Repeated G and Bb notes can be heard coming from the bass and synthesizer, thus possibly suggesting G minor. The group sit back and let the synthesizer sound be the focus and for it to lead the music, playing supportive lines. Again, the bass provides solid foundation, laying out the key and feel and linking to the drums in its conventional role. Simon's guitar plays a percussive wah-wah line. Though its rhythm doesn't directly acknowledge the synthesizer, it is played around the same pulse in a way so as not to challenge that offer, rather to provide a secondary voice, giving interesting rhythmical and textural context. One of several complementary lines, Javon's guitar comes in with a small melody again re-enforcing the G minor. The audio environment feels quite messy and disorganised, there isn't a lot of space, but nobody is challenging the synth, they're all working around what it's doing, exploring its offer and supporting it.

17:41 At this point the drums change again. Simon's guitar immediately responds and begins playing a clearly different and genre-referenced line that could come from a typical late 1970's New wave pseudo-ska

track. It is deliberately attempting to force in a new offer, confidently proposing it as a repeated loop played loudly and clearly, looking to see whether the other instruments are willing to join it. The group aren't quick to join in or support this idea from the guitar and drums. This could be because they don't know what it is (what chords or what key) or it could be because they don't like it and they don't want the music to go in that direction. The synthesizer is still drifting in the old idea and even when it does move doesn't really pick up on the pitch information contained in the offer - not picking up on the D minor (full progression Gm/C/Dm/C). Bench on the bass clearly gets the stylistic reference and begins playing rhythms appropriately however, again, it's unclear whether he has really picked up on the tonality. This points out an issue that the group had throughout their practice and that will be unpacked in chapter 5 concerning which elements of improvising were the most difficult for them. Evidence as witnessed here points toward pitch concerns being more difficult than rhythm, dynamic and timbre (Sudnow 2001).

18:20 By this time, the group have had some time to adjust to the insistent new idea and are starting to find ways into it. The violin can clearly be heard picking out melodic phrases that will fit in the current key. The keyboard can be heard still playing one chord rather than trying to pick out all three. The offer being made by Simon's guitar is not the easiest to engage with, partly as in its 'playing around' (as defined in chapter 1) it isn't playing a clear and obvious repeated pattern, rather playing the same three chords in different patterns, which is possibly making the task for the rest of the group harder (though they are all in the same key.)

19:00 Again, the music cuts here to another section and this is indicated by the drumming style. Bench and Sam know each other very well and are watching each other intently so they keep playing through the change where the other instruments back off, this possibly as they are not sure what will happen but also to swap the attention onto the bass by again removing layers and giving more space. Playing as the main pitched instrument, Bench makes a clear offer based around the pattern played by the drums. After 16 bars and having clearly established his offer in his 'solo' this pattern resonates with the rest of the band and they can be heard to respond to it joining his rhythmic emphasis (19:20). The group here are heading to a climax, very much drawing from their rock roots and still in G minor. Clear agreement on rhythmic and pitch content between the bass, drums and guitar provides a platform for the other instruments to freely work around, including the drums progressing and opening out to play more freely.

21:00 Around this point, the improvisation is very much drawing from type 1 with the music possessing the common trappings of rock and post-rock improvisation. The rhythmic feel is solid from the drums and bass and the other instruments are being played confidently and loudly. Again, as happened earlier, these contributions are not continuous, so the sense of rhythm is still present and this is overemphasised by the guitars which are now working as a team - deliberately being played in a similar manner. This requires a

great deal of skill, with continuous watching and listening to pick up on and lock into what the other player is doing. The aim being that lines are weaving and intertwined but they don't 'tread on each other's toes'. This is possibly made easier as Javon and Simon have many similar reference points within their listening palette.⁹²

21:40 The drums can be heard to pull back for a final time, again revealing the violin's playing, this showing that Maddi is taking quite a different approach to the underlying rhythm when compared to the guitars. After the music pulls right back, (21:56) The drums and bass change and Simon's guitar joins in and starts to play the harmonic minor scale in order to move the music somewhere different. However, by this point the group are imaginatively and physically tired. They've generated many different ideas within a fairly short time, intensively concentrating and creating for twenty minutes. The demanding nature of their playing sounds to have sapped their ideas for now, thus the music passes its most interesting point in terms of SGI and is faded out.

⁹² An iconic twin-guitar partnership referenced by CBS in their discussions was the Duane Allman and Dickey Betts lineup of the Allman Brothers Band. A representation of their improvisation skills can be heard on *'Mountain Jam'* (1972)

Chapter 5: The Application of Methodology

"Certain behaviours are not analyzable in terms of the dynamics of the separate actors; those behaviours are effected through the interplay between actors and environment."

(Cobussen 2014 p.23)

Where Chapter 4 served to identify key points that emerged from three selected workshop sessions, this chapter will put forward the researcher's analysis of how and why these and other issues were occurring. This will factor in information gleaned from discussions, interviews and researcher reflection across all of the sessions, as well as contextual research including the researcher's professional practice, in order to move towards the table of key constituents in answer to the research equation presented in Chapter 6.

Studying This 'Unknown Music'

Before getting into the meat of this chapter, it's worth pointing out a difficulty in this writing in translating intricate occurrences within the music into words. It isn't going to be dwelt upon, but it needs to be said that what's written here is a translation, it isn't what actually happened, which was in mind, body, sound and music and despite the researcher's best efforts, loses something in its translation into written language (Fennesz in Hopkins 2009.) Also, as stated in the introduction, this study is meant to speak and be of use to musicians and if you're not a musician some of this writing won't mean a great deal.

Let's begin by defining the field of play: When discussing this research at the outset with colleagues, there were a number of comments made relating to the difficulties of studying '*just making it up as you go along*': '*How can you meaningfully discuss the process when all involved are simply doing whatever they want*'? etc. As has been stated in the method, this research is studying very particular areas under specified definitions partly in order to avoid such conceptual quagmires (Denzler & Guionnet 2020). Whilst acknowledging that it limited the scope of the findings to the constituents of 'B' at work within the defined area, clarity was given to the research, not only through its focus on specific improvisational approaches (see chapter 1), but further in being entirely centred on the improvisations done by a small number of individuals within a specified time period. The field of view was further defined in only seeking to answer the equation set, where to meet SGI the music must have "*content that the players do not know previously*". This clarification ruled out a lot of music but also brought with it its own questions.

"As any game you get better by playing. To a beginner it might appear to be a game of chance but to the expert player it clearly becomes a game of skill... Improvisation is commonly believed as performing without preparation, in reality though, improvisation requires a lot of preparation."
(Mayer 2020)

In beginning to look to answer what it was necessary for the players to know and do to conduct the activity it is worth briefly playing devil's advocate: *Can't such 'unknown' music be made by those with no experience at all merely through putting chance to work?*⁹³ The players surely simply need to have the confidence to take risks, to throw themselves into the unknown – to press the keys, to open their mouth, to hit the drums etc.⁹⁴ This doesn't mean to say the resulting music would be subjectively good to our ears, but players could and have undertaken such playing without any of the sustained workshop series/ analysis/ skills development that were demanded of CBS. Further, it needs to be stated that chance is operative to an extent in all unknown music, arguably in all music. For this reason, in continuing to map the field, it is clarified that through the practice conducted the researcher has defined improvisation for CBS as a skilled and learned activity, possessing and embracing chance as a key element, but not as its *raison d'être*.⁹⁵ *"Learned things that are reorganized differently, plus an element of chance, of failed attempts"* (Oliver Benoit within Denzler & Guionnet 2020). As Bench clarified in interview Sept. 2021 *"This was something we were learning and getting better at..."*. Within improvisation, though all are going to places unknown, chance manifests very differently between more and less experienced players in terms of the extent to which they are able to control the music. There is a higher degree of guesswork in the inexperienced, they'd try something to see if it would work, they wouldn't know before they did it = a high element of chance present. In contrast, experienced players are practiced in the activity and as such have a developed set of musical tools to engage it. They could thus very likely relate the current musical situation to one they've encountered previously and choose simply to navigate it in a similar manner in order to reach similar solutions – taking known routes to known places. However, for CBS going along these known paths is *precisely what they don't want to do*, that isn't why they (or indeed anyone) are undertaking the activity (Rose 2017 p.55, Schlicht 2008). They seek to test themselves, to discover the new. In order to do this, even the most

⁹³ Schlicht (2008) notes *"...a first free and uninhibited experimentation with sound sometimes comes more easily to students with less musical training since they tend to have less of a self-imposed standard of excellence."*

⁹⁴ An insightful phrase emerged when considering this thorny issue. It talked of chance operations as *"generating (poetry) independent of the author's will"*. This gets straight to the heart of the matter in that the case that will be argued in these chapters puts, as Mayer has stated, the game of improvisation largely as one of skill: The CBS improvisers looking to impose themselves upon the moment, to exert their *"author's will"*. Of course, this whilst wholly acknowledging that there are many other factors at play including chance/the unexpected - elements beyond their control. <https://poets.org/glossary/chance-operations> (Accessed: 10/08/22): As Parker states *"There are, of course, chance elements in improvised music, but it's not chance in the way that John Cage works with the chance."* (in Denzler & Guionnet 2020)

⁹⁵ Rose (2017) presents a similar discussion but rather trying to define the role of chance focuses on 'spontaneity' *"...its not that spontaneity should be negated but that the contribution of spontaneity should become clarified"* - his interviewee Honsinger puts it rather as *"one part within a 'bigger picture'"*.

experienced player will seek to use elements of chance, to deliberately interject the unknown. An obvious example being the commonly employed practice of regularly working with different players in order to open up new possibilities.⁹⁶ Players keep the creative ground shifting to avoid repeating themselves, both within how they play and the variation in ensemble musical dynamics that lead them to different musical places.⁹⁷

"Improvisation is, for example, when, in the street, you meet someone by chance, and you start talking with them. It's an accident, it's improvised. At that moment, you're improvising. But when you play with someone, you bring your instrument, you know pretty much what the other person is going to do and there are things you can predict."

(Sejuro Murayama in Denzler & Guionnet 2020)

Extent: Answering Murayama and following what has been said about chance and its role in the practice of CBS, to what degree is this music unknown? Again, to further the point made in chapter 1, for CBS the parameters in terms of what was going to happen within their improvisations were, if seen through a certain lens, quite narrow: An airplane wasn't going to fly in, Javon wasn't suddenly going to engage in contemporary dance. The band would pick up the instruments that they always played, play the same notes that they always used, sometimes pressing an FX button or changing a drumstick. The bass would play a bass line, the guitar would take a solo etc. In some ways this activity is very known.⁹⁸ Viewed in this light, it's only the nuance of difference, relatively small changes within the way the music is made and its motivations, that are being studied. So, in returning to the broad questions asked by colleagues about the difficulties in studying this 'unknown music', actually the field is quite defined. The issues within the research then become focused on analysing the operations of the group as they work within that defined field. As illustrated in Fig.1, these analyses involved constantly relating the group's creative actions to wider context and using these insights to inform subsequent developments in practice.

Improvisation as (Instant) Composition Pt2.

This topic was initially discussed in chapter 1 and is returned to here in order to be expanded following the practical sessions: To restate the central initial points: In discussing the topics emerging out of the practice, it was very quickly apparent that much of what was necessary in carrying out SGI would also be present within

⁹⁶ Chris Corsano who the researcher has brought to UCLan on three occasions, is a very good example. See discography at <http://www.cor-sano.com/hateddiscog.html> (Accessed: 13/07/22)

⁹⁷ A reference here should not be needed. However, looking at any jazz players CV will confirm this e.g. <https://garyhusband.com/pages/about> (Accessed 04/06/2022)

⁹⁸Nachmanovitch (1990) on *'The Power of Limits'* discusses this (known field of play) from the perspective of boundaries being a creative stimuli, rather than an inhibition.

precomposed music (a statement which aligns with Parker within Schroeder and Ó hAodha 2014). The researcher defining precomposed as where the compositional choices have largely been made before the players realise a version of the piece. Where the comparisons were most obvious was in the activity of composing, the composer starting possibly with nothing, or just a fragment, and then through a combination of imagination and a skillset informed by years of previous experience and contextual listening, creating something. This could describe a recipe for either the improvising or pre-composing activity, the key differences being that the improvisers must devise their material in the moment (Nunn 1998). Improvisation is an activity, it's about the *doing* of the thing, it's about the moment and navigating that moment. (Rose 2017).⁹⁹ Deciding that some of what was going to be present within the improvising activity would also be present more broadly in composing helped inform what was covered within the sessions. Though something of this content was in scales, notes and chords that belong firmly within 'A', it also meant it was important to cover arrangement and roles within the music and these are discussed later in the chapter. Of greater relevance to 'B' was in asking the group to form successful compositional narratives. They needed to be able to do this in order to form pieces from scratch (Parker in Denzler & Guionnet 2020 p.63). The complexity of this task caught the group out regularly. On occasion it would seem that they had 'got it' and a piece that met the SGI definition would be formed. At other times the same problems occurred; one good idea would emerge but then the group couldn't move on from it, or the communication seemed to break down and the music was not coherent. It was becoming clear that CBS needed a way to pass ideas between themselves, engage with them, move the music to create a narrative and have confidence to stop and then go somewhere else.

Reflecting upon the evolving practice identified further elements that were specific to the improvising activity and that it would be beneficial to embed into the practice of the group. A clear difference in improvised music is that a period of finding or establishment is nearly always necessary. This can be clearly heard in the early stages of [Piece 1](#). In a precomposed piece, the musicians as they ready themselves to begin, can look at the score and know that each will begin playing quavers on a D note. The conductor counts them in and they all immediately begin doing this and thus the musical place is instantly established. It comes with the nature of improvisation that this is not the case, that the music is not instantly successful. There is no score or prior compositional decisions that have been made, no knowledge before those initial notes are played of what other people will be doing, or indeed even what you will be doing yourself.¹⁰⁰ As such, improvisation is not a place for a group to instantly, coherently put forward fully formed arrangements of ideas, that isn't its nature.

⁹⁹ Clarification on this subject was aided by a discussion with one of the researcher's Masters students Matthew Wells who said that his group The Dissonance Collective always referred to their recordings as objects, records of improvisations, not the *actual* thing (see Wells MA submission, UCLan August 2021).

¹⁰⁰ This is theoretical, see earlier discussion of extent, the music is to some extent known.

Rather, to explore and find, to evolve, possibly over a long period. Indeed, players must accept that they may not find anything that they feel works at any point during the conducting of the activity, and even if they do, they may not sustain it.

Initial sessions asked that players went straight into exercises that picked up where the last ones left off. Connor suggested that rather than doing this, some playing with no direction given would be a good idea to begin with. This was tried and proved successful. Having also worked over a number of years with dance students at UCLan, the researcher recognised that this related to their need to warm up. This warming up for the players was taking place in a number of ways: Mentally tuning in - tuning out the noise and concentrating on what you are doing (Nachmanovitch 1990); physically adapting - fine tuning to the sound, the room, the instrument set up on that day; physically warming the body (joints etc.) and connecting with others in the room – actively listening/looking out for what the other players are doing. These elements need to be taken care of in order to be ready to engage in what is an extremely complex and demanding activity. So, further to conducting the improvising activity successfully, the initial period of any session shouldn't be expected to be the SGI activity being conducted to its fullest, that is not its purpose. This initial time in the improvising activity serves purely as a warmup, and as such no music of any quality should be expected within it.

Risk and Confidence

"...committing to improvisation, wholly committing to improvisation, implies taking risks. It's a philosophy of leaving yourself open to possibility and leaving yourself open to magic."

(McNally, Long Strange Trip, Ep.3)

The necessity to take risks within improvisation had been flagged up by the pilot project. When seeking to make subjectively interesting music with the group it was quite clear that they could all join in on a riff in A and stay with that for ten minutes. What was hard was moving the music, making the narrative journey to the unknown places required to achieve SGI. As well as being necessary in answering the equation, the researcher insisted on this as being subjectively important to him. For this reason, seeking to find ways to move the music on became an important part of the research.

"...Maybe it's more a confidence thing or that I'm just going to play whatever I want, I guess there's a[n element of] 'I'm just going to hit a load of wrong notes if I go for this random run'. And if we are in a certain key, it's very obvious because of the sound of my instrument is a bow going over a string and there are no other bows going over strings..."

(Maddi interviewed in 2020)

As Maddi's comment reflects, when players were asked why they were staying around the same idea, comments were made about playing 'bum notes' or 'getting it wrong'. Attempting to read between the lines, the researcher took it that the group were playing it safe, partly as they were worried about the consequence of taking risks (see Nachmanovitch 1990 on *The Judging Spectre*). There could of course be other reasons, they might enjoy what is being played and not see it as compositionally correct or of interest to move, they might not know or be inspired as to where else the music could go. However, having already laid out the factors essential to SGI, the researcher could see being risk averse would be a problem in reaching it. The players had to be able to go beyond the surety of the known, to reach out, relying on their musical skills and experience to conduct the activity. The workshops needed to help them with that, to give space for that process of development to occur (Schlicht 2008). Part of the solution was simply to reassure the players on the nature of improvisation; that mistake making, transition, change and sketching out are all signs of a successful process.¹⁰¹ Even if aesthetically, they do not create what in pre-composed music would be defined as a successful outcome, they are not wrong, rather necessary in conducting the activity.¹⁰² Not taking the risk, making the change and thus exploring the new place would be the failure. *"I'd rather have you up there making a mistake, you know trying to do something, than finding some area that you're comfortable with and doing it over and over again"* (Mitchell quoted in Rose 2017 p.142.)

"Confidence levels can have a direct impact on improvisational performance, at least in my own experience. As humans, we all have peaks and troughs in how confident we feel but if I'm feeling unconfident in my improvised playing on a particular day, thinking some positive thoughts about myself, for example, affirming or reminding myself that I'm experienced and know my instrument well can make a huge difference to the quality of my improvisations..."

(Sam in Appendix 2: Player Profile)

Another issue discussed at length throughout the study was confidence (Shevock 2018).¹⁰³ Confidence to state, to express and to create clearly underpinned the group's practice - the other constituents rely upon it being in place to function. Even when the player is in possession of a large amount of technical knowledge, if they haven't got confidence to make music with it, then it is of little use. The researcher's approach (derived

¹⁰¹ The way that visual artists 'sketch' out is being referenced here: Roughing out an idea, gradually bringing it to realisation, drawing the bits you know in order to work out which bits you don't know, providing an outline and possibly then filling it in are all relevant to musical improvising.

¹⁰² See Robert's Levin's comments here <https://youtu.be/w3aaHHMUJog?t=562> (Accessed: 14/08/22)

¹⁰³ Though it is not the purpose of the study to define confidence, Shevock's definition of it *"...the ability to maintain a positive perception of self and abilities derived from a feeling of safety"* is very interesting in fitting particularly with what is discussed about foundational need for the safety of the environment in chapter 3.

from previous practice) was simply to build the group's confidence through experience.¹⁰⁴ If the player was worried because they did not know, then to try to ensure that they did know. Where they haven't done something previously, to make sure they had done it, and not just once, a number of times.¹⁰⁵ Confidence in making music was observed to be extremely complex, relating to personal situation, mood and physical health, as well as more basic factors such as inexperience within the type of music being made and uncertainty on which technical components they should be using. Javon's guitar playing was a very good example of this: In some aspects he was very confident. However, when it came to working with chords, he would sometimes pause his playing, becoming more hesitant, or simply just not do it. *Why is this?* As our discussions evolved, it became clear that he plays a lot of bass guitar, an instrument where chords are not commonplace and it may be that this is colouring his guitar playing. The researcher, however points to what he says in his player profile and proposes his level of confidence in improvising with chords connects much more with how he's learned to play and the types of music he has been involved with previously. This also reflects the researcher's own experience. Within rock and pop, it's unlikely the guitar player will be asked to improvise a chord sequence, much more likely they will be asked to improvise a single note solo over an existing sequence. Therefore, in Javon's case, the research suggests that it's a combination of a lack of knowledge (of how to improvise with chords) and experience of having then done that (building the knowledge into his practice) that is causing the lack of confidence.

There was a marked difference in confidence between the players. Connor was consistently confident, whilst Bench's confidence varied greatly between sessions. The players must and did accept that confidence ebbs and flows, this acceptance being viewed as a real strength in the group. To battle confidence issues, players used the group to inspire and reassure them and the playing of other members to maintain the quality of the music when they were not feeling 'at the top of their game'. Though the researcher did feel the group members generally improved in confidence as the study progressed, such improvements are extremely hard to accurately measure, existing in the qualitative statements made in discussions and interviews and being perceived by the researcher in what they played. An obvious flaw in attempting to assess confidence in this manner is that it would naturally follow that somebody who is less confident might well say less in discussion and interview. Therefore, the researcher is less informed about their situation and less accurate about how they perceive their level of confidence and what is determining that. Nachmanovitch (1990) observes

¹⁰⁴ Ward-Steinman (2007) notes that improviser's confidence increased after a period of instruction but does not identify that the increase in confidence may also partly have been due to having had more experience of the activity: Bailey (1992) observes Stevens seems to aim to "...instil in the people he works with enough confidence to try to attempt what they want to do before they know how to do it."

¹⁰⁵ Rose (2017) p.126-7 discusses the importance of kinaesthetic learning (by doing).

"Sometimes the student who is least articulate about expressing the ideas is in fact the one who is absorbing and processing them most deeply."

The Offers System

As previously stated, as the study progressed it became apparent to the researcher that to reach SGI the group's music-making would need focused help on working with musical ideas in order to construct successful musical narratives and form instant compositions.¹⁰⁶ To attempt to tackle this perceived need, the researcher devised 'The Offers System'. Conducting workshops on the embryonic system was designed to gain more detailed information, particularly to illuminate and articulate how the improvising group work with such ideas. In fact, the topics introduced which are defined here as focus elements, prompted discussion on all aspects of improvisation and pointed out the impossibility of entirely isolating individual elements.

The name Offers System and the approach employed are developed from a way of working used in improvised group comedy: One or more member(s) propose an idea or 'offer', then the other practitioners chose whether or not to engage it and if so how, to respond, to develop etc.¹⁰⁷ (see also Borgo 2007 p.83)

The Offers System was brought to Cold Bath Street as a prototype, a set of untested headings and exercises to be refined and developed necessarily through practice. The researcher's initial proposal to the players used six headings labelled as focus elements in order to begin to draw out and analyse the complex issues involved in how ideas were being dealt with. The headings were derived from the researcher's previous observations of the practice of both this group and other improvisers. For the researcher these headings were thought to provide useful starting points, inroads for further investigation of what was expected to be in reality a highly complex, layered and cyclical process. For the players, they were intended to be working tools, elements to help them consider and improve the way they work with ideas. Originally it was planned to introduce each of the six individually, moving through the stages, spelling out the chronological developments as the music progressed over time: In practice it was impossible to entirely extract the focus elements from each other, thus the exercises conducted and the discussions around them often referred to numerous elements simultaneously.

¹⁰⁶ Schlicht (2008) notes on working with students on their improvisations *"...it is necessary to show them how to develop a directed practice and how to be comfortable and fluent with musical elements, techniques, and creative ideas."*

¹⁰⁷ An easily accessible example of this is the Channel 4 series 'Whose Line Is It Anyway?' In the show the four participants, usually working in subgroups, are given various start points for improvisations and make and respond to offers in order to generate comedic dialogues; As well as being proposed individually, offers could emerge from the interaction of two or more people.

