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Expressive musical process: exploring contemporary jazz musicians' views on the use of expressivity in compositional practice

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Abstract

Although there is a wide range of literature exploring expressivity in contemporary jazz music, I have found little to address the way that jazz musicians apply their expressivity in acts of composition. Moreover, I have found little academic research into the way that jazz musicians conceptualise their own expressivity in relation to their practice. This thesis uses this as an opportunity to interrogate the notion of 'expressivity' as a motivation for new compositional practice. I harness this concept explicitly in my own practical work, in order to illustrate how expressivity can be deliberately exploited within jazz composition. This investigation addresses the following questions:

How does expressivity impact communication between jazz players?

How do jazz musicians understand the relationship between expressivity and improvisation?

How do composers of contemporary jazz talk about expressivity in relation to instrumentation?

How do contemporary jazz musicians discuss the use of expressivity in modal composition?

The methodology of this research can be broken down as two different strands of investigation. First, I interviewed a number of contemporary jazz musicians about the notion of musician's expressivity, and how they embody this concept in their own practice. Secondly, I have composed new jazz music that responds to these themes and practically illustrates the concepts that I discuss. Throughout this analytical and practical process, I discuss expressivity in relation to four core concepts which are engaged with throughout this text: communication, improvisation, instrumentation and modal composition. Each of these themes is used to unpick, define and explore the concept of expressivity from different perspectives. Underpinning this high-level conceptual framework, around sixty lowlevel theoretical themes have finally shaped the musical trajectory of this project. Seven original compositions of new work support this written thesis, featuring two hours of musical experimentation. This sonic component is used to evidence key claims made in my thesis. Overall, my analysis leads me to conclude that expressivity allows us to see contemporary jazz from a very human-sensitive perspective. Expressivity encourages us to study the complex range of distinctive musical, cultural, technical and social factors that intersect when jazz musicians meet in performance. The unique expressive aptitudes of these various relational qualities can be channelled in the design of original musical works which treat expressivity as a mobilising factor for musical composition.

Chapter 1 – Introduction

1.1 Research aims

By examining the expressive process of contemporary jazz musicians, I have uncovered a new approach to considering the act of jazz composition. Although there is a rich musical discourse surrounding expressivity, there is little to critique the way that this concept can be channelled as a motivational factor for jazz composition. In this thesis, I analyse and experiment with expressivity as a core compositional element of five musical works. The primary argumentation of the project develops the claim that expressivity can be practically and explicitly mobilised in the development of new jazz works.

Secondarily, this thesis aims to define expressivity as a communicative process existing as a ubiquitous element to any jazz performance. I argue that expressivity functions as a highly personal component of any musician's personal style, and maps directly to their ability to express themselves using verbal language.

Following on from this focus on language, I aim to establish expressivity as a core component of improvisation. I argue that improvisation is another communicative process and that fluency in this area is integral to performing good quality solos.

Moreover, I aim to show that the expressive outcome of a musical work is directly related to the instrumentation of its performance: composers must study the expressive capabilities of an ensemble before writing the music. This can mean studying every performer of the band's musical skills before composing as opposed to composing the music followed by eventually choosing the musicians for the musical work. The contemporary jazz composer makes use of various instrumentation settings to achieve particular types of expression, sound quality and social interaction from the players that perform their work.

Finally, I demonstrate how modal jazz is a distinctive type of expression and that the contemporary musician uses specific rules of modality to obtain desirable expressive outcomes. I analyse how we can use these expressivity factors to compose this type of music and evidence these claims with new compositions.

1.2 Research questions

My thesis investigates the following core questions:

How does expressivity impact upon communication between players?

How do jazz musicians understand the relationship between expressivity and improvisation?

How do composers of contemporary jazz talk about expressivity in the instrumentation activity?

How do contemporary jazz musicians discuss the use of expressivity in modal composition?

These research questions are addressed by seven compositions, that evidence key answers that I make in text. The first and second composition relates to the first research question about the use of expressivity through communication. The third composition relates to the second research question about the use of expressivity through improvisation. Eventually, the fourth and fifth compositions relate to the use of expressivity through instrumentation and through modal jazz composition respectively. Furthermore, all these compositions will have the context of contemporary jazz music.

The way in which my four research questions were created and developed up until the current form has been constituted by different stages. These four research questions started being only three, which were sufficient at that stage for carrying out initial groundwork. After the data collecting period and as my thesis started to form, some of the aims of the thesis changed slightly, due to the collected data wanting to go in a particular direction. Because of this, the research questions were concomitantly adapted. Due to this, a vast quantity of material was discarded: only the most important themes and data were put forward in the written thesis. The research questions needed to adapt to the new direction of the study. This aspect has entirely shaped the conclusions. I started out researching expressivity through jazz techniques in general. However, I ended up researching this concept through the lens of four very important pillars: *communication between jazz musicians*, *jazz improvisation*, *modal jazz composition* and *jazz instrumentation*. This change of fundaments has produced a more fluid thesis. Although the questions were formulated to interrogate specific expressive techniques, the information that came about from this study has been more usefully applied in a unified discussion on the nature of expressivity throughout jazz composition.

At the end of writing this thesis, there has also been some modification to the research questions. For instance, a single research question covering the current third and fourth R.Q. topics eventually separated into two separated questions: *How do contemporary jazz musicians discuss the use of expressivity in modal composition?* and: *How do composers of contemporary jazz talk about expressivity in the instrumentation activity?*

1.3 Research methods

In order to collect data for this research, I interviewed a number of professional jazz musicians about the concept of expressivity using semi-structured interviews. More detailed information on this process will be given in *Chapter 3: Methodology*. I use the method "Thematic networks: An Analytic Tool For Qualitative Research" (Attride-Stirling, 2001) to analyse the data taken from my semi-structured interviews. This is a process in which data taken from multiple interviews is organised into sets of themes and displayed visually in a diagram. This diagram is used to present a high-level overview of the data that I collected during my interviews.

The global themes that emerged from this process are: *communication*, *improvisation*, *instrumentation* and *modal harmony composition*. I used these themes as conceptual points of departure as I developed a portfolio of new jazz compositions. Moreover, these concepts fully inform the ideas that I develop about expressivity in this thesis.

Table 1: Diagram of themes

| Basic themes | | Organizing Themes | Global themes |
|---------------------------------|---|---|---------------|
| - | Communication importance | 5.1 <u>Defining</u> | Chapter 5: |
| - | Individualism | communication in | Expressing |
| - | Sonic communication | contemporary jazz | communication |
| - | Collapsing communication with "The ego | | |
| trip" | | | |
| - | The stable band to improve the | | |
| comm | unication | | |
| - | Communication lead | | |
| | | | |
| - - - - - dishon | Sounding like others Sounding like yourself Refreshing our own sound Jazz or classical background Playing safe Influencers on our personal sound Playing beyond our possibilities as sest Appropriate mental state to play jazz | 5.2 <u>Development</u> of the personal sound and its communicative features | |

| - | Personal and musical evolution | | |
|---------|---|----------------------------|-------------------|
| - | Musically undressing | | |
| | | | |
| - | Improvisational honesty | 6.1 <u>Jazz musicians'</u> | Chapter 6: |
| - | Risk in live improvisation versus studio | philosophies about | Analysing musical |
| - | Mistake as part of the music | expressivity in the | expressivity |
| - | Fixing mistakes as source of improvising | contemporary jazz | through |
| - | Playing out and modifying the rhythm as | improvisation: risk- | improvisation |
| commo | on risk-taking practices | taking and the use of | |
| - | Free-improvisation section as risky play in | <u>dynamics</u> | |
| a tonal | or modal piece | | |
| - | Studio and live recordings as different | | |
| sources | s of expression in terms of risk | | |
| - | The risk of musically living the moment in | | |
| live pe | rformance | | |
| - | The use of silence | | |
| - | Musicians' interaction as a dynamic factor | | |
| - | Dynamics taken to the extreme | | |
| - | Will never play twice in the same way | | |
| - | The dynamic musician's journey | | |
| - | The dynamic routine | | |
| | | | |
| _ | Audience feedback importance | (2) | |
| _ | The melody informs the | 6.2 <u>Jazz idiom in</u> | |
| improv | visation | the 21st century: | |
| - | Every musician feeds the improviser | defining it as an | |
| differe | • | improvised idiom | |
| - | Mixing different types of jazz in one | | |
| - | Conducting an improvisation | | |
| - | Jazz definition depending on the | | |
| musicia | an's background | | |
| - | Groove as the most identifying jazz | | |
| elemen | ıt | | |
| - | Familiarization with the language | | |
| - | Modal jazz as avant-garde | | |
| | | | |

| - | Jazz and classical musicians' | | |
|--|-----------------------------------|-----------------------------|-----------------|
| expressivity | | | |
| | | | |
| - | Listening to the band | 6.3 <u>The expressive</u> | |
| - | Expressing a feeling | <u>features of an ideal</u> | |
| - | Dynamic control | improvised solo | |
| - | Musicians' Interaction | | |
| - | Knowing the language | | |
| - | Language variety | | |
| - | Using the silence | | |
| - | Intervals instead of scales | | |
| - | Phrasing is everything | | |
| - | Improvising in rock | | |
| - | Relationship melody-improvisation | | |
| - | Types and importance of | | |
| communicat | ion for the idyllic solo | | |
| - | The easiest solo | | |
| - | The narrative | | |
| - | The quirky solo | | |
| - | Creating interest in the audience | | |
| - | Spontaneity in improvisation | | |
| | | | |
| - | Looking at sound, density and | 7.1 <u>How</u> | Chapter 7: |
| texture in or | der to adapt the instrumentation | <u>contemporary jazz</u> | Analysing |
| - | Some instruments constrain the | musicians adapt the | expressivity |
| composition | al possibilities of the band | instrumentation to | through |
| - | Using bass and voice | obtain a specific | instrumentation |
| instrumentation as a way of breaking compositional | | musical expression | and modal |
| boundaries | | | harmony |
| - | From unsafe and challenging to | | |
| rewarding ex | | | |
| - | Exploring every individual | | |
| expressivity | 's qualities | | |
| | | | |
| | | | |

| - | Blending tonal and modal jazz | 7.2 | The use of | |
|---|--------------------------------|---------|----------------|--|
| - | How the lack of tension and | express | sivity through | |
| release affects the | musician's playing | modal | <u>harmony</u> | |
| - | Intervallic process instead of | | | |
| modal | | | | |
| - | Modal music recognised as | | | |
| more descriptive th | han tonal | | | |
| - | Modal jazz start: Django | | | |
| Reinhardt or Miles | s Davis | | | |
| - | Miles Davis Kind of Blue: | | | |
| new approach or b | lend of existing material? | | | |
| - | Comparing Western with | | | |
| Indian Modal music | | | | |
| - | How the soloist can make | | | |
| sound modal a tonal song and vice-versa | | | | |

1.4 Expressivity

The concept of expressivity appeals to me as a researcher and practitioner of contemporary jazz music. Musically, I am interested in exploring compositional and improvisational approaches found in contemporary jazz discourse. In research terms, I am intrigued by the notion of expressivity in relation to how I play and believe that a rigorous assessment of this concept is long overdue. Expressivity in music is the act of conveying a feeling or a thought through one or various musical instruments. This is the lowest-level definition of what I am analysing in this thesis. However, I will use the word 'expressivity' in different ways depending on context. Due to the subjectivity of musicians and music theorists, the term expressivity ends up taking on a plurality of definition. For one example, it has been defined multiple times by my interview participants as a process that cannot be defined, but instead needs to be felt and experienced. The expressivity of the contemporary musician can be described as a modifying musician's skill that changes depending on who performs or who speaks about it.

However, by using my organizing themes and my semi-structured interview, it is possible to unpick some generalizations about what expressivity means to the musicians who engage with it creatively, and the theorists who engage with this concept critically.

I here describe the most important researchers that have written about expressivity in the contemporary context:

Sakata, Wakamiya and Hachimura (2009) suggest that music has not only a sonic outcome but also a bodily motion-based component, and the unification of both aspects is necessary to more fully understand a performance. Bodily motion participates in the global meaning of performance, perhaps because it has the power of changing the expressivity of a specific musical passage. Based on this study, the expressivity during jazz performances is evaluated considering two main factors, such as power and aesthetic quality. By interpreting these bodily musical reactions, factors such as playing hard or soft and light or heavy are consequently more easily recognized.

Sakata, Wakamiya and Hachimura have proved this theory that relates directly to my first research question. For instance, the communicative process has a heavy weight in the use of sonic and bodymotion elements. Although we could find some theorists and musicians arguing that the body-motion aspect of the performance is not relevant, this is an open debate with different perspectives.

Woody (2000) questioned several musicians after their studies in music college, in order to learn how they were taught to develop their expressivity, and how they continued to develop this skill outside of academic institutions. According to these studies, and perhaps quite surprisingly, private lessons have more content on performance expressivity than the class or ensemble lesson. Although some private teachers used the classroom teaching patterns to teach in private, more than 60% of the subjects were given by using verbal-based training to teach expressivity. Students who had lessons in private classes typically showed more practice time spent in the control and mastery of feelings during performance. Woody mostly explores the emotion-centered pedagogy for music, and ways in which feelings are demonstrated with expressivity and thereafter with sound. In my research, to link Woody's claims to my second research question, I focus on the mastery of personal skills and feelings to illustrate how the contemporary musicians develop their playing professionally. In my investigation, the interviewed musicians speak and relate the use of risk and being a dynamic musician to the master of feelings during the jazz performance.

Cochrane (2008) introduced a new concept in relation to expressivity. In his research, he examines the abilities to add feelings to our music by developing and mixing different terms such as excitation, similarity and personal theories in an exercise of self-expression accuracy. In this work, he suggests that music acquires the brain mechanisms for simulating feelings and that we, as musicians, have evolved not only the abilities to express our own emotions but, more importantly, other people's emotions too.

Cochrane refers to my third and fourth research questions. This questions develop the use of expressivity through instrumentation and modal jazz harmony. The way in which Cochrane and these two research questions link is illustrated during the thesis when, by altering the instrumentation of the band to sometimes very rare forms, we can perform a sought expressive outcome. Likewise, by using

modal jazz composition, we will see in this thesis, that we are able to reach very specific and accurate kinds of expressivity and therefore express our feelings and others'.

1.5 Filling a gap

As there is currently little research examining the concept of expressivity (Arcos, Guaus, & Ozaslan, 2013 and Roze, Aramaki, Kronland-Martinet, & Ystad, 2007) in relation to jazz music (please see my literature review, pg 13), there is a lack of research regarding the way that it can be used as a tool for new composition. This written thesis, alongside the evidence provided by my compositions, does some work to fill this gap.

My participant interviews discuss the use of expressivity in relation to themes such as: *musicians'* communication in performance, improvisation, instrumentation variations and modal jazz composition. My participants expressed what they thought about expressivity in contemporary jazz. Based on their rich musical experience, within the context of my qualitative study, I have produced analyses around how each one views expressivity in relation to their own practice. By unpicking commonalities between the responses of each participant, I have developed a set of general claims that describe the functioning of expressivity in contemporary jazz practice, and how it can be deliberately exploited in the composition of new works.

The practical component of this research also covers a gap in the contemporary jazz discourse. My underlying conceptual themes are here used to compose some new music. The sound behaviour of these works is directly supportive of the claims that I make regarding expressivity, and all musical material has been produced in order to solidify my ideas about this concept. The musical component of this study has been key to bridging this gap in the literature.

1.6 Thesis structure

My thesis splits into the eight following chapters: *Chapter 1 – Introduction*: here a summary of the whole thesis is given. *Chapter 2 – Literature Review*: in this section, the most relevant literature about musician expressivity is mentioned and analysed. *Chapter 3 – Methodology*: in this section, I give details on this project's data analysis methodologies. *Chapter 4 – Methods*: I here explain all steps taken before and after the collection and analysis of data.

I here summarise the findings of *chapters 5*, 6 and 7:

Chapter 5 - Expressing communication, starts by defining the concept of musicians' communication. In this chapter, I use my participant interviews to develop a standpoint on the ways in which

musicians communicate with one another whilst performing. A 20-minute long musical work, composed as a response to the concept of communication, is here discussed, and used to support the primary argumentation of the chapter. The main claim for the *section 5.1* is that by developing our musical ear, we directly develop our communicative attributes as musician, and that this ear training is the most important aspect in order to grow that efficient communicative tool. The main claim for *section 5.2* is that the jazz musician is a human in constant evolution and that this growth affects and mutates the performance skills of any musician. Due to this, as we will see later, a jazz musician never performs an improvisation in the same way. The concept of "undressing" to the other players of the band, to the crowd and to ourselves as performers, also implies that the musician plays with total sincerity and open character to the others in order to reinforce the collective expressivity. By achieving the practice of these concepts, we are able to accomplish our purest personal language.

Following this, in Chapter 6: Analysis of musical expressivity through improvisation, I discuss the use of risk and dynamism when improvising on stage. I developed an eighty-minute composition for this chapter. This composition develops upon thirty-seven basic themes unpicked from my participant interviews. This piece is documented as an audio-visual work and used to support key claims made in text. In text, I use my participants' responses as a way to discuss the risks that they take on stage as they improvise, and to develop a rhetorical stance on improvisation as a method of taking expressive risks and mastering dynamism. Again, I refer heavily to the idea of communication, as I discuss the ways in which my participants consider jazz improvisation as a form of language. I argue that to improvise fluidly and with ideal self-expression, one must learn how to speak this language. Within this expressive condition, the jazz musicians that I interviewed value honesty and sincerity in conversation above crude technical proficiency. As a main claim for section 6.1, I highlight the notion that it is impossible to repeat the expressivity of an improvisation. This declaration is based on the extreme complexity of the expressivity of the human body when developing an improvisation and applying risk and dynamism in her/his playing. The primary claim in section 6.2 is that I have not noticed much experimentation in terms of expanding the jazz idiom in the improvisational task. One of the only innovative approaches that experiment with the expressivity is "orchestrating an improvisation" and this is a clear example of a pioneering initiative that will open up many musical possibilities in the future. For section 6.3 of this chapter, the main claim is that it is unmanageable to interpret the idyllic solo. I base this statement on the fact that every participant of this research, either interviewed or recording participant, has given me a plurality of approaches that can be used to achieve the ideal improvisation. The resulting solo would be tremendously difficult to achieve due to an excess of different and sometimes contrasting instructions that would challenge the improviser. This exceptional solo is a function of a musician's own abilities and experiences, rather than something that can be mapped from discourse.

In Chapter 7: Analysing expressivity through instrumentation variation and modal harmony, I focus on the variation of the instrumentation in jazz composition. In order to evidence and support claims made in this chapter, I composed a piece of music using a variety of different instruments, including a computer sequenced part. I did this to experiment with the way that the contemporary jazz musician uses instrumentation variations to obtain a specific type of musical expressivity. Here my participants shared their responses on musical works where the unusual instrumentation is at the core of the composition. In addition, risk-taking by using unusual combinations of instruments is here discussed as a unique form of musical expressivity. The primary claim for this section is that instrumentation and communication are extremely related when selecting suitable musical instruments. Musical communication, and therefore musical expressivity, is directly impacted by the instruments that are selected. Furthermore, in the case of a small musical ensemble, features such as musician's creativity, risk, coordination complexity, and great interaction will always have a different impact than in big bands. This aspect will normally offer specially inspiring and imaginative tests in every concert.