The following table lists the focus elements proposed to the group to aid working with offers, what those elements were looking to improve within their playing, the exercises that were brought in to highlight and explore them and any further playing directions that were given.

Table 3. *The Proposed Elements of The Offers System*

Stage	Focus Element	Aims/Exercises/Playing Directions
1.	Active Listening	<p>Aims: Look to heighten the players' awareness, make them more sensitive, inquisitive and receptive in order that they are more likely to pick up on ideas. This could be when the music is already going/in process or at the start of a new work.</p> <p>Exercises – Not playing instruments, rather listening to the space, was used to begin the session. Following this, the group were asked to pick up on changes in someone else's playing whilst they were minimally playing also. At first it was made explicit, nominating a player that is followed, then gradually ask for players to choose their own person to respond to, with a final stage to be able to choose to follow ideas from anyone.¹⁰⁸</p> <p>Playing Directions: <i>Rather than just hearing, players are being asked to actively process that audio information to inform their creativity. The intention being that they are 'switched on' to the sounds in the room and are constantly listening for changes within them.</i></p>
2.	Engage the Idea	<p>Aims: The players try to 'feel' the music, acclimatizing rhythmically and harmonically. This is largely a mental activity and does not involve making any sound though the rhythm could be felt in the body. This process could be thought of as familiarising themselves with the territory in which they were about to operate.¹⁰⁹</p> <p>Exercises – This element was highlighted and discussed as part of a wider exercise that also incorporated focus elements 1 & 3. Offers were made by individuals, and with their active listening engaged, the players were asked to both identify the underlying rhythm or rhythmic stresses and to find the tonality that was being used.</p>

¹⁰⁸ See also Nunn (1998) on 'Creative Listening'. Stevens (1985) exercise 'Search and Reflect' was influential here however more important were soundwalks the researcher has taken part in organised by Dr Jon Aveyard.

¹⁰⁹ Borgo uses the territory analogy extensively in his 'Free Jazz in the Classroom' 2007 article. The research follows this, having the players operating within an environment to some extent unknown, that they will then explore.

		<p>Pre-existing skills living within 'A' were being called upon here – ear training, harmonic and rhythmic knowledge.</p> <p>Playing Directions: <i>None further than the exercise set.</i></p>
3.	Develop the Idea	<p>Aim: To <u>musically</u> join in: What is added does benefit the piece, its arrangement of the current idea, and/or potentially its future direction. That through repeatedly doing this, the players develop skills in sound control both in their own instrument-specific skills and in a wider sense, including understanding roles within the arrangement, what they can do, where they can fit in. This approach is intended to lead to longer-term developments in confidence and wider musicality.¹¹⁰</p> <p>Exercises – Possible physical options, examples of 'things you can do when joining in' were given to the group. These to include questioning or challenging, illustrating or accompanying the offer. NB One answer could be to be silent. These were introduced by the researcher as useful starting points, but by no means as an exclusive list. The potential issue of the roles that different instruments take within the music was flagged up at this point.</p> <p>Playing Directions: <i>Add something that musically works with the offer. It is probably not going to replicate it but instead be complimentary. Don't rush to join in. Play what and when you feel. The music is not heading to a set goal – a single correct destination - every player and every improvisation is different in some way. What is added to the offer could start to lead the music somewhere else, but it makes this change musically, possibly gradually.</i></p>
4.	(Optional) Realise when the idea is tired	<p>Aim: To improve compositional awareness. Players were asked whilst they were playing to consider '<i>Is it best to stay with this idea or does the music need to find a way out?</i>' Making this judgement in the moment involves the players instinctually engaging with and listening to their emotions and experience base as much as making a cerebral compositional judgement in order to feel when the energy has gone, or the creative possibilities of an idea have been exhausted.</p> <p>Exercises: This element was pointed out and discussed rather than having its own distinct exercise in these sessions. Previously, the group had experimented with how long a section should be in an exercise where they were asked to engage a single</p>

¹¹⁰ Though it could be argued that such developments relate to all of the focus elements, they are particularly relevant to this one.

		<p>idea and then to stop when they thought it had run out of energy. This is a compositional skill, very similar to judging endings (element 6) but normally enacted on a micro-scale within the piece.</p> <p>Playing Directions: <i>This focus element might not actually be used, as the opportunity for development to a new idea (element 5) might well present itself <u>before</u> the existing idea feels tired. Within a shorter piece, the chronological progression of ideas will normally be quicker, the changes will take place more often. The only exception to this being a one idea piece, where the whole piece stems from and stays within one idea.</i></p>
5.	Find a way out or to move on	<p>Aim: Finding a way to satisfactorily move the music forward.</p> <p>Exercises: This element was built into larger exercises. Discussions began from the premise that the music should change and then tools to do this were suggested, discussed and trialed. Tools included starting to create change, suggesting or attempting to enforce change, the levels or degrees of change, and considering whether to radically or subtly alter the direction, either immediately or gradually changing the rhythm, timbre, dynamic or pitch. Initially individuals were nominated and asked to make change, then this was allowed to be freely exercised as and when any of the group members felt that it was compositionally necessary.</p> <p>Playing Directions: <i>This is not usually a deconstructive/destructive activity (taking the music apart, leaving it as it is failing) rather, a positive way forward may be formed by the suggestion of a new idea, or joining one already being offered by another player.</i></p>
6.	Ending	<p>Aim: Finding a <u>musical</u> way to end a piece. What the players could play to do this. Links in some ways to element 4 in terms of compositionally realising when it needs to happen and making a communal decision to make this change.</p> <p>Exercises: This was explored through setting up artificial playing scenarios then looking at ways out of them. At times a clock was used to indicate the point when people should start to find a way out. This exercise was done on different scales (shorter and longer pieces) and gradual or sudden endings were trialed in order to present them as options for future improvisations.</p>

		Playing Directions: Successful <i>execution needs the confidence to stop, the compositional awareness and skill to know where to stop and how to stop in a creative and satisfying manner.</i>
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The six elements set a guiding framework of start or focus points for the workshops on The Offers System, as opposed to a detailed, formal structure. They were to be introduced, questioned, worked with and if useful, integrated into everyday practice. As can be seen from the table above and the further exploration of the points as laid out below, working from them led to other subjects and questions which were opened up, explored and noted. There is an artificiality within the table in listing the elements as standalone subjects with a sole role, purpose or chronological position within the music-making. They are being presented with an artificial clarity and distinction which in the reality of regular practice is integrated and by no means so clear. Lastly, though some of the elements seem to focus on the individual and their skills base, it should be restated that the wider purpose of working with The Offers System was to build skills aiding collaborative devising in the moment.

The Six Focus Elements and How They Further Helped to Understand SGI

At the outset, the researcher expected that each element would have its own specific exercises. In actuality, the exercises became broader and about improvising using The Offers System in a wider sense, the researcher merely asking that different elements of it were given focus at certain points, including where the emphasis was placed within the discussion following the music-making.

1. Active Listening

"...If you are not listening or if you are not aware of the environment, then it seems to me there's not a lot of point in doing it, really. If music is about anything it is about listening. Certainly, as a player, that one of your skills has got to be about listening to what other people do, listening to what you are doing yourself and making a connection."

(Eddie Prevost in Hopkins 2009)

"I am in the process of developing my listening skills, skill being an operative function in that development – listening to and observing five, six, seven plus musicians and being able to understand what stage everybody is at during a performance has always been difficult..."

(Connor Interview September 2021)

This focus element did have its own exercise which involved the group members intensively focusing on listening to a nominated individual. Every time the nominated individual changed what they were playing, to acknowledge that they had observed this, the other players had to change what they were playing. The

exercise was then repeated but with a different individual nominated to be followed. No specified length was given for the changes or other musical parameters specified. In theory, it did not matter what the individuals played but merely that they picked up on the change. The exercise set what was at first glance a very simple question but one of great significance to the group's practice: *'Can you pick up on change in what someone else is playing?'*¹¹¹

In actuality, this exercise was difficult to keep distinct from the other elements of music-making. In terms of being able to pick up on change, the players had to think about *what constitutes a change?* It immediately highlighted that there is a difference between changing what you are playing and changing exactly what you are playing. "*I'm playing a chord vamp in C*" doesn't spell out where the chord is voiced or exactly what the timing is. So, there is a difference between repeatedly playing *exactly* the same thing, which the researcher would refer to as 'looping' and 'playing around' the same thing, this as defined in chapter 1 being an extremely common playing approach employed throughout popular music and being much more likely to be utilised within a CBS improvisation. Introducing the notion of playing around immediately signposts the importance of musical place which is discussed at length later in the chapter.

Necessary skills highlighted by the exercise:

- There is a complexity in being able to play and listen at the same time. Here the musicians were being asked to practice the mental and physical skill of being able to move their focus away from what they were doing onto what somebody else was doing whilst continuing to make appropriate contributions.
- That being able to hear what others are doing is key, here in the working of The Offers System and applicable to group improvisation generally. If you can't hear what somebody is doing, then you can't respond to it (see communication and dialogue later in this chapter and next bullet).
- In terms of being able to pick up on change, visual signals were surprisingly important, body language could be almost as useful as being able to hear the audio.
- Even though it was not the primary purpose of the exercise and in actuality jumps forward to the fifth focus element, it was apparent even in this early stage that some changes were easier for the group to pick up on. For example, a subtle change in melodic emphasis from the person being followed might easily be missed, whereas a sudden change in tempo was much more likely to be identified. So, nuance and subtlety of change and the players picking up on them, have an important role to play in the effective functionality of The Offers System. When the researcher was leading the

¹¹¹ Josh noted in the session 18th April 2021 that in his cover band he does not need to listen in the same way as their material is pre-known to a greater extent. This pointing out the pivotal necessity of active listening within the improvising activity as opposed to the lesser importance of it in other types of music-making.

group, he found himself deliberately making changes more obvious in order that the group members would 'get them', particularly in a busy audio environment. As referred to in focus element 5, the practical realisation of making the offers and the changes within them more obvious might well involve doing something repeatedly so it cannot be mistaken, (fairly) loudly so it is more likely to be heard, or starkly (overly-clearly) again, so it stands out in the music. Though these methods are helpful in communicating change, they can very easily sacrifice being musical i.e. they don't always sound good. This is illustrated in the example [here](#) from the initial Offers System workshop where the researcher is playing overly-clear offers, bold and repeated statements that cannot be missed. He sacrifices musicality for the purpose of the exercise, delivering a stark and repeated phrase and inarguable pitch change at 00:20.

Also evidenced by this exercise, and indeed all of the work within The Offers System, was the group finding some offers more difficult to engage with than others. This possibly merely points out that it is easier to engage with offers which point towards a musical style or way of playing with which the individual or group is familiar or interested in.¹¹² In this way offers could be more or less effective in leading to good music dependent on the particular practice of the group that they are made to. Of course, a counterargument exists that familiarity or ease is not necessarily positive or desirable within creativity. In [this extract](#) from the 18th of April, the researcher had told the group that he would deliberately play offers that would be easy to engage with. As the clip begins, he is beginning to play, repeating a single chord and changing its tempo. The group members indicate that they are struggling to engage with this offer by playing things on top of, rather than within the music. They are in effect soloing within the key rather than engaging the offer to form a successful arrangement. The leading role is then passed to Javon who leads an improvisation where the offer doesn't move in terms of chord/ central pitch but rather changes dynamic, timbre and rhythmic emphasis. The group find this much easier to engage with and are able to create a better improvisation. *So, what does this say about the playing of the group?* The CBS members classify themselves as coming from rock and pop backgrounds and their improvising skills are largely self-taught.¹¹³ This meaning that they have devised their own largely internal system in order to complete the activity (see Rose 2017 p.136 on Autodidactism). The researcher speculates that this means that they don't have the ear training necessary to quickly recognize

¹¹² See Javon's comments made here:

https://soundcloud.com/elmet5/javon-on-krautrock-lack-of-confidence/s-8HucGrTMk8x?si=280741c5c3644acaa8ed8b1c7576169f&utm_source=clipboard&utm_medium=text&utm_campaign=social_sharing (Accessed: 04/08/22) in the session 30th May 2021 about his lack of confidence in playing drums in a krautrock styled piece. See also the difficulties that the group had in that same session engaging with Connor's atypical chromatic playing in *'That Chord Isn't Strange Enough'*.

¹¹³ This was discussed in earlier work with the group. Though all studied music at university, this did not include instrumental teaching and only some sessions on improvisation. See player individual players profiles for specific information on influences and background.

chord changes. This type of musician does exist, but it is not them. This topic is further discussed in Appendix 1: Self-Evaluation.

"It's always been my hope that the group as they developed over time would start picking up on chord patterns. I'm not sure exactly why they don't do this, but they seem quite resistant to it. If they are given a chord pattern in advance, they can work to this, we did this on 'Sound Research Rebellion'.¹¹⁴ However, when the players aren't given the pattern in advance, they either can't find it or they don't want to find it. Their abilities to pick up on rhythmic, timbral and dynamic changes seemed to be much further advanced than their abilities with pitch."

(Researcher notes June 2021)¹¹⁵

Part of the realization for the researcher here, was that as all of the players have worked with him for an extended period, and he does not improvise in a chordal way, the group's not doing it must to some extent simply reflect back how they've witnessed him work. They've effectively been shown how to conduct the activity in this manner, this having the knock-on effect, that within CBS as a working environment, they are learning from and interacting with other players who are not doing it either.¹¹⁶ There's a frustration for the researcher in this, in that something in the group's practice feels to be lacking and he feels this is partly down to his own musical shortcomings. Possibly the only exception to this observation is Connor. His chordal confidence can be heard on *'That Chord Isn't Strange Enough'* (see Music Analysis 2.) *So, why is he more confident to use chords?* Very briefly, some of this can be attributed to the role of the instrument and how it is normally played: Piano is often played solo and as such Connor has learned to self-accompany utilising chords. He has also been actively engaging in numerous projects, instruments and styles whilst being a CBS member, so is familiar with and comfortable in taking lots of different musical roles. He has thus possibly been less influenced by the improvisational approaches of CBS as that is only a small part of his wider practice.¹¹⁷ Also identified in the interviews was that he has been heavily influenced by improvising pianists who centrally incorporate chordal work.

In pursuing our brief diversion into the relationship that CBS has with chords there are other much more positive elements which must be emphasised to give a more-balanced case. Firstly, it should be said that lots of groups regularly attaining high levels of SGI do not use chordal approaches. The iconic modal pieces of Miles Davis' album *'Bitches Brew'* as an obvious example. Secondly, insisting that all players stripped their playing back and learned an entirely new way to improvise through working up from standard chord progressions as many jazz players traditionally do, would have been insisting on the CBS players working in

¹¹⁴ The track '80s Thing' from the LP *'Sound Research Rebellion'* (UCLan Recordings 2018) is a good example of this approach.

¹¹⁵ See Sudnow (2001) p.18 on highlighting particular difficulties with pitch.

¹¹⁶ Clearly, this doesn't affect drummer Sam in the same way as he is not playing a pitched instrument.

¹¹⁷ Connor's LinkedIn profile gives a sense of this. <https://www.linkedin.com/in/con-daniels-a9589b216/?originalSubdomain=uk> (Accessed: 09/07/22)

a different way, being musically someone else. This was not the purpose of the study, which was seen as development, not reinvention. Lastly, working around standard chord progressions, even if when and how they are used is left open, has an inevitable effect as it places something fixed at the heart of the music. "...to introduce a significant structure to the music, and a lot of static sound" (Josh Player Profile).¹¹⁸ There is less freedom, less choice. When instead of offering a riff on a G major scale, the researcher put forward a clear pattern around Em, G and A chords which can be heard [here](#), the musicians, though attempting to engage, produced little of any interest and in discussion afterwards fed back in a very negative way. As a result of this, the researcher decided that the best position was that having pointed out that it could currently be considered as an omission, to leave it with the group that if a chord progression naturally felt the right thing to do in the music, then it was absolutely encouraged, but that it wasn't insisted upon.

Taking all of this into consideration, the researcher summarises that he is simply wanting to place chords and chord progressions in the CBS toolbox alongside single notes and modal improvisation. He has increasingly been practicing these approaches himself and encouraging the band members to explore this within their own work. Particularly to the synthesizer and guitars of Simon, Javon and Josh, this harmonic content would continue to add to the group's developing practice.

2. Engage the Idea.

It is difficult to differentiate between stages of a process that in practice happen extremely quickly, that overlap, repeat and feel to be instinctual. However, the engagement that is discussed here is defined as an acclimatisation that occurs after the active listening is engaged and before the beginning of construction of musical lines of arrangement necessary for stage 3 begins. It is usually a very brief process and draws on being able to mentally process and extract an understanding from what is being heard. If improvisation is indeed a journey, engaging the idea is probably analogous to finding your bearings, getting a sense of where you are, maybe if we're generous, even physically testing the ground before setting off – sounding a note or feeling a rhythm. Within the workshops the researcher suggested doing this through acclimatising to rhythm, timbral and harmonic environment.

In the exercises on engaging the idea, CBS were making two large presumptions: The first that the person making the offer wants the other musicians to join in and so proposes something that can be comprehended by the other players (see chapter 3 on the importance of the supportive and non-judgmental environment). The second, that the offer accordingly has either a clear melodic content, probably in a single key, or a

¹¹⁸ Echoing this point in Schlicht (2008) participant Jeff notes "Sometimes a certain idea will be good, but it will not easily allow change and different textures to develop."

complete lack of this and is chromatic or atonal. If the offer was in a regular diatonic key, the player who has perfect pitch would know as soon as a single note or chord was played what that was, the acclimatisation would be near instant. If they played a number of notes, the non-perfect traditionally trained ear would, though slower and with need of some sort of reference point, fairly quickly recognize those as being from within a particular diatonic system, harmonic minor or melodic minor etc.¹¹⁹ However, for the self-taught musician who doesn't have perfect pitch, the acclimatisation might well involve making some 'mistakes' in order to find their melodic footing. The [example linked here](#) briefly shows Connor followed by the other group members doing this for Bench's initial offer. The largely self-taught researcher still sometimes finds himself after thirty years playing, testing the water harmonically in this manner, playing a few notes in order to acclimatise. In effect musically asking, *'do these notes work in this environment'* or *'where am I on this territory – give me a start point?'* In this way, engagement with harmonic information within the offer for him is different than with rhythmic or timbral information. In that the player *can* join in in the wrong key, or not pick up on a chord being major rather than minor etc. This pattern was reflected in the pitched instrument playing of all the group members. In this manner, the engagement stage can fail, and the music *can be harmonically wrong*. It follows that there is a further skill, connected to the active listening element, in being able to very quickly realize the contribution isn't going to work and to make the necessary corrections, responding in order to fix it. There is also the possibility that the initial offer may be correctly but differently interpreted by members of the group, this leading to clashing notes from them etc. Again, there is a skill here for the group as a society in being able to quickly come to a consensus on key. For CBS, there were periods where multiple possibilities (differing interpretations in response to the offer being made) would co-exist. Though these periods of co-existence were valued, it was the normal practice of the group to hear and consider what everybody else was doing, (acclimatization) and then to move to/ continue with whatever they thought was working best. As such, it was very unusual for these multiple possibilities to co-exist for any sustained length of time. Possibly the only exceptions to this were when CBS were working in a 'noise' environment. Without getting into a long discussion of how or whether pitch concerns or systems can be applied in such playing, it's safe to say that a diatonic pitch consensus is not sought. This can clearly be heard in the later stages of ['That Chord is Not Strange Enough'](#).

The absolute failure that sometimes took place within pitch response to an offer was much less likely to occur in rhythm and timbral concerns.¹²⁰ Forgive the author if he jumps a little between the elements of

¹¹⁹ As witnessed in the researcher's professional practice, whereas perfect pitch is thought to be something players are either born with or do not have, over time, training to recognise pitch usually increases the speed in which players are able to ascertain within which key the music is being played.

¹²⁰ *"The ability to perceive pitch and time can never be too fine. The more we teach our musicians to develop ears and skills, the better equipped they will be to work in an ever-changing environment."* David Borgo's interview with Mark Dresser, quoted in Schlicht (2008).

active listening (element 1) engaging mentally (element 2) and engaging physically (element 3) in attempting to answer this: Rhythmically, if the player can 'hear' or identify basic tempo, phrasing and emphasis in what someone else is playing (in this case the offer) then from this feel what they hear, tapping along, finding the rhythm within the body, then, with practice they can translate that onto their instrument.¹²¹ Similarly, timbrally, if at engagement the player imagines a soft, warm tone but the initial sound they produces is extremely harsh, i.e. wrong to what the player wants, with experience they can, literally as soon as they've heard it, realise it does not fit with the offer and very quickly respond and make changes, adjusting the tone control, FX level etc. in order to address this.

So, timbre and rhythm, though extremely complex in their own right, were demonstrated within the sessions to be easier than pitch for CBS. This finding clearly connects with the earlier discussion on the issues with chords within their practice. Though difficulties in engaging with pitch were most evident in the sessions focusing on elements 2 and 3, they were also evident at other points across the study. CBS could identify and engage rhythms and timbrally control their instruments, quickly responding to alter the sound qualities where necessary, more consistently and confidently than they could (particularly initially) get right the pitch/harmonic content. The research suggests that CBS's strength in rhythmic and timbral work likely reflects on the group's previous experience. Being in time and 'in the groove', having a good sound and playing at the right volume are stressed more than ear-training for rock and pop musicians. Though not explored within this study, the researcher would be interested to further investigate the connections between musicians being self-taught and relative weakness in pitch recognition.¹²²

3. Developing the Idea

Continuing from the previous element, developing the idea was addressed within what on the surface was the same exercise - the players listening to one person and trying to work with the offer they were making. Where the exercise differed, is in the importance placed on the physical response made, and that the response needed to demonstrate what the researcher initially discussed as a developed 'musicality'. Engaging the offer in order to quickly function as part of a successful arrangement was extremely complex and demanding of the players, and thus in this respect the group were not always wholly successful. For

¹²¹ On many occasions within the researcher's teaching practice he has asked music students to clap along with a simple repeated phrase. It is unusual for such a student not be able to do this. However, if then asked to translate the phrase they have just clapped on to their instrument the results are not immediately as strong.

¹²² Schlicht (2008) notes related difficulties in phase 2 of her improvisation study in working with "*Foundations of Harmony and Theory*"; the differing levels of prior knowledge within the group, that it isn't conducive to teaching in a group setting and that it can't be applied in the same way to those playing non-tuned percussion instruments.

example, in [Meltin' Jam at 11:40](#) the audio space was quickly overwhelmed. Due to the importance attributed to this issue in attaining SGI, a discussion follows on the complexities of making successful contributions to an arrangement.

Firstly, in discussing the generic roles and contributions to the music that instruments were seen to make, the research of course acknowledges that no two people will play the same instrument in exactly the same way. Also, that the instrument they choose does not define the player's creative personality. It might give some parameters to work within or indeed to rail against, but it doesn't say exactly what they are going to play nor how they are going to play it. That said, the research has identified that a substantial issue for CBS in consistently reaching SGI is not specific to improvisation and rather connected to the player's broader understanding of the role of the instruments within functional arrangements. For example, if you have three midrange instruments as CBS did, and they all try to start responding to an initial offer simultaneously, there is a possibility that they will clash, purely because they are all working within the same pitch ranges.¹²³ In attempting to diagnose and remedy this problem, there were numerous factors to be considered regarding what instruments could do, what were their musical capabilities? Also, which, if any, of the conventional roles for instruments within popular music should transfer to improvised music? Discussions and practice revealed that each instrument had its own issues. For example, the violin didn't usually play chords, the keyboard could play a low bass line when the bass wasn't occupying that space, the cello was hard to hear alongside the distorted guitar... it was a very long list, again a topic that could warrant its own study. It was made even more complex by the range of possible materials covered in what the research had defined as type 3 improvisation and the different functionalities within arrangement across such a broad spectrum of music. As well as opening up the discussion of instrumental limitation and functional roles in an arrangement, addressing these issues also had to take into account what was acceptable or preferential to the player's ears. Ultimately the researcher was subjectively steering to a large extent here, setting his expectations through points of reference for good practice in what he had experienced previously and identified as successful or desirable (see chapter 2). His thoughts following the sessions on roles within the arrangement and the options that the instruments have are summed up below.

Overall: That within CBS' type 3 improvisations there will be circa five instruments, this providing a balance - giving enough audio space that everyone can hear each other and be heard whilst also giving enough input so that ideas, dialogue and communication can be active and effective, enabling the music to change and

¹²³ The livestream that the Group performed from the New Continental, Preston in December 2020 contains numerous examples of this. <https://youtu.be/WZmKJlIzUQs?t=5064> (Accessed: 30/06/22)

develop as laid out in The Offers System.¹²⁴ Within CBS, these five instruments are ideally going to cover the roles of drums, bass and mid-high registers, this purely as the researcher thinks this makes for a satisfying ensemble sound based on his experience in listening to other groups.¹²⁵

Drums are most easily defined from the other instruments. They have a different timbre, are non-pitched and they do something different than the other instruments can do; within a pop or rock song they normally keep the beat and this is also often the case in group improvisation.¹²⁶ However, in improvisation it will be completed in subtly and intricately different ways: It may still spell out time and provide rhythmic stresses but different drums might be brought in on certain beats or rolls and stops regularly used. These wouldn't fit with the continuity and positive lack of attention seeking required from drums within pop music, where consistent beat and drumming pattern is expected/ required in order to provide subservient backdrop to vocals or high mid-range melody.

Ideally within improvisation the hierarchical support role of beat keeping is removed, allowing the drummer to explore. With the shackles off, drums can give and change emphasis, define and conduct, this greatly adding to the improvising potentials of the group. Workshop sessions explored different ways of working with drums, either highlighting approaches already present or suggesting additional ones that could be added to the group's palette. In looking at the standard tools and their relevance to improvisation, composition and arrangement, most obvious to the drums was the ability to control dynamics, including underpinning changes. The drums are very difficult instruments to play softly. Consequently, a task most drummers the researcher has worked alongside struggle with, is to provide upbeat rhythm (with lots of impacts upon the skins) without playing loudly. Even with a great deal of control and use of brushes, this isn't wholly possible due to the physical design of the instrument. This gives the drummer a great deal of responsibility in terms of dynamics and the overall arrangement: In making a decision to play, they are going to have an audible impact and unavoidably move the music. In practice, for CBS's open improvisations, this translates to a conductional role. The drummer is making compositional decisions that are very hard or impossible for the rest of the group to argue with, clear signals that are very unlikely to be missed. If the drums drive hard, the music is going to get loud, if they dynamically back off, the other musicians will tend to follow their lead etc. Different exercises were tried in order to try to explore possibilities beyond this conduction role: The rest of

¹²⁴ The plan/rationale given here in reference to the makeup of the group is by no means original. Toop 2016 p.175 notes the challenging nature of working in a trio *"Material transformations of sound were exposed by the spare sound of the group, it's pinpointing of extreme detail and the volatility of its internal dynamics..."*

¹²⁵ Actually, interesting improvisations could have been conducted with all five people playing the same instrument. e.g. the work of UCLan Senior Lecturer Justine Flynn 'Bass Ensemble' Professional Doctorate in progress at the time of writing.

¹²⁶ Though they are definitely doing what was defined in chapter 1 as 'playing around' Bill Kreutzmann's drums here are performing that task. <https://www.youtube.com/watch?v=6JukZBGgv8I> (Accessed: 30/06/22)

the musicians carrying on when the drums stopped, the drums soloing in free time whilst the rest of the group played a repeated phrase in a set time, and everyone else playing quietly whilst the drums were loud. This was about exploring the wider arrangement and role palette available to the group, and only a certain amount could be covered within the limited number of sessions available. The researcher personally found breaking the links with the conduction role of the drums very difficult as it has been his modus for many years. This derived from long periods of practice within a loud and potentially confusing audio environment, where locking to a drummer and their beat and allowing them to conduct can be used to help define and clarify/ organise the sound and synchronise the rhythm.

Sam took the decision not to attend one session largely in order that the group members could explore what the music-making would be without drums. Though only done once, this led to some very interesting results, something of which is represented within the first portion of *Meltin' Jam*. Despite struggling at first, they came up with two solutions: The first was to play without any sense of pulse at all. This led to open explorations of timbre, with long drifting sounds with an obvious incorporation of sustain through reverb and delay. An example of this playing is linked [here](#). The researcher then asked the players to think as a drummer, to play their instrument as though they were playing the drums, first utilizing very short sounds (a la the points of pointillism), then introducing longer sounds, but always staying with a clear sense of pulse or beat. An example of this playing is linked [here](#). Again, this led to useful information which broadened the artistic palette of the group even when Sam returned.

Bass Line: This role within the arrangement in CBS is normally dealt with by an electric bass guitar, this operating in a lower frequency range than that used by the other pitched instruments with the exception of synthesizer and piano. It is worth pointing out that just because somebody is playing the bass guitar, it doesn't necessarily mean that they are playing the bass line. Bench's playing brought this up repeatedly: *Was it appropriate for him to solo, when a bassline that would have benefited the music was not being delivered? Was he fulfilling his role as a bass player?* There is something pivotal here about the interlocking of musical lines between the bass player and drummer. The way the two musically interact is different than any other musical relationship within the band.¹²⁷ That understanding plays a big part in generating and defining bass lines and bass playing ability beyond simply playing A. N. other line within a low register, as might be played by another member of the group. It feels in CBS as though there is still need for and advantage in the bassist and drummer operating as a rhythm section, even within improvised and unconventional musics of

¹²⁷ Towards the end of the study period, members of the group performed a public set with a different but very capable drummer as Sam was not available. The resulting archive recording with its lack of musical relationship or lock within the rhythm section, can be heard here: <https://soundcloud.com/elmet5/moorbrook-omm-280422> (Accessed: 30/06/22)

type 2 and 3, possibly even more so, due to the complex compositional demands being placed on the musicians.

Again, within improvisation, the idea of the necessity of the simple but highly effective pop bass line, working off the bass drum, spelling out the harmony and chord movements etc. is theoretically removed, along with the hierarchical constraints. So more can be done, and as with the drums, a whole raft of extra techniques come into play. Interestingly though, it was often when Bench moved into more conventional but technically simpler bass playing that the music as a whole seemed to work better. He and the researcher had numerous conversations about this. They felt the best solution centred on keeping a good balance between musical freedom and the instrument fulfilling its conventional role within the arrangement. As with any balance, it was hard to maintain. In discussion with Bench he talked about his playing influences coming from small ensembles. In such cases, the bass player needs to cover a lot more ground – more notes and more frequency range (he mentioned Rob Wright of the band No Means No as an example.) In a larger group, say a seven-piece CBS gig, the bass needs to change roles accordingly. So, the effectiveness in fulfilling the role is connected with both Bench's composition and arrangement abilities and having the awareness to apply these differently according to musical situation. He considers this a topic for further development.

Mid-range Instruments (Keyboard/ Synthesizer/ Guitar/ Violin): This is where clashing is most likely to take place as these instruments operate in the same frequency ranges. As such, considering register is very important; playing high or top range is different than playing low-mid etc. To avoid clashing, a constant application of musicality is needed from the players in being particularly aware of what the other mid-range instruments are doing and being very careful as to how they are inter-relating with that.¹²⁸ If an individual player within a larger lineup is playing a line that covers a wide register, that makes it harder for the group to maintain audio space. Consequently, it is much more normal in CBS to use the 'playing around' approach defined in chapter 1 and to maintain a similar register and role, at least for a time. All of this must be done whilst simultaneously interacting successfully with the drum and bass parts. It is of particular relevance to the mid-range instruments that they don't have to stick to a fixed role and may move between a number of roles:

- A melodic riff – normally a single note pattern. This can work from low-mid to high ranges, it needs to be clear and defined in relation to the pulse, it doesn't need to repeat exactly the same notes but again to stay around the same type of idea.

¹²⁸ Though performed over a standard backing and utilising stock phrases the improvised playing here from Danny Kirwan and Peter Green in this live version of '*Like It This Way*' is a very good example of musically staying out of each other's way and making clear statements that compliment rather than clash. <https://youtu.be/funhAFeo0Is?t=89> (Accessed: 30/06/22)

- Chords (playing more than one note at once). Chords can work but for CBS they could also be problematic as has previously been discussed. An improvisation with a defined chord progression can very easily become cliché. Working within an environment where ideally every aspect of the musical contributions is being carefully considered, inserting the narrative block of an obvious chord progression feels like a blunt instrument and is not in this way a good fit. It's also hard not to link chord progressions to recognizable songs. So, this approach was trialed but not maintained. The researcher has found that a better way to utilise chords within his own playing is in smaller partials, for example dyads or stacked chords, so one person playing one chord and another person playing a different chord on top or underneath that. This creates interesting texture and melodic questions rather than simple blocks (see chapter 1 on the modal improvisation of Miles Davis).
- Taking a lead part. The normal register for this is mid to high as this makes it audible over the other parts. A discernable melody over a period of at least eight bars, possibly including some higher level of technicality and musical drama (rises/ falls/ incidents) is delivered at a volume loud enough to be clearly heard. Traditionally in pop music, this lead role would most often be taken by the vocals; in jazz, a saxophone; in CBS, where these roles occur, they are usually carried out by guitar or keyboard. The whole idea of 'lead' reinforces hierarchical notions which aren't encouraged in the band's functional society (see chapter 3). However, in trying to conduct an open improvisation it is important that players feel that they can play these parts if they feel it's what the music needs (Toop 2016). *"I know there are times when I think a high melody here would be really good and find myself beginning to take that role and then backing off because I feel I'm taking too much of the limelight. Then the other players will ask me afterwards 'I liked what you started doing there, why didn't you carry on...?'"* (Researcher notes June 2021)
- The option not to play (Toop 2016 p.168) Maddi pointed out that at some points it is best for her to make the decision not to play because the possible roles she might occupy are already being occupied. This also points out that not playing is often a good option for the success of the music; maintaining the audio space is a better musical outcome than filling it (Schlicht 2008). All players were encouraged to think in this way, but it was particularly of relevance for the mid-range as they were much more likely to duplicate what the other midrange instruments might do.

In looking back upon this discussion of roles, it is worth noting how in this light the piano is much more complex to play in CBS than the other instruments in the respect that it has to cover all of the roles: It's percussive, like the drums and involves playing/ coordinating lots of different elements at once, as they do. The left hand needs to understand the bass line and to get the feel and rhythm. The right hand needs to understand chords and also be able to deliver effective melody and lead. The complexity of the piano's role

was not really picked up on during sessions, possibly because Connor came across as confident and didn't ask for any particular help. Good examples of the complexity of his piano playing can be heard in the track ['That Chord is Not Strange Enough'](#). As well as doing all of the above, within this session Connor's playing tests The Offers System and the practice of CBS in that what he suggests does not have obvious diatonic content and rather necessitates working in a chromatic manner. The whole notion of making a proposal in order to engage in dialogue was challenged by the notion that the language being spoken was one that the other players were not (certainly at first) comfortable with. Hence this particular piece was chosen for inclusion as opposed to many others where diatonic offers were quickly understood and integrated by the group.

4, 5 & 6. When Ideas are tired, finding a way to move on and to finish

Though a great deal more needed to be said to expand on elements 1, 2 & 3, elements 4, 5 & 6 are largely explained by what has already been written in the table and they need only brief further comment here. This is not to understate the importance of these elements, particularly the skill of being able to move the music on. Indeed, this would be a key difference between what the researcher perceives as a skilled improvising group and the one chord, one dynamic jam often had by beginners. In using the tools laid out within the table, the group found themselves at points, possibly over an extended period, of transition. These points were viewed as some of the most exciting music in that it's very difficult to determine exactly what ideas are being worked with; the music is in no one musical idea or place but is on the move. As was discussed in chapter 1, in the shifting sands of type 2 it could be argued that the music is always in transition. The researcher encouraged the group to be comfortable in transition, not to rush out of it, but rather to relish and exploit the indeterminacy. If transition itself is a place, if it needed a function, then from within it the players might see where the music could go. They were reminded that such transitions can be gradual as well as sudden. As such, they didn't need to suddenly leap to do something else but could rather look to evolve the music over time. Such gradual evolutions gave chance for the whole of the organism of the band to shape the music rather than a sudden insistence from one member who was trying to take the music to somewhere specific.

Gaining the ability to perceive when musical ideas are tired is highly subjective. The CBS players communicated that they were doing this based on the feeling that they were getting both from themselves internally and from the group. To the researcher as an observer, they can get this judgement wrong, they can think that a place is still interesting, still has potential worth pursuing, when actually its potential is already fully mined. As with confidence, judgements on change and the need for change due to ideas being

tired were expected to develop through experience. Actually, of course, all that is happening here is that the players are being measured against yardsticks, judged against the context of practice that the researcher and the group members have experienced previously. There is not actually an incorrect length for any part, possibly other than the players going against their feelings, knowing a part should finish and not doing that, or the players disengaging from the improvisation and not steering the piece. It was sometimes the case that ideas did not get time to run their course as in *'Meltin Jam'* where good ideas are quickly moved on from before being fully explored due to the fast and energetic nature of the improvisation. It should also be said that there is a model for a piece e.g. *'On the Corner'* (Miles Davis 1972) or *'Halleluwah'* (Can 1971), that just thoroughly explores one idea to the point that that idea would be expected to have run out of creative steam, but the group keep on going to see what is beyond their initial explorations of it. Again, this was offered as a possible approach but wasn't able to be thoroughly explored within the sessions. Deciding in the moment to take this as a macro-compositional approach is a complex decision. The researcher wasn't sure that he witnessed that the communal abilities of the group were yet developed to the point of being able to judge when this should be done.

Lastly, in discussing responses to the Offers System, it's important to talk about endings. This really comes down to being aware compositionally as to when this should happen and having the confidence to do it. This is deceptively hard and again highly subjective. Expectation also plays a part; this was experimented with in telling the group *'Let's just play for a couple of minutes'* or *'could we do a piece that's about five minutes'?* This expectation of scale was seen to make a difference as to how many ideas were included, how thoroughly they were explored, as well as when the group felt it was appropriate to conclude. In watching a recent performance by trio The Dissonance Collective,¹²⁹ the researcher was absolutely sure that they were going to stop forty minutes in as a phrase came to an end, but they did not *all* stop. Two of them did and were left looking at the other who decided to carry on, this then leading to a different ending found at a later point. This, a reminder that there is not only one right place or right way to end. Indeed, 'more than one way to do it' rings true about much of what has been witnessed in the improvisations of CBS and others. This is the nature of the activity. *There wasn't one solution to find, what matters is you found a solution and that it worked.* Knowing when to end is part of the skill, hearing it actualizes a communal, compositional judgment from the group as to when the ideas have run their course and the group together should pause the activity.

Briefly Summarising The Offers System

¹²⁹ <https://tdcmusic.bandcamp.com/> (Accessed: 14/07/22)

Seen through the eyes of The Offer System sessions, a sizeable proportion of meeting the challenge of SGI is centred in understanding how music works, and in this manner shares common ground with the activity of pre-composing: The practitioners need to come up with arrangements, to know the possibilities of the instrument that is being played and be able to use it to cover a range of roles. However, as has been evidenced here, understanding the role taken by compositional constituents was only part of an evidently larger emerging picture. Offers had demonstrated that CBS needed a developed sense of composition and musicality, an ability to work in the moment to come up with functional lines, to realise when it was a good time to either move on compositionally or bring the piece to a close. However, the reality of the practice being witnessed was much more complex, with its own intricacies and peculiarities for every player and the research sought to further probe these and to go beyond the common compositional constituents.

Relationship with the Instrument

True creativity occurs in improvisation through the fluid use of materials in response to the possibilities on offer in each creative setting."

(Rose 2017 p.145)

It is important to discuss the significance to improvisation of the player's relationship with their instrument - their knowledge, experience and skills with it. As this develops beyond the basic functionality of the initial steps that live firmly within 'A', the artist's voice (deciding what, when and how to play) and their palette of ideas living firmly within 'B' begin to be developed. Bailey (1993 p.106) discusses the development of the "*styles, techniques and habits*" of individual vocabulary then progressed within collective performance. Prevost (within Denzler & Guionnet 2020) supports the often proposed paradox of needing to know in order to explore the unknown. The practice of CBS agreed with both, with players looking to individually develop their relationships with their instruments to a point where they would have as second nature the series of physical actions/ technique necessary in order to then be able to freely and rapidly make and actualise creative choices in the moment. This then further agreeing with Nachmanovitch (1990) that the successful group improviser must have both the experience to quickly and accurately control the physical material, whilst at the same time be open and free to compose the unknown music.

The CBS players were seen to be gradually and incrementally developing skills on their individual instruments throughout the study. Further than what has already been discussed on roles were:

Vocabulary: The players were always looking for new 'A' components, whether this be a new mode or chord voicing, a different roll on the floor tom etc.

Timbral explorations: Adding to their range of available timbre, for example through the use of a new FX pedal or extended technique. Also, in refinement; learning how to control how the instrument sounds to a very precise degree in order that this can be instantly applied as required by the moment of the improvisation.

Feel: This is extremely personal to the individual. It is not about the notes or rhythms chosen but how notes are played, and is imperfect, human and organic. *"I'm not thinking necessarily about what I'm playing but how I'm playing"* (participant Jeff in Schlicht 2008). Development could be compared to handwriting, in that individuals in their formative stages, whilst learning to form letters and words can also pick up a sense of how those letters and words are written and used from aping the way their tutors (in this case who they are listening to or playing with) deliver them. It should be stressed that though the players may attempt to ape, they never exactly replicate, partly because they learn from more than one person and will also wish to bring something of their own. Thus, the individual's playing voice integrates elements of numerous other voices.

Habit: If, for example, the individual spent a great deal of their formative time as a musician playing blues rock, it would be no surprise to hear some of this language and feel, internalized over years of practice, evident within their improvisations. For CBS there was an element of development in looking to go beyond these habits, however it took conscious effort from all of the players to begin to do this.

"I made the analogy, a few years ago in an interview with biofeedback... you couple yourselves to that instrument... it teaches you as much as you tell it what to do... so you are sensitive to... how it is responding to your efforts to control it. By hearing the way it is feeding back to you, you learn to control it better. It's a very dynamic and very sensitive process... ...you're refining your sense of pitch, your sense of the accuracy of your timing, all of these things and the instrument at the same time, seems to be giving you additional information, so that there are things that you have under your control, but every so often something will go wrong, you'll lose control, but in that moment you're given an opportunity to learn something else that the instrument can do."

(Evan Parker interviewed in Hopkins 2009)

The player's relationship with their instrument and their playing is very personal, comprising of developed physical and mental understandings built over many thousands of hours spread across many years. Through this process the psychomotor skills develop, as do the strength and muscle memory in the hands, arms etc. Through sustained practice, the process of actualising their thoughts through the instrument becomes so fast that it feels to be second nature, to just happen without conscious thought. The musician does not have to think about how to play an A minor chord, they just play an A minor chord. This speed of recall and actualisation is vital within the rapidly evolving improvisational situation, where the question must be *what to play and not how to play*. The researcher attempted to explain what his developed relationship with the

guitar brought to his improvisations in his notes of March 2021. *"It is about a sensitivity both in the tactile world and in the creative imaginative world that has been built through countless hours of practice. In the tactile world of physical objects, it's about exactly how we touch/press/push things, exactly when we do these things, and in what combination. Nuance is also essential – the very fine difference in timing, emphasis, phrasing and timbre."* Schroeder (2014) notes "...a very sensual, tactile engagement with one's tools". In terms of thriving within both the tactile and the creative imaginative worlds CBS were witnessed to be still in development. As such, they were facing challenges both in what they didn't know and were yet to learn, but also in how they used what they did know. That their hours of practice may well have given them a useful palette that they can quickly draw from, but they then needed to make sure not just to recite or regurgitate it. The hierarchy must be that their internalized playing processes on their instruments are governed by and subservient to the creative voice, not vice versa.

Big Ideas, Compositional Places, Structures and Micro and Macro Decision-Making

A key issue that emerged from The Offers System sessions concerned the type of improvisation being undertaken and how that determined to some extent chronological developments in the makeup and utilisation of ideas: The reader will remember that CBS are operating in what is defined as type 3 improvisation, this allowing the use and combination of any approaches present within type 1 or 2. Building on what was laid out within chapter 1, it is important to clarify the fundamental difference in the way ideas have been seen to function within type 1 and type 2 improvisations:

Type 1 - Establishing a musical place and developing within it. When the group are working within the remit of type 1, the theme or idea at the heart of the music is usually quite static. A typical pop or rock improvisation (or 'jam' see chapter 1 discussing Green 2002) consists of playing around a given riff, repeated phrase or chosen tonality. Scenes and scenarios in music are set up and played out between the group.¹³⁰ Type 1 much more than type 2, has these identifiable 'places', sections of music that, although they will present it in different versions, are quite obviously built on the same repeated idea, these being places the improvisation goes to, stays in and moves on from.¹³¹ As such, the improvised piece spends some of its time evolving, changing, or in transition but at other times, and this could be for a large majority of the music, it exists within musical places where a framework of parameters have been established and are

¹³⁰ Santana can be heard doing this here <https://www.youtube.com/watch?v=HRyXffL1WuY&t=480s> (Accessed: 30/06/22)...though in actuality they sound to be paying more than a little homage to Bo Diddley in this track!

¹³¹ 'Morning Dew' from the album 'Cornell 5/8/77' by the Grateful Dead is a very good example. The track consisting of fourteen minutes and seventeen seconds all built on a cycle of F/C/Em and D.

worked within. As stated in chapter 1 this approach to improvisation usually involving the use of a small amount of pre-existing content as a 'jumping off' point, can be heard in the live improvisations of many late 1960s/early 70s rock and pop groups. 'Dark Star' by the Grateful Dead is a perfect example.¹³²

Due to its underpinning of substantial sections, possibly the entirety of a piece, it feels appropriate to refer to this idea that creates a whole section of music as a 'big idea'. In this type of big idea type 1 playing, though the idea stays the same, the arrangement, or what is done with it, does not. Rather, it develops through phases or stages e.g. an increase in volume over thirty seconds, followed by a guitar solo, then a percussive part. This is central in understanding both how different types of improvisation work and subsequently what was covered with CBS in aiming to help them take on this type of playing. In type 1 improvisation, it is in forming these arrangements of the big idea, making these *micro*-decisions, that the skills of the improvisers are collectively and individually tested as the version of the big idea gradually morphs over time.¹³³ This is not the same as the *macro*-decision-making, making major compositional decisions, changing the underlying idea to construct a narrative, a means of doing which has already been laid out in The Offers System.