Finally, I discuss the use of modal harmony as a method for achieving very specific musical expression. The composition that I created for this section develops a modal motion from beginning to the end of the piece. I used this piece, as well as my participant interviews and literature review, to indicate that modal jazz is a more descriptive style than tonal jazz. A very particular type of expressivity can be achieved by using modal jazz as opposed to tonal harmony. Due to the strong emphasis that tonal jazz has in academic studies of contemporary jazz, musicians tend to use tonality techniques of improvisation even in complete modal jazz pieces. The main claim of this section is that modal jazz has the ability to describe more musical contexts than functional or tonal and that in modal improvisation, there are three key methods to elaborate the solo: by thinking in modes, by thinking in intervallic motion in relation to a centre or by blending modal thinking and intervallic relativity.

In the last chapter of this thesis *Chapter 8 – Conclusion*, I give an overarching summary of the whole thesis.

1.7 Limitations of this research

A key limitation of this study is the availability of the musicians who were called for interview. The most well-known jazz musicians and composers were often hard to pin down. Musicians like George Benson, Pat Metheny or John Scofield have been contacted for interview but only some of them replied. Although these three famous instrumentalists could not achieve the interviews, seventeen recognized artists have taken part of it: a director of the BBC orchestra, a director of a Spanish big band, an international jazz and Indian music performer, an international jazz performer in a jazz trio and quartet now touring in China, a musician and college teacher who has shared stage with

musicians like Larry Carlton, a band leader and London college teacher and other professional musicians have nevertheless participated in this investigation.

Another limitation that this research has presented is that not all the participants felt comfortable talking about their idiosyncrasies regarding musical expressivity. To avoid this problem, I chose to ask open questions of a semi structured type of survey. In this way, the participants felt less pressure and expanded on their answers more freely, with room for diversion and spontaneity, where the interview required it.

Finally, in my conclusion, I summarise my findings and my next steps as a researcher. Here I recapitulate my aims for the thesis and my research questions; I explain my final outcomes; I explore the limitations of my approach; I give an overview of what I found the most important parts of the thesis; I again explain the gap of knowledge that I have covered with this research, and, finally, I discuss what research will be carried out by me in the near future.

1.8 Conclusion

The primary conclusion that this study makes is that expressivity is a process that can be harnessed for the composition of new jazz music. Given the key role of communication in jazz music, one cannot deny that the musical outcome of a jazz ensemble is a function of the self-expressive capabilities of each individual. If we are able to deliberately engage with the expressive and communicative processes of each musician, then we can create new music that is sensitive to the musical conversations that takes place between performers (and from musicians to audience).

In relation to expressivity and improvisation, I refer to several key concepts in order to explain the musical relationships at play here. Firstly, I discuss 'risk and dynamism' in the expressive solo. I secondly refer to the expressive features of 'an improvised idiom'. Finally, I consider 'the expressive features of an ideal improvised solo'. Considering how often these ideas arose within my participant interviews and reader, I define these features of improvisation as key to this musical practice. Crucially, I define improvisation as the central feature of this jazz music.

Instrumentation and modal composition have been grouped together as two significant compositional activities that channel of a specific expressivity to obtain an exact wanted musical outcome. Experimenting with instrumentation can be a sensible way to invoke risk. This is because using some new instrumentation appears to modify the relationships between performers and certain forms of instrumentation require a more challenging social context for musical communication.

The study of contemporary modal jazz composition in this thesis allows us to see how musicians understand or even fail to understand this topic. Different agreed theories and contradictions crop up and make us travel in time to the beginnings of modal jazz composition.

In the following section, *Chapter 2: Literature Review*, I am going to analyse a range of current literature that explores *expressivity*. The role of this concept will be explored in relation to *communication*, *improvisation*, *instrumentation* and *modal jazz composition*.

• **Chapter** 2 – Literature review

In the context of contemporary jazz studies, *expressivity* is an under-researched concept. This literature review will provide an examination of how expressivity is currently (under-) discussed by jazz scholars, in order to describe and establish this gap in the literature, and how my research can occupy this gap.

Firstly, I will refer to the work of jazz theorists who discuss expressivity in quite general terms, before moving on to a fuller engagement with the ways that expressivity intersects with the chapter themes that I established in my introduction (*communication*, *improvisation*, *instrumentation* and *modal harmony*). Finally, I argue that there is a significant gap in this literature, in particular relation to the way that expressivity can be channelled and used as a tool and motivation for new jazz composition. I use this gap to justify my doctoral project.

2.1 Musical expressivity

This section will discuss literature that refers to expressivity in fairly broad and general terms. I do this to present the idea that 'expressivity' is a nebulous term, with an enormous range of potential interpretations. I use this to support my notion that, in the context of this thesis, 'expressivity' can be best understood in relation to my thematic musical concepts (musicians' communication, improvisation, instrumentation and modal harmony). I use these themes as lenses that can offer different perspectives on this complex and subjective musical concept.

Roze, Aramaki, Kronland-Martinet, and Ystad (2007) analysed the relationship between two types of expression: sonic expression (i.e. the articulation of sound) and bodily motion expression (i.e. the articulation of bodily form). Between these two types of expression, there are a range of different mappings and influences between these two domains. These relationships can be direct, e.g. the clear relationship between a drummer's arm movement and the resulting percussive sound, or indirect, e.g. the impact that a crowd of dancing audience members can have upon sound articulation. In their project, they asked a range of musicians to play a specific piece of music twice: once with their body posture constrained and once with a free range of movement. The recorded outputs of each performance were sonically compared with each other. The results showed that certain sound articulations required certain physical space. For instance, this study reveals that in the harsh notes, there was a tendency to look for the more bowing body positions, according to the researchers. It can be stated that the self-expression of a musician or band on stage is a union of both processes – body motion and sonic and therefore, music is not only a sonic type of expression.

Arcos, Guaus, and Ozaslan (2013) created a computational system to analyse musicians' expressivity and represent it through digital images. The project was based on the production of computational algorithms that were capable of representing bodily movement as images. This expressivity is, according to the writers, a process that is acquired by the musicians by the practice of musical listening and imitation. Here these researchers deal with this problem through the use of soft computing techniques and using audio analysis algorithms. The soft computing techniques are those such as machine learning, genetic algorithms, fuzzy logic, artificial neural networks and expert systems; systems that aim to provide models of the human mind. To achieve this, they have designed a graphical user interface for a flexible analysis of the bodily input data, as a means of determining the potential expression at play. This project provides an advancement for the analysis of expressivity, due to the novel action of pairing the expressive behaviour of the musician with a computer. With a similar aim, I hope that my data-driven analysis together with this computational approach are capable of discovering new insights for the study of the phenomena of musical expressivity.

Huovinen and Pontara (2010) developed a philosophy-based project, in which the authors investigated the definition of musical expressivity, giving space for possible contesting arguments based on the various experiments that they carried out. In this work, one of their analyses explains that definitions of expressivity cannot be completely intuitive; they are mostly based on our experiences as performers. Another of their arguments explains that this kind of experiment cannot show a spontaneous result. This is because the performers and the evaluators surely know that there is an assessment in progress, and so the outcome will therefore be of a more pre-meditated type. This aspect questions directly the reliability of my and any project. This resonates with my research, where there has been a strong use of spontaneity while asking the participants open questions; trying to let them choose the wanted path for their answers on expressivity and adding spontaneous questions to the main ones. In addition, the recording musicians of this project have been always called to the spontaneity by the unawareness of the core elements of this expressivity-based thesis.

Zabor (1981) outlines a problem with jazz music in the 1970's and 80's. He argues that this period was a challenging time for jazz music (which is indicative of a wider problem that jazz music has today). This problem was the loss of popularity due to the development of this style in a type of music more apparently played for musicians than for the audience. The rise of emerging rock music styles also eclipsed it. Jazz was consequently becoming a far less popular and influential style in its pure version and felt with the need to blend with other genres to keep part of the popularity that once exhibited in the end of 19th and beginning of 20th centuries. A self-centred type of expressivity forced its failure.

Zabor argues that jazz music survived due to its ability to blend with other genres and produce new stylistic tropes. His writing includes a subjective understanding of the role and influence of successful

jazz composers and how they use their own musical expressiveness for their compositional and improvisational tasks. According to Zabor, expressive factors seem to have a more important role than sonic ones in order to understand the successful projection of the most successful jazz performers. For instance, he describes the keyboard player Montoliu's type of expressivity while playing in duo with Chick Korea. He says: "Montolius is a master who communicates as much joy as he takes in his music and whom I have never ever heard run short of ideas or finesse. It's terrific to hear him so well served by a recording and to find simultaneously so much invention and so much care". Another example of this was made about one of Pepper's jazz albums. Zabor states: "He makes his tension work for him. Some of the albums best moments come in the honks and atonal flutters, in which he blows of excess steam". Therefore, it is important to emphasize that as it will be discussed in *section* 5.2, the audience generally prefer an expressive performance to a technical or emotional one.

A wide range of literature has been here explored in order to gather data about various aspects of contemporary jazz musicians' expressivity. I have also studied this idea in relation to the second half of the 20th century period. Smith (1986) and Russo (1968) explored the relationships between compositional techniques and expressive output. In these two cases, they explored the development of the musical expressivity through compositional techniques developed up until the 80s. Different techniques and developments of the jazz compositional process, explored in both works, show the many stylistic conventions in jazz music that have developed in accordance with cultural changes, social identities and audience demands. Expressivity is shaped by and shapes these just mentioned elements.

In Smith's work, the analysis focuses on the most contemporary period of composition. Free diatonicism, serialism, and indeterminacy are the key elements of a scrutinised work on composition that has given clear insights for the elaboration of my research. In particular, Smith's contribution to my research, has happened both in the learning of the mentioned compositional techniques, as well as bitonality and polytonality, atonality and twelve-note mic and in the elaboration of my illustrative compositions, where the explained techniques by Smith have been considered.

In Russo's exploration, a wide work on composition has been produced by the author about composition techniques covering from the beginning of jazz up until the end of the 60s. Harmony, rhythm, melody, counterpoint, modality and chord progression are some of the subjects that he exhaustively explores giving examples for every compositional technique. This work has contributed to the solidification of my knowledge as jazz composer in the more technical manner and with the focus on musical self-expression. This author offers a wide group of techniques that are not only valid for jazz but for other musical genres. He has also offered me, through his work, the chance to strengthen my jazz composition knowledge and how to use musical expressivity by putting together three fields that are not normally conjoined in research literature, namely *harmony*, *counterpoint*, and *orchestration*.

2.2 Expressivity through communication.

In the next part of this literature review, I will focus on "Expressivity through communication". I will discuss literature that analyses ways in which contemporary jazz musicians have defined expressivity in relation to communicative processes. After this, expressive features of the musician's personal language will be analysed in relation to the current literature.

2.2.1 Expressivity as communication

Seddon (2005) analysed different types of communication between six jazz musicians and students during practises and recitals. Six hours of rehearsal time and a performance were recorded for later analysis. This process revealed two types of communication: verbal and non-verbal. Within these two classes, communication tended to serve three purposes: instruction, cooperation and collaboration. Non-verbal forms of interactions tended to require or solicit more empathy and were more likely to lead to creative activity than the verbal examples.

Brand, Sloboda, Saul and Hathaway (2012) explored the communication between the crowd and the performers during a series of performances at a London jazz club. Ten audience members and seven musicians were interviewed, using a semi-structured interview format. The primary objective of this survey was to try to understand what communicative elements could make a jazz gig successful. After examining the answers, three main topics stood up in significance: the energy of the audience, which can be described as negative or positive; the quality and size of the venue, which can impact communication between both parties; and the expectations of each group. A final outcome of this research was the idea that jazz performers really measure the communication with the audience and how much they take into consideration from the audience behaviour and comments that are made before and after a performance. This contribution maps directly to my first research question, namely, how does expressivity impact upon communication between players? During this project and as its final claim, we have learnt that many contemporary jazz musicians articulate this communication with the audience in their playing and as a way to express their feelings through music.

Following this analysis, I will explore literature that speaks about the personal language and how it links with the musicians' communicative process on stage.

2.2.2 Expressivity and personal language

This section will discuss methods in which communication on stage can be achieved through the development of a musician's 'personal language'. Communicative features of personal language will be a major concern in this section of the literature review. First, I will give a definition of this term:

I refer to personal language as the characteristics that make a musician unique in terms of sound production, whether in composition or improvisation. Aspects such as the use of dynamics, the stage experience or the communicative skills are the most important in order to describe a specific personal language.

Palmer (2016) studied relationships between a player's historical background and their personal language. Around seventy-five participants from high schools and colleges contributed to this experiment. Participants were surveyed on their musical experience, their skills as an improviser, their capability to imitate music aurally and their knowledge on jazz theory. Two main features were shown to be crucial for the mastery of jazz improvisation, namely imitation and technical facility. Other important features included their experience as an improviser, and with their own personal style, their confidence and the knowledge on jazz related theory. Palmer showed that a variety of different parameters of musical expression, i.e. melody, harmony, rhythm and creativity, evolve in parallel with the experience of the performer, and that developing these skills improves the musical communication with the rest of the band in a performance.

Phuti Sepuru (2015) researched unique features that six South-African improvisers developed during their musical language training. He focused on how these qualities would differ from improvisers who had trained in other parts of the world. His research was carried out via a semi-structured interview, which allowed the respondents to discuss their special interests in relation to music. Each interview was structured around a group of themes, which covered elements such as: techniques whilst practicing, musical background, the development of improvisational skills, and musical influences. The analysis was performed on six expert South-African musicians who had played and recorded jazz internationally over several years. Three themes were used as essential sources of information during this investigation. These were: improvisational training processes, motivation and past and present influences. A series of influences were discovered regarding the training of these particular South-African musicians. Among them we can name active listening, self-teaching and formal lessons, family groups, transcribing, the church environment, sharing stages with numerous musicians, imitation and racial segregation issues at that particular time. The researchers demonstrated that internal and external elements of these musicians' motivations shape the way in which they perceive and approach improvisation, as well as the way in which they communicate with the other musicians on stage.

According to this study, improvisational skills and the development of a personal language emerge organically against a structured method of learning. This process encompasses formal and informal practice, as well as understanding the central jazz basics and its techniques, identity development and accurate self-expression.

Although every musician applies their own methods when learning to improvise, it seems that there are certain common factors for every artist. Aspects such as acquiring a good technique, motivation, active listening, reliable practice routines and developing a unique style are the common attributes that seem to define the jazz improviser in-training. Sepuru has identified that despite these similarities between musicians, there are unmistakably various elements that differ from one musician to another in the development of the jazz language and improvisatory skills. South-African musicians have demonstrated that they have a different learning process that makes their musical expressivity to be unique.

Despite these efforts to define musical communication in relation to the development of a personal language, very little of it has been explored in relation to expressivity in that context. As stated above, a key aim of this research is to fill this gap in the literature.

2.3 Expressivity and improvisation

I will now focus on analysing expressivity through improvisation. This section is divided in three parts. The first one explores the philosophical approaches to understanding a jazz solo that includes elements of *risk and dynamism* in it. I will then explore contemporary literature on what *fluency* in improvised language means in jazz discourse. Finally, in this section, I will illustrate with the help of current and past writers, how the current literature defines the *ideal improvised solo*.

2.3.1 Philosophical stances on the solo

Martin Lussier (2011) also discusses his philosophical perspective on the meaning of an improvisation. He states that significance of an improvisation depends on how it was expressed, and how the risk and dynamism was used, instead of what it actually consisted of. The improviser tells us a story that is not merely comprised of a message, but also of a group of techniques that are used to express the message. This group of techniques is a reference point to the resources and the culture that the performer participates in and can therefore be seen as a historical statement about the performer's existence. Whilst the message is important in itself, the means of conveying the message are also highly significant.

Ramshaw (2006), likewise presents some philosophy on improvisation in her discussion of the saxophonist Ornette Coleman and the philosopher Jacques Derrida. During a free-jazz improvisation in France, Coleman performed instrumentally as Derrida recited a text that he had written. Sadly for Derrida, the audience did not like his risky contribution to the act. They drove him off the stage very early in the performance. Derrida aimed here to demonstrate his theory; theory that aims to prove the impossibility to find spontaneity, improvisation and free expression in this type of jazz act, performed in this case by Coleman. According to the audience, Derrida failed. Nevertheless, after his failure he

still exhaustively supported his critical ideas against jazz and jazz improvisation. Contrasting to this thinking, Coleman did not support Derrida's view on improvisation: Coleman theorised on this matter by relating improvisation and jazz to freedom. He also stated that to achieve this, we need to avoid following the harmonic and chord patterns as would in pure tonality, and search for risk and the use of dynamism. He also supported the core idea that melody or improvisation line becomes harmony and vice versa, deleting the barrier that separates both. Liberation, freedom, creativity and revolution are where Lussier and Ramshaw come to a philosophical consensus on the meaning of improvisation. Conclusively speaking, freedom is to Coleman the expressive factor that perhaps include all the elements to achieve the successful jazz performance. It seems, according to Coleman, that jazz musicians need to learn all the theoretical aspects to eventually get rid of them and play intuitively and reach this musical freedom.

In the following paragraphs, I speak about the relevant literature on the fluent expressivity in the jazz performance and consequently in the jazz language.

2.3.2 Fluent expressivity

If jazz is a language, then how does one become fluent in it? This next section will unpick ways in which theorists contextualise or address this question.

Nolan (2008) relates jazz idiom fluency to the way the language is learned. In his exploration of jazz idiom fluency, he metaphorically links the learning of it to studying verbal languages. He suggests that not everyone has had the chance to listen to this style since childhood, meaning that some practitioners are at a certain disadvantage. However, as with any language, fluency can be developed later in life, almost as a second language.

For one example, learning the blues scale is an essential part of learning the jazz language. The six notes of the scale can be applied and expressed in practically any Western musical styles, due to its versatile character. To further develop Nolan's metaphor, a baby learning a language will start with one word, then two and eventually start learning aspects such as dynamism in her/his speeches, in the older age. In conventional music training, we will perhaps start with arpeggios, then pentatonic, blues, and finally the other important scales such as the Greek major modes, harmonic and melodic minor, whole tone and bebop scales. The blues scale can be considered as a middle point between playing simple and complex expressive combinations.

According to Nolan, the student can develop the expressive skills, building a language, by adding one note at a time. From the perspective of the teacher, we cannot pretend that our students will be easily capable of jumping from pentatonic to be bop melodic minor, as we cannot pretend a child to be able to present a research at a conference at the age of three. The last aspect to emphasise about his view

regards the expressive attributes that we need to show when communicating an understandable message. Interaction, desire, sense of time, great rhythm and melodic intention and development are the aspects that Nolan assumes we need to include (2008).

Heinitsh (2013) investigated the jazz language fluency, looking at John Scofield's musical expression as example. John Scofield is a clear example of a jazz language using post bebop language to further elaborate his music and improvisations. He includes various bebop elements in his playing, such as substitutions, pentatonic scales and altered dominant chords. Considering that this guitarist had the influence of rock and blues before becoming a successful fusion player, it is then easier to understand the type of expressivity that he stylistically demonstrates. He, as well as musicians like Hancock, are among certain musicians who, in the 70s, were using the jazz language to improvise and compose in other styles.

We can mention that in previous decades improvising outside in jazz was an advanced way of playing this music. Scofield developed this skill and became a pioneer of such a currently popular tendency. Besides, and stylistically distinct, he demonstrated a powerful use of swing feel, as well as using his particular slightly distorted sound.

Concluding with this topic, Scofield has been a pioneer in the use of expressivity through improvising in and out technique in the style of jazz. This aspect relates directly to my second research question, how do jazz musicians understand the relationship between expressivity and improvisation? It is very difficult to discover a new way to play and be successful on it. Nevertheless, John Scofield has definitely achieved it. Heinitsh in this contribution to knowledge claims that by mixing or fusing styles and trying new musical concepts, as Scofield did, we are able to finally express innovation and complexity.

2.3.3 Expressivity and the ideal improvised solo

To conclude this section, I will now refer to literature which concerns itself with the expressive features of good quality improvised solos. Ciorba (2009) created a system to predict the success or failure of an improvised solo. He described three factors which were reliably able to predict a good quality solo. These three factors were: jazz improvisation achievement, time spent practicing, and listening experience. A number of 102 students from high school were assessed on this research.

Too much rigorousness from part of the judging team, who were highly skilled professional musicians, was the cause of the generally low marks in the improvisation achievement assessment. This variable of *jazz improvisation achievement* was generated by a table after the tough mentioned judgement. Two songs were used as a vehicle for the assessment of this parameter; Bb blues and Satin

Doll. Astonishingly, a vast portion of the participants acquired a very low mark. Perhaps, improvisers of the present could have a lower musicality than musicians from the 20th century. It seems that the training to become a successful improviser could currently be less demanding than before. These reasons might explain why the marks were very low.

Moreover, and unexpectedly, over half of the participants did not practice improvisation regularly. According to Ciorba, the creator of this prediction system, it seems reasonable to suggest, again, that this is due to the differences in stylistic conventions between 20^{th} century and contemporary practice. Nowadays, other types of training are typically valued over improvisational practice and the development of expressivity in the aforementioned task.

Furthermore, for the listening experience variable, the study examined the frequency in which the participants listened to music. The mean of hours among all the participants was 23.31 per week. 16% of the participants listened for around 40 hours a week; 5% of them listened around 60 hours of music per week; and finally 1% of the participants listened around 90 hours per week. The remainder of subjects listened to under 40 hours per week.

This illustrates that contemporaneously successful improvisers are not necessarily obsessed with listening to music as training, and that good solo practice seems to come from other types of training rather than listening to others. The way in which the amount of time spent listening to other improvisers impacts the results of this study is by considering that musicians listen to music mostly to train their ear, rather than for entertainment. Perhaps Ciorba in his study, and considering these results, discovered a new tendency, claiming that listening to other improvisers is not as important task as it has been in the past, in order to develop our expressive attributes.

In terms of styles, the participants of this study spoke about the quantity of time they spent listening to all styles. Jazz resulted with a mean of 4.40 hours per week, rock achieved 4.27 hours per week, rap got 2.44 hours per week and classical obtained 2.21 hours per week. This also proves that many of the current jazz improvisers study other musical genres to expand their musical expressivity in jazz.

Thomas Williams (2011) explored the cognitive processes involved in producing the ideal solo. He states that a massive range of techniques, tools and mechanisms need to be managed by the improviser in order to create a coherent improvisation in real time. Achieving this is difficult, requiring an unconscious mastery of all the material needed to confront the activity of improvisation. This is because the musician needs to focus on the higher-level or more abstracted elements of the process, in order to achieve a more emotional outcome. This is only possible once the lower-level technical detail is in place. Williams demonstrates that the information that a musician processes while improvising is drawn from the unconscious, rather than from the conscious mind. This

conscious information is stored within the so-called "knowledge base", which is comprised of a group of rules and a relevant syntax for an expression.

Mendonça & Wallace (2004) studied the activity of improvisation by analysing creativity and temporal planning. This study tells us that the musician uses more cognitive skills in a free jazz performance than when performing a jazz standard. They emphasise that, in free improvisation, the differences are high between different types of ensembles, especially in terms of creative cognition. Furthermore, a high use of conscious cognitive tools in performance will likely stop the musician from acquiring a high level of creativity and improvisation efficiency in a free jazz context. The same will happen in a jazz standard situation, where the musician needs to completely familiarise her/himself with the musical piece in order to avoid the conscious and explore the creative path. Conclusively, and in relation to my second research question, the right type of expression in a solo resides in the right quantity of creativity and correct conscious control of decisions.

2.4 Expressivity through instrumentation and modal composition

I will now consider literature that discusses expressivity in relation to two fundamental composition techniques, namely instrumentation and modal harmony composition.

2.4.1 The use of instrumentation

The primary concern of the following section is the way musicians use instrumentation for a particular expressive aim.

Some of the most renowned instrumentations for jazz combos have been: Tenor saxophone, piano, double bass and drums set as in *Coltrane Quartet; or* alto saxophone, piano, double bass and drums set for *Brubeck Quartet; or* trumpet, tenor saxophone, piano, double bass, drums set, as in the formation of *Miles Davis Quintet*. Every one of these particularly successful instrumentations had some expressive attributes that helped to achieve a unique and majestic sound.

Bertholf (2006) explored Coltrane's quartet and the expressive factors that helped the success of this band. The formation of this quartet in 1960 changed Coltrane's expressivity quite drastically. The facets explored with this type of instrumentation were mostly modal improvisation and the transformation of songs like "My Favorite Things" into modal sound. With this kind of instrumentation, John Coltrane transformed the self-expression of unknown songs into magnificent musical backgrounds for intense and limitless improvisations. This quartet formation was a vehicle for Coltrane to develop other expressive aspects such as overblowing, panmodality by playing freely using many different keys and scales, altissimo register performances and multiphonics.

Hansen (1962) analysed Brubeck's quartet musical career, considering his contribution as a pioneer in some aspects of jazz using this type of instrumentation. He used this combination of instruments to discover the inherent expressivity in the jazz polyrhythm. Before him, some expert performers experimented with polyrhythms in the style of waltz jazz, e.g. Max Roach or Benny Carter. What Brubeck discovered with this instrumental experiment was mostly rhythmic, going further than any of the other famous players by composing mysterious rhythms and mixing or layering different patterns simultaneously.

Morton (2006) studied Miles Davis' expressive aspects of instrumentation and his contribution to jazz, as used in the Miles Davis Quintet. He used this formation to achieve many innovations during that period of time. In the late 60's, he used these specific instrumentations to develop the darkness and complexity of his sound, using more electronic instruments as he was getting older. Miles explored, innovated and invented as a way of illuminating his personality through the sound, and to communicate messages that were specific to the materiality of their production. The expressivity acquired by Miles' instrumentation responded to the requirements of the composer.

A discussion of using polyrhythms as no one has done before with an exclusive instrumentation has taken place. In addition, adapting the instrumentation depending on the personal development of a musician is also a remarkable aspect that we have been able to appreciate in the current literature about this subject. We can conclude by saying that finding the right instrumentation is as important as finding a very skilled combination of performers.

2.4.2 Expressivity in contemporary modal composition

The use of expressivity through modal harmony has attracted my interest as a vehicle for understanding some characteristics of contemporary jazz musicians.

If we explore the moment when modal jazz started, we can focus on two personalities: Miles Davis, and Django Reinhardt. What happened in France, Belgium and America with Django Reinhardt, who was practising the modal jazz composition already in the 30s and 40s (Cugny, 2014), cannot be ignored historically, and helps us to understand some expressive elements of this harmonic approach. However, in the following lines, we are going to study the expressivity features of modal jazz, as it appeared in the hands of Miles and the musicians around him on this journey into the experimentation and American birth of modal jazz.

Monson (1996) explored these expressive factors of the modal approach. She stated that the birth of modal jazz was Miles's achievement, and declared "So What" to be the canonical song of this style.

The melodic concept implies the movement of the same motif a half tone up and a half tone down, in a minor 7th context. Bill Evans changed the expressivity of this tune and modified the harmony of it by playing quartal chords instead of tertiary, keeping the characteristic modal move from chord to chord.

Monson stated that there are some expressive aspects to emphasise in terms of modal approaches in the improvising task. Miles and Evans would fit to the rhythm section by using not much more than the Dorian mode, while Coltrane and Adderly would express their narrative for this song by allowing themselves freedom in relation to scales and keys. With this understanding, we can deduce and add that there are two elements that transcend this approach to harmony: fewer chords than the rest of jazz styles and more freedom in terms of scale choice.

Finally, modal expressivity also has implications for rhythm. This manifested in several different ways and these changes are possibly due to the habit of drawing a changing harmony, as had happened in the other jazz styles like bebop, swing or hard-bop. Bassists using pedal notes much more often, keyboardists needing to accompany a greater variety of riffs and vamps and drummers playing with more density, with an extended use of cross-rhythms, are the clearest examples of these changes of rhythm. Coltrane and Davis in the 60s are very powerful illustrations of what happened in that era, (Omry, 2009)

Detailed above, I have illustrated some literature on instrumentation and modal jazz composition. In terms of instrumentation, I could emphasize that there are some rare ensembles that require the rest of the musicians and the composer to make additional effort in order to achieve an appropriate sound. Bands such as a duo of double-bass and voice, or a jazz ensemble with an Indian sitar, are examples of the importance of instrumentation is for the resulting sound texture.

In the case of Coltrane, Brubeck and Davis' work, they did not find their appropriate instrumentation at the first attempt. Rather, they had to work hard on their music and ensembles to be able to eventually find the instrumentation with which they could materialise their more personal ideas.

Regarding modal jazz, there is definitely a change after this approach to harmony first appeared in Reinhardt's and Davis' contributions to this phenomenon. What can be appreciated is a stylistic self-expression change, from a more predictable type of harmonies like in swing, beloop or hard bop to a more surprising changes type of style, as it started happening in modal jazz. A mix of unique rhythmic and harmonic features classified this style as distinctive and still today heard widely across the world.

2.5 Literature review summary

In this literature review I have discussed a range of relevant works that illustrate and link to the research questions of this research. Some generic works on the concept of musical expressivity have been presented at the beginning of this section in order to obtain a generic idea of what has been researched about this concept. Following this, I have analysed the expressivity through the communicative process happening in live jazz, with the help of contemporary jazz writers. Two different primary ideas emerge from this section, namely "defining expressivity through communication" and "the personal language". The first one has helped us to find a definition of this concept of communication, the second has enabled us to comprehend the link between the personal language and the communicative aspects of our playing.

I then analysed expressivity in relation to improvisation, where many improvisational aspects of the present literature have been commented and scrutinised. This section was split into three parts. First, philosophical theories about the contemporary solo were presented. The second part comprised of ways in which contemporary jazz theorists critique the development of a fluent jazz language. Finally, I discussed factors that can impact the expressivity of the *ideal* improvised solo.

The last section of this literature review discussed expressivity in relation to instrumentation and modal jazz harmony. First, I established an overall idea of how some specific instrumentation have been sought and required in order to obtain the sonic results that a specific musician was looking for. I followed this with an overview of the ways in which modal harmony has been studied in relation to expressivity. Finally, I contrast modal harmony with older jazz styles.

It is relevant to remark that there is clearly a trivial context for the discussion of expressivity in relation to jazz music, and there is even less research into the ways that it is used as a practical tool for jazz composition. The remainder of this thesis will explore the ways that participants' interviews have revealed certain ways in which contemporary practitioners engage with this concept. Furthermore, these expressive attributes of jazz practice are further elaborated upon by the new musical works that I have developed to aid this research.

In the next section, *Chapter 3: Methodology*, we are going to examine the methodology of this research. Specifically, we will examine the two methods to process the data. These methods are: the *semi-structured interview*, to collect the information and *Thematic Networks:*An Analytic Tool For Qualitative Research, to analyse the collected data.

Chapter 3 – Methodology

In this section, I study the methodological framework that I used to collect and analyse data for the context of this thesis. I first describe the aims of this thesis in terms of methods. I then provide an evaluation of 'qualitative analysis', which is a general theoretical framework I apply to the management of data. I next discuss two specific examples of qualitative analysis that I use in my research: *thematic networks* and *semi-structured interviews*. I evaluate how these processes work in general terms, before moving towards a more thorough analysis of how I applied these ideas in practice.

Immediately following this, in *Chapter 4: Methods*, I give an assessment of the lower-level methods that I applied to my research, with focus on the following topics: *the role of the researcher; the process of recruiting to interview; consent to do a doctoral research; data collection; interviews transcription; the reading; pre-analysis: before the thematic structure; and my compositional methods.* I then conclude with a short overview of my methodological focus.

3.1 What are the aims of this research?

My research experiments with expressivity as a key feature of jazz compositional design. This thesis breaks this investigation down into an examination of four processes that are key to expressivity, namely *communication*, *improvisation*, *instrumentation* and *modal harmony*. As a way of determining how musicians speak about expressivity, I interviewed a range of jazz musicians in a semi-structured format. I used these four practices to motivate compositional processes which reflect and evidence this use of expressivity. The musical pieces have been consequently composed to illustrate the most important ideas taken from the various interviewees, and further my own perspective on the phenomenon of musical expressivity.

3.2 Why use Semi Structured interviews for data collection and Thematic Networks for analysis?

My qualitative approach to research aims to obtain data through open-ended communication. This is the primary reason that I chose to use semi-structured interviews. During the application of this method, there were two primary high-level questions at hand: what do interviewees think and why they think it? Understanding a specific topic from these two perspectives by using qualitative techniques helped me to derive in an in-depth understanding of this topic. Moreover, this also allowed me a more thorough knowledge of my participant's motivations and feelings; key to my understanding of how they approach their expressive musical practice. The results from the qualitative methods are more descriptive than those obtained from quantitative methods and my conclusions were drawn from my analysis of these descriptions. Qualitative research has its origins in the social and behaviour sciences. It is difficult to understand what people perceive and how they think and

qualitative methods attempt to tackle this complex problem through description and communication. (Bryman & Burgess, 1994)

In the context of qualitative methods, there are a range of different approaches to data collection and analysis. Different types of qualitative method are appropriate for different types of research problem. The most commonly used examples are: *in-depth interviews*, *record keeping*, *process of observation*, *case study research*, *ethnographic research*, and *focus groups* (Bryman & Burgess, 1994). A thorough assessment of the benefits and pitfalls of these different approaches is beyond the scope of this thesis, but for my research I decide to use *in-depth interviews*, which are also called *semi-structured interviews*, as I found that this method offered me the appropriate practical benefits. This is because it would allow me to discuss my ideas and problems with my participants in a fluid and communicative fashion. By applying the in-depth interview method, I have been able to obtain very specific information around each of my four research questions. This is because I was able to fluidly tailor my line of inquiry in relation to the topic at hand by adding improvised follow up questions to the main questions that I prepared. This aspect has helped to re-direct the interviewees to the specific topic when the participant's response to the main question was insufficient.

With this table we can clearly differentiate between qualitative and quantitative research methods:

Table 2: Qualitative and quantitative research comparison

| Qualities | Qualitative Research | Quantitative Research |
|--------------------|--|--|
| Objectives | Description of individual experiences and beliefs. | Description of characteristics of a population. |
| Types of questions | Open questions | Closed questions |
| Instrument | Semi-structured methods: in-depth interviews, participant observation and focus groups | Structured observation using questionnaires and surveys |
| Kind of data | Descriptive data | Numerical data |
| Flexibility | Contestant answers alter how and which questions researchers will use next | Contestant answers do not influence on how and which questions researchers will use next |

Using qualitative methods has allowed me to dig deeper into the concept of expressivity than I could have achieved with quantitative methods. This is because of the characteristic differences between these two processes. My thesis wanted to describe a concept based on opinions and beliefs; information that can more easily be gained from a necessarily subjective exploration of what people feel and think. My qualitative approach allowed me to use open-ended questions, which could then be supported with additional follow up questions to allow me to dig a little deeper into the remarks of my participant. As I will explain more fully later in this chapter, asking follow-up questions also allowed me to redirect conversation when a participant would wan

der a little off-piste (as interviewees are liable to do when talking about their own personal experience and understanding of a topic; potentially illuminating one slight risk of such an approach). Choosing a quantitative approach for my research would have limited my results to a more objective type of data, which would have been insufficient for encapsulating these highly personal explorations of expressivity as used, felt and talked about by jazz artists.

Once data has been collected, there are a range of different approaches that can be used to analyse the results on a qualitative basis. Different types of research question suit different types of analytical approaches. The particular method that I used for my research is *content analysis*. I have chosen this method because it is proven to be reliable when the aim is to analyse data from interviews. Moreover, it is the most popular method applied to qualitative data. It is capable of analysing data in the shape of media, text or physical elements.

It would have also been possible for me to use *narrative analysis* for this study. As opposed to content analysis, this method explores content from various sources, such as observations from the field, surveys and interviews. Similar to content analysis, it would have allowed me to base my investigation on participant interviews. However, I did not use this method because narrative analysis is often geared up to produce work with less personal and more numerical data (Feldman, 1995), which did not work for my research aims.

Discourse analysis could also have been deployed. Also using interviews, this method specifically analyses the social context of the interaction between interviewer and respondent. The day-to-day environment of the participant is used as a source of data (Feldman, 1995). This procedure was very far from the aims of this research. In this project, I never had the intention of exploring the interaction between participants and interviewer. Furthermore, the environment of the participant only was relevant for my project in cases where a few of the questions of the interview needed to explore a specific musical context, be it the musical stage or the daily routine. In most cases, environmental factors could be reasonably explored with the interview itself.

Grounded theory is another popular analytical method. This method aims to explain why a specific phenomenon happened. A study of cases concerning to the study at hand is carried out in different settings, using the findings to explain that phenomenon. Eventually, after many studied cases, an explanation will be given to explain all the cases. This method is linked to the aims of my research but it has not been used. This is because the aim of my research is not explaining why expressivity happens, but instead how the contemporary jazz musician uses it.

3.3 Qualitative Methodologies

In this next section, I probe a little deeper into the general concept of qualitative methodologies and analysis and discuss two key qualitative methods that I engaged with: *thematic networks* and *semi-structured interviews*.

There are various theorists who have contributed to the development of qualitative analysis. In the context of my thesis, Silverman (1993), Miles and Huberman (1994), Bryman and Burgess (1994) and Feldman (1995) are influential researchers in this field. Silverman, in his exploration of Qualitative Analysis tried to represent how four different research methods of data collection can simultaneously be used in qualitative research. Elsewhere in his research, he argues that by taking into consideration the different types of data that these four methods produce, there is a unified way in which the data can be analysed in any of the cases. These analyses aim to get the research participants opinion on their problems and activities. Moreover, relating this theory to my research, the interviewed musicians are also asked about their expressive practice in relation to contemporary jazz, although in my research I have only used one qualitative research method for collecting data, namely semi-structured interview and one for analysing the data, namely Thematic Networks.