Coming to this understanding raises the question of *whether The Offers System is still relevant within type 1, a type of music-making where the macro-decisions are already made?* The workshop sessions gave evidence that The Offers System is still very much functional and helpful in articulating how the music-making is being carried out, even when macro-decisions are not being made. It gives the players a way to process the progression of the ideas, but its focus elements are being applied at *micro-level* and only five of the six proposed are being used, as numbered here in brackets: Staying within the macro of the big idea, the players are actively listening (1) and based on this, deciding what needs to be done. They reference their musicality and this acclimatizes them (2) and suggests what other lines could be added (3,4). They don't look to find a way to take the music somewhere else (5) but do need to again refer to their musicality in order to decide when the music should end (6).

Type 2 - Shifting Sands – Discussions within the CBS sessions around offers within type 2 heard the band members referring to dynamics, timbral change and chromaticism as concerns that they were responding to in this type of playing. The 1970 track *Third Stream Boogaloo* by the Music Improvisation Company, featuring seminal free improvisers Derek Bailey and Evan Parker, points out the difficulty in attempting to verbalise or notate the evolution of ideas within this type of music (or indeed to discuss it at all). The two minute thirty five second piece could be described as showing quick movement from place to place. It begins

¹³² A version of 'Dark Star' can be heard on the following link at the time of writing, although any version they recorded serves to support the point made. <https://www.youtube.com/watch?v=6JukZBGgv8I&t=89s>

¹³³ 'Magische Eulen' (2019) by Cold Bath Street is a very good example of this. The whole track is basically built from one riff. <https://open.spotify.com/track/4ZS5Ra5a2p7ufHoarulQP7?si=ce7bc17758774048>

with a scratching sound up to 00:50, then moving to quiet resonant tones accompanied by some scratching, to a pause at 01:25, followed by a purring sound made by the voice which quickly builds to a frenetic crescendo of free time playing from all instruments including some extended technique, finally dying down over the last fifteen seconds of the track bringing it to a complete stop. However, attempting to chronologically identify the main musical ideas in this manner doesn't really describe most of what is being heard. It would be more accurate to say that the evolution of the music could not be defined in simple blocks based around clear (big) ideas. Further, that generally in this facet, this is indeed freer improvisation, in that the players are not having to conform to obviously discernable content in terms of pitch, melody, rhythm or theme, as would be established by offers in type 1 and that the changes in the music as it evolves are also not conducted in simplistic manners.

In free improvisation, as was defined as type 2, the idea will not have been agreed in advance, there isn't pre-determined material that is worked from. Consequently, there will be less of a feeling of musical surety, working on solid ground or of having 'arrived'. Also, that any sense of place would be expected to shift much more often, and in fact there may be large sections of the music where there isn't an obviously audible place at all. Indeed, 'less obvious' and/or 'less defined' are useful general headlines in terms of working with ideas in type 2 and the content of offers that improvisers working in this way are proposing in the moment. Without the surety of the big idea, the music feels to be in constant flux, constant dialogue, statements that are made are not being constructed in relation to a fixed base (the musical place). This move away from sure musical footing is evident at points within *'That Chord Isn't Strange Enough'*. As everything is to play for and nothing is decided, the dialogue about the macro-structures and microstructures is constant. In theory, every note and parameter of that note is being decided on and improvised in the moment. So, in type 2, the compositional techniques and aims are different, the settings are different, as are the playing skills/ requirements made on the player and ensemble.¹³⁴ It is a fundamentally different and more complex activity. The task now goes beyond the simpler micro-arrangement decisional duties undertaken to complete type 1. It asks for macro-compositional awareness, that the core idea is constantly considered by the ensemble and the overall progress of the composition steered, as well as individuals making decisions about how they will contribute to the current place. *What are we playing? What am I playing as part of that?*

In practice, the difference between the ways practitioners working within type 1 or type 2 chronologically use ideas is nowhere near as defined and pronounced as has been laid out above. Free Improvisers do find

¹³⁴ In conversation with Roscoe Mitchell Rose (2017) p.141. discusses the need to be able to make compositional decisions and warns of the dangers of simply 'following' "...by the time I've waited to see what you're doing I'm already behind."

places and they do (choose to) stay within them, sometimes for extended periods. Although it might be harder to verbally describe their musical parameters, they do exist. An excellent example of this is the 2017 track 'Rise' by Australian band The Necks,¹³⁵ this staying in its entirety within one single place which is set up by content introduced early in the track. The subsequent improvisation explores the existing idea and does not seek to break or challenge its atmosphere or mood. It works *within* rather than seeking to move on.

It was notable that within the offers sessions, CBS players were only really moving idea, changing what they were doing, at the end of a bar cycle. This structural convention is likely derived from their backgrounds in pre-composed pop and rock music and subsequently type 1 improvisation. It serves as a reminder that in terms of structure and movement between ideas, such music is most usually broken into chronological sections rather than the 'could change at any time' interaction within the shifting sands of type 2. The researcher did encourage players to challenge this norm, however, there were strongly ingrained habits evidenced here. Though mentioned casually [in this clip](#), there was a marked impact on the group's playing in having learnt through styles/ genres and even within his own playing the researcher wasn't able to truly begin to challenge such habits within the limited time frame of the study.¹³⁶ Though it has not been any more than touched on here, possibly acquiring the ability to abandon these conventions of timing and note groupings, of four and eight bar phrases, sixteen bar solos et al. might actually not be a good thing for the group's music-making, partly as it would break down the player's normal understanding of the functioning of this language, re-arranging the 'words' that they know in a way that they do not understand (see Margulis on Syntax 2019 & 2020). Regardless, the question of whether, if players have learned through a popular music system using rhythmic and melodic construction based around groupings of threes and fours, such a system could ever then be truly forgotten when improvising, or rather only temporarily pushed away or ignored, warrants further investigation.

"Perfection with this business, that's a long way away most of the time. Because there is so much about the thing that is (pauses) just about under your control some of the time."

(Evan Parker interviewed within Hopkins 2009)

Despite the system of offers having been proposed and explored as a means to deal with ideas, CBS sometimes found maintaining the communal macro-compositional steering of type 2 exceedingly difficult. As has been stated, working within the shifting sands is particularly demanding of the players. The complex

¹³⁵ Available at time of writing on this link <https://www.youtube.com/watch?v=q7OQwfN8cAo> (Accessed: 07/07/22)

¹³⁶ See Javon's comment in his player profile that he could not separate his improvising influences from his non-improvising influences.

interactions and set of components needed to navigate the activity mean that in terms of achieving SGI, even the most experienced players don't always 'get there.' As the sessions progressed, it was continually pointed out that SGI wasn't a binary achievement but rather on a spectrum. On occasion, there would be a highly successful ten-minute section of a two-hour session, other times there would be three or four very effective parts. However, it was never the case in terms of SGI, that all of the music-making within a session was either wholly effective or a complete failure. Rather, it was 'to what degree was it successful' and 'for how much of the time?' Examining exactly what the difference is between these gradient levels in the achievement of SGI and detailing precisely why they occur, is beyond the remit of this research's stated intention to establish and define the constituents. Again here, there is a further opportunity for study suggested. However, having revised expectations beyond the binary, the researcher was looking to achieve higher percentages; that CBS reached better versions of SGI more often and for longer. In this manner, the researcher considers the research was in part successful (evidenced partly through the three selected recordings). The research proposes that accepting a variance in the level and amount of SGI achievement, including that sometimes the players may not get there, is another fundamental of the activity.

Decision-Making and Taste

How the music develops and whether these developments are viewed as successful partly comes from the expectations that the improvisers have and their subjective tastes. Some players will prefer a busy musical environment with many different lines going on simultaneously. In that case, it's appropriate if everybody plays different things, possibly even actively ignoring the lines everyone else is producing. Others will desire a much clearer consensus in the music, where the group come as quickly as possible to something that sounds like one idea or an arrangement of that idea. Ultimately, the type 3 remit of CBS allows them to take either one or combinations of these approaches, however, this makes the player's task harder, adding to the decisions that they need to make.

The researcher discussed his own decision-making process in his notes January 2022:

"One thing is for certain; you can't go back. You can choose to either add or not add and you can choose what you add. You can choose to support or engage the contributions of other group members... in this way I suppose it's societal.¹³⁷ I often find myself looking round to see what people are doing and then deliberately joining in with one of those people, showing support and interest in what they're playing.

If you are viewing it as a decision-making process, some of the decisions are consciously considered, I'm aware that I'm making them, for example this could be where I've played a lot in one section and

¹³⁷ See also Rose (2017) p.55

then choose to step back for a while. Others happen very quickly and feel to be following instinct or habits formed through countless hours of previous playing, rather than to be making a decision as such. I personally find that I do sometimes consciously try to steer the music... However, this does not always work, and I certainly don't know exactly what I'm trying to steer it to. Rather, I have a general direction of what I think will benefit the music... In our better playing these moments of conscious decision-making are fewer for me, and this gives the sense that the music is to an extent somehow playing itself. Actually, I think once the plate is up and spinning, the improvisation is going, we've started and everybody is doing what they need to do to keep it supported, to maintain it, including not letting it stagnate. I have done this many, many times before so it feels 'known', the processes, the actions are ones that are familiar to me. The successful improviser and improvising group is then fluid enough in their practice that they can evolve the precise form in the moment, take risks and communally steer. The countless hours of previous experience in conducting the activity are being continuously drawn on, but the speed of this drawing on is so quick that it feels to do itself.¹³⁸

In terms of whether such decisions are correct my ear is telling me whether what I'm playing works and suggesting what might go immediately after that. This is most obvious for me when placing new pitches alongside/against pitches that are already present in the environment at that time. Sometimes I consciously do things that I know will work. So, for example, placing an E note against a B drone. Other times, and these are the more interesting points, I try doing something, adding something, unsure of what the result will be, or I pick up on a mistake or chance occurrence. In these cases, the whole group must be listening actively as the environment will evolve very quickly and everyone will need to pick up on its evolution in order to evolve their contributions in the state of flux."

This lengthy extract is reproduced partly as it demonstrates the effectiveness of the method in forcing the researcher to attempt to articulate elements of his practice that would normally remain unspoken. Though many topics are covered here and referred to within other parts of this document, the researcher's reflections in terms of decision-making are very clear. He does consider improvisation partly as a decision-making process. Some of these decisions are being consciously made, whereas others, which feel to be making themselves, are suggested as actually being the result of many hours of practice instilling a way of doing something. The way the topic is presented here is also notable in that it reflects how the study developed in terms of reaching understandings: It isn't that the whole group are making their individual statements on this subject. It is rather that the researcher is using his time with the group in order to clarify his own thoughts. So, the group are not being specifically quoted, as might have been expected when writing the method, but everything that they said and did is being taken into account by the researcher in making the comments here.

Communication and Dialogue

¹³⁸ See Borgo with Shroeder and O hAodha (2014) p.46

"I thought it would be nice to have an electric band that was that way, it was conversational, the instruments talked with each other, it was a good way to organise music so for me... that was a model for how a band could work... how could the instruments relate to each other, what would their roles be and so forth..."

(Jerry Garcia 1995)¹³⁹

Music has often been compared to language and improvisation a conversation (Bailey 1993, Fennesz in Hopkins 2009, Margulis 2020, Nunn 1998 et al.) These comparisons felt to ring consistently true in what was seen with CBS.¹⁴⁰ The question for the research was how this is of relevance to 'B' and SGI. The Offers System had already covered material stressing the importance of communication and dialogue, including active listening, proposing, responding, discussing and ending. This all operating within the supportive environment of constituent 1 (as introduced in chapter 3), giving the intention that such dialogues would be hierarchically even – everyone should be in dialogue with everyone else and without a prejudice in terms of whose voice was most important. As the sessions evolved, the researcher found himself increasingly valuing the communication between the players and trying to work out through discussion with them exactly how this was manifesting in particular situations. He felt he was witnessing that if communication was effective between players, within the positive working environment this would lead to healthy dialogue, this being more likely to result in subjectively good music.¹⁴¹

"...Pieces are created through constant aural and visual contact among the musicians. This contact is crucial to whether a particular musical idea is picked up on, developed, or ignored."

(Monson 1996 p.88 quoted in Cobussen 2014 p.26)

Important to considering communication and dialogue, is acknowledging that the creative environment within CBS's music-making is extremely mentally demanding of the players. It was consistently evident within the workshops that the group can only maintain the required high levels of focus¹⁴² for relatively short periods, and that actually the precise level required varies markedly during playing. Careful listening to the included piece 'Meltin' Jam' (as detailed in chapter 4 and with an effective example linked [here](#)) reveals points where the group seem to be more or less responsive, with a greater and lesser sense of the individual's listening and engaging with what the other members are doing. If, for example, there is a period in the music where a player is not playing, the only thing they need to be thinking about is when, if at all, they need to come back

¹³⁹ <https://www.youtube.com/watch?v=QAfVbVmh0NU&t=6s> (Accessed: 08/06/22)

¹⁴⁰ Parker in Denzler & Guionnet (2020) p.112 states this analogy does break down at some point *"...namely the abstraction of the material"*.

¹⁴¹ Reflecting the value of communication and dialogue, in March 2021 the researcher led CBS in the online piece 'Self-Isolating Clouds' which sought to express his thoughts on how the period of separation forced by the pandemic was clarifying to him how group playing normally works. The central element being the interaction of people, particularly in the development of rhythms. Online archive from the piece is available at https://www.youtube.com/watch?v=ranT4AoT_XU&t=1487s (Accessed: 08/08/22)

¹⁴² Shevock (2018) uses the phrase *"listening to the music completely"*

in. This is of course still taxing as they need to be listening to the improvisation as a whole. However, if they are in an intensive period of dialogue, playing a large number of notes in a highly complex rhythm differing from that of the rest of the group, the mental demands placed upon them are much greater. The researcher's personal experience as an improviser would suggest to him that through sustained periods of practice this level of focus can be maintained for longer stretches of time (Nachmanovitch 1990 and 2019).¹⁴³ It is also important to state that improvisation is physically demanding. Even with a good instrumental technique minimizing effort, watching Sam, you could see how much moving around he was having to do, how many different drums he was having to hit and how quickly and often he had to do this. Within an improvisation, these periods of sustained physical activity might last for many minutes. Again, a more experienced player through 'training' can maintain this physical intensity for longer periods.

Returning to dialogue, paired with the large requirement for mental focus, is what the player chooses to focus on, to dialogue with. This is a highly subjective choice and may vary throughout the piece whether they are conscious of it or not. The player may pick out some aspects of interest to them, possibly what one particular person is doing and begin to dialogue with that.¹⁴⁴ Sam and Bench were particularly interesting examples of how dialogue and communication were influenced by other factors. They already had a longstanding musical relationship before beginning the project. As such, they both commented that they could to some extent predict through experience how the other might respond in a given situation. This could further suggest that when playing together, they needed to give less mental focus to what the other was doing in order to successfully engage in dialogue. The researcher found Javon's guitar playing was easier in some ways to dialogue with, as he was drawing from similar musical influences. He was also playing the same instrument and had shared his practice for a number of years within the group, giving the researcher prior information on how he normally carried out the activity including his preferences and capabilities. Thus, in our conversational analogy, to some extent his actions could be predicted and the researcher knew something of what he was going to say.

¹⁴³ This is a topic that warrants further investigation beyond the constraints of this study. It became particularly evident to the researcher when working a number of years ago with Moroccan Gnawa musician Abe Haddini in a group called 'Darbukabeat' which involved long periods of improvising drones. At first, the researcher would find he could only stay focused on the improvisation for a relatively short time but after two years of rehearsals, he and the other group members were notably able to sustain their concentration for a longer time. An example of the groups playing in rehearsal can be heard here. <https://soundcloud.com/wonkychris/creedy-moroccan-band-210414-tr4> (Accessed: 15/07/22)

¹⁴⁴ Nunn (1998) points out that although there are similarities between dialogue in musical improvisation and its use verbal language, there also clear differences: *"The "message" might be represented by simple repetition, either continuous, implying a Ground or Support, or periodic and developing, implying an Identity, or the intent to establish one..."* This links with the importance placed by the research on The Offers System as a tool to work with ideas through a system of dialogue.

LINK: [Javon and Sam point out the need to hear and see the other players](#)

During the workshops it was interesting to observe the body language between the players. Though this again could warrant its own study, it is important to briefly note headline points: It would be easy to presume that two players who are looking at each other are in good communication, as looking at each other implies they are paying each other attention; it would follow that they are interested in what the other person is doing; so, more of this 'watching' would be evidence of good communication and if all the group are watching then the dialogue and thus the music must be going well? This was sometimes but not always the case in CBS. In terms of the effectiveness of the improvising, it appeared that once the players were tuned in to each other (actively listening and aware of what is taking place in the music) visually watching each other was not an essential ingredient in effective musical communication. Indeed, that watching was often being used rather as a way of finding each other when the music was not working, looking to realign or reconnect. Within CBS, there was evidence of a difference in the amount of watching that was being employed by individual players, and how that could be read. The researcher found himself typical of the group members in applying watching in an unplanned manner and only at points within a piece, such points sometimes being moments of particularly direct communication with a specific intention. For example, when wanting to play the same riff as Bench, to mimic him to some extent, watching and then physically reflecting some of his movements, particularly the rhythmic phrasing, was very effective in creating cohesion. Watching also provided more general information which could then be used to help the music. For example, a player might be able to tell by watching when somebody was really committing to what they were doing and look to support that. It could also be used to rhythmically align the music, which often meant picking up a better sense of the groove or rhythmical stresses (as Sam states in the linked clip). Most obvious in terms of body language was the look between players searching for acknowledgement or permission. Maddi giving a nod of encouragement 'that works really well, keep doing it' etc. In this way, body language was being used not just to make decisions, often in a noisy or complex environment, but also to boost confidence or to steer e.g. Connor smiling because something he was playing was particularly working well.

As has already been implied, closing their eyes is not necessarily an indication that the player is switching off to the music. It could be that they are attempting to shut out distracting visual information and to focus

¹⁴⁵ There was a deliberate decision made in the method not to use video material, partly as it would make the players feel self-conscious, partly as it might distract from the audio when analysing or focusing on the music made. However, in assessing body language and visual communication, this would have been useful, and the research acknowledges this limitation.

entirely on the audio (Axel Dörner in Denzler & Guionnet 2020). Such listening 'out' to the rest of the ensemble was highly encouraged for CBS and pushed in the sessions on The Offers System. However, it is also important to emphasise that some of the dialogue that needs to take place is internal (see discussion following on audiation). There are moments where the player needs to go on their own journey into their own sound and become completely obsessed by what they're doing. To tune in to themselves and their own responses, internally dialoging with the emerging musical line (see Nachmanovitch 1990 on disappearing and Lynch 2007). This is conventionally applied to soloists, who are individually required to create such journeys. They must prioritize their own thoughts whilst also having an awareness of what the other musicians are doing. Though this approach isn't at the centre of CBS's practice, all of the players do need to have this ability to some extent as can be heard in Bench's cello playing [here](#). For CBS it's not a matter of displaying technical 'solo' virtuosity, rather an ability to state and explore musical lines, to express as far as possible undiluted personal feelings (see Lynch 2007 p.51 on Transcending, *"The Mental State During Improvisation"* in Denzler and Guionnet 2020 and Schlicht 2008). In some ways tuning in could be viewed as quite a selfish activity. However, the researcher would argue that from his own experience, the need for the player to focus almost entirely on what they are doing in such moments, rather than being selfishly motivated, demonstrates them giving everything they can to the music. As stated in chapter 1, Nachmanovitch (1990) discusses the importance of the removal of blockage – physical or mental factors that block the path of the playing, disrupting or stemming its flow *"... keeping open and unrestricted pathway for the creative impulse to play its music straight from the preconscious depths beneath and beyond me"*. Attempting to reach into and actualise their personal imagination is immensely mentally and physically demanding for the players, so they have to focus entirely on what they are doing at that point in order to complete the task. *It's so demanding that I have to give it all my focus.*

"Dialogue in free improvisation, however, is not linear to this extent and, again, may involve more than two improvisers. Interactions almost always overlap as the direct back-and-forth communications loop continues, with each player immediately affecting, and responding to, the other(s)... with obvious similarity to a bifurcated group discussion or cocktail party full of adjacent conversations (which can be heard as a single sonic collage-like linguistic image)."

(Nunn 1998 p.9)

To reach SGI new unknown music needed to be made. Though individuals were mentioned when discussing matters such as how change occurred or when ideas were introduced, all group members discussed this new music as being what occurred when the group played & dialogued together, that it evidenced their creative combination and interaction (see Sgorbati 2013 & Toop 2016 on emergent improvisation and Sawyer 1999 on collaborative emergence). The group improvisations of CBS enabled the players to do

something, to make music, in a way they couldn't individually. Again, relating dialogue to The Offers System, if individual players were indeed proposing, that was not because they were looking to dominate. They were looking to begin a process where music was constructed through suggestions, interaction, change and movement. They were offering and receiving interjections to help steer, functioning within the group's responses to see where such ideas could be taken. They were conducting improvisatory communal composition, working within an environment constantly in flux, individually and communally making decisions to define the moment "*...this is collective improvisation. No one person could think all this up themselves.*" (Phil Lesh in '*Long Strange Trip*' Amir Bar-Lev 2017).

As with the discussion of roles given earlier in the chapter, arrangement or vertical musical thinking needs to be highlighted in relation to dialogue. The improvisational activity is much more complex than a (horizontal) dialogue to create the chronological construction of a single musical line. There were many different dialogues being conducted horizontally and vertically, right across the music-making throughout its duration. There might be one in the midrange between the guitar and the keyboard, whilst simultaneously there is a lead line interaction between the violin and cello etc. The group were constantly building and evolving together in a multifarious dialogue with a sense of symbiosis, the players responding to each other, living together as elements within a larger form. Within this, there was a necessary acceptance that identifiable musical conversations between certain players were of indeterminate length and that some of them simply wouldn't musically lead anywhere and if so, were quickly abandoned. Individually, they could choose to be supportive of each other, to acknowledge somebody else's creative input, possibly by immediately playing something that fitted with it, or even by repeating it back to them. They could choose to be confrontational, deliberately ignoring other players' ideas, trying to force the music to go somewhere else or attempt to be assertive, deciding that a section had run for long enough and trying to insist on a new idea coming in. However, ultimately the group's music was not owned or steered by any one person. When the group were achieving SGI, it was impossible to attribute ownership other than to the collective and to point out some moments of individual or sub-group contribution as was done in chapter 4.