Miles and Huberman in their work on Qualitative methods wisely stated "good research is not about good methods as much as it is about good thinking. Good thinking means to look for and find patterns in the data. Good thinking means to construct substantial categories from an array of codes. Good thinking means to transcend the localness of a particular case to find its generalizability and transferability to other contexts. Research methods are excellent tools, but they are only as good as the craftsperson who uses them". Clearly these two authors relate qualitative research to a good thinker rather than good methods. This seems to be the key to good qualitative research. As it has been done in my research, the synthesis of themes and data needs to happen in order to transcend information and link ideas from different sources of information, be it an experience that an interviewee has had in the past or a theory that this interviewee has proved during the years of composing jazz.

Feldman observed the vast quantity of data that the researcher typically has acquired after finishing the data collecting process in a qualitative research project. She discusses the difficulty of generating interpretations from all these data, as she states how the perspective of the researcher on a specific work changes after doing the qualitative data analysis. She comments that her view on data analysis has developed in sophistication after trying to understand many qualitative data works. This analytic process has allowed her to obtain a more detailed perspective without losing the overall knowledge gained in the process of applying different research techniques. She also mentions that new questions and new interpretations consequently take place during that procedure. Likewise, in my analytic procedure for this research, keeping an overall view of the thesis while applying the analysis of data has been challenging due to the massive quantity of information.

While analysing the data, and even when looking at the quantity of data after my interviews, the same feeling than Feldman had, came to me. Trying to organise all the collected data in an understandable and reliable form needed a laborious and challenging process. However, and as I mention below in my explanation of how Thematic Networks works, this procedure has efficiently allowed me to schematise the data in a very well-organized manner.

3.3.1 Thematic Networks: an analytic tool for qualitative research

Boyatzis (1998) and Roulston (2001) carried out some explorations on the use of the qualitative analytic method "Thematic Analysis". They explain that although it is not currently used and acknowledged as it should be, it is still a much-practiced qualitative analytic method, being currently applied to identify and hierarchically analyse the most important themes from a given data. A hierarchy of three types of theme results from this process. *Basic themes* are the simplest and lowest level. Basic themes are grouped by topic to form *organising themes*, which encapsulate the lower-level basic themes. Finally, organising themes are grouped by topic to form the *global themes*, which are top of the hierarchical structure (i.e. the most thematically significant) and encapsulate organising and basic themes (see Graphic 1: Themes structure, below).



Graphic 1: Themes structure

Thematic networks (Stirling, 2001) is an iterative and qualitative method for processing research data. During each phase of the process, the data is divided in separated categories. Differences between categories in the analysed data are determined and used to group samples. A coding system is applied in order to structure the gathered information into an easily comprehensible form, explained in the following paragraphs.

I have used this method to structure the data that I gathered from my participant interviews in an efficient and communicable manner. One benefit of thematic networks is the fact that all data is structured into a diagrammatic representation (see Annexe III: Diagram of themes, pg 138), which visually demonstrates similarities and differences in the collected data. I then use the visual layout of this data as a way of unpicking key ideas, which I relate to my compositional practice.

As compared to other methods that aim to reconcile conflicting definitions of an issue, the objective of Thematic Networks is to understand the meaning of a problem or idea. It appears that this analytic procedure has still needed to adapt and rename in order to fit with the objectives that Thematic Networks was demanded to accomplish such as systematization and presentation of qualitative analyses, as well as illustration and summary of the main themes constituting a piece of text.

I will now give a detailed explanation of how Thematic Networks works and how it has been implemented in my research. Various stages, described in the following lines, are compulsory for the creation of a thematic network.

3.3.2 Analytic stage A

Firstly, the text is reduced to a shorter amount of writing. To achieve this, three different steps must be followed: *coding material, identifying themes* and *constructing thematic networks*.

Coding material (Step 1)

In this part there are two processes: (a) elaborating a coding framework and (b) reducing the information into segments by using this framework. A coding framework is created by naming every piece of related data, with normally a word or a short sentence. The information of every piece of data is taken from the interviews' transcripts.

Identifying Themes (Step 2)

There are two different tasks in this step: (a) *identifying themes* from the text of the data (in my case, the interviews) by reading it and (b) *refining the obtained themes* by selecting the most significant for the research and discarding others.

Constructing Thematic Networks (Step 3)

In this section, there are several tasks to be carried out. These are: (a) structuring the themes by relating them by topics and importance (b) making a selection of the basic themes, (c) arranging them into the organizing themes (d) identifying the global themes (e) describing the structure of the thematic network in a five-page document (f) and refining and polishing this network by repeating step three many times.

3.3.3 Analytic stage B

The initial task in this stage is <u>describing</u> and <u>exploring</u> thematic <u>networks</u> (Step 4). This section comprises two parts: (a) *describing* the network by studying its outcomes and (b) exploring the network by reading and improving the concepts and re-building its structure.

The next stage is <u>summarising</u> the thematic networks (Step 5). This step forces us to simplify the network into a small structure of the most important themes. It is important to start memorising the most important parts of the network at this stage.

3.3.4 Analytic stage C

In this stage, we incorporate the term *data exploration*.

There is a unique task at this point: <u>Patterns interpretation (Step 6)</u>. An exploration and interpretation of the data patterns that have arisen during the analysis is carried out here. Every single theme starts associating with others into sections to start making the thesis writing.

3.4 Semi-structured interview

Most of my participant interviews were carried out in person, with the exception of a small number which were mediated in writing. Whether in person or in writing, each interview used the same set of questions, using a *semi-structured interview* approach. This type of interview is a qualitative method in which the interviewer asks the participant a pre-determined group of open questions (*please see annexes for the list of questions that I used, pg 137*). Within this framework, the interviewer retains the option to spontaneously generate new sub-questions based on what is revealed within each unique investigation. This allows him or her to dig a little deeper into the idiosyncratic response of each participant.

In Benjamin's (1981) discussion of interview technique, he discusses the relationship between empathy and interview practice. He suggests several procedures that can be used by the interviewer as a way of responding to the unique narrative of thought developed by each participant. He uses these techniques to provide a basis for empathy between interviewer and participant.

Hague (1993) extends Benjamin's ideas with an analysis of contemporary interview technique. According to Hague, the most important features of interviews are the communication and interaction. He argues that the interviewer needs to have an active presence within the interview and allow the participants to feel comfortable as they deliver their responses. The interviewer, in this instance, is responsible for guiding the participant through the interview process. As an interviewer, I have endeavoured to make the interviewee feel as comfortable as possible on this aspect. I have attempted to do this by asking improvised follow-up questions by routine, as a way of further unpicking the responses of my participants.

A pilot interview was carried out at the University of Edinburgh before starting the actual data collection. A lecturer from Edinburgh College of Art was invited to be interviewed in order to examine the accuracy and effectiveness of this type of data collection for this research. During the first questions of this semi-structured pilot interview, no doubts or issues came up. Only after asking a few questions, I came to understand that some follow up questions could improve the outcomes of the process and lead to a more interactive, comfortable and thorough data collection process. The main questions were also partly modified with the help of the academic during the pilot interview, in order to find some open questions that could be easily followed by follow ups. These additional questions were practised so that I could fluidly re-direct the conversation to the topic at hand if necessary. The pilot interview also raised some questions about the proposed length of my interview. Although the interview length was not a problem during data collection, in the pilot the interview felt excessively long, to both me and the lecturer. The pilot interview was around eighty minutes long: twenty minutes more than the average interview during the data collection. This helped me to structure the size of my interviews by allowing me to understand that my questions were leading to an unwarrantedly long conversation.

In the following section, *Chapter 4: Methods*, I inform and scrutinise all the steps taken as researcher before and after the analysis of the data.

Chapter 4 – Methods

The process of my research has included various steps. Firstly, I have collected the data by interviewing seventeen musicians, using the semi-structured interview. When I had collected all the data, I condensed the material into a thematic network, as explained above. Once the network was complete, I began to use the thematic network as a means of structuring my music composition work and my thesis. In this section, I am going to discuss a range of different topics concerning my methods used in this research, from collecting the data up until finishing the thesis.

4.1 The process of recruiting to interview

As stated above, I used semi-structured interviews to source information from my participants. I chose to interview professional jazz practitioners to ensure that the information that I received would be relevant to the context of contemporary jazz practice. It was also important to me that the participants were active composers, due to my personal focus on composition.

Twenty-two professional jazz musicians, resident in America and Europe were called to contribute to the interviewing process. They were chosen considering that they needed to be professional jazz musicians or professional musicians that played jazz regularly. All participants were previously emailed with an invitation to participate in this research. Nineteen accepted, from which fifteen were interviewed on a face-to-face procedure and two of them by written questionnaire. Pat Metheny and George Benson were the other two non-interviewed musicians. Both replied showing interest in the first email, but the interview was eventually not possible due to their tight touring agenda.

Of the seventeen musicians that I interviewed, two of them were unable to attend in person, and therefore answered my question via a questionnaire. In both cases, the musicians consented to the interview, but were unable to allocate sufficient time for a face-to-face meeting. It is extremely relevant to mention that this did reduce the quality of the interview. This is because I was unable to ask follow-up questions in a fluid and conversational manner and therefore I could not physically interact with the participant. Whilst all seventeen interviews were structured around the same primary questions, the fifteen face-to-face interviews were able to penetrate more deeply into the topics at hand. Again, this is because I had the ability to ask follow-up questions.

In many cases, the information gathered from follow up questions was more relevant to my study than the responses to my primary questions. For instance, when querying the participants with my primary question about the importance of communication in jazz performance, I responded to the participant's answer with a more specific follow up question. This question was tailored to dig much deeper into

the idiosyncratic way in which each musician uses communication as an expressive feature of their practice. For example, I could ask them about how they personally understand the relationship between expressivity and communication, by drilling into the way that they respond to the topic of communication. When discussing an idea as nebulous as expressivity, it is essential that we are able to understand the subjective manner in which each participant personally defines the term.

After finding participants, the interviews were conducted either face-to-face or by using web-conferencing tools, such as Skype and Facebook's video messenger service. During one interview, audio quality was low enough to warrant additional post-processing in Cubase in order to improve speech intelligibility.

4.2 Consent to do a doctoral research

All participants were asked permission to use their names and gather information for this research. All agreed to this. In addition, my research proposal was subject to committee approval and ethical procedures at the University of Edinburgh in 2015, in order to proceed with this investigation. (See Annexe IV: Participant Consent Form, pg 141 and Annexe V: Research, Ethics and Knowledge Exchange Committee Aprobal Form, pg 143).

4.3 Data collection

Depending on participant availability, each interview length varied from 40 to 67 minutes long. As mentioned above, each interview was audio recorded. Different venues were used. I was especially interested in using venues with musical instruments, as this often allowed the participant to support their ideas by playing live music. University spaces, restaurants, music studios and composers' homes were used as interview locations.

Alongside face-to-face interviews, as mentioned above, in two cases we could only use the written questions, sent via email. As mentioned above, although this still produced good quality and appropriate data, I found the results to be much less specific. I feel that this is because we did not get the chance to drill a little further into the investigation with follow up questions and informal conversation. (See Annexe II: Interviews questions, pg 137)

4.4 Interviews transcription

The process of transcribing the interviews helped me to understand and contextualise the data. Indeed, my first approach to analysing data required me to unpick the most important concepts covered by the participants' answers. The transcription process required me to listen in detail and cement conceptual links between the various transcriptions and contemporary literature.

4.5 The reading

Through reading the transcripts, I was better able to identify themes and generalities in the responses of my participants. Allowing myself to become familiar with the text by reading through several times was crucial to this process and helped me to analyse and conceptualise upon the responses of my participants. This has been a crucial part of allowing me to map out particular claims and arguments within this thesis. Moreover, this iterative approach to reading through the material was key to the development of my thematic network. By reading the data from the interviews, not only have I become better able to understand the input of each participant, but I have also become better able to produce my own rhetorical and practical stance on expressivity in jazz music.

4.6 Compositional methods

My research splits in two sections, the theoretical and the practical. In the theoretical, a study of all the gathered data is reflected in this approximately 50,000-word document. In terms of the practical contribution, all the most important themes that have been acquired from my semi-structured interviews and data analysis are experimented with in five musical pieces. These pieces have different formats, including: live recorded in jazz trio format, studio recorded using computed instruments, musical pieces recorded with musicians in studio, and an improvisation based work of eighty-minutes of length. These formats have been the chosen artistic activities to address expressivity in various jazz music contexts. In musical compositions of this thesis, there is a different arrangement of musicians and materials.

Using thematic networks analysis of data, three global themes have arisen. The first global theme is illustrated by *Musical experiment I* and *II* and with reference to the first research question "*How does expressivity impact upon communication between players?*" The second global theme has been illustrated by *Musical Experiment III* and with reference to the second research question "*How do jazz musicians understand the relationship between expressivity and improvisation?* Finally, the third and last global theme has been represented by *Musical Experiment IV* and *V* and with reference to the third and fourth research question respectively: "*How do composers of contemporary jazz talk about expressivity in the instrumentation activity? And How do contemporary jazz musicians discuss the use of expressivity in modal composition?"* (See Annexe III: Diagram of themes, page 138)

In the *Experiment I* and *II*, three musicians and several rehearsals took place in order to musically illustrate the investigated themes. For these two musical pieces, drums, guitar, bass, vocals and flute were chosen to interpret these themes.

Musical Experiment I and II are used to illustrate the themes of Chapter Five. The primary theme of communication is broken into two sub-themes: 'defining communication' and 'personal language', which are respectively catered for by Experiment I and Experiment II. Both compositions have been recorded in a jazz-rock trio format with a fourth and fifth collaborative lead instruments. In both musical works, the aim is to represent all the themes, which have the form of instructions and have been obtained after the analysis.

Musical Experiment III is used to illustrate the themes of Chapter Six. This piece features myself alongside two other musicians. During these sessions, it was imperative that musicians did not practice together before takes, so that the improvisation was as spontaneous as possible. The primary theme of Chapter Six (Improvisation) was split into three sub-themes, which are respectively dealt with by different recordings. The first one 'Risk and dynamism' reflects upon these two processes in improvisation. The second 'An improvised idiom' embraces many jazz idiom peculiarities in terms of expressivity. Finally, 'The expressive features of an ideal improvised solo', focusses on the expressive elements that form that idyllic solo.

Musical Experiments IV and V respectively map onto the chapter themes of 'Instrumentation' and 'Modal harmony'. In both recordings, all the instruments are played by the composer, using the computer as MIDI instrument and as other musical tools, such as drums programming. This feature has been carried out in order to show elements such as a lack of communication between musicians in a performance or recording.

Instrumentation's sub-theme 'The use of expressivity through instrumentation', embraces different instrumentation settings that can be used in order to obtain a specific type of expressivity. This is reflected in *Musical Experiment IV*. Themes such as different expressivities depending on what instrumentation there is; or adapting the composition when there is a folk instrument which is harmonically limited, are here illustrated sonically.

In *Musical Experiment V*, we focus on themes extracted from my participant interviews, such as the descriptive capabilities of modal harmony, and the directionality imposed by a tonal centre.

All the pieces are presented as an audio/video link, and they can be found in the Annexe I "Musical Compositions" in the page 126 of this document.

4.7 Conclusion

In these two chapters, we have explored the overall methodology of the study and the lower-level methods that I engaged with whilst working on this investigation. The qualitative method has been used in order to obtain information of a specific concept, namely expressivity, and qualitative approaches have been carried out together with a Thematic Network. Once the information has been transcribed, this Thematic Network has helped me to make sense with the findings. The methods with which the musical compositions have been composed allow me to evidence the claims of this thesis musically.

The following chapters present the findings and how every theme becomes music. I will start with chapter 5, showing the analysis of the communicative aspects of the jazz performance from the perspective of musical expressivity. In the first part of this chapter, I will describe definitions of communication between musicians on the stage from the expressivity viewpoint.

• Chapter 5 – Expressing communication

5.1 <u>Defining communication in contemporary jazz</u>

- Musical work: Musical Experiment I: Se fue la tormenta
 - Translation: The storm is gone

The song "The Storm Is Gone" for this section 5.1 has been created in a jazz-rock trio band format. The players were instructed to think about: "communication, exaggerated communication with each other". I kept the players of this piece unaware of this chapter's themes and I gave them only the instruction above. This concept achieved the greatest prominence during the free-jazz section of the song, from 2:25 to 4:46. The link and score of this tune can be found on page 126, 127 and 128 of this document.

In this section, I develop an argument on non-verbal communication in the context of contemporary jazz. In particular, I will focus on recent compositional and improvisational works. This requires me to provide a clear definite of 'communication' in the context of contemporary jazz, which I achieve with reference to theories discussed by professional composers. Through an analysis of this definition, I reveal the complex relationships between musical expression and communication.

The primary claim of this section is that by developing our musical ear, we directly develop our communicative attributes as musician. This ear training is the most important aspect to consider when developing communication skills in music practice.

5.1.1 Where does the interest for this topic come from?

This specific topic is under exploration in this thesis because of my academic, professional and artistic interests. My musical practices directly relate to and embody the concepts of expressivity and communication in contemporary jazz. Moreover, I work with these concepts professionally, not only as a musician and composer, but also as a lecturer. As an artist, I continuously analyse and question the meaning of communication and expressivity. Crucially, these diverse practices have raised numerous doubts and curiosities that are so far unexplored and will be questioned in the following paragraphs.

5.1.2 What works define expressivity through communication?

Much academic interest has been expressed regarding the subject of communication between musicians. Ingrid Monson (1996) explored different perspectives on how rhythm sections interact during jazz performance. She focuses on a variety of descriptors regarding the identity of the performers that she discusses, namely race and political background. Improvisational interaction has a prominent role in Monson's investigation, as it has in my research. She considers the interactions

between improvising musicians to be a unique compositional method; believing that this improvisational method creates music that is shaped by and shapes the cultural communities: "We need to start introducing ourselves as researchers to many people, and locate the musicians' fraternities and communities. Music making communities go farther than races, cultures or geographic position, and this is what jazz improvisation does." (Monson, 1996)

Seddon (2005) argues that there are two different types of communication: verbal and non-verbal. An experiment with student jazz musicians in a one-hour rehearsal was carried out by him in six different times. According to the results, these two different forms of communication are each formed by three different modes of communicative expression: instruction, collaboration and cooperation. He concludes by stating that non-verbal communication is the most significant form of communication in the development of empathy between performers.

Alterhaug (2004) also explored the communicative process through the task of improvisation, looking at how it can be used as a pedagogical tool. According to his investigation, musicians' communication is relevant for current academia in terms of cultural studies, anthropology and even sociology: "improvisation is the human practice from which all music derives; as such, it represents a tool for communication and interaction that seems crucial in a global context" (Alterhaug, 2004).

5.1.3 Gap to be filled with this section

This section has been written in order to explore expressive elements pertaining to musicians' communication in contemporary jazz and how the ear training helps in this aim. Explicitly, I argue that the concept of expressivity in this field is underexplored in contemporary jazz discourse and that the ear training is necessary to mature our communicative and expressive qualities as musicians. Expressivity and communication are here the reason to explore the newest materials occurring in contemporary jazz practice.

With this aim, I explore ways in which contemporary jazz composers create music by specifically considering the communication process between musicians. I interviewed a range of contemporary jazz practitioners in order to further our understanding of this topic. The responses given by my participants during semi-structured interviews are my primary source of data in order to fill that gap. For more information, please see my Methodology chapter.

Furthermore, we will experientially explore contemporary characteristics of jazz musicians' communication processes, as we listen to my original piece that illustrates the researched concepts in this chapter. I will explain in detail the ways in which the sonic outcomes evidence the claims that I make in this chapter. These works are directly related to data collected from my interviews and practically address the aforementioned gap in contemporary jazz research.

5.1.4 Discussion structure of this section "Defining expressivity through communication"

We will start by evaluating the significance of the musicians' communication process in the contemporary jazz context. Following this, an exploration of possible mistakes on the musicians' communication practice will be examined. The figurative idea "ego trip", mentioned (below) by one of the participants as they refer to a musician's casual egocentric behaviour during a solo, will be also explored. Friendship and trust as variables within the musicians' communication activity will also be addressed. I will finally examine the meaning of the explored concepts and their underlying metaphorical connotations.

5.1.5 Other relevant literature

To corroborate certain points that I have made in relation to this communication, I refer to the work of Kristoffer and Marchetti (2010). Their research provides an exploration regarding certain behaviours such as modulations of sound, steady eye contact, physical gestures, and facial expressions as communicative elements that take place in the performance. Although their work is not focused on jazz, the insight of these two authors has enabled me to appreciate important aspects of non-verbal communication. Through the study of non-verbal interactions, these two authors have recognized how relevant the term "Belief-Desire-Intention" (BDI) is. BDI is a concept embodied by musicians with the desire to play good quality music, and who use their communication as a tool to achieve this objective. Furthermore, Davis (2007) examines such musical communication in a jazz trio performance. Here she observed different cues and musical statements that can lead to a successful jazz performance. As it has been carried out in my research, the process of musical communication is in her work compared to a conversation with a friend. Furthermore, and considering the mentioned studies, collaboration, interaction and spontaneity are the most significant elements occurring in a communicative conversation. These elements can therefore be seen as the most prominent actions happening in jazz improvisation and composition.

5.1.6 Discussion with the participants and illustrative musical experiment I

Participants were asked about the importance of the "musicians' communication". This answer below was a typical example of what a jazz musician thinks about it:

"Hundred per cent, hundred per cent important. It has to be..." (Issie Barrat)

This participant gave an exaggerated response to this question, as happened in the interviews with the participants Jaume Vilaseca, Mayte Alguacil and Fabián Barraza.

In corroboration with my previous point, MacBee (1990 cited Monson 1996, p.66) gives his perspective on the relevance of the communication and how it shapes the musical outcome:

"You can't go there and intellectually realize that you are going to play certain things. You are not going to play what you practiced... something else is going to happen... see, the individual her/himself must make contact with that and get out of the way"

In the tune for this section 5.1, and presented as a completely improvised interaction between bass, guitar and drums, there are several illustrated aspects from this current discussion. In the first task shown in the song, we experiment with the use of expressivity using the musicians' communication as a composition tool in a free jazz improvisation. As can be listened, from 2:25 to 4:46 of the piece, there is no pre-established harmony or rhythm as background for this communicative experiment. This musical passage of around two minutes is played and recorded based entirely on musicians' communication and how it shapes the sound.

Expressing communication among musicians can be seen as teamwork. Playing in a more anarchic and individualistic way seems to lead to musical disruptions.

"I think that's how jazz kind of breaths. Sometimes when you hear younger musicians, there is the playing over the top of the kind of music. It sounds like the rhythm section is playing and they are soloing separately. I think that everything has to be together." (Kevin Mackencie)

With reference to Kevin's contribution, we can say that balance is a precious musical factor in jazz improvisation. Individualism and idiosyncratic forms of expression, combined with being a good listener, are the perfect blend. Three elements are inseparable from the activity of improvisation when it accomplishes, at least, the communicative and stylistic standards. These aspects are interaction, attentive listening and musical freedom, and are necessary to achieve this purpose (Frisk & Östersjö, 2013).

"That's how jazz kind of breaths", and, "everything has to be together" are two fundamentals in terms of stylistic self-expression, mentioned by the participant Kevin. From 2:55 to 3:10 of my tune, we can examine when an instrument stops this fluidness. Here, an exploration of the dissociation created by one of the instruments while playing a free improvisation is associated with a broken fluidness in the musical communication. The bassist takes in this mentioned short period of time a different path to the one taken by the guitarist and drummer together, creating a split of intentions between the participant musicians.

Mackencie discarded the verbal and the visual communication, and focused on the sonic:

"There also has to be an interaction so that it has a groove or a swing to the music. If there is one who is a bit off the band, no working with the other bits of the band, it just doesn't set as a whole thing. It's nice to get an eye contact and communicate that, but most of the time is focusing on listening to something rather than..." (Kevin Mackencie)

Some contemporary jazz composers relate the communication development to the life experience as jazz musicians. In addition, we may say that the "ear" is the most precious musician's tool. Currently, there are studies were this human organ is considered not as a passive body part, but as an active one. Furthermore, and considering the perspective of the psychoacoustics, the ear is contemporarily considered even as an instrument (Connolly, 2015), considering that it absorbs sound and that consequently and depending on how many people there are in a venue, the music will sound in one way or another. Moreover, given that expressivity in the communication activity is mostly based on the ear training, we can therefore say that the communicative process is likewise a training-based task.

The concept of an expressive "ego trip" is a term that has been colloquially used by a participant in this thesis. It defines the process that an improviser in a band carries out when she or he does not listen to the rest of the musicians and performs a musical passage that is not sonically coherent with the goals of the ensemble. It defines a very common process that the jazz soloist, and consequently the whole band, experiments with in certain occasions. Although this term is used rhetorically, it perfectly defines the characteristics of a musician in a performance that collapses the communicative flow.

"If is your turn to do a solo, but at that time you've got enough material from the rest of the musicians to be able to..., you know, get something... I reckon that... I mean, you see people going off on an ego trip, don't you? "Where the hell did that come from?" you know? What is he doing? And I hate it." (Bil Fultone)

It should be clear that 'ego trip' is a subjective term. The quality and quantity of musical communications in performance are a function of the musicians' expressive skills. These skills are shaped by the mutual understanding of each other, and the personal desire to perform in a specific social context. Therefore, and coming back to the concept "ear training" (see above in this chapter for more information), we may deduce that the more trained our musical ear is, the easier is to avoid or positively react to an "Ego trip".

In relation to this last point of collapsing totally the musical communication, there is an illustration of it in my composed tune "Se Fue La Tormenta" for this section.

From 2:55 to 3:10, although there is an apparent communication between drums and guitarist, the bassist is immersed in this above explained concept "Ego trip". The communication is here therefore disrupted. This musical section of fifteen seconds creates a really sensitive and simultaneously tense musical moment that detaches from a more communicative part, presented before and after this mentioned fragment.

From 3:57 to 4:10, again, the bassist starts an individual journey expressing an isolated message, to which the rest of the performers respond by a dual connection from guitarist/drums. This last connection fades into a total disconnection of the whole band. That disconnection lasts thirteen seconds and, in addition, relates to the dissociation created in the moment 2:55 of the piece. What this process is telling us is that no matter how far the expressivity of a musical fragment is from unity in terms of communication, the dissociation created will be eventually progressed into a musical bond. From this bond an intelligible and logical musical section always emerges.

Shifting towards the importance of trust in musical communication, a stable band life can be crucial for developing these musicians' communication skills:

"...and this idea of stable group appeals to me; working always with a very good team. People that you know and you enjoy playing with. Lately, I can see many bands that are considering and doing this with their bands, consisting in keeping the same people in the band and making a trusting group..., then composing music, recording albums, playing gigs, now sharing moments, then thinking together..., and finishing by becoming real friends." (Jaume Vilaseca)

Filippova, Fitzgerald, Kingsford and Benadon (2012) developed a study in which they assessed the stability of 20th century jazz bands. They reveal that whilst a number of recognized jazz musicians in this period kept the same band members for long durations, others, contrarily to our participant Jaume's statement above, would play with different musicians in an everyday basis. For instance, Count Basie participated in 253 collaborations since 1945 to 1950 with other musicians; Duke Ellington participated in around 1740 sessions with about 600 musicians, which tells us that he really liked meeting new musicians, instead of keeping the same members. However, Ellington and Greer recorded together around 588 studio sessions since the 20s to the early 50s, which suggests that they also kept some band ensembles through their careers while meeting other musicians.

In jazz discourse, musical communication is often described as a conversation (Davis, 2007). Can we therefore deduce that a musical piece played by a group of musicians who are also friends will sound more synchronised than that same musical piece played by musicians who did not know each other

previously? Some key features can arise when musicians do not know each other. Spontaneous communication, less comfortable interactions and less eloquence in terms of ensemble expression are likely components of playing with strangers.

Considering the musicians' friendship as a positive musical tool has been also included as one of the relevant aspects to be analysed through my original tune for this section.

In this recording, the musicians were playing together for already one year, and shared a considerable friendship. We can appreciate in this musical piece the concept of "musical friendship". This concept was mentioned by my participant Jaume as a powerful element that makes the expressivity throughout communication increase and becomes another tool that the composer needs to consider in order to compose effective jazz music. Using the metaphor of comparing music making with a conversation, "musical friendship" transcends the expressivity and articulacy in the band and develops accurate and new musical forms across that interaction happening in jazz.

Contrarily, in "Musical experiment II" from 0:48 to 1:55 of the piece, we can appreciate a lack of relationship among the band members and the soloist. While the rhythm section are the same players than before, who know each other very well and share a significant relationship; differently the flute player recorded the solo without knowing anyone in the band. The result of this illustrated a disjoined solo with the rest of the players' intentions. I support the idea that this disjoin when playing the flute solo is provoked by the lack of friendship with the rest of the band.

One of the participants, Felicity Gorst, defined the importance of the musicians' communication in jazz in two words:

"Absolutely vital." (Felicity Gorst)

This statement reveals the ubiquity of musical communication in jazz performance.

Seddon (2005) explored the different types of communication in the jazz band. He summarized this process as one that depends on the emphatic creativity, which is based on the concept of emphatic intelligence. This tells us that to perform on the jazz stage, we perhaps need to understand what the other musicians are trying to express.

According to one of my participants', in some circumstances, one of the musicians seems to lead the communication.

"The double bass needs to pay attention to what the soloist is doing. If the soloist is playing a scale or different substitution in a specific moment, the double bassist needs to know that the soloist needs that." (Fabián Barraza)

Moreover, it is possible to look at the soloist as a leader. What the soloist is doing will have a meaning only when the rest of the band respond to it consequently and accordingly. Berliner (1994) realised an extended work on improvisation in jazz. During this work he emphasises the relevance of the interaction between the members of the band. He underlines that call and response, rhythmic phrase interaction, melodic figures copying and phrase filling in the soloist gaps are indispensable for the contribution to the essential cohesion of the communicative performance on the jazz stage.

Responding to a leading voice as a communicative and essential element of jazz performance is expressed in some sections of my tune for this fragment of the chapter.

From 2:48 to 2:54, the bassist creates a motif that the guitarist copies, differently to the drummer who offers a more background and rhythmic posture during these seventh seconds. That musical passage calls to the leadership in an improvised whole ensemble solo and seems to tell us that the bassist is permanently looking for a cue to introduce different personal musical elements and lead the musical section. Leadership in this context reflects on the personality and consequently on the musical expressivity of every player. In this particular case it appears, and it has been corroborated, that the bassist during this specific jazz project had more dominant or controlling behaviour features than the other members, as it can be appreciated in the music.

From 3:30 to 3:54, again the bassist leads a communicative exercise of musical articulation where guitar and bass start interacting by question and answer while the drummer has an, again, more rhythmic role inside this context. During the last seconds of this interaction, all the instruments suddenly agree to play a coordinated passage of synchronised musical expression where everyone appears to play the role of soloist. The leadership was "again" started by the bassist, answered by the guitarist and finally joined by the drummer, but the musical expression of the band as a whole finally transformed into a leadership fight, or from different viewpoint, a unification of leading ideas with equal roles and importance.

From 4:12 to 4:30 and concluding with this last section of leadership in the communication, a harmonic and intuitive direction is taken by the guitarist. As a harmonic expression, the guitar creates an ambience and the band agree to follow the idea, as if it was a suggestion that somebody proposed in a conversation and the others agreed to execute or debate it. Although here the leadership starts with the guitarist, it becomes a group led activity after some seconds, with articulation emphasis on keeping a musical ambience.

Jazz seems to require and perhaps has always required communication between musicians. The following statement concludes wisely this discussion. Fabián, one of the participants, says:

"From 10 people that are listening to the concert, only three will know what jazz is about. If the magic does not happen is because there is not communication between the musicians. If you play with paper, you depend completely on the paper. Jazz was born from a type of communication between people."

5.1.7 Summary of this section

In this section, I have evaluated the communication process between musicians, and assessed various conceptions of this social interaction. In addition, I have analysed various perspectives on efficient and inefficient methods of communicating between musicians. This has been necessary to contrast the positive and negative components of this phenomenon.

There is a link between this communication process and the ear training preparation, which makes us recognize that the more musically trained our ear is, the easier it will be for us to communicate in musical practice. A concept that many soloists seem to have experienced or will be tempted to practice is the "ego trip". That type of miscommunication can cause problems regarding collective musical expressivity. This is in many cases due to the apparent dissociation that one musician generates with the rest of the band members.

The degree to which players know each other impacts musical expressivity, as the crucial role of the "friendship" plays a very important basis for good musical communication. The outcomes that these two types of social groupings generate are notably different based on the interviewees' empirical results.

It seems important to consider the musical expression that flows from soloist to every player in the band. Interestingly, we have seen how some researchers argue that communication between members of the rhythm section is as important as the communication between the soloist and other band-members and that this communication depends on how well trained our musical ears are. Based on my participants' contribution to this section, I find it imperative to remark that in a contemporary jazz performance every member of the jazz band has an equally important, but different, communicative and expressive role.

In the following section 5.2, the link between the communicative features and the personal language of a musician is scrutinised.

5.2 <u>Development of the personal language and its communicative features</u>

- Musical piece: Recuerdos

o Translation: Memories

The musical piece for this section was composed in a jazz-rock trio with the additional participation of a flute and guitar soloists (respectively with classical and jazz background), who each recorded one solo. This can be heard from 0:48 to 1:55 of the tune. This song was created to experiment with the musicians' communication in the context of jazz-rock and free-jazz. Similar to the first piece in section 5.1, the instructions for the performers were "try to communicate as much as possible to one another". Other more specific instructions were given and are detailed below. All players, similar to the musical piece of section 5.1, were unaware of the themes for the piece and were just given instructions to accomplish. This piece can be listened and seen on pages 126 and 129 of this document.

This section focuses on the *personal language*, which is a subjective term defining the idiosyncratic sound behaviour that is produced by an improviser and their instrument in the context of live or recorded performance. The primary aim of this section is to interrogate this concept in relation to expressivity. To do this, I have produced an analysis of this topic based on the perspectives of contemporary jazz composers from all around the world. These participants were invited to discuss the relationships between personal language and communication. I use the responses of my participants to theorise on how the expressive potential of musicians' personal language can be exploited by in order to produce relevant musical interactions in the moment of performance.

The main claim for this section is that the jazz musician is a person in constant evolution and that this evolution affects and processes the playing of any musician. For this reason, as we will explore later on in this thesis, a jazz musician never plays an improvisation in the same way. The concept of 'undressing' for the other members of the band, for the audience and for ourselves as musicians, also implies that the musician plays with total sincerity and open disposition to the others in order to strengthen the collective expressivity. By accomplishing these concepts, we are able to achieve our purest and most meaningful personal language.

Considering my participants' Mayte Alguacil, Joan Fonfría, Fabián Barraza and Kevin Mackencie's contributions to this section, I argue that expressing our musical abilities with utmost sincerity, in order to reach our purest personal language, is the main aim of sharing a stage.

5.2.1 Aims

This investigation has been carried out to understand the relationships between self-expression and personal language. In addition, I relate this concept to communication in order to evidence the most

important factors that make a musician's expressivity manifest sonically. At the core of this chapter, we will better understand the development of this personal language from the viewpoint of musical expressivity.

5.2.2 Impact of this research

I argue that the success of a musician's personal language is directly related to communicative skills of the performer. While my research has found literature that has helped me as I develop this investigation, I have consistently found a distinct lack of published research as it relates to my synthesis of expressivity, personal language and improvised communications.

I believe that my research could aid composers as they attempt to give opportunities for improvising players to interact. Trying to sound like oneself, developing personal musical language or comparing the backgrounds of various musicians are among certain compositional concerns that will be discussed in this section (*see below*). This assessment of ideas will enable us to investigate and clarify the role of expressivity within personal language. I will come to argue that this expressivity is not only a crucial communicative tool between musicians, but that it also provides a channel of communication between the musicians and the audience.

5.2.3 Participants' discussion structure

This chapter will begin with a discussion on the emerging concept of "sounding like oneself" in compositional and improvisational terms. Then, I will discuss how musicians may need to 'refresh their language' in order to better communicate with audiences and co-performers. A comparison on the different expressivity approaches among classical and jazz musicians will also be considered, before addressing the importance of the musical globalisation and its influence on the contemporary jazz musician's personal language. Mental state and human evolution are then discussed as primary features of compositional and improvisational articulation. Finally, I will assess a more complex concept in musical communication and expression terms, as I discuss the metaphoric term of "undressing", before briefly summarising my key claims.

5.2.4 Relevant related literature

Harris (2011) presented his main ideas of the definition of musical expression. He stated that it is not only a sonic matter but also a matter of body and facial gestures. In addition, he states that expression through personal language includes comprehension and has the quality of communication. We also need to consider that it comprises communicating information that is sometimes impossible to convey via spoken speech.

Zijl (2014) carried out five studies to answer two research questions:

First, what is the role of performers' experienced emotions in the process of an expressive performance? And second: what is the effect of performers' experienced emotions on their movement characteristics, auditory performance characteristics, and the audience perception of performances? The first study, with *Experiment I*, showed that the performers' individual language consists of perceived and felt feelings. *Experiment II* and *III* revealed that depending on the performers' focus there is a different movement and auditory characteristics. *Experiment IV* revealed that audience preferred expressive performances to overly technical or emotional instances. Finally, the *Experiment V* showed that performers' emotions and their personal language consist of performance-related and music-related emotions.

Woody (2000), as mentioned in page seven of the Introduction, demonstrated some aspects in terms of personal language development in academic music lectures. He concludes that individual private lessons are more efficient at developing expressivity than lessons containing whole classes and ensembles.

5.2.5 Discussion with participants and musical experiment II

Now that we have defined the personal language, I follow with an evaluation of how this concept is identified and discussed by my participants. Finally, I conclude and summarise this unit.

The personal language is an expressive constituent pertaining to a composer's identity. This feature can be influenced by other players' attributes. Every player can be recognized by her/his idiosyncratic musical expression, illustrated in their playing as part of their personal language development.

Here, the participant Kevin Mackencie speaks about his and others' personal language.

"Pat Metheny's music..., he always sounds like Pat Metheny, even when is playing in trio or the whole band... there are so many influences, and I don't think I ever really focused on one person. I never felt that I wanted to sound like any of the others." (Kevin Mackencie)

It follows that when a performer reaches certain level, their expressive aim, conscious or otherwise, is to create an own specific and personal language.