Audiation

As the research progressed, though all of the key matters above had come to light, the researcher still felt he needed to go beyond them, to reach to some deeper skill or ability that hadn't yet been illuminated. That what he was hearing and discussing with the group, pointed out something about being a musician, and particularly an improvising musician, that was at the heart of 'B' but had yet to be articulated. He considered at length what the difference was between people who could and couldn't do this activity well and what it

was the group still needed to develop to get there. There was something missing but other than experience what was it? What makes a great improviser? What abilities or skills do they need to have? What could Miles Davis do? Watching Davis and others at work, the researcher realised that CBS players needed to be able *to think in music* (this building on what had been defined in focus element 2 of The Offers System as engaging the idea). To develop the ability to imagine or 'hear' lines - pitches, rhythms, melodies, timbres, that will work in the moment and then through continued practice to translate those thoughts into the actions of the body and enact them in interaction with their instrument.

The players' actions during the study highlighted that part of what holds them back as improvisers is that their contributions are being overly led by what they can physically do. Relating it to The Offers System, that the physical action (of focus element 3 'Develop the Idea') has preceded and likely bypassed the thought (of focus element 2). That Bench has started to do tapping arpeggios without any thought as to what the music actually needs from the bass, that Josh has brought the keyboard in with a big pad which is obscuring the delicate percussive playing Maddi was doing. In this way, that the improvising activity for CBS is to some extent being conducted in the wrong order or missing a stage, with the players physically delivering what they have learned to do, rather than being able to imagine (very quickly in the moment) what the music needs and then do that (as can be heard successfully being carried out [here](#)). Again, here in his analysis, the researcher is restating his position that improvisation for CBS is to a large extent a compositional activity. He is also attempting to clarify, at the risk of erroneously sounding to simplify (see Borgo 2007 on the dangers of this). In sessions with the group, the researcher began to use the term 'musicality' to describe this skill, this musical thinking. During the academic year 2020/21 he was tutoring highly experienced musician Matthew Wells.¹⁴⁶ Matthew was also extremely interested in improvisation and discussions with him on this need for musicality led him to introduce Edwin Gordon's term 'audiation' into the conversation which the researcher has adopted and adapted.¹⁴⁷ Though the research isn't completely aligning with other uses of the term,¹⁴⁸ bringing it into the study seemed a good step forward from 'musicality' in better pointing towards a key aspect of what it is the improviser needs to be able to do: To be able to audiate is to pre-imagine what they're about to play. This also fits extremely well with Benoit's assertion (within Denzler & Guionnet 2020) supported by the research and discussed at the start of this chapter, that improvisation is largely a skilled or informed activity as opposed to one based largely on chance.

¹⁴⁶ Wells works on many projects. His latest improvisation work, some of which was completed while under the tutorage of the researcher, can be found here. <https://tdcmusic.bandcamp.com/> (Accessed: 10/07/22)

¹⁴⁷ See Wells (2021)

¹⁴⁸ Such as the six stage process outlined here by the Gordon Institute for Music Learning [https://giml.org/mlt/audiation/#:~:text=Audiation%20is%20the%20foundation%20of,\(see%20types%20of%20audiation\)](https://giml.org/mlt/audiation/#:~:text=Audiation%20is%20the%20foundation%20of,(see%20types%20of%20audiation).). (Accessed: 10/07/22)

In introducing audiation to the list of constituents of 'B', it is very important to stress that improvisers are working individually with all of their skills in countless and often extremely rapid cycles of continuously overlaying mental and physical activity. As well as the musical thinking of audiation, rapidly proposing what contributions might be, as has been stated, the improviser must always be actively listening. They must also be continuously responding to whatever else is taking place in the environment. The individual and the group are being asked to make decisions, not everything can be done, not everything can be listened to, not every musical avenue can be explored (hear Javon's offer being ignored at 3:00 [here.](#)) Audiating also does not remove the notion of an element of chance being present, and more importantly that the improviser may still consciously try something that they are not sure will work or where it will lead, inserting deliberately an element of experimentation or risk, at either a micro or macro-compositional level. But audiation makes a large contribution, without it the music-making misses something: It does have the element of responding, sounds are made and then it's decided whether they work or not, but without audiation the imagination can't steer the music - we are not the captain of the ship navigating exciting and uncharted waters. Watching and listening to Miles Davis, *he is the captain of the ship*. He is choosing how to navigate that particular moment, deciding direction, imposing form and realizing his imagination, drawn from his vast wealth of musical and life experience. Obviously Cold Bath Street are not Miles Davis and have their own music, their own personality, their own things to say. However, his level of being able to musically imagine and steer, level of control over the realisation in the moment is key and absolutely desirable.

In conclusion on this topic, it should be restated that within improvisation, audiation though absolutely key, does not stand alone, it is not the absolute solution. A world where (just about) everything could be pre-imagined does exist in pre-composed music, from where the term was originally taken. In this type of work, being able to audiate can complete much of the activity. In its differing use here, in improvisation audiation is just one of the constituents, and as such interacts absolutely with the other constituents, embracing the moment, the situation and the unexpected.

The Nature of the Beast

Over the course of this chapter many factors have been laid out in terms of what needs to be done to be successful within this activity. In analysing why and to what extent SGI has or has not been achieved, it's important however not to overlook that the players need to want to do this music and to work within its distinct nature and demands. It is not enough just to accept these; successful improvising players have to embrace the opportunities and limitations of the form. Group Improvisation is not an easy activity to conduct, it's hard work creatively to attempt to control and steer the music, and as has been said, requires a great

deal of focus (Rowe within Hopkins 2009). Due to its complexity and unpredictability, it is a music that rarely if ever attracts large audiences and so there isn't a great deal of praise or positive external feedback expected.¹⁴⁹ Most success found by players will be in internal satisfaction or simple enjoyment of engaging the medium. To be successful, the player must desire and revel in the freedom that is offered, feeling liberated by the lack of walls present in most other forms, not wishing they were there. They must enjoy the challenge, or what could be seen as pressure, of the instant communal composition activity and thrive in that environment. As has been discussed, they must accept that 'mistakes' are absolutely part of what's going to happen and that perfect aesthetics present in other forms are not applicable here. If the individuals within the group don't want any of this, then they are undertaking the wrong activity. The researcher found himself frustrated at points that the music wasn't sounding 'better'. He had to take a step back to realize he was referring too much to the sounds he expected in pre-composed music. Group improvisation is not the same thing and the same aesthetic judgements cannot be applied. Although having some common ground with other forms of composition, success here is largely judged on its own criteria, that of a creative activity, which are hopefully clearer for their articulation within this chapter.

The Evolution of Insights within The Recordings

Chapter 4 has already presented a breakdown of the recordings, identifying points of note. It's important here to briefly marry the evolution of insights evident within the recordings with the theoretical framework and context introduced within chapter 1.

What the recordings represent: The recordings are an actualization of how the musicians dealt with the 'now' discussed in the theoretical frameworks of Borgo and Nachmanovitch. They were essential to the project in providing concrete examples, specific details of the group's practice, for subsequent analysis by the researcher but also for consideration by the reader. Access to such information enabled a very different perspective and approach to be employed, particularly to the holistic guidance given by Nachmanovitch. As discussed in chapter 1, the research to some extent was a trialing of both Nachmanovitch and Borgo's theories and the recordings present some of the trial's key results.

¹⁴⁹ Philip Morton of the Improvisers Network confirmed this position when the researcher worked with him. At one concert the researcher was apologising for an audience number under 20. Philip to the researcher's surprise countered that he was very pleased with the size of the audience and that within the sessions he organised the number of players usually outnumbered the audience. This is a situation that the researcher has experienced in subsequent sessions including *the Noise Upstairs* (Manchester and Todmorden) and most notably Anthony Donovan's 'Murmurist' events. Toop (2016) notes that the feedback he was given when he proposed a book on the British free improvisation scene was "*career suicide*."

The music presented in the recordings utilizes elements from within types 1 and 2 to make type 3 improvisation (as defined on page 17). Placed within chapter 1's contextual discussion of the extent of improvisation, the three pieces work broadly across the range summarised on page 16. In piece 1 CBS align with Green's (2002) comments on agreements both in their establishing of a tonal centre and use of pulse. Though present in all three recordings, pieces 2 and 3 particularly align with Borgo (2007) in moving emphasis in the playing away from more traditional concerns such as melody, rhythm and harmony and rather focusing on dissonance, extended technique, timbral and gestural work. Piece 3 shows the group beginning to be able to regularly move musical ideas, removing Nachmanovitch's 'blockage' and prioritising active listening, communication and interaction. Piece 2 is particularly useful when placed in the context of Cobussen's (2014) discussion on the possibility of actual improvisation. After beginning with an uninspired section (00:00 to 03:38) based on a large level of agreement over pulse and tonality, the group is then heard to embrace a possibility allowed only by improvisation in collectively deciding within the moment to leave this 'uninspired' music and to quickly move to playing something else. It could of course be argued that in actuality all the group did was to switch from one type of improvisation to another, flicking between two presets, as opposed to actually being free to fully embrace the possibilities offered by all constituents.

Viewed in certain lights, the recordings are still very much work in progress. For example, in terms of confidence, piece 1 could be seen as hesitant and not particularly successful, pieces 2 & 3 recording less-hesitant interaction and possibly being more successful. However, when considered in light of Nachmanovitch's comments on the importance of personal and interactive relationships and Borgo's (2007) defining of the improvisational activity as an ecology, how the recordings are received and perceived is very different: The pieces are experienced as documenting an eco-system – capturing musicians listening to each other, playing lines in support of each other, picking up, reflecting and responding to each other's actions. Continuing to align with Borgo, the recordings directly evidence enactment of his guidance (applied across the project) that improvisation be considered holistically, as a complex activity and should be facilitated accordingly. Though as the project progressed particular aspects were highlighted and explored e.g. the elements of the Offers System (detailed in chapter 5) in the three recorded pieces all of the players are attempting to simultaneously consider every aspect of their music-making. The piece-by-piece chronological breakdowns in chapter 4 record that in so doing they demonstrate some progress across a broad range of considerations.

Summary

Within this chapter it has been demonstrated how the research with CBS illustrated the complexity of successful group improvisation and led to an extensive list of key constituents that will be summed up in chapter 6. The research has clarified that the extent to which this music is actually 'unknown' is smaller than one might expect and that SGI is a skilled activity, though containing smaller elements of chance. It has presented the group improvisations of CBS as a form of instant communal composition and as such, as having some aspects which are very much in common with pre-composition, including the need to understand arrangement and the complexities of different roles within the music. It has spelled out difficulties that CBS had in working with musical ideas to form successful narrative journeys, going on to propose the six focus elements of what the researcher calls the Offers System as a means to aid the group in doing this and then to detail how this slightly crude set of headings were useful in opening up wider discussions.

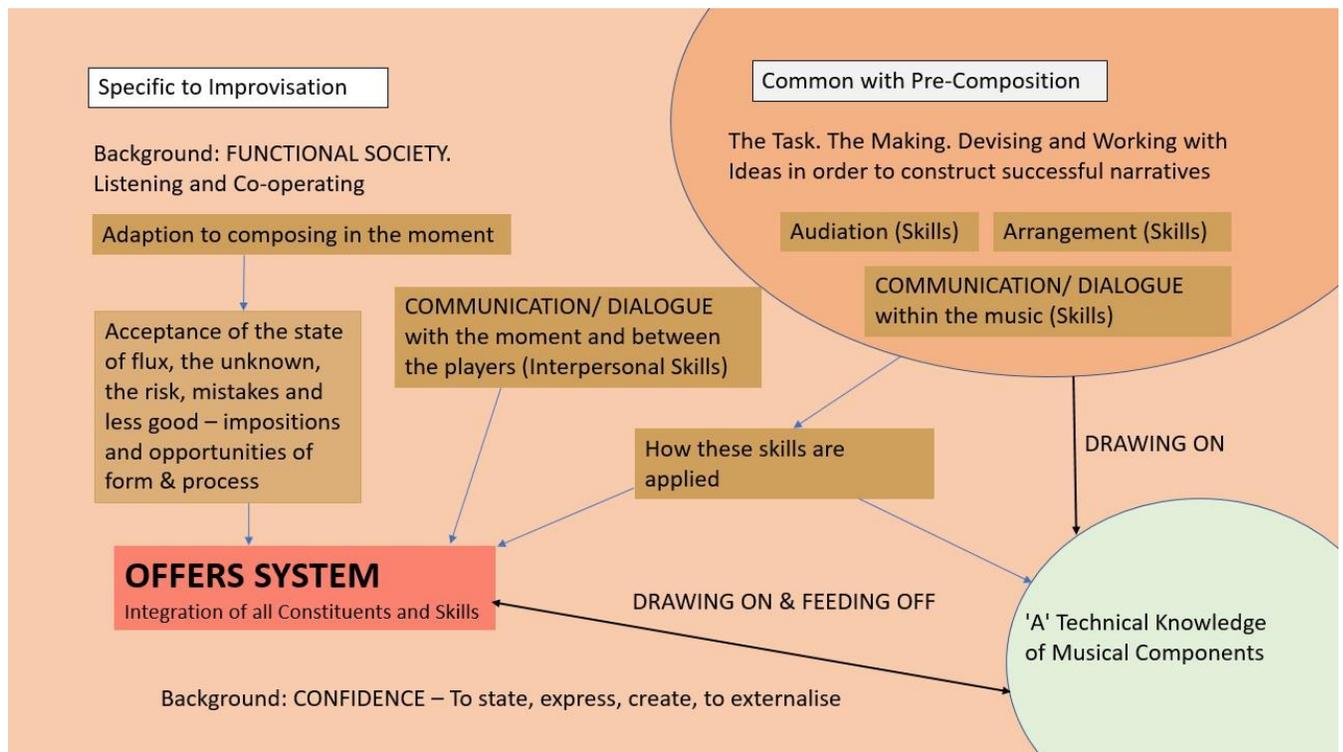
The study identified some activities as distinct to improvising including the need for the players to acclimatize mentally to the territory and necessarily to take risks. The researcher spelled out how he looked to build confidence through experience with the group members in order that they could better put forward their own musical contributions. It was noted that the group found some elements of the music-making more difficult than others, and that this was particularly relevant to pitch information. The researcher acknowledged how attempting to steer the players improvisations was to a large extent applying his own subjective preferences. Also, that to achieve SGI, it was necessary not just to be able to play an instrument in a basic manner, but to have spent the time to develop nuances of detail and to develop the practice with the chosen instrument to a point that the physical act of playing becomes second nature, meaning that it does not have to be actively considered within the moment of improvisation. The chapter then discussed what the researcher labelled 'big ideas', compositional places and decision-making and how these manifested differently within type 1 and 2 and thus CBS' type 3 improvisations. It went on to discuss that in terms of achieving SGI, such achievements are not binary and rather measured on a gradient scale and that even the best players don't always 'get there' due to the complexity and unpredictability of the activity.

The research identifies that even though it has uncovered an extensive and diverse list of headings, many of these could not be fully followed up within the study period. It agrees with Olivier Benoit (in Denzler & Guionnet 2020 p.13) that improvisation can be seen to an extent as a process of conscious and unconscious decision-making.¹⁵⁰ The chapter moves on to discuss the importance of communication and dialogue, proposing that good improvisation could be viewed simply as evidence of effective dialogue and communication between skilled musicians. It stated that mental focus and the ability to maintain it was vital,

¹⁵⁰ There are of course those who disagree with this view *"...for me, the best state to be in is the absence of consciousness, that is, not making any decisions, not listening, not being involved in the sounds that I'm producing, the sounds that other musicians are producing – this is absence of consciousness."* Jean-Sébastien Mariage in Denzler and Guionnet (2020)

that focus levels vary during playing and that these may be maintained for longer through practice. Also, that repeated improvisations with the same person or group of people could lead to an understanding of their practice that would introduce an element of predictability. It stated that visual information was useful to some players, but that what it christened 'watching' was not necessarily an indication of effective dialogue. Also, that a player tuning in to their own internal dialogue was important, particularly at demanding points within the music. The chapter went on to discuss that the truly successful improvisation is a dialogue between all of the players, developing music together that is not owned by any one person. Audiation, a type of musical thinking involving a pre-imagining of what is about to be played, was proposed as critical in terms of utilising the imagination rather than previous practice to create and a large part of what makes for a truly great improviser. It is noted that this music has its own criteria and mustn't be judged in the same way as precomposed, or indeed any other music. Finally, it is proposed that to be a successful group improviser the musician must embrace the opportunities and limitations of the form. To explore the state of flux, propose their own artistic solutions to the moment and to thrive within it.

Figure 2. Diagram: Showing Constituents of 'B': In Common with Pre-composition and Specific to Improvisation



The Constituents of 'B': Summary Table and Identifying New Knowledge

Q. Other than possessing technical knowledge, what has this research shown are the constituents of successful group improvisation for Cold Bath Street?

Improvisation has been demonstrated by the research to be an immensely complex activity involving many constituent elements. All are important, all are necessary, all are interacting in differing combinations and orders at different points within the activity. The only reason musicians are able to conduct the activity is that they have built an understanding of, and learned to rapidly and concurrently process, these complexities over many years.

In answer to the research equation presented on page 2 the constituents of 'B' highlighted by the research are grouped under the following numbered list of headings which are further detailed in the table below. This also notes their suggested relevance to the activities of pre-composing and/or playing pre-composed material in addition to whether they are thought most relevantly applied to the individual player or collectively.

Table 4. The Constituents of 'B' within Successful Group Improvisation.

IND = Applied to the Individual Player

COLL = Applied Collectively

Pr = When pre-composing material

PI = When playing precomposed material

Constituents of 'B'	Manifestation within Successful Group Improvisation	Where Used		
		SGI	Pr	PI
1. The Functional Society	The right working environment - mentally and physically COLL	√		
2. Broad Agreement on the Remit of the Music-making	Broad agreement on the remit of the music-making COLL	√		
3. Skills				

3a. Active Listening, Communication & Dialogue	Listening, engaging & responding to the other players IND	√		
3b. Ability to take Compositional Decisions	Working knowledge of compositional tools and their functionality inc. constructing narratives & functional arrangements IND & COLL	√	√	
3c. Ability to make Creative Decisions	Make decisions to help shape the artistic work inc. extent of the decisions – options from an existing palette IND & COLL	√	√	
3d. Rapid and Continuous Decision-making	Constantly reassessing what needs to happen in the music IND & COLL	√		
3e. Instrumental Skill 1	Ability to control the chosen instrument to a high expressive level IND	√		√
3f. Instrumental Skill 2	Ability to control the chosen instrument in the moment to a point where it becomes second nature allowing the translation of the audiation IND	√		
4. Confidence Through Experience	To be heard IND	√	√	√
	To devise new contributions to existing material IND	√	√	
	To make compositional change IND & COLL	√	√	
5. Operating Within the Nature of the Activity				
5a. Audiation	To imagine creative contributions in the moment (pitch being the most difficult) IND	√		
5b. Accepting Flux, Indeterminacy and the Unknown	Being able to operate & express without pre-scripting IND & COLL	√		
5c. Taking Risks and Making Mistakes	Choosing to go beyond the safety of what is known and using the opportunity of the unexpected IND & COLL	√		
5d. The Ultimate Goal – What Improvisation is and How to Value it.	Realising that the ultimate goal is a creative interaction. Valuing improvisation is about the quality of the doing of the activity, the interactions and dialogue in the moment, not an attempt to refine or complete a finished piece. Its aesthetics are not those of perfection but rather of group discussion, qualities of ideas and their development and creative, collective group ownership IND & COLL	√		

1. The Functional Society: The Right Working Environment **COLL** (chapter 3)

Most importantly, there must be present the right creative atmosphere between people. The ego has got to be down – all of the group must be playing for the music, not for themselves, or to try and impress anyone. The research defined this constituent as foundational as the music might be able to be somewhat functional without it in place, but it will not reach the higher gradients of SGI.

There are some practical basics of this environment for CBS – They need to be able to hear each other and ideally, they'd like to be able to see each other. They need the right tools (instruments, amplifiers, FX), ones they're familiar with, that give a range of creative possibilities and that deliver satisfying sounds, providing affirmation to continue or develop. Everything needs to work properly.

CBS needed circa twenty minutes to warmup (chapter 5). Playing music is a physical activity and in this way similar to a sport. A warmup period is essential to both physically and mentally tune in. Once this is achieved, the group have developed to a point where they can possibly attain high degrees of SGI within a piece for up to circa half an hour at a time. Even when SGI is maintained, due to the nature of the activity, this music will be better and worse at points. For CBS, the best results tend to occur between one and two hours into playing. After this, their playing is diminished as they are mentally exhausted due to the complex and high levels of the demands of the activity.

2. Broad Agreement on the Remit of the Music-Making **COLL** (chapter 1, 3 & 5)

There has to be broad agreement on what the aim of the activity is. This emerged as a constituent from discussions on the music-making as a communal activity and through practically trialing the guidelines laid out for what the research defined in chapter 1 as types 1, 2 & 3 improvisation. This constituent is also defined as foundational: A base agreement, needing to be in place in order that the group have the possibility of achieving higher gradients of SGI through successfully utilising the other constituents.¹⁵¹ If everyone else is trying to make a noise collage and one player is trying to make a pretty melody with a conventional arrangement, not everyone will get what they want. So, the players need to have something of a loose shared agenda – to be working in the same ballpark - for the activity to be successful. One of the reasons CBS works as a creative environment is that their type 3 ballpark is relatively large, the palette is broad and as the pieces are relatively long, thus it can incorporate different people's interests at different points. CBS uses sections of regular rhythm, so for example a 4/4 rock beat, that wouldn't work within type 2 free improvisation. CBS also uses open, free sections with no rhythm at all based around timbral exploration that wouldn't have worked in a 1960s rock band working under type 1.

3. Skills **IND & COLL** (chapter 1 & 5)

¹⁵¹ Shevock (2018) cites the importance of players knowing the style that they are improvising in. Whilst not the same point and bringing in other aspects connected with genre, the conventions of style etc. There is no doubt Shevock's report connects with the research's stressing of the importance of a loose agreed remit to the playing.

This research proposes that the particular area of improvisation that CBS are engaging with is a multi-skilled and to an extent, a known activity (Lewis interviewed in Rose 2017 p.142).

In defining what the constituents of improvisation are for CBS, it is worthwhile restating the relationship their practice has with chance: CBS improvisations are activities informed by countless hours of practice in which the members have made music and worked with their chosen instruments either collectively or individually. Their version of the improvisation activity involves knowingly steering or attempting to steer the music based on previous experience. However, it would be a falsehood to claim that chance does not play a part; it is present, embracing and exploiting mistakes and exploratory journeys into uncharted territories have been discussed as key to its nature, but chance isn't the main ingredient for CBS. It follows that there is a very fine line being walked here in stating that CBS improvisation is a known activity where the music is controlled through pre-learned skills, the insistence within the given definition of SGI, that the music must go somewhere unknown and the acknowledgement that it includes an element of chance. For this reason, it is important to state that the number of points in time within the activity in which the music is being controlled by skill is much higher than the number of points where chance is controlling it.

So, what of the case of the player who has a general understanding of music, picks up an instrument that they've never played before and is quickly able to communicate that understanding through successful basic contributions to the music? *Are they not improvising?* What they have done clearly fits with one widely understood interpretation of improvisation; that being rapid adaption in the moment in order to be able to solve a problem i.e. *'they improvised a solution'* (Rose 2017 p.28). So, the proposition is valid if this interpretation of improvisation is used, however this isn't the interpretation of the improvising activity as defined and studied by this research. Within this definition, the music-making must go beyond merely being functional, to incorporate the subjectively higher qualities of expressivity gained through countless hours of practice that CBS have completed individually and collectively (see Instrumental Skill 1 and 2 below).

3a. Active Listening, Communication and Dialogue. IND (chapter 5)

This constituent concerns each individual within the group actively listening, engaging & responding to the other players. Improvisation is a conversation and for it to be successful, everyone has to engage in it, to listen to each other and use that listening to inform what they do. Pivotaly, they have to listen and to respond to that listening in what they do, concurrently. The focus of such communications will change radically within a piece e.g. at one point, everyone is listening to the keyboard player, at another the keyboard is listening to the guitar... at which time the guitar may be working off the drums etc. All the players need to be focused on the activity, the more time they can spend wholly 'in' over the duration of the piece

the better. This is an extremely challenging task and maintaining this level of focus over sustained time periods can only be developed through repeated practice.

Decisions and Decision-Making IND & COLL (chapter 5)

The improvisational activity was often discussed by the band members in terms of making creative decisions. Though again not a silver bullet and only part of the emerging picture in terms of constituents, decision-making was clearly central to how they tackled the activity - *to play or not to play, what will you play? etc.* These decisions are presented here separated under three headings, though in reality all are being put into practice in simultaneous combination and the boundaries between 3b and 3c are extremely blurred.

3b. Ability to take Compositional Decisions: This constituent asks that each improviser has the functional ability to compose and arrange: They need to have a (subjective) technical understanding of how music works, to know what musical components are available to them and how they can be put together.¹⁵² Most obviously for CBS within the research, work here focused on constructing narratives and functional arrangements utilising The Offers System (see chapter 5). This constituent is extremely similar in its makeup to that seen within the devising/writing of pre-composed material. It only really differs in its application - operating within the moment, with decisions made communally and concurrently with the performance/realization of the music. The compositional decisions made also need to be conducted appropriately to the nature of the improvisation activity – incorporating flux, risks etc. (see constituent 5c).

3c. Ability to make Creative Decisions: This in practice may not be as large or as difficult a task as it could appear if working with the number of creative options presented by a blank slate where literally anything could happen. The research discussed the extent of the creative options open to CBS in chapters 1 and 5, concluding that the players were in fact making a series of relatively small creative choices (they wouldn't suddenly begin to dance or eat a meal etc.). It went on to observe that they were largely drawing from an existing palette, basing their decisions and actions on the sizeable amount of previous experience that they have of operating in those situations and making such decisions and drawing on what they know will work. In this manner for CBS creative decision-making and consequently improvisation, is to a good extent a calculated and known process of operating. Indeed, due to the large number of times they've engaged the instruments and the improvising activity previously, making these decisions feels known, even to the point of being instinctual *'it seems to play itself'* (see constituent 3f and Nachmanovitch 1990 p.73).

¹⁵² Of course, the components that 'are available' will differ depending on instrument, subjective taste, experience level etc.

Using these calculated methods of operating drawing from previous experience, achieves the basic functionality of playing music together – it works. However, the research asserted when improvisation truly becomes exciting, is when there are sections where it goes beyond these basic operations, beyond repeating the creative decisions that are known to work in a given situation. It was only at these points, when players took decisions either deliberately or accidentally and to even the smallest degree to enter the unknown, that CBS successfully reached the definition of SGI (see also constituent 5c). Taking such decisions also pivotally involves the ability to recognise and capitalise on creative opportunities wherever they arise. In reality, the number of these opportunities is so great that all cannot be explored and the individuals and group must decide which are taken up. How they make these decisions further defines the players, the way they improvise and the particular pieces they are involved in creating.

3d. Rapid and Continuous Decision-making: Making decisions must usually be done very quickly - within the moment. This aspect marking it out from the pre-composing activity. The decision-making element is also ongoing – constant throughout from the start to the end of the activity. It isn't the case of finding a solution and then sticking to that. The player must constantly re-evaluate the situation to see whether what they're doing is appropriate.¹⁵³

Instrumental Skill IND (chapter 5)

CBS players were told they could choose any instruments they liked for any session. However, in practice they rarely moved type of instruments. The only two substantial exceptions to this were that Bench sometimes chose to play electric cello when he felt it was appropriate instead of bass and Javon was once asked to fill in on drums for a session that Sam couldn't attend. The research proposes that the reason for this is integral to what specialisation means in music practice and the players as examples of highly skilled specialists on their chosen instruments: To reach the higher qualities of expressivity on any instrument, the player has to spend the time with it, this to master its particular eccentricities and to attempt to form their own voice on that instrument e.g., Javon as a guitarist. It isn't the same to improvise on drums as it is to improvise on guitar. When Javon changed instruments, the music was still functional but his level of expressivity, what he could do and how well he could do it, on the drums was much more limited than it was on the guitar. He simply didn't have the experience, the amount of time with that instrument, to have

¹⁵³ It may be worth the reader revisiting the rapidly changing environment evidenced in Piece 3 *Meltin' Jam* in this way. How many creative decisions are having to be made? [Click to listen to Piece 3](#)

mastered its intricacies and eccentricities, to be able to add to the music at the same level. Consequently, even if he could 'hear' the part, he couldn't then pick up the drumsticks and play that line.¹⁵⁴

3e. Instrumental Skill 1: The ability to control the chosen instrument to a high degree in order to enable a high level of expression. "...you want to have enough technique to be able to present the ideas that you're hearing" (Mitchell quoted in Rose 2017). This level of control, including the details of sound-making and eccentricities/peculiarities of the instrument, would also be present when playing precomposed music - learning how to navigate a pre-composed score on your chosen instrument in order to best interpret it. NB Defining this constituent as part of 'B' rather than 'A' further reinforces the pretense of the research equation - that on its own knowledge of the basic functional physical parameters that live in 'A' is not enough to reach the higher expressive qualities required either in improvisation or in the playing of pre-composed work to a higher level (agrees with Nachmanovitch 1990).

3f. Instrumental Skill 2: The ability to control the chosen instrument in the moment to a point where it becomes second nature.¹⁵⁵ Note this ability does not necessitate highly technical playing; it's concerned with the fluency of sound-making on the chosen instrument. Having this skill in place enables the possibility of the audiation of constituent 5a in that the player does not need time to think '*how do I?*' in order to play the instrument. As such, their concentration can be entirely on what needs to happen within the music. In this way, a very high level of familiarity with their chosen instrument helps the player successfully function in the improvising activity.

4. Confidence Through Experience **IND & COLL** (chapter 5)

Improvisers need to build confidence through experience of 'many' hours of playing in order to be able to realize the sounds that they hear and then to project those clearly out into the world.¹⁵⁶ There's a balance here in having enough confidence but not being *overconfident* – surety is not what is being sought (see constituent 5). As has already been stated in constituent 1, having the ego down, not being sure, is essential in establishing a functional society which can facilitate the group's improvising to its highest level (Nunn 1998, Nachmanovitch 1990).

¹⁵⁴ Rose (2017) p.125 discusses the embodied learning specific to playing a particular instrument.

¹⁵⁵ Describing his learning curve Sudnow (2001) p.23 says he could "...produce them rapidly without looking." Rose (2017) p.137 states "*The musical demands of improvisation benefit from the acquisition of fluent technical ability that is contextualized by the creative, collaborative aim.*" Nachmanovitch (1990) goes further in stating that the player must become as one with their instrument "...not by mastering the instrument but by playing with it as a living partner."

¹⁵⁶ Exactly how many hours of playing is beyond the purposes of this study.

Confidence and levels of confidence were discussed throughout the study and its effects were evident at many points. Its complex manifestations within musical improvisation doubtless warrant their own study (Shevock 2018.) It is worth noting that having confidence is not directly linked to playing loudly or being forceful, which though appropriate at points, may actually indicate a lack of confidence – an inability to listen and interact. Also, that in producing a list of constituents applicable to all players, it must also be acknowledged that individual players have their own approaches. For example, the difference between Maddi's not playing in a loud rock section and Simon's prominent playing could be thought to be purely about levels of confidence. However, from what Maddi explained, some of this is connected more with whether individual players are interested, or feel they can contribute anything, to what is happening within the music making at those points. Her lack of playing may also simply have been attributed to the violin being a difficult instrument to control or make heard within a loud environment (see player profile in appendix 2).

Three specific points concerning confidence were identified as necessary in order that the group could regularly reach SGI:

Firstly, the players need to be heard. Despite the positive environment (of constituent 1) there is possibly still some trepidation from players in making a contribution, possibly a loudly amplified contribution, that may stand out to everybody as being 'wrong' (see also constituent 5). Such trepidation must be overcome, and the researcher identified two approaches to help the group deal with it: To begin with, the player must give themselves permission to make so-called wrong notes. Such notes must be redefined not as a problem and rather part of the activity. Accordingly, the players must alter their mental prioritization away from avoiding wrong notes and focus on seeking to attain SGI (see constituent 5c). This shift removes the sense of playing as walking a fine line, being overly worried, in the desperate hope that they don't make any mistakes.¹⁵⁷ Such over-sensitivity leads to being tentative, which simply won't allow the group to achieve high levels of SGI. If unsure, the player can make initial notes more quietly. This gives them a chance to land or acclimatize in terms of pitch, which subsequently instils a higher degree of confidence in that they know their relative position (see also Appendix 1: Self-Evaluation).

Secondly, the players need to have enough confidence to make new contributions to existing material. This was explored extensively in The Offers System sessions (see chapter 5). This is the confidence to say, '*I think this is a good addition to an existing idea*' and '*This is what I think, via my musical personality, my instrument should be doing at this point.*' The research suggested that the best way to build this confidence

¹⁵⁷ In discussing participant 'Gwen' Shevock (2018) importantly notes her comment "*the other performers were not concerned with her mistakes*" and that this aided Gwen's confidence.

is simply to use rehearsal or workshop time to experiment and find out what works, then to draw from that knowledge, those banks of experience, in subsequent playing (Shevock 2018, Schlicht 2008). Along with this experimentation/incorporation cycle of development, players can utilise contextual listening in order to experience how others operate and then trial similar techniques in their own playing. In practical sessions they should then be encouraged to trust their judgements within their playing, as attempting to self-analyse in any depth within the moment can erode confidence and distract focus from the rapid and continuous decision-making process (see 3d).

Thirdly, the players need to have the confidence to make compositional change, be it either gradual or sudden. If the individual does not have this, then they are condemned to always being under the macro-compositional control of the other players. To an extent this goes back to being heard: The player must make a loud/discernable enough contribution that it makes itself evident to the other players. In order to steer the improvisation, this contribution may need to be made repeatedly, possibly even with the player attempting to insist that other people take notice of them by using body language (e.g. nodding, gesturing, moving towards, see chapter 5). Of course, even if they do all of this, their attempt to steer could still be ignored. However, in the functional CBS society of constituent 1, people are listening to each other and so this would not take place. Observed in the practice of CBS, compositional steerage, though sometimes clearly led by one or two individuals, was most often co-owned by the group, being developed through a gradual process of different lines being added within an environment/arrangement that is ever-changing. Summing up in terms of confidence and linking to constituent 5a discussed in the subsequent paragraph, if the audiation process is flowing through the player's developed skills, enabling them to do what they imagine and to have the confidence to be heard doing that, then higher levels of SGI for the group are much more likely.

5. Understand the Nature of the Activity IND (chapter 5)

5a. Audiation

To be able to make this 'unknown music' operating without the surety of a preexisting framework, players need to be able to audiate. In stating that it is a constituent it is particularly important to define how this term is being interpreted differently by the research than it is elsewhere: We sit down to draw a picture. We begin with a blank piece of paper. Maybe we imagine something on it, or maybe we start to draw a line and quite like the way it is curving round and decide to continue that curve and to make it into a circle. We imagine a second line crossing it – it isn't there but we can 'see' it. Audiation is this process but in music - to imagine what could be and then use the instrumental skill of 3f. to translate and realise those imaginings in

the moment. In musical improvisation the players are actively listening, responding to the situation, thinking about and acting upon what they feel needs to happen now and next in order to take what they perceive to be the correct decision for the music in that moment. *'I think at this point, this should happen'*. Deciding what these artistic contributions will be and the manner in which we deliver them is a highly personal creative activity. Each individual gives a different answer made with a different touch of the hand - a direct expression of their individual musical character. Continuing with audiation, a difficulty discussed with and evident in the practice of the CBS members is desiring to make an answer, to be able to imagine or 'hear' it and then not to be able to translate that imagining into physical sounds in the external world through their instrument. Presuming the imagining is present, not being able to translate it is attributed to lack of technical knowledge of music (from 'A') and/or practice to build instrumental skill and fluency (constituents 3e and 3f). This including developing the psychomotor skills that enable us to translate what we think into physical actions in the real world. This process is one of development over countless hours, with the aim to learn to control the instrument so that it communicates those imaginings more accurately.

Exactly how the imagination works is beyond the sphere of this research. However, reflecting what CBS have said, the imagining, to an extent, is fueled by context – the other music that we listen to and play giving a framework of what is possible, even what is desirable. It follows that as part of the process of audiation, in imagining what they could or should play, players apply their understanding of the conventions of arrangement and instrumental roles (even if this is to choose to completely ignore them.) This helps them imagine/decide what their instrument can contribute. A particularly good example of this in CBS was Bench's bass playing. He had to adapt what he was doing, which had largely been developed in four-piece modern punk-rock type settings, to playing in a way that would work within a larger group working with different types of music. This process for him involved not only trying to stay true to himself, to genuinely express, but also adapting to *'what the music wants.'* (Borgo within Schroeder & Ó hAodha 2014). Lastly it is also key to the successful improviser that they don't fall into ruts of habit through their countless hours of practice. As has already been discussed, they should constantly be evaluating their contributions, imagining something different and seeking to go somewhere new.

5b. Accepting Flux, Indeterminacy and the Unknown IND & COLL (chapter 5)

(See also constituent 4) SGI is not about stability or surety – it requires and embraces the unknown – we are far away from anticipating the 'tricky rundown on page 12 of the score' here. As has already been stated, the extent to which the activity is unknown is in some aspects actually quite limited, however, never knowing exactly what will happen is a big part of the reason that CBS members engage in this activity. They

are also accepting a state of flux that will continue throughout the playing. The music will not settle and they must constantly be re-evaluating both individually (*what should I be doing?*) and collectively (*where is this going?*) throughout the playing, as everything and everybody that they are working with is moving (see also constituent 3d).

The more successful improviser doesn't just accept these aspects, they thrive within this environment. They want this challenge and find the element of chance occurrences stimulating to work with in terms of having to use their skillset to cope with them. A triumph for the group (and essential for SGI) is the discovery of something new of subjective worth. As such, improvisation is a genuinely creative artistic quest. As has been said, these new moments/places may well only make up a very small part of the piece. However, due to the highly complex demands of the activity, even this small fragment of something unique, created through the interaction of the group in those moments, is a worthwhile achievement.

5c. Taking Risks and Making Mistakes IND & COLL (chapter 5)

(See also constituent 4) Improvisation has some constituents that are very much present in pre-composed music. It has others that clearly mark it out from precomposed music (see Fig. 2). One of the most obvious differences in the improvisation activity is that within its nature it involves an acceptance of making what in other activities would be regarded as mistakes.¹⁵⁸ NB In improvisation 'mistakes' may in practice actually mean playing things that are less good as opposed to playing things that are 'wrong'. Mistake could also mean not exploiting a potential creative opportunity that is present only for a moment and then subsequently permanently lost, or even that that is applied when giving your own version, your own answer to the potential situation, which you feel is less good than someone else's might be.¹⁵⁹

The successful improviser has to take risks, to want to turn down the path marked '*unknown destination*'. They have the tools (previous experience, instrumental skill), they know how to walk, to conduct the activity of music-making, but to meet SGI they must set off with an open mind for places anew. Otherwise, they will be condemned to go through the same cycles repeatedly – delivering the same safe material, perpetually reaching the same safe destination. In this manner, some musicians possibly delude themselves as to the extent of their so called 'improvisations'. Yes, they improvise to some extent, but actually the choices

¹⁵⁸ "...things will be played that could be construed as 'wrong', but none of this matters..." (Josh Player Profile)

¹⁵⁹ The researcher personally felt this repeatedly when listening to Charlie Parker: His virtuosity is such that it doesn't make you want to play more, it makes you think '*I cannot give an answer as good as that musician is giving, therefore is it worth me giving an answer at all?*' Rose (2017) p.55 makes a similar point, emphasising the need in improvisation to come away from this way of thinking and for the improvising player to aim for an expression that is personal to them rather than judged against the yardsticks of others.

available to them are extremely limited, the potential variations minor, many parameters are pre-fixed and the risk of failing is virtually nil.

5d. The Ultimate Goal – What Improvisation is and how to Value it. [IND & COLL](#) (chapter 1 and 5)

Determining whether we have been successful in an activity often begins by deciding what our success metrics are. Profiting from engaging the complex nature of the activity, the successful improviser feels that they are able to play things, to express themselves within improvisation, in a way that they would not and cannot do when playing precomposed music. This was referred to repeatedly by the group and within the researcher's notes and professional practice along with comments that creative abilities and playing had been tested in some new manner, leading to a sense of artistic self-discovery.

Most important to achieving SGI is the realisation that the ultimate goal is not to make a piece, rather to undertake a creative interaction. Valuing improvisation is about the quality of the doing of the activity, the interactions and dialogue in the moment, not an attempt to refine or complete a finished work. As an activity, to some extent successful group improvisation has its own criteria, some of which are shared with precomposed music, others of which are not. Ultimately its aesthetics are not those of perfection, but rather of group discussion, quality of ideas and their development under creative, communal group ownership.

Identifying New Knowledge

The new knowledge in this study exists not in the exposing of previously undiscovered elements or in disagreements with existing texts. Rather in the identification, further detailing and consolidation of a long list of disparate elements into a single text articulating what was necessary beyond technical knowledge in order for a specified group of musicians to carry out successful group improvisation.

Further Articulation: When the researcher began this study, he felt to be taking on a jigsaw puzzle where he could see to some extent the resulting image but knew he would have to undertake a great deal of detective work to determine the makeup of its constituent pieces. Within the variety of sources being considered in combination through the study's Continuous Developmental Feedback Cycle, the discussions and researcher

reflection were found to be particularly and unexpectedly useful in enabling key understandings to emerge and form.¹⁶⁰

Perspective of the Method: This study is not typical of work at level 8 in that it centres almost entirely on analysing occurrences within the group. Accordingly, in line with the method, external context was sought and referenced but placed very much in second position to what was witnessed firsthand. Rose (2017) emphasises the value of “...*lived experience of learning through engagement with practice, beyond academia*” and cites David Sudnow’s ‘*Ways of the Hand*’. Here, as in this study, the author writes directly from the perspective of the learner, it’s a personal account of what they had found in their experience they needed to know and do in order to undertake the activity. “*I didn’t need an analysis. I needed advice. How could I now learn to do it?*” (Sudnow 1978 rev. 2001). Also particular to this study was the lens, the fresh perspective on the activity of group improvisation given through reporting the insights emerging directly from an extended period of practice working with and within one specific group. This allowed for a great deal of detail to be recorded, this forming the two-stage analysis of chapters 4 and 5. The extended time frame also enabled the detection and documenting of small and gradual developments in practice including the importance and changing levels of confidence, abilities with narrative structures and the links between developments in the player’s practice and their perception of their instrument’s role. The approach taken placed the researcher at the heart of the music-making, providing a direct and constant flow of information on the subject matter and ultimately the findings reflect a great deal about his own practice (Bartleet and Ellis 2009). This is especially relevant to observations made concerning difficulties with pitch and the linking of this to the musicians being self-taught. This is believed to be particularly potent as a finding in its relevance to the core practice of a wide range of players. Though there was constant specificity and subjectivity to the study in the single small participant group, the remit of the type(s) of music that they were making and the researcher’s subjective preferences for their practice, appropriate to the Professional Doctorate, his wider professional experience aided the study in suggesting that many of the insights that were being exposed resonated with the practice of other groups.¹⁶¹

Studying type 3 improvisation: Stevens (1985) Hall (2009) Nunn (1998) and Rose (2017) amongst others have previously published texts on conducting the practice of free improvisation (labelled type 2 improvisation by the research). Whilst acknowledging and incorporating elements of these works and their approaches to practice, this study went further in addressing a broader remit of practice, to also include what it defined as type 1 improvisation; this presenting approaches more regularly utilised within pop and rock

¹⁶⁰ The researcher had presumed in his planning, as evident in the amount of time proposed, that time making music with the group and analysing the recordings would be the primary source of data for the project. This was not borne out in practice, where reflection and discussion proved highly fruitful in informing the findings.

¹⁶¹ Example of work with ‘Firetower 4’ provided in appendix 3.

which have received much less illumination.¹⁶² To facilitate this broad remit, the research worked under what it christened type 3 improvisation - a hybrid of types 1 and 2. To define the workings of 'B' within this remit, the study had to encompass what were in many ways more traditional understandings of the fundamentals of composition and arrangement, adding these to the necessary requirements placed on the player by the improvising activity.¹⁶³

The Offers System as a way for musicians to work with ideas: (p.69) Though Borgo had already touched upon the notion of offers as of relevance and such approaches have been commonplace within the area of improvisational comedy for many years, the idea of laying out a six-stage system specifically as a way to work with ideas within musical improvisation is bespoke to the study.¹⁶⁴ The focus element headings are intended to be open enough that they will work across a broad range of personal practices.¹⁶⁵

The long list of ingredients and their detail in practice: (chapter 5) Although the resulting table of constituents may be what the casual reader jumps forward to, the researcher suggests that the thesis' most useful material is within the analyses in the body of chapter 5. Here the study brings forward and elaborates on a large number of points in answer to 'B'. For example, the need to listen and play concurrently, to acclimatize and warm up, the importance of picking up on subtleties, the extent to which the activity is unknown, that SGI is achieved on a gradient rather than a binary scale, the relevance to Sgorbati's 'collaborative emergence', the role of visual communication, risks and mistakes... It's a extensive and matter-of-fact breakdown of what was seen, analysing what was necessary to reach SGI. Though none of the points made are claimed as entirely new and many are not particularly surprising, having one document that brings them all together, detailing how they were witnessed in practice will be, the researcher suggests, extremely useful to other musicians and a canon of pointers that he will repeatedly return to in his teaching practice and further research.

Constituent Table: There is a braveness, possibly a naivete, in attempting to present in a simple table what needed to be done by CBS to successfully complete the activity of group improvisation. It may appear arrogant to presume to summarise in a couple of pages what countless players have spent a lifetime

¹⁶² Beyond manuals and guidebooks giving stock genre phrases etc. see chapter 1.

¹⁶³ Interestingly Ward-Steinman (2007) notes *"It is a rare musician who can improvise "in a variety of styles""*. Depending on exactly what is meant by a 'style' - how narrow and genre specific the definition - the researcher's professional experience would not agree with this: Many popular musicians can play in different specific styles within a broad remit. Their improvisations might lack authenticity and be surface 'sound-a-likes' but it can be done. This was also demonstrated in the practice of CBS.