"Although I really liked what they all did, I thought, you know?... look, this is very important to try and develop your own sound..., you know? Trying to sound like yourself as much as possible, I think." (Kevin Mackencie)

David Liebman (1989) examined what he considered to be the most important elements in every note that a musician plays; the components which seem to reveal the identity of a jazz musician. He states that personal language has many identifying characteristics. These are: attack or staccato and legato, development or body elements such as vibrato, and dynamic changes, including tone decay and sustain. Therefore, three elements are implicit in every note: attack, development and decay. Nuance and the concept of *how* the musician is playing rather than *what* is being played is a differential factor that demarcates the development of a specific personal language. Accumulations of notes and the musician's personality are also among the changing possibilities. Furthermore, Liebman notes that, due to this immense quantity of expressive characteristics in relation to personal language, it is practically impossible to re-create the exact same solo twice (a point that I will interrogate more fully later in this thesis).

Here we can appreciate the importance that some musicians give to the concept of "sounding like oneself". To sound like oneself, one must develop their own language. I associate this with a metaphor: the development of a personal language is parallel to evolving and changing as human being. This reinforces what I have previously argued in this work: that a musician's personality and character is generally reflected in her/his music.

We can also consider musicians with social and mental difficulties, where their complex personalities would not always cleanly map onto their complex musical expression. To mention some significant examples of this phenomenon: Miles Davis had depression due to a culmination of the pain provoked by sickle-cell anaemia; Gerry Mulligan experienced drastic temper changes produced by hypoglycaemia; Bud Powell was diagnosed with schizophrenia after his enter in the hospital; and Paul Desmond and Bill Evans have suffered from dysthymic disorder (Wills, 2003). The music of these musicians features wonderfully coherent and delicate sound, despite their personalities having their difficult or darker sides.

In the composition for this chapter, there are some aspects of this above discussion illustrated. For instance, the guitarist in this musical piece has adopted the role of trying to sound like oneself as much as possible, avoiding any external influence before recording this piece and any sonic link with other influencing music. This has taken part of this experiment with the aim of avoiding copying other musicians' expressivity and/or their personal language.

Personal language and musical expressivity change depending on the instrument, and according to certain cultural and social demands.

"I think it's a constant challenge because you want..., it's easy to do the same thing all the time. So if you want new licks, new ideas, and new riffs... I think it is a constant refreshing. You have to refresh all the time, otherwise you do end up doing the same thing." (Kai Hoffman)

Culicover (2005) explains how important is to consider similarities between speech and jazz, in order to advance and refresh our artistic expressivity. This can be achieved by grounding the development as jazz musician in a similar discipline of practice to tasks that one would use to develop their verbal communication. In his work, Culicover unifies speech and jazz because of their similar cognitive elements, although both are seemingly very different processes. Perhaps, learning new musical licks, developing the already learnt ones and playing tunes could be compared to learning new languages or grammar, developing the already managed languages and practicing by talking with someone, correspondingly.

During the song for this chapter, especially from 1:44 to the end, this concept of refreshing the language is illustrated. To achieve this, a new expressive technique has been used as well as trying new riffs, licks and phrasing. This new technique is called "listening to oneself" when improvising. Technique very used in jazz improvisation to acquire a logical narrative during a solo. In addition, this song has been recorded with relatively unknown musicians, forcing all the group members to use new communicative musical elements.

There are expressivity differences depending on whether the musicians come from classical or from modern music types of learning.

"It is different listening to a soloist who developed as musician in the classical context than another coming from the jazz context; finally, I think that pop and rock composition is closer to jazz than to classical composition" (Manolo Díaz)

Benedek, Borovnjak, Neubauer and Weber (2014) studied the differences between jazz, classical and folk musicians. They investigated whether jazz musicians differ in personality and creativity from those who practice the other genres. They carried out this investigation by examining music students. In their study, they analysed musical activities, psychometric creativity and personality attributes. The outcomes of this comparison reflected the capability of the jazz musicians to engage with extracurricular activities and to obtain various creative musical achievements. Jazz musicians also showed more adaptability to impulse creativity and alternative thinking tasks, with more capacity to adapt to new experiences than classical musicians. High creativity and divergent thinking are therefore among the most relevant expressive aspects that jazz musicians developed further. It is noteworthy that these skills are extremely important for the task of improvisation.

Differentiating between the language of different musicians who have been trained classically or in modern music institutions can be easily noticed due to the very different learning processes which different artists are exposed to in their academic years at the conservatoire. Rock, blues, funk and all the new genres have more composition elements in common with jazz music than with classical, jazz band director Manolo Díaz states. The jazz player practices composition more frequently, while most of the classical musicians focus more on performing and sheet reading. In addition, it appears that the creative expression generally falls under the remit of jazz music, while the interpretative expression has more weight within the classical musical practice.

Sammler and Bianco (2018) presented a research on how differently a jazz and a classical musician's brain works. In this experiment with thirty professional musicians, a computer registered the brain agility and accurateness by measuring the time of response to different selected harmonies. The final results demonstrated that jazz musicians react faster to unexpected changes, focusing more on what to play instead of how to play. On the other hand, classical musicians showed more proficiency in the material that they knew how to play; focusing more on *how* than *what*.

From 0:48 to 1:55, we can listen and differentiate between a classically trained musician (version A) recorded solo with transverse flute and a jazz trained musician (version B) recorded solo with guitar. In the song for this chapter, we have recorded with both types of soloists, with the aim to observe the main expressive differences that they illustrate over a very relaxed harmony on a jazz-rock ballad. No indications for the solo were given to any of the players, allowing total freedom and creativity to both participants.

The mental state of the musician and her/his inspiration will likely be reflected on the improvisation self-expression:

"It can be a real tough assignment, but you've got to do it, and you've got to have a margin where you can just play safe. In a way, you don't have the inspiration..., you are just performing to what inspiration was there and then your own influence." (Bil Fultone)

Taylor (2014) realised a study completely based on the process of jazz improvisation in relation to the musician's personal language. He talked in numerous parts of this work about taking or not taking risks while improvising jazz. He supports the idea that carrying out with this musical task can be very tense and flustering, and sometimes we try too hard. Another problem that occurs is that we are not able to play ideas as we think them in our brain, or we also play familiar licks to avoid risk, which hinders the expressive process. Taylor also explains that there are two extremes in this "game", which split the listeners in two groups: the ones who pounce on every mistake you play, and the ones that

want risk in the performance. This leaves two possible actions for the development of the personal language in that improvisation: no risk taking and improvisational adventure.

From 1:44 to the end of the musical piece assigned to this section, only one take was recorded. With this, we intend to show the risk and inspirational factors that are illustrated as spontaneous elements of the communicative process. Using the existing inspiration and motivation and expressing our own feelings in a live recording is the aim of the experiment, where mistakes, amends and wise choices are part of the work and part of the expressive resources of every musician.

In jazz improvisation, what you listen to transforms your musical expressivity:

"I listened to my parents' music..., classical music and with my brothers who are older than me...
pop music too, or the first music that really influenced me, which was the progressive rock. But Jobim
music has a heavy importance in music history..., for me it was very inspiring. Also the music by Paco
De Lucia too and the Flamenco with others such as Jose Pardo, Chano Dominguez, and all this
Spanish repertoire which is also very important." (Jaume Vilaseca)

Looking at how jazz was influenced, Palmer (2016) realised an extended work on improvisation development with music students from College and High School. In this work, he defines the original influence of the jazz style, by stating that jazz comes from a fusion of rhythmic and vocal influences taken from African-American values. This musical style enjoyed in its origins of European harmonic elements and instrumentation. It musically included an illustration of diversity and life itself.

In terms of personal and individual language, my participant Jaume stated above that his playing was and is influenced by many different styles, but other factors help to our improvisation to be influenced. For instance, Palmer comments that when playing other instruments, self-assessment and aural imitation has a very positive influence on our communicative and expressivity skills.

The solo and tune of this chapter has various influences. Realising the experiment, the composer has tested the fusion of various styles with jazz. For instance, jazz-rock (fusion), standards jazz and rock music are the most reflected styles in this song.

We sometimes, as musicians, try to communicate something beyond our expressive possibilities, which, according to Joan Fonfría, is dishonest:

"Because we have the capacity of with a few of notes creating very interesting things...; I think that it is all about knowing your limitations, and that what you improvise needs to be played comfortably." (Joan Fonfría)

Contrasting with Fonfría's comment, Plake (2014) explains his perspective on this. He supports that musicians like Lester Young, Jim Hall or Ellery Eskellin are comfortable playing jazz with risk, and prioritise self-expression to perfect sound. Plake adds the attribute of "full of life" to this type of music articulation. According to Plake, even perfect sounding players are constantly taking risks.

"You can't simply fall back on a bunch of heavily practiced licks and improvise like Jim Hall." (Bill Plake)

From 4:20 of this composition, we are looking at the two edges of this concept: parts of the solo played comfortably or safe; and parts of the solo played uncomfortably or with risk. As these two concepts can vary depending on who interpret them, I leave here my viewpoint as composer of the piece.

- Played comfortably/safe
 - o From 4:20 to 4:50, 4:52 to 5:12, 5:17 to 5:28, 5:29 to 6:09, 6:10 to 6:42, 6:44 to 7:33, 7:34 to the end
- Played uncomfortably/with risk
 - o From 4:50 to 4:52, 5:12 to 5:17, 5:28 to 5:29, 6:09 to 6:10, 6:42 to 6:44, 7:33 to 7:34

Another aspect of the personal language is our mental state. This factor modifies considerably what musicians communicate to each other and to the audience every day on the jazz stage.

"I think that it is our duty as musicians arriving to get a constant mental estate of inspiration. I believe that it can be an emotional state or behaviour..., the same than when you are in love, you are in an emotional state and when you are not in love anymore, then you lose that mental state, and you do not feel the same." (Joan Fonfría)

Lopata (2014), similarly to the participant Joan, assumed that the mental state that a musician adopts in jazz improvisation, which is characterized by impulsive intuitive thoughts, is called creativity. In this work, Lopata asked numerous artists to describe their experiences of creativity in the improvisational process. Three main philosophical statements appear to be essential to describe this musical experience: the first, dissolution of self and of time; the second, operating from an instinctive mental state; and the third, moving between intuitive and mental states.

According to some of my participants such as Joan Fonfría, Bil Fultone or Jaume Vilaseca, the musician needs to stay in a high level of inspiration and creativity to do her/his job, expressing feelings that in most cases do not pertain to the actual musician.

From 1:44 to the end of the song composed for this chapter, the guitarist is looking for different techniques to focus in the music and avoid reducing the concentration, in a creative task that refers to the last discussed section. For instance, in this recording the guitarist focuses once more on the creative skill of "listening to himself" in order to create an especially coherent narrative and maintain the level of inspiration and creativity.

To control our own personal language and what we communicate, we need to also communicate honestly and connect appropriately with our instrument.

"I am three years now studying Indu music, and we work this overall; and behind an instrument there is always a person in constant evolution, and this is the most important aspect" (Joan Fonfría)

Black (2017) claims that some elements of jazz practice make a musician develop certain expressive aspects of their personality. Some members of a jazz combo from a Scottish secondary school were called to participate in this research, where three socio-cultural stages were conceptualized. The first stage of this musician evolution is initial apprenticeship, followed by guided participation, and thirdly, participatory appropriation. Using Interpretative Phenomenological Analysis (IPA) and considering socio-cultural aspects of their learning, three key factors emerged in Black's analysis, such as personal effects, social effects and jazz effects. During his research, results illustrated that playing in a combo helps in the development as musician and human, specifically on the factor "confidence" of the players. It showed that this type of learning helps to develop the musician's voice and the combo members' creativity.

In addition, expressing a musical fragment is a way of telling and interpreting a story. The manner of articulating that story will perhaps change depending on the personal evolution as a human and musician in that specific moment of her/his lifetime. The personal language is therefore directly linked to every step we take in our life journey and the unification of instrument-interpreter articulates these steps.

In the tune composed for this section, an expressive evolution of the personal language can be appreciated. The tune shows the development of the composer across 18 years of compositional practice. It illustrates a jazz-rock with straight rhythm and soft character of jazz ballad, which was practiced by the composer for many years. Here, there is a central solo of free improvisation based on group interaction, where the listener can appreciate the influence and personal evolution of this composer during the last four years of intensive learning about this technique of free improvisation.

My participant Mayte Alguacil stated her perspective on how important communication is to the development of a musician's personal language:

"You are nobody without the other musicians. You need to be generous and so do they. To me music is undressing..., becoming totally vulnerable." (Mayte Alguacil)

According to this extract, we can perhaps assume that performing means sincerity towards the audience, sincerity towards the other musicians and sincerity with oneself.

In terms of group expression, Bjerstedt (2014) aimed to explain the meaning of storytelling in the discursive context of jazz improvisation. In one of his chapters, he speaks about the aforementioned need to be communicative and sincere in the jazz improvisation. He supports the idea that improvisation, although often referred to as *solo*, is a collective effort. Another statement that Bjerstedt presents is that in a jazz improvisation the members of the band need to give something new to the others continuously, and that the jazz improvisation has certain protocols that pertain to the specific type of group improvisation. Bjerstedt concludes his discussion on musical conversation by suggesting that jazz is essentially a social and collective musical process. Moreover, he considers the idea that equating soloist and improviser is a mistake by taking into account three factors. Firstly, that not only "the soloist" improvises. Secondly, that in many jazz contexts, much of the music is improvised. And thirdly, that the dynamics being shared between the other members of the group and the improviser makes this act a fundamentally conversational activity.

In my musical piece, the idea of undressing, suggested by the participant Mayte, occurs in two directions, and as she also supports, it happens all the time in every performance. The free improvisation section, from 1:44 to 4:20, specially shows these two types of undressing: undressing towards the audience and undressing towards the other musicians.

In undressing towards the audience, the main aim is showing the listener a sincere piece of art. To achieve this, recording all in one take to show the so important spontaneity feature and applying no modifications after recording, have been the processes applied to the composition.

In undressing towards the other musicians, the musicians did not prepare the improvisation at all. They were told to improvise without guidance, without a demanded result. The improvisation was therefore very impulsive, spontaneous and interactive due to the absent previous preparation and the little practice on this particular style and with the specific musicians of this recording.

5.2.6 Conclusion

During this chapter we have explored an element of musical expressivity, namely personal language. This concept has been analysed according to the responses from seventeen successful jazz musicians.

One of the most important elements that has been discussed here is the development of the personal character and the personal language of a jazz artist. As discussed, one of the core elements of building this personal language is the repeated task of refreshing our own musical vocabulary. A jazz musician cannot avoid this process and needs to update her/his musical language in order to recognise and be recognised by her/his expressive skills.

The definition of classical and modern music instrumentalists is expressively different. Although there are exceptional musicians with the capability to achieve a solvent performance in both contexts, a general dividing line has been mapped out above.

We have also considered the impact of the mental state of the performer. Playing comfortably and "not suffering" seems to be compulsory in order to express ourselves with our personal language (although this statement has had some contrasting opinions, as my participant interviews have shown...).

The influence of the audience, alongside other cultural or social factors, can dictate the emergence of new musical features. The impacts of the First and Second World Wars evidence this, in that they caused drastic changes to the way in which the personal language of jazz players of that time, and jazz music in general, developed in North America and, consequently, the rest of the world.

The idea "behind an instrument there is a person in constant evolution" has been relevant in this section. Undressing is the last expressive concept and metaphor that we have explored. This metaphor has been used to relay the feeling that many musicians sense when performing in front of an audience. Considering my participants Mayte Alguacil, Joan Fonfría, Fabián Barraza and Kevin Mackencie's contributions to this section, I argue that expressing our musical abilities with utmost sincerity, in order to reach our purest personal language, is the main aim of sharing a stage.

In Chapter 6, I am going to explore the use of expressivity through improvisation. To achieve this, I have divided the chapter in three sections: risk-taking and musician's dynamism in the improvisation, the jazz idiom and the idyllic jazz improvisation.

Chapter 6: Expressivity through improvisation

- Musical work: Musical experiment III: Blindly

The musical piece "Blindly" for this chapter covers the sections 6.1, 6.2 and 6.3 and has a length of 80 minutes. The music was recorded in a trio format with guitar, drums and double bass. There are thirty-seven instructions across the whole recording that come from thirty-seven basic themes from the collected data. In this song the performers knew about all the themes whilst playing. This is different to sections 5.1 and 5.2, in which the musicians were not aware of the themes. In order to make the project as improvised as possible and dependent on the skills of the trio, only one rehearsal was carried out. In that rehearsal, they were told to do their best two follow all the instructions and to experiment and exaggerate as much as possible all the tasks, in order to obtain maximum expressivity in the sonic outcome. (The link for this recording can be found in page 126)

6.1 Risk and dynamism

In this section, we will assess ways in which musicians are dynamic and take risks as they attempt to become better improvisational soloists. This study is directly informed by my participant interviews with successful jazz practitioners. Moreover, the argument that I develop in this chapter is sonically evidenced and extended by myself and other musicians in my *Musical Experiment III*. As a main claim for this section, I underline the idea that it is impossible to repeat the expressivity of a solo; each solo is unique. This statement is based on the extreme complexity of human bodily expression when performing an improvisation.

6.1.1 What is the aim of this section?

The primary aim of this unit is to explore specific philosophies about the improvisational process, with reference to the concept of expressivity. This study is supported by the responses of my participant interviews. I include an analysis of the concepts risk-taking and dynamism, which are inherent to improvisation. Moreover, a section of an original musical piece will be used to clarify and develop certain information that I gathered from the interviews.

6.1.2 Gap to be covered with this section and how am I going to fill it

This chapter has been written so that we can better understand and develop upon current theories regarding expressivity in contemporary jazz improvisation. Although some aspects of self-expression in improvisation are addressed in contemporary jazz discourse (Plake, 2015; Ellenberger, 2005; Ankney, 2014; Palmer, 2016 & Lewis and Piekut, 2016), there is a substantial lack of information

around expressivity and improvisation in jazz music, especially in relation to *dynamism* and *risk*. This gap is filled with the help of my participant interviews, who spoke in detail about these two concepts. As mentioned above, I realise the argumentation of this chapter sonically, with my *Musical Experiment III*.

6.1.3 Structure of this chapter

We will start by talking about the honesty and risk-taking of an improvisation and how these factors can impact the musical outcome. Following this, the meaning of a mistake that occurs due to musical risk-taking will be debated. Taking risks will be defined as essential to good quality soloing practice. I follow this with a discussion of playing in and out and rhythm modification as essential components for the contemporary improvisation. The different expressive characteristics found between live performance and studio recording will then be interrogated. Furthermore, a musician's dynamism will be analysed as an essential self-expression facet of their improvisation. A masterclass on dynamism by the participant Dario Cortese, run as a part of a team with Larry Carlton will be examined. Interaction between musicians will be in this chapter debated as a crucial dynamic element, followed by the instrumental dynamism taken to the extreme with the multiphonic techniques of the monophonic instrument of saxophone. Finally, with reference to my participant Jaume, I will explain why it is impossible to play a solo the same way twice, before addressing the metaphor of "path choosing" as the dynamic aspect that explains the improvisation continuous process of changing direction.