¹⁶⁴ Nunn (1998) does present a *'Chart of Interpretation and Response in Free Improvisation'*. This work, discovered by the researcher after The Offers sessions, does have common ground with the system proposed.

¹⁶⁵ The researcher has already begun to work with other musicians using the The Offers System and initial responses are extremely positive.

attempting to master. However, the constituent table presented here is offered, rather than as the final word, as a beginning – a set of key tools to be utilised in different ways at different points by different musicians. The research claims only that what is documented here was observed to be pivotal to the practice of CBS – that these constituents were present in what they did, were felt by the researcher and participants to matter to their practice and that ultimately through identifying and placing focus on them their improvising progressed. The study states that its findings are expected to some extent to be transferable and of help to other musicians and music educators. Accordingly, it looks to present them in as clear a language and as accessible a form, as possible. Hence the possibility that the brevity and directness of the presentation of the findings might be incorrectly perceived as, at the very least, over-simplification or possibly even arrogance.

Discussing the improvisers' attempts to interact within sound, space and moment was nothing new (Toop, Nachmanovitch, Hopkins et al). However, the subsequent tying of this to the desired intention to control and steer, thinking in music using an interpretation of Gordon's audiation, and the further positioning of that process within what was clarified as the highly complex and skilled activity of instant composition was pivotal in producing the research's specific definition of improvisation and its constituents. Further to this, the observation that within the playing of their instruments the CBS players were enacting habits rather than actually being able to hear what they were about to contribute to the music was distinctly notable.

Though a large number of sources both musical and theoretical have been referenced throughout the thesis, in terms of relationship to existing texts, key concepts proposed by Nachmanovitch and Borgo remained at its heart; indeed, rather than proposing any contrary position, the study could be seen to incorporate and practical trial certain of their theories within its philosophy and method. Nachmanovitch's way of considering the activity - that the successful improviser needs to go beyond the technical, to the channeling of creative and personal expression, heavily influenced the research equation and resonated positively throughout the subsequent work. However, if his was a core component in the background to the study, underpinning the philosophical preparation (particularly evidently influential in chapter 3) the workshop time making music within CBS, as detailed in chapters 4 and 5, was a practical trialing and as such provided insights beyond the scope of Nachmanovitch through the researcher's experience of specific realisation which eventually led to the constituent table presented in this chapter. Similarly, the study served to support through application Borgo's proposal of the complex ecology at work within improvising groups and the dangers of trying to overly-simplify and compartmentalise what the research extensively evidenced was a highly complex activity (see also Sawyer 1999) within which all the constituents were continuously interacting and the need for a positive environment where all including the facilitator were learning. Borgo's influence is most evident in the planning of the study (chapter 2) and the research environment (chapter 3) consequently leading to the

identification in this chapter's table of constituent 1. Cold Bath Street is a living breathing organism, an ecology of complex interactions existing under his model.

Evaluation

*See also the researcher's reflections on his own practice presented as Appendix 1: Self-Evaluation.

This project has been a labour of love conducted over seven years. It has felt long overdue in providing answers and extremely beneficial both to the researcher's practice and his ability to discuss it. As has been repeatedly stated, the study did not start from a blank slate - something of improvisation was known at its inception. The central consideration in evaluating its success then is to assess if more is known about successful group improvisation at its completion.

It can be a failing of such studies to seek absolutes, clear clarifications and simple answers. It was never expected this research would find a single, simple answer to the makeup of 'B'. Rather, it sought to give an informed answer encompassing any constituent elements that emerged through the practice and attempted to present their identities and detail their manifestations. As the research progressed and the scale of the sheer number of possible investigative avenues that could be taken became apparent, the researcher found himself repeatedly questioning the remit of the study. Though the research design usefully set a clear boundary in defining that in terms of music-making, only that that took place within the workshops was to be studied, some questions still remained e.g. where did the music-making interaction stop and the social interaction begin? These blurred edges to the remit and subsequently the constituents proposed, though challenging for the researcher to deal with, are not seen as a weakness of the study. Rather, that attempting to define the constituents has further acknowledged SGI's complexity as an activity, to the point of wondering what attempting such a task should be considered to encompass. Consequently and unapologetically, the research findings are limited to giving constituent identities and how they emerged through the practice rather than exploring them in great detail which the research proposes is opportunity for subsequent specific studies.

Defining improvisation as a compositional activity with common constituents shared between improvisation (instant composition) and pre-composed music was an important step towards better understanding 'B'. The research then progressed to consider whether the shared compositional constituents were being used in a different way within SGI and placed subsequent focus on navigating the task of group composition within the moment. As part of this consideration, the research looked to clarify what activities the improvisers were

undertaking that were not found in pre-composed approaches. This led to investigating the nature of the activity including working in the moment, taking risks and ultimately onto the need to audiate – to imagine in sound.

In terms of CBS reaching SGI, progression was as discussed in the main body, on a gradient as even the most experienced players will not constantly be achieving SGI a hundred percent of the time. As was, the members of CBS demonstrated marked improvement over the duration of the study in being able to more consistently effectively compose together. This under the researcher's subjective preference for the forming of instant compositional narratives and the considerations of the nature of the improvising activity as defined by the research. Musical improvisation is not a logical, linear activity leading to exactly the same outcomes for all involved, rather a creative, personal journey leading to outcomes that are to some extent unique. When given free reign, it allows us to state our subjective preferences both individually and as a group in what we include in what we do, including what we reference either from the practice of others or from our own previous experience. The music-making skills defined in the constituents all developed for CBS through more time spent on the activity: Audiating and being able to realise those audiations on our instruments, learning to better listen and communicate, compose and arrange narratives and exploit the opportunities present in the moment, all contribute to improving the qualities of our improvisations which in turn fuels increasing confidence levels. Within the study there was a great difference in the manifestation of constituents, even within the small number of players studied. The difference in confidence between Maddi and Connor, or between the contributions from Bench and Javon when tackling the same Offers System exercise for example. As such, the constituents were seen to apply to lesser and greater degrees to the CBS players whether considered individually or in groups. The constituents also differed in their manifestations between sessions, even across the duration of a single session or piece. Remaining constant was that though all of the constituents were not consistently present to the same degree, *they were all always present*.

The Original Research Problem

Beyond applying a base vocabulary of technical music knowledge through their instrument, what do musicians need to know and do to undertake successful group improvisation? In terms of providing answers the work was successful to an extent, albeit acknowledging its answers are highly subjective, illuminating a particular version of improvisation. In terms of articulation for the purposes of rock and pop pedagogy, the thesis including the music recordings, provides transferable materials for educators and musicians to work with. What it doesn't do is to provide simple answers. What was needed further than 'A' was evidentially complex, broad-ranging and thus difficult to convey in a coherent, concise form. There will also need to be an

element of interpretation when transferring its insights to other musicians. To aid clarity in this process they are presented as a summary table of constituents answering the research equation.

The Constituents of 'B' within Successful Group Improvisation (table 4, page 107) - Answers the research problem with five constituent factors proposing '*what do musicians need to know and do*': The Functional Society, Broad Agreement on the Remit of the Music-Making, Skills, Confidence Through Experience and Operating Within the Nature of the Activity are all identified. The application of these constituents will be different in every case, but all are key. In terms of transferability, whilst this research only evidences these factors in the improvisatory practice of specific musicians from rock and pop backgrounds, in providing the table it offers the possibility of trialing them beyond this remit. This to determine whether using this information one could explain the fundamentals of this activity and in theory any musician in possession of the basic vocabulary of 'A' and who was able to audiate, to compose, to imagine, to any extent would be able to engage in it (see chapter 6).

The Offers System – '*A way to do it...*' Provides a transferable set of tools, offering musicians and music tutors a method comprising six focus elements with which to conduct a version of the activity: Active Listening, Engaging the idea, Develop the idea, Realise when the idea is tired, Find a way out or to move on, Ending (see chapter 5).

To be further critical as to the extent to which an answer has been provided, in pointing out topics that were not addressed and where further research is needed, the study does not tackle where those original offers, those initial ideas, come from. How does the player find the new topic of conversation, what sparks the inspiration? Though, in defining the necessity of the incorporation of unknown content, risk-taking and an element of chance the research is clearly stating that SGI must go beyond merely running known processes and regurgitating existing knowledge, it does not go as far as answering these points. For example, the notion that new ideas emerge from some sort of gift that players are born with? This has simply been beyond the remit of the work.

As noted in the main body, in order to more fully answer the original problem, now identified, each of the constituent factors should be detailed through further research. Exactly how subjective and productive the study's findings are will only be visible as the research is disseminated beyond CBS. Initial results within the researcher's teaching sessions are positive. The constituent headings seem to resonate with other players and approaching improvisation through The Offers System appears to provide useful inroads into practice. The researcher will be seeking further data to test transferability, with particular interest being attached to projects conducted by other music tutors.

On the Method

The impact of the virus on the study made a difference in terms of maintaining the momentum of progress. It might have been that if the bi-weekly sessions originally intended with all of the group had been able to be conducted, that their music-making would have more universally improved. As was, The Offers System in particular was not fully integrated into the practice of the group even by the end of the study, this being partly because individual members had received different amounts of information and had different amounts of workshop time with it.¹⁶⁶ As can be heard on the music recordings, the group's practice did however greatly benefit from work on The Offers System, this leading to clearer and more regular evidence of the ability to communicate fluidly within music and the building of more effective narrative journeys.¹⁶⁷

Other than issues with the virus, the main threat to the method was felt to be the highly subjective nature of the research. The intended goal was a version of the improvising activity that the researcher wanted the group to be able to do. He had to regularly pull himself back from this, to remind himself that the aim of the project was not to get CBS to sound like the groups in the discography. This of course leading him to repeatedly question - if this wasn't the aim, *what was he asking them to do, how could they be successful?* Hopefully this question feels to have been answered by the previous five chapters and ultimately the constituent table. Though it came as no surprise, there were drawbacks in working with participants who were well-known to the researcher prior to the study. There was a coziness that wasn't always beneficial. This combined with the extended period of study, in some ways made it difficult for the researcher to accurately pick up on what were sometimes very slight changes in practice or to be fully objective about what was taking place.

The data sources were all effective both individually and in combination, they'd already been trialed and found to be so in the pilot project. However, the large volume of material generated within the sessions that took place made the task of analysing it in any detail somewhat overwhelming, with the result that the researcher never felt it was as rigorously mined as it could have been. When conducting interviews, as many have reported over the pandemic, regular face-to-face contact would have been better. There felt to be nuances of detail lost in some rather forced remote conversations. Also, sending out written documents for the players to complete, though a pragmatic solution responding to limited face-to-face time with the players, proved to provide a varying level of return and chasing up missing texts took time and interrupted the flow of information into the study. Towards the very end of the study Connor was basically not in contact with the

¹⁶⁶ This was evident through the interviews. When the researcher asked the participants what the stages of The Offers System were, responses were very varied. At least one player not being able to name any of the stages.

¹⁶⁷ Though the researcher has deliberately chosen not to incorporate less successful recordings of practice, this livestream recording from the New Continental gives some sense of how the group were struggling with these issues before the introduction of The Offers System <https://youtu.be/WZmKJTlzUQs?t=5064> (Accessed: 30/06/22)

researcher and other members were simply too busy with their weekly work to enter into conversations which could have been useful in providing final details.

An unexpected and impactful change was that as the study progressed the researcher found himself changing the way he dealt with the data sources, increasingly moving away from focusing on listening to the recordings of the sessions and towards primarily valuing discussion and researcher-reflection in producing the list of constituents. This change may possibly have been connected with the large periods of remote working imposed by the pandemic, but the researcher suspects it would have happened regardless. Perhaps it was simply spelling out that more of the same 'what' information coming in from workshops wasn't what was needed – rather valuing and allocating more time spent to considering 'why'. In terms of keeping focus and fully pursuing complex topics opened up by the method, the researcher was often frustratingly interrupted by his other professional activities and always wanted more time. This was particularly notable in finding the mental and physical space necessary in order to further pursue theoretical context - the further depths of Borgo, Nachmanovitch, Cobussen, Rose, Schlicht et al. The researcher presumes he is not alone in coming to the end of a study and still having a 'to do list' and this further pursuance would be the top of that list.

Finally...

Though this whole document has hopefully provided some answers to the questions laid out within its initial pages, the researcher offers this simple brief reframing to those whose available reading time may be limited:

Q. What can musicians in possession of 'A' but not 'B' do?

They can use their instrument(s) to produce a set of sounds that make up common musical vocabulary. They have a toolkit of technical musical knowledge such as notes, chords, keys, rhythms or phrases and are able to execute this on their instrument. They can functionally play lines that somebody else has composed. They cannot compose their own lines, either in advance or within the moment.

If, as was done in chapter 5, we compare music-making to conversation: The musician who knows only 'A' is able to correctly deliver basic components - words and sentences. Through correctly physically forming these components they can recite what somebody else has thought/written/composed.¹⁶⁸

Q. What can musicians in possession of 'B' do?

¹⁶⁸ Detailed discussion of at what point these 'interpretations' become compositional or improvisational activities is considered beyond the remit of this research, as SGI specifies the need for new content not merely interpretation.

Improvisation is a type of compositional activity and therefore includes applications and variants of a number of the same constituent elements as the pre-composing activity: Musicians in possession of 'B' are able to come up with their own lines within an existing musical place. More importantly, they are able to imagine, introduce, develop and realise wholly different places. These are skills that any composer would need, a key difference in improvisation as opposed to pre-composing is how the constituents are applied, that the compositional decisions are made in the moment rather than in advance. The successful improvising group adds the further elements that these decisions are made communally and that they can operate within ever-shifting environments, away from any surety or fixed place. The music emerges from the interactions of the group and in this way represents their collective mind. It's an audible discussion through music.

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Appendix 1: Self-Evaluation

As this study progressed, it became increasingly apparent to me that, though I was learning a lot from the group and about the group, actually much of what I was gleaning was insight into my own practice and my strengths and weaknesses as a musician. Though a little unexpected, this was wholly appropriate to the project; I was a participant in the study, a member of CBS, the method included personal reflection and self-evaluation and what I was experiencing might well be applicable/useful to other musicians. Through these processes, I realized that pitch, and I'd also include as part of pitch 'harmony' (in this context meaning two or more notes at once and their relationship) is the element of improvisation that I find the most difficult to 'get right'. Rhythm was easier; I felt practiced enough to be able to play in time and to subdivide that time into interesting groupings. Of course, there are always ways in which one's use of rhythm could be better, but within my playing it wasn't 'wrong' in the way that a pitch decision could be (see chapter 5 on Active Listening).

Q. So why was the ability to work with pitch an issue in your practice?

A: I propose this is strongly linked with the audiation concept as introduced and detailed in chapter 5, succinctly, being able to musically imagine and then realise those imaginings. I don't have perfect pitch. As a result, within Cobussen's improvisation milieu, I don't know exactly what certain pitches will sound like when brought into the music, until they are brought into the music, and so am to some extent guessing as I go to play them for the first time in any given 'place'.

Q. So if you don't have perfect pitch (and none of the CBS players demonstrated this), how do you successfully operate within the improvisation activity?

A: I problem solve and adapt through a practiced process: Speaking purely about pitch concerns, when I hear for example an A 440Hz note, I don't know straightaway that that's what it is, I don't have that skill. The skill I do have is being able to quickly locate that note on the guitar. This very often occurs through playing a different note and then that telling me what its relationship or relevance to the original note is. Let's call this very quick (to the point that a listener might not notice it) search, a period of acclimatisation – of finding my feet.¹⁶⁹ *Where am I?* Once I've found this starting point everything from then on in is relative to it – higher

¹⁶⁹ See 'Engage the Idea' part of The Offers System in chapter 5.

notes, lower notes, intervals, chords et al. Borgo's quoting of the phrase "*the map is not the territory*" reminded me of my experience of recent local walks and during those the importance in navigation, of before setting out for somewhere new, first establishing where you are. This resonated strongly to the journey taking place within the improvising activity: Once I knew where I was in terms of pitch, then I could progress from there: The journey was relative to the starting point.

I'm not going to gain perfect pitch. Possibly if I did, then the period of acclimatisation could be eliminated. As is, I must accept it as part of the activity. Once I have established a starting point, it is still possible for me to lose my way and get it wrong, even if we are working in the same continuous pitch environment e.g. a riff in C. The reason for this is that I do not know the sound of the intervals well enough that I can audiate with all of them, so to an extent I'm working from theory and muscle memory rather than being able to 'hear it'. I am by no means alone in having to work with this restriction. In my teaching work I've found that a good test of whether this audiation is occurring is whether the musician is able to sing the line that they are about to play. This being a good indication as to whether they are audiating or playing from existing technical knowledge and/or muscle memory. When I tried doing this exercise myself, I would get the rhythm and some of the pitches right, but I couldn't sing all of what I was about to play.

Q. So if you are not able hear the pitches of the line before you play it, how are you able to play anything?

A. I use two techniques in combination that sound very simple written down but actually in practice are at the heart of what many experienced players do: First is the consideration of movement or motion in what I'm playing: I'm either staying static or moving up and/or down, making rapid continuous assessments of what does and doesn't sound good in the moment: '*Now I should play something higher*'. '*This phrase should keep on going upwards*' etc. (see constituent 3d). These assessments are so rapid, and I've engaged that process so many times, that I'm not often aware of them, but they are taking place. The second part of the answer is more complex in that it varies depending on the type of music the group are playing: In more traditional diatonic rock and pop type parts, I'm deciding what pitches to use derived from basic technical knowledge and muscle memory of how to enact that on the guitar. So, for example, playing a relative major chord over its minor scale is something I've done many times and a device that I often use. As I make those melodies, chords, riffs and phrases I employ theoretical knowledge both in a cognitive and embodied manner. From experience working with diatonic theory, working from my 'correct' starting point in our rock and pop style improvisation there will never be 3 semitones in a row. So, if I've played E and D# the next note if moving downwards could be C#. It's not going to be D etc. In terms of dealing with pitch mistakes, when making the rapid assessments, one of the outcomes might be that a wrong note has been played. This can sometimes be covered up on the guitar by bending or sliding the notes up or down to a 'correct' pitch.

Another way to deal with an incorrect pitch is simply to stop playing, or to play the pitch next to it, which due to diatonic theory will be correct.¹⁷⁰

The approach to pitch will change if CBS are working outside of conventional pitch systems. So, for example within a grating, chromatic environment, where I will deliberately play clashing/dissonant notes. Within this type of playing, I'm focusing primarily on rhythm, timbre and dynamics, combining these with the idea mentioned previously of movement or motion. Rapid assessments are still being made but not with traditional diatonic theory as the first concern. The notes can't be 'wrong' as in the rock and pop situation, but they can still be better and worse, more and less good in terms of what they bring to the music. So, this isn't an easier form of playing in terms of pitch decisions – just different - the different format brings new challenges where decisions around pitch are less the focus. For example, particular care must be taken if the sound has delay applied to it - as it will be heard for a long time, similarly if the sound being made is going to be very loud and consequently prominent. Within this type of playing, I often repeat or 'play around' content, staying within contributions that through the rapid assessments I deem to be working. In this way, as the music is steered, it is clearly compositional in the most conventional of senses.

From my time spent with musicians both in CBS and beyond, I theorise that how musicians deal with pitch when they improvise is directly connected with how they've learned music: What happened in the formative years, whether in formal schooling, self-teaching, or as was witnessed with the CBS members, in some combination of both, instils a process for working with pitch which is then used either consciously or subconsciously throughout the improvisation activity. Conventionally associated with improvisation is an approach common amongst schooled jazz musicians, where students learn the sound of standard chord progressions and how to work with arpeggios and scales against them. This approach of establishing a language of harmonic relationships, gives a vocabulary and process of deciding what to play which produces a very different improviser than the (generic) self-taught type 1 rock musician with which CBS were more aligned. CBS members discussed their playing styles and content, including pitch choices, being heavily influenced by their playing in previous non-improvised material. They also discussed learning their instrument through imitation and interpreting from songs – context coming from practitioners who were influential upon them.

For the guitar and bass (Javon, Bench and myself) there was reference to 'patterns' – scales and shapes on the fretboard that will work in given keys etc. This is also typical of students I've worked with who learn through rock and pop. The reason for employing the patterns approach seems to be to quickly reach a point

¹⁷⁰ This holds true most of the time but shows why the researcher is occasionally caught out when a harmonic minor scale is in use.

that music can be made. *'If you play this pattern that will give you the riff for this song'* *'This scale will work to make a solo for 'Good Times, Bad Times''* etc. However, in engaging through patterns, without knowing the *sound* of the pitches and intervals involved, the player ultimately misses something which is pivotal when it comes to improvisation, in that their harmonic knowledge is limited and as such, they cannot audiate their contributions. Consequently, the player's fingers move to produce the sound on the guitar, but they don't actually know before it is audible what it will sound like, unless they are repeating notes that have recently been played. Analogous to learning to walk, the feet are mentally and physically trained in a means to conduct a whole activity, not to cognitively consider each step before and as is it is being taken or to consider where they are going. Applied to improvisation: We know the improvisation is in A minor, therefore the guitarist moves to the fifth fret and makes their A minor scale shape and then begins to play. The thinking about pitch processing is over as they know what they do won't sound wrong. However, the player hasn't actually made any pitch decisions about the music that they want to play other than a block calculation based on the knowledge that they are in A minor. From here on in, it is habits and rhythm, movements and motion that are being worked with rather than individual decisions in deciding the melody. Such a process may be functional if moving over the same territory (minor blues in A) and as such is very useful in type 1, but when the remit is free playing, the improvisational journey is in a state of constant flux and doesn't have a single, defined pitch territory, the pattern model falls down and a further level of skill is needed.

Though none of the CBS players identified themselves as jazz-schooled, it was apparent that Connor had more of what was previously referred to as the jazz model in working with pitch and harmony. This can be heard in his relative fluency in the use of chord changes in his contributions (super-imposition of chords on existing tonalities and harmonic movement between chords as a means to progress and develop the music). He was apparently more confident to move the harmonic base. It was unclear exactly as to why this was, but he did quote jazz pianist Cecil Taylor as being someone who he regularly listened to and clearly demonstrated such abilities. For myself, I feel knowledge of pitch – the ability to better hear intervals and thus to audiate with them - can be further improved with sustained practice. So, for example, listening to and playing some jazz standards in recent years has meant that I now use 6ths more often. The harmonic knowledge acquired in terms of elements of musical theory that I can realise on the instrument, I would suggest lives within 'A'. The use of such knowledge as potent source material with which to audiate and creatively improvise lives firmly in 'B'.

The realisation of the particular importance and complications of pitch and their relationship to how the individual musician has learned has been key in better understanding the CBS players as improvisers. I would suggest all musicians and music educators should particularly consider these points within their own practice

and that of their students. The underpinning role they play within the workings of CBS may not be universally applicable, but when combined with audiation they have begun to provide key insights and to perform deep practical diagnostics for the group that when viewed as part of the study's wider constituent picture constitute exciting tools with which to further develop their improvisations in the future.