6.1.4 Literature Review on Risk and Dynamism

Lewis and Piekut (2016) discussed the self-expression fundamentals of the improvisational process. He explored it with reference to its use by professionals from fields such as popular music, computer science, ethnomusicology, architecture, anthropology, philosophy, art history, cognitive science, cultural studies, dance, economics, education and gender studies. Crucially, he supported the idea that improvisation includes a vast quantity of contexts and types of activities. He suggested that improvisation should be looked at from a wider perspective than the one that is generally afforded by contemporary research.

Furthermore, Palmer (2016) explored different processes that have an important role in the development of expressivity as a jazz improviser. Aspects such as aural imitation ability, jazz theory knowledge, personal background and risk and dynamics mastery, are among the most important variables with which an improviser's identity is discovered and differentiated from other players. Ankney (2014) examined jazz ensemble teachers during their lessons as they analysed the students' perceptions and reactions while using the expressive factors risk and dynamism in the improvisation

task. After this analysis, two primary claims were made. The first was a reflection on what the improvisation teachers notice about the student's thought processes during improvisation. Here, the students were examined in relation to the way they prepare mentally for this task. Consequently, teachers in this project discussed the ways in which they drew from their own experience as a musician as a means of transferring knowledge to the student. The second claim was an analysis on how teachers respond to the students' needs during improvisation. During this last activity, we could appreciate the variety of teaching improvisation approaches. This second exercise showed certain action that can be taken in order to master fundamental improvisatory techniques.

Lewis and Piekut (2016), Palmer (2016) and Ankney (2014) have helped to understand some of the

Lewis and Piekut (2016), Palmer (2016) and Ankney (2014) have helped to understand some of the current essentials of jazz improvisation philosophy, particularly about the two parameters risk-taking and dynamism in this musical setting.

Furthermore, Fabian, Timmers and Schubert (2014) explored expressiveness in jazz. They divided the research in four different areas. These are: historical, philosophical, cross-cultural and teaching expressive music. Three main statements in form of questions were here addressed as core of the investigation where a link to risk and dynamism in the improvisational task was found:

What does it mean to be expressive in music performance across diverse historical and cultural domains?

What are the means at the disposal of a performer in various time periods and musical genres? What conceptualisations of expression and performance roles shape expressivity in performance?

These three questions relate directly to the use of risk and dynamism in the performance. The risk and dynamism that a musician is using today is a historical and cultural process that we as musicians illustrate in our contemporary practice. Our current playing is demonstrative of historical development.

Similarly, and now in terms of effortlessness when using risk and dynamism, Ellenberger (2005) carried out an analysis of materials and concepts for improvisation in jazz. In a primary claim of his work, he states that when we see a master playing a jazz improvisation, we are in fact seeing an effortless command of dynamism and risk-taking, among a large series of other pre-ordained techniques. This also relates to what was mentioned before about how expressivity is a mixture of sonic and bodily motion (Sakata, Wakamiya & Hachimura, 2009). Considering this, in the aforementioned case of effortless command of dynamism and risk-taking by a jazz master, her/his bodily expression will always be positive for the performance.

These two conceptual themes of this section: dynamism and risk, each take a variety of different forms. In terms of being extraordinarily dynamic or wisely using dynamism when improvising, Plake

(2015) carried out an investigation on the use of the silence. He theorised that this absence of sound is of equal importance as the played notes, whether we are conscious about this when we play or not. In this work, two main aspects are considered as key of improvement for the use of silence in a conscious way. These are: listening skills and our expressive intentions. Plake (2015) stated Lee Konitz's opinion about a chorus in one of Lee's improvisations.

"It was the best chorus I've ever played..."

Surprisingly, he did not play a single note during the whole sequence...

6.1.5 Discussion with participants and music experiment III

As mentioned above, the concepts of *risk* and *dynamism* provide the thematic basis of this chapter, as I examine these ideas through the lens of expressivity. I will now refer to the ways in which my participants responded to these concepts during my interviews.

The first participant that I will refer to discussed the importance of "honesty" when playing an improvised solo:

"So I prefer to go and see and artist..., be musician, sculpture or a painting, or whatever that is and really trying hard being honest, and really trying hard to be in that moment; and maybe even fail. I prefer to see that than to see something that is perfect, but there is not risk..., there is not honesty in it. It does not loose me... improvised music... when you throw yourself out there, with no safety in that... then you really see, you can really touch people, I think." (Dario Cortese)

I need to mention here that this chapter is formed by three parts and every part is illustrated by around thirteen tasks in the Musical Experiment III, recorded for this chapter six. In addition, every task represents a basic theme of this mentioned chapter from my thesis.

In "Musical Experiment III", the jazz trio perform task number 1, where this concept raised by Dario is illustrated. Safety and risk are the main elements of that improvisation and we can see how contemporary jazz musicians project the two different concepts.

Joan Fonfría, another participant, talks about taking risks during improvisation. Here he links this expressive tool to the honesty that the participant Dario Cortese mentioned.

"An improvisation in live... I understand it as a moment when you can take risks, you know? I think that the beauty is in that; and possibly a live improvisation is not valid for an album, you know? Maybe, because there are too many wrong notes..., at least in my particular case. I think that that is the beauty of live music, or going to a Jam session; being able to risk a bit, and if I mistake, what? Nothing happens. And in a studio you need to try to do it as perfect as possible, you know? But the sound engineer can help you afterwards anyway. (laughter) (Joan Fonfría)

In the task two of the musical piece "Experiment III" I compare the qualities of a player's solo who has rehearsed that solo, with another player's solo who did not prepare a different improvisation. With this it is appreciable that a prepared solo lacks of the expressive skill of spontaneity while the unprepared one has more mistakes.

My participant Mayte Alguacil gives her opinion on the meaning of a mistake, due to musical risk-taking, when recording an album with the peculiar band form of double bass and voice.

"So I am thousands of times more confident and satisfied when I record music with total honesty... I screwed it up so many times. In Victor's (double bassist) album, I screwed it up with the lyrics. In Pau's album, my voice was damaged... it is what it is..., it doesn't matter". (Mayte Alguacil)

She supports and corroborates Dario's and Fonfría's perspective, emphasizing the positive aspects of risk-taking and mistakes as part of the artistic self-expression.

Taking risks can also be considered as essential in an ideal solo:

"I think one of the great things with improvising on the spot is that you can take risks, you can try out and if it doesn't work, "ok that's no working, let's try something else!" You can just do that in the moment and make it sound like you did it on purpose." (Kai Hoffman)

In the task three of "Experiment III" there is an analysis of the expressivity in a solo with many voluntary mistakes and with their amends. Here we compare the capacity of three musicians of a trio by improvising over a jazz background where the improvisers, in their turn, force various mistakes and try to react and fix them, trying to make the audience feel that the mistakes were played on purpose.

Bjerstedt (2014) mentions how mistakes are a source of creativity in the process of improvising. In this work he states that playing in a "safe mode" will very possibly lead to rigid patterns, empty of expressivity, and that mistakes will normally interrupt this unwanted process, calling to the

musician's invention. It is not a question of how it sounds, but rather a question of the musician's sincerity. This suggests that a sophisticated listener can notice when a solo embodies sincerity and risk by exploring its expressivity features, whether they are sonic or gestural. Based on these two claims, we can deduce that, taking risks when improvising, or when performing, is more appealing than sonic perfection. As has been mentioned before, it seems that risk and sincerity in improvisation mean "being in the moment".

Trying to hide a mistake by repeating it or attempting to make the audience believe that it was intentional is a common expressive technique. Relating a mistaken phrase or passage with a response to it seems to relieve any potential lack of musical cohesion, according to Kai Hoffman.

Other examples of risk-taking in contemporary jazz improvisation are, *in-out soloing* and *rhythm modification*. The participant Fabián explains these concepts:

"It's a question of thinking that a dominant chord has many different possibilities of substitution, and from that point, working on this aspect. It is called "in out". You can go out in a specific moment of the piece, "I am going to play outside", we need to know how to play outside; how to play a major third on a minor chord. We all need to know that, a part of working this type of concept..., of harmony, there is also currently a work on the rhythmic aspect, modifying the rhythm in many different ways. We are lucky of having experience and information previous to the contemporary jazz, such as the classic jazz. We know how swing was played in classic jazz and how the quiver was used. We know how it is used now and how we can use it..., taking it forward, backward..., and then the rhythmic aspects..., this is partly what people are working with now." (Fabián Barraza)

In the task four, as suggested by Fabián, we will develop a section of the piece, where the expressive concept of "in-out" soloing will take place, as well as another section where the rhythmic element will fluctuate considerably. This will be carried out to consider what some current musicians are developing in the avant-garde improvisation field in styles like gypsy jazz.

Another perception of playing outside and inside the harmony is presented bellow by the participant Dee Byrne as another expressive feature of risk:

"You can say 'I am going to play with the chords from the bar 5, but the first 4 bars I will play outside'. The other thing is not having chords at all and play completely sort off free within a completely free piece." (Dee Byrne)

In task number five, considering Dee's contribution to this part of the thesis, a section of the piece is played completely free, followed by a tonal jazz section. This process is repeated three times. I illustrate then another perspective of playing outside in the contemporary setting.

My participant Barraza summarizes some of the musical techniques currently used in jazz improvisation. Phenomena such as the increase of free jazz techniques, jazz fusion transformations or the removal of swing rhythm are among the most important tendencies in contemporary jazz. Playing inside and outside the harmony generally requires a more complete understanding of the tune than 'safer' approaches. Playing notes outside the chord, expanding on the duration of one chord going to another, or playing a motif from another tune in different key are some of the techniques being used to play outside. The concept of "playing outside" means playing "free", without tonality, or lacking any harmonic structure. We could name some musicians that have used this type of expression in abundance, such as Anthony Braxton, Joe Henderson, Cecil Taylor or Woody Shaw. (Levine, 1995) The participant Fabián also mentions the overuse of the dominant chord in jazz. We could mention here that this is presumably the most used chord in contemporary jazz, together with its substitutions. The use of the mixolydian scale is studied in conservatoires and applied to the contemporary jazz composition as the most relevant harmonic resource for soloing and melody-making. The modal approach to jazz partly avoids the dominant chord as a core factor.

What expressivity features are we looking for when we play outside of the harmony? Based on Fabián Barraza and Dee Byrne's answers, tension is the clearest answer to this question. Tension and release is, according to the participants of this research, the most sought after improvisational factor when looking for an expressive narrative and a coherent musical journey. Playing outside as playing with risk and dynamism has many approaches in the jazz context. This matter tries to answer partly to the second research question and it is a very open debate in terms of how to use it. We have been able to appreciate various definitions during this chapter and it definitely opens to numerous meanings. Taking risk while playing outside gives us a world of possibilities, and these possibilities are reduced depending on whether we play a live concert or we are recording in a music studio.

Live and studio recording have different expressive characteristics in terms of risk:

"The difference, let's say, is that the studio improvisation will be saved and kept. In some way it becomes a sort of composition, without it to be made for this purpose exactly; a registered improvisation. And this registration becomes in some way a composition. When you listen one of my songs..., let's say from an album, then you listen to a saxophonist improvisation..., that improvisation, when he was playing has been recorded forever; and if you listen to it again, eventually you remember the parts..., why? Because that work has been finished like that. It does not happen in live." (Jaume Vilaseca)

Mayte Alguacil, explains how different these two scenarios are to her:

"I'll tell you very briefly. I find more problems in the studio because the REC button is on, than in a gig performing a solo... because in the gig I have assumed that the music does not stay any longer. It goes away and it is not kept... and having mistakes is good too, nothing matters, nobody is killed because of a mistake... 'I had a mistake, it does not matter, let's carry on'... but in a studio solo it is different because it stays forever." (Mayte Alguacil)

We can identify two types of improvisation, namely live performance improvisation and studio recorded improvisation. Broadly speaking, live performance improvisation occurs when in a concert or rehearsal: there is an improvised solo and it is not recorded. This has not been kept for further use. When I say studio recorded improvisation, I refer to those cases in which the improviser is keeping that musical passage for further study or other practicalities. The most significant difference is that the recorded solo has a documentary component whilst the live performance improvisation does not: it is lost forever.

We can appreciate the same concepts being shared with Mayte Alguacil and Jaume Vilaseca. We can consider whether a mistake forced by introducing the expressive component of risk is a positive or a negative factor in our improvisations. Nevertheless, a mistake is a source of new possibilities (Hsieh, 2009).

Mayte also states the importance of living in the moment when producing improvised music:

"If I record in a separate room with headphones, being able to repeat the same thing once and again and again... that's not music to me... because I am not living musically that moment... I am playing like that because I only react to what is sounding." (Mayte Alguacil)

In task number six, two kinds of self-expression are shown: a live free-jazz solo with no previous practice by guitar is played, and a modal studio solo, which is more practice based. Here we differentiate between the two different approaches to play a solo: studio-practice based solo and a completely improvised one, where risk is a much more present factor.

As the participant Mayte stated, some recording systems can negate the improvisational creativity in jazz. This is due to the fact that the music can be manipulated after recorded, that it might have been recorded in an 'artificial' way; i.e. tracked in separate rooms with headphones, or with heavy use of overdubs. Nevertheless, some recording methods are changing in order to represent more naturalistic procedures of capturing jazz music. Although musical production techniques such as the repeated recording of single solos and copy and paste editing were once standard practice, these tricks are becoming less commonplace. Newer and more experimental recording techniques have surfaced in order to capture the unique expressivity of live jazz performance within a studio context. One current

and experimental way to achieve this is the process *orchestrating a live improvisation in the moment*, where every second of music is improvised by a musician, and accompanied by the whole orchestra, based on what she or he plays. Another technique is to record all musicians simultaneously. The recorded musicians will typically share a long history of live rehearsals and performances together and understand each other on an expressive basis (Blier-Carruthers, 2013).

Another element of the contemporary improviser in the expressivity domain is being dynamic. I can define being dynamic as the state when a musician embraces the features and skills to be called proficient with their instrument and in many musical settings.

My participant Dario Cortese explains his experience running a masterclass with Larry Carlton on different expressive tools related to musician dynamism, namely the use of silence and dynamics:

"He (Larry Carlton) uses the silence and he uses the things that he doesn't play as important as the things that he does play. So it was a very good experience. The solo is not what you play but also how you play it. He was trying to explain people that there is a difference in, for instance, picking everything very loudly and having dynamic while playing. Again we go back to the analogy of speaking, of the dialogue. You need rests, and you need dynamics. You cannot speak all the time at the same pitch, with the same volume ... it would freak people out! People cannot listen to that, we need dynamics, we need a piano; we need a forte..." (Dario Cortese)

In the task number seven, I illustrate a section of improvisation with no dynamics and the same section with much dynamics, reflecting on Dario's comments on this aspect of expressivity.

Bjerstedt (2014) also uses the metaphor to define the expressive importance of dynamics in improvisation. In his exploration on this topic, he states and describes improvisation as speaking "straight out from your heart", also linking it to processes such as individualism, instincts, and language ability.

In addition, Bjerstedt states that improvisation is a process where our inner impulses and personal musical dynamism are at the very core of our expressive behaviour. Moreover, he emphasizes that improvising is about being oneself (as discussed in Chapter 5, section 2, pgs 50 & 57) and that it has many functional similarities with spoken conversation. In addition, he mentions that instinct and avoiding conscious thought are part of this dynamic practice. Improvisation is about talking from you heart, after having learnt the language.

Bjerstedt also explored how the dynamic process in jazz improvisation can function. According to his findings, improvisation starts from an idea and, consequently, several expressive possibilities are created. The continuation or discontinuation of this suggested idea will create an obvious or a

surprising musical moment as response, where the dynamic elements will determine this resolution. This process of decision-making by the musician has the power to modify the future of that improvisation and transforms insistently its spontaneous process.

Silence in music is not simply a rest space but a part of the music with an equal level of importance as any played note. Larry Carlton, sharing stage with the participant Dario, explained that the use of the silence needs a very careful appreciation. A solo without the use of this dynamic component will perhaps lead to a lack of expressivity and communication.

Another dynamic factor in jazz performance is the interaction between musicians:

"..., I want to improvise like Sonny Deep..., it is impossible but I'd love it (Is the musical language what brings you closer to them?) Yes, the language and how they interact with the rest of the musicians." (Mayte Alguacil)

In this task eight, the musicians express a total interaction in a specific part of the piece and a collapsed interaction in the following section, in order to demonstrate Mayte's observation.

Seddon (2005) illustrates the fundamentals of the expressive process of interaction between jazz musicians. He states that jazz musicians, during their development, learn to interact with the other performers as a primary way of developing their skills. One of the components of this interaction is *sympathetic* and refers to a synthesis of their own abilities with the other musicians' knowledge. Another factor of this interaction, according to Seddon, is the process of collaborating with, consciously or otherwise, the aim to attune to one another empathetically. Once this process takes place in public performance, the risk becomes more prominent in the musicians' playing, allowing spontaneity to take place.

Certain ways that musical dynamism can be taken to extremes are described by Dee Byrne, as she speaks about expressivity through multiphonic sounds. This polyphonic improvisation with monophonic instruments has become more popular, particularly on the sax, due to the apparent demands of the current composers:

"So we had like a duo and a saxophone player, and he was playing a lot of extended technique..., multi-phonic sounds..., that's the whole other thing, you know? Sound world is crazy... noises..., it is another kind of world expressing. I haven't spent a lot of time in learning to play that sort of thing, but I do appreciate it, and I can do something, occasionally like that. But it is not something that I have spent many years trying to do. I find more interesting crossing things over..., compositions for playing over free and then playing over changes." (Dee Byrne)

I have shown in the task nine, a section where the role of the musicians is focusing on the variety of sounds making of each instrument, instead of following a melody, rhythm or harmony, as Dee Byrne suggested previously in relation to extended technique.

Since the saxophone's invention in 1840, this instrument's expressive repertoire has increased significantly. Composers force sax players to adapt their techniques to the requirements of the piece. These performers are exploring new boundaries and possibilities of this relatively young instrument. It appears that many resources explain this so-called "extended technique", but very few texts explore the initial steps or history of this practice (Murphy, 2013).

My participant Jaume Vilaseca states the impossibility to play the same improvisation twice due to the dynamism and the self-expression of the jazz musician, caused by her/his unstoppable development as artist and human.

"When you play music, you never play two days in the same way. It is difficult to know why one day you play better and another you don't. Or maybe better and worse doesn't exist itself. We simply play differently. Why? Because the motivations..., your state as a human being is different.

(Jaume Vilaseca)

Cortazar (1959) described what the journey of the jazz improviser means in spiritual terms, and the participant Jaume comments on it:

"In life, every day we do a different improvisation. And this live improvisation is something that you have done for some reason. It is not made for no reason. Because the jazz musician is a person that has started a journey with herself/himself and with the whole world. And this journey implies that she/he has to play, and play, and play..., until she/he gets a considerable level, and she/he obtains an accomplished set of skills as musician. This journey is the jazz musician's journey. So the fact that the improvisation is not recorded and is lost in the way has an actual sense..., you will play it again; you will play different things but you will never be the same again. This is a philosophic concept that you can find in Cortázar's book." (Jaume Vilaseca)

In task ten, responding to the main claim of section 6.1, the drummer will play an easy improvisation and repeat it many times afterwards whilst trying to play it in exactly the same manner. Here we will consider that it is impossible for a musician to play the same improvisation twice due to this constant human evolution.