Appendix 2: Player Profiles – Javon

Instrument(s) played in CBS during the research and how many years you've been playing them (main and secondary if applicable).	Electric Guitar (Main) 12 years Electric Bass (Second) 7 years Drum Kit (Second) 5 years
Influences you're aware of on your playing.	Jimi Hendrix, Frank Zappa, Prince, Sly & The Family Stone Daft Punk, David Byrne/Talking Heads, Steam Powered Giraffe, L'Impératrice, Papooz, Tame Impala, Massive Attack, Louis Cole, Domi & JD Beck, Snarky Puppy, Marcus Miller, Victor Wooten, Cory Henry, Vulfpeck
Background as an ensemble player including how (if at all) you have used improvisation in those settings.	<p>Attending jam nights- 3 years. Mostly playing classic pop and rock, blues and Rockabilly. occasionally trying to learn songs on the spot and always improvising guitar solos.</p> <p>Odium Corpus- 2 years, during college. A thrash metal band with limited improvisation (occasional guitar solos).</p> <p>Vendetta - 2 years. A rock band with influences in classic rock and funk rock. Again, occasional improvisation, limited to solos and elongated breakdown sections.</p> <p>Baz on the Weekend- 4 years. Noise rock/Atonal electronica. Totally free improvisation with no pre agreed elements or pre agreed instruments.</p> <p>Smooth Glue- 3 years. An improvisation based psychedelic rock band. The majority of music played was free improvisation, with the understanding that we were intending for the music to follow the harmonic and rhythmic conventions of the genre. Some songs were based on pre-composed ideas but would have a free form, with regards to structure and variations in individual parts.</p> <p>The Busking Collective- 2 years. An acoustic band, performing within the limitations of a portable setup, that played a mixture of modern western popular music songs and improvised jams. These Improvised jams would follow the conventions of Western popular and folk music. A key would be agreed upon at the start of a jam.</p> <p>Cold Bath Street- 5 years. Improvisation based ensemble. Levels of improvisation have varied from working off of pre agreed musical starting</p>

	<p>points, working in response to other performers (such as dancers), responding to film, responding to environment, free improvisation, individual conducted improvisation and working from pre agreed limitations on playing.</p> <p>Regards- 3 Years. Synth pop band. Very little improvisation, with only the occasional fill to be improvised.</p>
Improvisational influences.	When I am improvising, I tend to be more inspired by non improvisation based music, on the whole. I would not be able to separate my playing Influences from my Improvisational influences.
What do you consider are your strengths as an improviser?	When playing, I tend to play to the playing environment and ensemble. I enjoy a more supportive role in music, either adding texture through sound design or playing a foundational role to add new context to other players' parts. Although I predominantly play melodic instruments, my focus is often on rhythm and sense of place on the bar line. Often I like to play with where the perception of timings and accents, already being played with others, are in the wider context of the group. This can allow for a more gradual evolution of group ideas or add more variation to looping ideas.
What do you consider are your weaknesses as an improviser?	I think my use of guitar can be quite limiting when it is my only instrument. My current set up is designed more for textural sound design than it is for sitting in a traditional place in a mix. I do find that my approach on this instrument is far less appropriate for certain musical ideas than my bass playing is. On bass I tend to perform more of a conventional role, which is better suited to a wider range of musical ideas. My drumming style tends to be informed by my lack of experience in performing that instrument in a live group setting/lack of technical proficiency. This often means that I will play a responsive role more than a conducting role. This works well with additional percussion being played but can feel quite disjointed without that additional context.
What do you think an improviser needs to know in addition to technical knowledge, in order to successfully improvise with a group?	It is important to commit to ideas. I believe that playing an unintentional note confidently, with the ability to then return to intentional notes, sounds better than playing something that is correct but is hesitant. Also, having the ear to recontextualise unintentional notes and let them guide your playing into new places is useful, as it can also inspire other musicians to follow you and take the music to different places. Additionally, being open minded and reducing the impact of ego is very important. This enables the others to feel equally comfortable sharing musical ideas and also letting musical ideas fade if they are not adopted by the group as a whole

Appendix 2: Player Profiles - Bench

<p>Instrument(s) played in CBS during the research and how many years you've been playing them (main and secondary if applicable).</p>	<p>Electric Bass (15 years) Electric Cello (4 years)</p>
<p>Influences you're aware of on your playing.</p>	<p>Bass: Fat Mike (NOFX), Pete McCullough (Streetlight Manifesto), John Ferrara (Consider The Source), Sam Wilkes (Knower), Geoff Kresge (AFI), Flea (RHCP), Mark King (Level 42), Rob Wright (NoMeansNo), Mono Neon, Jack Bruce,</p> <p>Cello: Jaqueline DuPre, Rushad Eggleston, Jorgen Jorgensen (Cellist from Ezra Furman's Transangelic Exodus album), Yo Yo Ma (When playing in Silk Road Ensemble)</p> <p>A lot of my recent cello influence comes from trying to mimic voice and vocal melodies. Recently, I have approached this by learning to cover the vocal melodies from songs by some of my favorite singer-songwriters and vocal led bands like:</p> <p>Elliot Smith, Ezra Furman, Andrew Jackson Jihad, Mountain Goats, Cokie The Clown, Kate Bush, Neutral Milk Hotel, Placebo, Toh Kay,</p>
<p>Background as an ensemble player</p>	<p>"Skydiver's Atrocity" (indie/rock group) (for 1 year) (formed when I was 15) (I started playing bass to join this band)</p> <p>"Downpipe" (punk/rock, with elements of funk, hip-hop, and metal) (for 8 years, although I had been collaborating with Johnny, the guitarist/singer, on writing songs for 2 years before that)</p> <p>"Droogs" (semi-composed/semi-improvised, indie/vocal led band) (3 years)</p> <p>"Goldgrube" (semi-composed/semi-improvised, free jazz band, with punk and experimental influences) (1 year)</p>
<p>Improvisational influences.</p>	<p>SBP's Improv research, John Zorn and Naked City, Henry Cow, Nerve,</p>
<p>What do you consider are your strengths as an improviser?</p>	<p>I have a wide toolkit of sounds, techniques, and styles that I am able to apply in a variety of different musical situations.</p> <p>I am opportunistic and reactive. This allows me to notice moments in the music where I am able to influence change and respond quickly to ideas/offers presented by other members, and also be willing to take risks.</p>

	<p>My experience as a multi-instrumentalist gives me insight and understanding of the strengths and limitations of a wide variety of different instruments, as well as their usually preferred keys/styles/techniques. This informs my judgement as to whether other instrumentalists in the group are going to be able to easily follow and adjust/adapt to my offers, and the offers of other group members. For example: a flautist may struggle more with a key change to C# major than they would to C major. Minor pentatonic blues scales are unlikely to present a challenge to guitarists/bassists, but could be more awkward to play on bowed strings or stringed instruments that are tuned to 5ths instead of 4ths. Reed and brass players are going to find it easier to follow intervals of 5ths than they are chromatic passages, etc...</p>
<p>What do you consider are your weaknesses as an improviser?</p>	<p>I often allow my current mental/emotional state to govern my playing, instead of offers from other members or the current needs of the music being played. Sometimes this comes in the form of allowing my mood/thoughts from that day intrude upon the improvisation. However, I have also noticed this problem manifest for me in the form of panic. I will perceive some problem in my playing, or the improvisation as a whole, and will then allow that to distract me. I may become fixated on trying to fix the perceived problem, or allow it to destroy my confidence. I have noticed that once this has happened, I am much more likely to either play selfishly, or to withdraw, play quieter, stop playing, overplay, etc...</p> <p>Whilst my impulsive personality can allow me to be opportunistic and reactive in a way that is helpful to an improvisation, it can also lead me to make silly mistakes, be insensitive to what other members are playing, and distract me from the current needs of the music.</p> <p>I can often become fixated on one element of the music, or one player's contribution, or solely on my own playing, rather than the music as a whole. This can blind me to the needs of the music and the needs/contributions of other players. Also, in the case of me focusing on my own playing, I can spend long periods of time looking at my instrument, which drastically limits my ability to communicate with (or even be aware of) other members.</p>
<p>What do you think an improviser needs to know in addition to technical knowledge, in order to successfully improvise with a group?</p>	<p>In my opinion/experience, a musical improviser needs to have a good awareness/acceptance of the skillsets, styles, strengths, and musical habits of the fellow improvisers in the group. They should have good communication skills, good risk judgement, and the ability to focus on the present moment/their present musical environment. Also, a good improviser should have a good balance of creativity and spontaneity, along with the ability to enter and maintain prolonged states of mindfulness. Perhaps also, good multi-tasking ability. I.e., the ability to perceive the music both as a whole, and as individual parts/individual contributions from the players.</p>

Appendix 2: Player Profiles – Josh

<p>Instrument(s) played in CBS during the research and how many years you've been playing them (main and secondary if applicable).</p>	<p>Synthesizer (Main) Keyboard (Second) I have been playing with Cold Bath Street for 8 years, since 2014.</p>
<p>Influences you're aware of on your playing.</p>	<p>Pink Floyd, Talking heads.</p>
<p>Background as an ensemble player including how (if at all) you have used improvisation in those settings.</p>	<p>I have been in a funk/soul/Motown/classic pop covers band named <i>Neon Cactus</i> for 7 years, since 2015. Listening and communication when playing live is key. When performing in a setting where we are providing music for entertainment, the song may well change depending on what is happening in the room at a time - a song that has plenty of people up and dancing might carry on for a time, a particularly well received guitar solo might last longer, and so on. It is important for us to be able to play to the room and know where we are going as a group, above and beyond our rehearsed structure. Improvisation is, of course, also vital for carrying on in the face of any problems that might arise in the volatile environment of a live show.</p>
<p>Improvisational influences.</p>	<p>I tend not to listen to much improvisation, and so I couldn't confidently state any artists who have explicitly influenced my playing.</p>
<p>What do you consider are your strengths as an improviser?</p>	<p>I am confident in playing with timbre or lead (or at least more melodic) playing, and I am also just as comfortable making noise as I am playing popular music. Manipulating sound is a particularly important component of expression in my playing, so it has become easy for me to create the sounds I hear in my head, and then find my way back again - I know my way around the keyboards I use for CBS very well. I am content to support the music around me most of the time.</p>
<p>What do you consider are your weaknesses as an improviser?</p>	<p>I have struggled to find or establish chord progressions in improvisation. But it is more that I find doing so uncomfortable - to do so is to introduce a significant structure to the music, and a lot of static sound. In the past I feel that such things have locked the group into playing round in circles, and I also believe that audible space, free from chords, is valuable in allowing everyone the room to express an idea or propose a new "offer."</p>

<p>What do you think an improviser needs to know in addition to technical knowledge, in order to successfully improvise with a group?</p>	<p>I think an improviser needs to be able to hear, or at least have an idea of, what a piece of music needs. It's composition in real time, so one must be considerate to augment the music and not add arbitrarily.</p> <p>I also believe that an improviser needs to surrender to the danger of the unpredictability. Things will go wrong, not sound great, things will be played that could be construed as "wrong". But none of this matters. It's often not noticeable, memorable, or damaging to the piece as a whole. In an improvisation setting, "wrong" notes, moments where things aren't quite locking, times where we might trip up, are all part and parcel of the playing - the other players expect it, the audience expects it. It is a time for expression, creative freedom, and fun.</p>
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Appendix 2: Player Profiles – Maddi

<p>Instrument(s) played in CBS during the research and how many years you've been playing them (main and secondary if applicable).</p>	<p>Viola and 5 string Electric viola (with high E string).</p>
<p>Influences you're aware of on your playing.</p>	<p>The Mount Fuji Doomjazz Corporation. Emilie Autumn. Aphex Twin. Nigel Kennedy. Anna Meredith. Laurie Anderson. Colin Stetson. DTheD – glitch art collective. Sudan Archives. God Speed You! Black Emperor. Nwando Ebizie. Jockstrap.</p>
<p>Background as an ensemble player including how (if at all) you have used improvisation in those settings.</p>	<p>Various string groups, quartets, and children's orchestras with other students of my violin/viola teacher and Birmingham schools' council/music service. Age 3 – 11. Used improvisation when learning to play instrument and in some group settings I think as a tool to develop musicality and ensemble playing.</p> <p>Queensbridge School Samba Band age 11 – 12 1 year. – no improvisation – just learnt parts.</p> <p>I was in a Dalcroze group for a year or two, we improvised movement to sound to learn about musicality and explore music theory.</p> <p>National Childrens Orchestra – 3 years – some improvisation in workshops and warmups.</p> <p>Halle Youth Orchestra, 1 year, – some improvisation in workshops for a project at the Royal Opera House.</p> <p>Pink Elephant Fish (pop-ska-funk –covers band), age 14 – 2 years, played saxophone, viola, backing vocals. Some improvisation to learn/develop parts.</p> <p>Drum Machine, 3 years– learnt parts, no improvisation.</p> <p>Electro Jazz Orchestra – 6 months – viola – improv workshops towards a structured performance.</p> <p>Cold Bath Street. Oct 2018 – Present?</p>
<p>Improvisational influences.</p>	<p>The Mount Fuji Doomjazz Corporation, Graham Massey Tool Shed. Paddy Steer.</p>
<p>What do you consider are your strengths as an improviser?</p>	<p>The electric violin really adds timbrally being quite different than the guitars. Very good at listening to the group overall, and picking out individual parts and responding – although sometimes get stuck doing this rather than introducing new bits myself. Don't feel tied to 'normal' rock/amplified band instrument roles due to having a mixed artistic background.</p>

	<p>Got a very good ear and internal time keeping. Ego is down so doesn't insist on leading or being prominent but growing more confident to step forward. Very comfortable working with effected, sustained or drone sounds.</p>
<p>What do you consider are your weaknesses as an improviser?</p>	<p>Not always confident to play flowing or faster passages. Still developing ways to be heard within louder environments. Sometimes get internally annoyed about other people seemingly not communicating/listening.</p>
<p>What do you think an improviser needs to know in addition to technical knowledge, in order to successfully improvise with a group?</p>	<p>Not be tied to traditional and contemporary types of theory/scales/chord sequences as the only way to communicate and share musical ideas. Willing to be part of the group and for the music rather than only pursuing individual goals.</p>

Appendix 2: Player Profiles – Sam

Instrument(s) played in CBS during the research and how many years you've been playing them (main and secondary if applicable).	Drum Kit – 15 years.
Influences you're aware of on your playing.	Drum Kit: Stewart Copeland, Jon Bonham, Jojo Mayer, Louis Cole, Yussef Dayes, JD Beck, Scott Pellegrom, Marco Minnemann, Mitch Mitchell
Background as an ensemble player including how (if at all) you have used improvisation in those settings.	<p>2 years of college cover bands featuring Rock, Pop, Funk, and Blues styles. No improvising.</p> <p>8 years of playing in a Punk band, with small elements of improvisation in drum fills and occasional 3 chord jams while performing.</p> <p>5 Years playing with The Cumbria Gaita Band, improvising variations of set rhythms, based on the specific type of song, e.g. a Xota, or Rumba, etc.</p> <p>4 years playing in drumming ensembles, mostly in the styles of Samba and Maracatu. Set rhythms and following cues, although the structure of the pieces section to section was improvised by the band leader. Generally, very little improvising in my role but have occasionally been appointed as a soloist, where improvising was essential.</p> <p>5 years playing in Cold Bath Street. The group focuses on methods of improvisation to develop the associated skills, and then embodying those methods and skill developments in public performances.</p> <p>1.5 years playing in Smooth Glue. 100% improvisation in rehearsals and performances. Recorded an hour-long album with no prior cues agreed, or discussion of what we'll play.</p> <p>I have also been involved in many 'one off' projects as a percussionist and composer, including;</p> <p>Reconciliation (final 3rd year degree performance). This contained elements of improvisation whilst following a structure of 3 distinct sections over 25 minutes. The 2nd section of this performance was 100% improvised.</p> <p>Small Is Beautiful. Minimalist composition with no improvising.</p> <p>Many improvisational + set roles for collaborative university projects.</p>
Improvisational influences.	Jojo Mayer + Nerve, Yussef Dayes, Scott Pellegrom, Mitch Mitchell
What do you consider are your strengths as an improviser?	<p>I'm a very passionate player who aims for lots of consistency in my playing. I'm good at setting a solid foundation for other players to work from, meaning I fulfill a supportive role in improvised music to a high standard, understanding the conventional role of my instrument without being distracted by ego, or any need to individually impress an audience, or play 'unnecessary' notes, unless it will complement the music. I'm very good at always listening to and watching other players, including noticing and responding to offers made. I put a lot of consideration into the providing the appropriate level of energy in my playing, for what will suit the music. I have a wide range of rhythmical and stylistic vocabulary, and so can fulfill a supportive role</p>

	<p>across a wide range of styles and genres. Since being a member of Cold Bath Street, I have intentionally developed my skills in leading the group with offers. I feel that I have seen a lot of improvement in this sector of my playing through this time.</p>
<p>What do you consider are your weaknesses as an improviser?</p>	<p>I consider my weaknesses to be in the area of taking a lead role, and soloing in particular. As stated above, I have worked on this in rehearsals and exercises facilitated by Simon, although I would still consider it a weakness. Gestural work also isn't very natural for me, even though I have been satisfied with my performance in this realm occasionally, these are things I feel that, at this stage, I don't perform to a high standard with enough consistency. This will continue to improve with further experience.</p> <p>Also, due to financial limitations over the last few years, I haven't had the ability to purchase much in regard to new equipment and therefore don't have access to a wider range of kit, to extend my range in timbral qualities and general possibilities in sounds and tones. Although, I do explore this with the equipment I have access to.</p> <p>I haven't worked with a large list of highly experienced and professional improvisers and would like to explore further how collaborating with different musicians affects my decision-making in improvisation and the quality of the work produced.</p>
<p>What do you think an improviser needs to know in addition to technical knowledge, in order to successfully improvise with a group?</p>	<p>Experience is key. To quote Jojo Mayer "Think of improvisation as a game, and like with any game, you get better by playing". Getting better at improvisation correlates with becoming more comfortable with the unknown and being more accepting of not having a comfort zone stay in, to fall back to.</p> <p>As a percussionist, but also as a musician in general, acquiring a large range of rhythmical and stylistic vocabulary is essential for improvising in different settings. This concept is as simple as, if you only know rock grooves and fills, in theory you can only appropriately improvise in rock settings.</p> <p>Confidence levels can have a direct impact on improvisational performance, at least in my own experience. As humans, we all have peaks and troughs in how confident we feel but if I'm feeling unconfident in my improvised playing on a particular day, thinking some positive thoughts about myself. For example, affirming or reminding myself that I'm experienced and know my instrument well can make a huge difference to the quality of my improvisations, if I'm feeling nervous or unconfident. However, along with confidence it's very important to remain attentive and receptive to the other performers.</p>

Appendix 2: Player Profiles – Connor

Authors note: As Connor was not in contact towards the end of the study he did not complete a player profile however he did complete this interview in September 2021 included as it provides relevant information.

Length of involvement in CBS: 3 years

Q. Please discuss how you work with musical ideas in improvisation to form successful pieces or narrative structures.

A. This all depends on the nature of the piece. Should I feel comfortable and prepared to offer something, then I will be prepared to offer a gesture, normally quite a large gesture – mostly built from just two notes to establish some form of rhythm which often affects the direction of the piece from the outset. Alternatively, I have found a 'safe place' where I don't have to play, I can simply observe until I feel something is offered in which I can add, explore, or design new narrative around that whether that be foregrounded or backgrounded – often starting in the foreground and finding my way forward into the piece as a sort of 'middle lane' driver.

Q. Discuss what you are working on and what still needs to be worked on within your improvisations, what do you find difficult, what was improved, changed, what are you doing in a different way? etc.

I am in the process of developing my listening skills, skill being an operative function in that development – listening to and observing 5,6,7+ musicians and being able to understand what stage everybody is at during a performance have always been difficult within a performance. When looking at improvements and changes, my technical skill on the piano has improved and that has developed with the artists I have been to see or listen to daily, just one little feature taken from an entire album is adding to my ammunition.

Along with this, I have started to implement reserved elements into my playing, the primary function of this is to address how important just two or three notes or a pattern could be within a piece used sparingly or exhaustively and realise where that can work in a piece.

Q. Which improvisers do you listen to regularly? Anyone from a friend to a nationally known group. Just give the names.

A. Cold Bath Street!!, Gabriela Montero, Cecil Taylor, Keith Tippett.

Appendix 3: Fire Tower 4 - Context Drawn from Professional Practice

Whilst engaged with the CBS study the researcher has also worked with the group Fire Tower 4 (hereafter FT4). There are similarities and differences which have provided useful context:

Difference in framework (constituent 2): FT4 is also an improvisation group with drums, bass, guitar, and keyboard as its core. However, the music produced lives much more within type 1 improvisation and the approaches and sounds of type 2 are not included within their palette. The keyboardist, one of the founders of the group, has stated that this is a conscious choice. That though he has worked previously within free improvisation he did not wish to have that sound with this group. Indeed, within these sessions he restricts himself to playing only the piano even though he is very able to use other timbres. So, there is a sense of choosing a certain palette, staying within that to see what it can do. The restrictions set, which aren't explicitly stated, also mean that in practice, for example, the group does not radically alter tonality or use extended or altered tonalities. The clarity here may help the players in terms of simplifying the improvising activity - the limitation on their options making it easier to work out what needs to be done.

The dynamic between the people, the societal relationship, is not the same as CBS: In FT4 there is no leader or person that is looked to to steer. The players are older and have been playing for longer. They are not looking to be taught, instructed or directed. Referencing constituent 4: It is apparent that the confidence level, particularly of the drummer, bass player and keyboardist is fairly high. One reason for this may be the amount of playing experience they have, this developing their musicality. Further, this develops their ability to cope within a given situation, to use their instruments in order to create music from wherever they currently are (constituent 5b).

There is very much the sense that FT4 work to a *modus operandi* established by other groups, most obviously Can, where what the research defined as a musical 'place' is built and that this gradually evolves though always based around a consistent tonality. Although there will be use of full stops, phrasing, musical diction and articulation from the individual contributors within the music, the radical, sudden or forced are rarely evident. The one counter to this gradually morphing single musical entity is the drummer.¹ He does not always play and when he does, will sometimes produce a part, that though clearly inspired by the current music, does not always fit directly in with it. He will sit, think and then do (constituents 3, 4, 5). Because he does this with confidence, the other instruments – most obviously the bass and guitar - will follow. This

imposition of new material makes changes and develops the compositional narrative. A recurrent device is that the keyboard and bass create a softer, more exploratory section, without the drums and the drummer then makes the structural decision on when that section should conclude, indicating his decision by beginning to play a new part. The comparison here was very useful in terms of considering what was taking place within CBS.

Although all instruments are valued by the nonhierarchical group, the saxophone playing does not have the same level of structural impact as the drums. This might sometimes be because the other players find it hard to hear, or that she lacks experience and hence confidence. However, conversations with her suggest it's also connected to her artistic personality: She is happy to play along with what's already happening and doesn't feel that she needs to assert herself, creating new parts or taking the music in new directions. The group's most recent recruit is a voice practitioner, also relatively inexperienced and she demonstrates similar traits. Both players have expressed interest in the research in considering how they could further extend their practice and develop what they do.