This improvisational musical journey is described by Jaume Vilaseca with reference to one of the books of Cortázar. In this book he mainly supports a theory for improvisation that claims it to be

about the process and not about the product. Cortazar also references the musician's journey and the dynamism evolution. He states that Charlie Parker, through his musical work, encourages us to dream and improvise by freeing our thoughts and exploiting our creativity; breaking the personal boundaries of our expressivity. The gestalt complexity of these musical components as a whole makes it impossible to repeat a specific improvisation, in accordance with Jaume's claims.

Another dynamic component in the musician improvisational activity is deciding the direction that we want to take at any given moment in time. Using this metaphor, the participant Joan Fonfría compares the improvisatory musical activity with the daily routine:

"People improvise from early in the morning until we go to bed, the entire day...; I get my car and I improvise, I cook and I am improvising...; it is the most essential, we improvise during the whole day, and in this daily improvisation you realize that you could have done things in one way or another continually; and it is the same with the music, I think that the same happens, you improvise and take a path, and take the risk; and depending on your musical knowledge, your emotional state in that moment, and all the things surrounding you, it will work better or worse. (Joan Fonfría)

In task eleven of "experiment III", one of the musicians will perform an improvisation twice. Both harmonic and rhythmic backgrounds will be mostly the same, with the only change being a different musical section before the solo. We explore here how modifying the musical background of the beginning of the solo changes the direction and intention of the rest of the improvisation, similar to how this happens in the daily routine of humans, as mentioned by Fonfria.

In relation to Fonfría's comment, the direction of the solo will seemingly change depending on many factors. Bjerstedt (2014) states the relevance of looking outward and exploring inward in order to find our own self-expression as improvisers. He states that the collective direction of the improvisation has two main characteristics, such as large and independent musical forces: large force for collective musical efforts and independent for individual musical activities within the group.

Bjerstedt also relays the fact that in collective improvisation every player in every moment is suggesting numerous options to lead the improvisation to a specific direction. It appears that is not the players who decide the direction of the music, but rather the music itself which directs the musicians to an unknown territory (Becker, 2009).

Furthermore, Fonfría suggests that in any part of our improvisation, our solo has the potential to go on one direction or another. In this process we build a story that requires solid foundations so that we are more likely to encourage a coherent and well-structured narrative. It seems that in improvisation, as in daily routine, organisation is essential if we want to develop a coherent trajectory.

6.1.6 Summary of this section

During this section we have debated the expressivity of risk-taking and dynamism applied in the improvisation process in relation to contemporary jazz music.

Being honest while improvising is compulsory in attracting the interest of the listener in this context. According to the participants Joan, Dario and Kai, risk also needs to be present within the expressive improvisation. It is perhaps possible that the more 'sophisticated' ear (i.e. an ear more familiar with the expressive and practical features of contemporary jazz music) is more likely to demand this attribute, considering it a necessary component of a coherent solo.

According to Vilaseca, live and studio recorded solos have very different expressive features. The recorded solo is a tracking of our progress as musician, soloist and human; the live performance is here a journey, where environment, musical evolution and intention intersect to deliver an expressively unique message, "impossible to repeat". Furthermore, dynamism and risk-taking develop throughout this journey, in both live and studio performance contexts.

My participant Mayte contributed a range of ideas to this section. The idea of 'living the moment' is key to the claims that I develop in this chapter. When improvising, living in the moment is not only a necessity, but is also linked to the honesty of a performance and the quantity of risk taken; an idea that directly relates to what Joan and Dario were suggesting. Secondly, when considering the importance of the musicians' interaction, a feature that jazz could potentially not exist without, Mayte stated that a single musician's expressivity depends vastly on the other musicians' dynamic responses and considered how this influences and impacts our playing.

Interviewees Fabián and Dee have stated very clearly that the mastery of dynamics and risk-taking by playing inside, outside and modifying the rhythm are the important factors of jazz improvisation. Mastering the production of multiphonics on monophonic instruments can help to take musical dynamism and risk-taking to a high-level, due to the inherent technical challenge of this pursuit. Multiphonic techniques are often used to produce polyphonic sounds within improvisational jazz contexts. With particular regard to the saxophone, this technique has widened the self-expression vocabulary of the jazz soloist in a way that was not happening just thirty years ago. Saxophone performers are today asked to produce sounds that test them as never before, expanding their dynamic range considerably. (Murphy, 2013)

The metaphor of 'choosing the right path' refers to the continuous and expressive process of one's improvisation abilities that happens in the daily routine and in the jazz improvisation. This metaphor

relays the risk taken when deciding what "path" to take and the dynamic factor of choosing between a constantly and infinitely expanding number of "paths". Choosing the right path may then consist in being honest with what we play, as stated by the participant Dario; or playing according to our musical development, as stated by the participant Jaume: using our musical development as the most important tool.

My primary claim for this chapter is that it is impossible to improvise the same solo twice. This is due to due to the infinite spectrum of musical possibilities and the self-expression idiosyncrasy of every player and moment of the piece. The act of expressing oneself whilst improvising is a very complex process. Every jazz player will have a different approach to risk-taking and their own personal and interactional dynamism. Copying the expressivity of a performance is a futile task.

In the following section, I explore the expressive components of the contemporary jazz idiom. I classify it as an *improvised idiom* and I present new works of music that fixate upon this particular definition of musical practice.

6.2 An improvised idiom

- Musical piece: Musical experiment III: Blindly

The aim of the following section is to define contemporary jazz stylistic and idiomatic conventions from the perspective of expressivity. I use this to experiment with these extant idiomatic features of the jazz language. I refer to literature about the jazz idiom, as well as compositional techniques which support these discursive explorations of style. This is done to assess and interrogate the variety of expressive factors that make up the contemporary jazz idiom.

The main claim that I present in this section 6.2 is that I have noticed a lack of experimentation in terms of expanding the jazz idiom. However, some innovative approaches to its development are expanding this musical style. In this section, I discuss and experiment these approaches with my participants. Moreover, I use my own musical practice as a way of evidencing the claims that I make throughout.

6.2.1 What has attracted my interest to carry out this investigation?

My main reason for writing this unit was to better my understanding of contemporary jazz language in relation to expressivity. I do this by speaking with and playing alongside jazz musicians, in order to learn more about the idiomatic conventions of the genre from those who practice it each day. This practice has been informed by my participant interviews and my literature review. The approximately 80-minute recorded practical component of this thesis supports and extends the claims that this research has led me to.

6.2.2 What is the gap and how it will be filled with this section?

For this section, I refer to several works that cover the field of 'jazz improvisation language'. Throughout my research into this field, I have found nothing to address the notion of expressivity in relation to this subject.

To fill this gap, I discuss techniques, audience reactions, type of musicians' interaction, as well as musical language mixtures for the creation of a coherent piece and focus this discussion around the role of expressivity with this process. The work that I have composed for this section gives us a concrete practical link between expressivity and idiomatic jazz language.

6.2.3 Section structure

Within this chapter, I discuss several different components of jazz language: the use of the audience's feedback for the development of a musical language; the changing of the harmony and structure of the

tune while soloing; and the idea of considering the improvisation as a group activity, instead of individualized practice are among the considerations that I address. Moreover, we will study the mixture of musical materials as a key factor of expressivity within contemporary jazz language. The orchestration of an improvisation is here considered not only as an unusual expressive element, but also as an innovative and overlooked parameter of the jazz idiom. We debate whether jazz language is a constantly changing concept that shifts according to who is defining it, as well as the significance of 'groove' in the definition of jazz.

To conclude, I will discuss familiarity with the jazz language. I will relate "strange" types of improvisation to unexplored types of self-expression. In addition, I will comment on the shift of jazz towards modal techniques and on the comparison of classical and jazz musicians' expressivity. Finally, I will consider that these two types of musicians essentially have substantial sensitive differences in various aspects and evaluate the expressive differences of jazz and classical musicians.

6.2.4 Relating current literature definitions of jazz idiom

Palavicini (2015) compares the training, efforts and results between instrumentalists and vocalists when developing and performing the jazz language. Her intent was to associate and differentiate different approaches of playing as used by jazz singers and instrumentalists and analyse them in terms of expressivity. The awkwardness that a musician faces when swapping from performing on an instrument to performing by voice is also addressed. Here she considers how phrasing, articulation and rhythmic interpretation have a specific role in this mentioned transition. Here as well as in this section's discussion with the participants, I link the use of expressivity through examining the jazz idiom characteristics to the differences between instrumentalists and vocalists. These differences here are notable and are further explored by the participants of this research.

Wetzel (2007) aimed to simplify the problems that some students may have with the jazz language in contexts where the activities are based on written notated examples. Here he cultivated strategies for musical language development; attempting to emulate a system in which successful performers developed their ability to self-express. This system intends to use the ear with aural tasks as a main focus, which is a contrast to more conventional methods that typically do not consider the ear as the core tool. This is more important if we consider the relevance of the ear training and that being expressive in jazz means being able to express and communicate within the jazz idiom to the audience, to the band mates and to ourselves as musicians.

McDonough, Danko and Zentz (2007) investigated the expressivity elements of the performance of two jazz language prodigies: Louis Amstrong and Jelly Roll Morton. They researched the way in

which both Louis and Jelly innovatively used spoken word as part of their singing. In addition, they explored how these magnificent musicians achieved a complex link between metric phrasing and music. These two musicians adapted their singing innovations to the style of jazz; defining, as it happened many times in the history of jazz, new boundaries. We can therefore re-define jazz as a style where the poetry metrics have also been included and much practiced during the first half of the 20th century.

6.2.5 Discussion about definitions of contemporary jazz idiom and musical experiment III

In the next lines, I am going to address the discussion with the participants on the topic "An improvised idiom". I have chosen this organizing theme to unpick many ideas and thoughts that the many current musicians see as relevant.

The participant Hatchard theorised about the importance of the audience-performer feedback loop in relation to our improvisational language.

"I always know when I've done a solo that is better than another solo. And the interesting thing is that the audience always do as well." (Mike Hatchard)

In task twelve of my Musical Experiment III, two double bass solos are presented to examine participant Hatchard's remarks. The double bassist will choose number one or number two as the improvisation he thinks was best. Audience and listeners will choose as well one of the two improvisations as best performed, to see whether musician and audience's opinions match. After asking several members of the audience, the 'best' solo was the second one, contradicting the double bassist choice. With this outcome and after this experiment we can deduce that what the improviser feels about an improvisation will not always match the stated preference of the audience.

Now talking in more technical terms, playing outside of the established harmony is a long process of improvisation training, and there are different techniques that can achieve this expressive tool. For one example, what is called chromaticism in jazz, may be called a 'blue note' in blues and country, or simply 'incorrect' in styles such as classical or certain forms of pop music. However, in many situations, these notes have the role of creating tension that will be released by a more stable musical passage. (Williams, 2011)

It would be entirely possible to play a piece of music that audiences would recognise from an existing recording (i.e. from an album) and modify the material in order to express something that was not present in the original recording. However, the novelty in itself may not be enough to convince the audience that the change in material was worthwhile. It seems rather impossible to please the

audience with a solo that the musician is not happy with her/himself. This reveals us about the importance of face and gesture expression, and how we react to our own improvisation in terms of body language. A musician's success on the stage is not only a matter of played notes, but is also based upon the gestural expression of their body through performance. Therefore, gesticulation can be a key contributory factor to the perceived success of a solo. The audience will perhaps notice when the solo is a failure or a success, based on these bodily cues.

The participant Fabián Barraza talks about possible modifications to the original 'known' tune.

"When we are playing an improvisation, we are changing the harmony. We can modify the tune in 20,000 ways. Listen to Bill Evans, he plays the tune in 1000 ways. Nevertheless, the good jazz composition always needs to be based on a melody that when you play the solo, the melody is in it." (Fabián Barraza)

During task thirteen, the musicians base the improvisation totally on the previously played melody. The harmony here is modal [:Cm7(x4)-Ebm7(x4)-F#m7(x4):] and here we will assess how a coherent melody pushes a coherent improvisation, as well as the idea of needing to link both parts.

Do logical-sounding solos need to relate to the melody? Vaartstra (2017) states that they do and suggests three steps to follow in order to achieve this. Playing the melody, followed by embellishing the melody and finally referring to the melody is a system that many contemporary jazz musicians stick to, in order to link the two sections of solo and melody.

We can modify the self-expression of a tune with the solo. The solo holds significance within the jazz idiom because of this fact. It can change the expressive direction of the song, meaning that two different articulations can occur, such as association with the melody or dissociation from it.

My next participant speaks about the jazz language in the solo, seeing it in two forms, as a group activity or just as an individual expressive process:

"When I am improvising, I am aware of what I do, rather than what the other musicians do. To me, what they do is not improvising in that particular moment. They do a different thing, but it is not something that I wanted them to do. If I do an arrangement, then it is what I wanted. Depending on what musicians you are playing with, there is an outcome or another. Every musician feeds you differently." (Mayte Alguacil)

In task fourteen, the whole band articulates a guitar improvisation. In particular, the guitarist is being musically fed by the drummer and later by the double bass. Here we see the different interaction and musical direction that being fed by a specific player creates, as stated by my participant Mayte.

Jazz improvisation can therefore be seen in two ways. On one end of this dichotomy, it is individual expression, where the other musicians feed the soloist, who is positioned at the top of a hierarchy of musical importance. On the other hand, it can be seen as a type of self-expression where every member of the band has a role within the unique emergence of the solo as sound. In either of these considerations, again with reference to Mayte, the expressivity of the solo and the meaning of the musical narrative will change when played with different musicians. Moreover, the meaning will change throughout every performance, even when played with the same musicians on multiple occasions. The emphasis here is on the drastic changes in solo that occur when playing with different artists, and how this impacts the expressive musical outcome. Furthermore, self-expression in a performance is never identical, due to the variability of personal circumstances of every musician. This depends on where this performer is in the course of her/his life journey, a concept to which the participant Jaume Vilaseca referred previously (see Chapter 6 section 1, pg 69).

Byrne talks about a conventionalised language development in contemporary jazz, which affords a range of potential expressive opportunities:

"Something that I and many people do that takes it even further is to have sections that are free within the structure. The composition may have structure: the melody, the chord sequence, but you can sort of have section C, which has got not chords, no time, with improvisation, but it is informed by the music of that tune..., and then, at some point it is cued to another section." (Dee Byrne)

In task fifteen, we play a melody, which is part A, and then a free improvisation, informed by the tune, then we go to a section C, which is melody again. In this musical section a modern and trendy way of understanding the jazz idiom is shown, blending classic jazz with free improvisation, as explained by Dee.

The complexity of this method seems to force the performer to control different techniques. Playing free-jazz improvisation is, in many cases, a process informed by the melody, as Dee suggests. However, we can mention that the direction of this improvisation will be informed by not only the melody, but also by the experience of every musician and, essentially, their social relationship to one another.

The birth of free jazz in the 50's, at the hands of Ornette Coleman, has had some significant impacts of jazz playing today. This includes the driving force of individual creativity, the drastic change of musical material used to make jazz, a significant manifestation of creative ideas and statements by artists, and an artistic deployment of political, cultural, racial and spiritual liberation (Pressing, 2003). This language seems to explore the inside of every musician and creates unpredictable ambiences and musical events. As has happened in other styles, the main reason for performing jazz has changed,

and in the case of Dee Byrne's suggested compositional method, a core tenet of the music is a process of sharing and distributing creativity and expressivity throughout musical social contexts. According to this section's participants, there is a constant evolution of the jazz idiom with many experiments with jazz as the core. The way in which the contemporary performers use their expressivity varies and develops continuously.

Some partially pioneering musical expression tasks are being developed. Issie Barrat, another participant, explains a very sophisticated type of language: orchestrating an improvisation.

"I started to do it but it is really difficult technically and financially; I actually wrote some pieces where we may not play some music within it. I just start to draw on depending on what the soloist is doing. But that's very difficult to rehearse and feel safe of how you are queuing with it." (Issie Barrat)

During task sixteen, the drummer will start and lead the improvisation and the other members will company him as he develops the solo. We show here how, as Issie said, the composition is built upon what path the soloist plays at every second.

To understand the mechanics of this process, it is essential to understand the intersection between jazz improvisation and composition. Knight (2011) explored this connection by asking himself the question, when does improvisation become composition? This required him to obtain the most reliable general definitions of both specific tasks, considering that they have been and are defined in an enormous variety of ways. We need to consider that even in the musical activity of free improvisation, which implies values such as freedom, creativity, spontaneity and interaction, there are elements of composition.

There are two pioneering ideas being performed in the current jazz context. The first one is orchestrating or adding instruments to an already recorded improvisation, as shown in *Themes Song 11* (see the link bellow in *Annexe I: Musical Compositions*, pg 126). The second idea is orchestrating or adding instruments to an improvisation in a live context, without previous rehearsal, as shown in *Experiment III*, task sixteen. These two ideas come from my discussion with the participants of this research and have been experimented in my practical component of the thesis. The most significant aspect to consider in this type of composition is the completely individualistic musical result that this process can offer. The pillar of these two approaches to jazz idiom is an inspired and unrehearsed idea that can go anywhere depending on the mental disposition of the soloist, which directly affects her/his expressivity and the band's sonic outcome.

This jazz idiom has different meanings depending on the artist's musical background. Issie, my participant, defines it:

"In the pallet that we draw on it is very broad..., the internet... Often it is very difficult to know why it is called jazz, because it is basically composition with improvisation." (Issie Barrat)

It is seemingly a global concern the fact that musicians and also audience have issues to define jazz and its boundaries. The terminology "composition with improvisation" is how many contemporary musicians define this style and how they include all jazz elements in one sentence. Let's see other relevant definitions:

"Jazz is not a musical form; it is a method of treatment. It is possible to take any conventional piece of music, and jazz it. 'The actual process is one of distorting, of rebellion against normalcy'" (Gridley, Maxham & Hoff, 1989).

"It is the spirit of the music, not the mechanics of its frame or the characteristics of its superstructure built upon that frame that determines whether or not it is jazz." (Ramsey, 1999)

"More than anything else, jazz is a feeling, a way of playing music, a way a musician feels at any given moment. It isn't written... we want to give musicians room to improvise..." (Gridley, Maxham & Hoff, 1989).

"A popular song doesn't become jazz until it is improvised on, and there you have real core of jazz: improvisation." (Bernstein, 2004)

This four partly similar definitions decrease the importance of the compositional process and increase the relevance of the expressive mechanisms of improvisation, in our attempt to define the jazz idiom. Although it has been attempted above, defining the jazz language will always be a difficult task. What remains in all the definitions of jazz is in the musician's journey of which Jaume Vilaseca discussed in his interview and whilst referring to Cortazar's (1959) book. In this journey, Jaume reveals every soloist's travels with her/himself, with the universe and with the others, whether it happens consciously or not.

Is the groove the most important element in order to identify the jazz language?

"So the only reason I use the word jazz is to communicate that to my audience and to people who want to know about my music. And I think that the elements that make it clear are probably the more groove based" (Issie Barrat)

In task seventeen, the band plays a fragment in Am with a melody and solos of double bass and guitar. Here the drummer will suddenly swap between jazz and rock rhythm. We evaluate here the outcome when a jazz piece modifies the rhythmic part, to see whether, as Issie says, it is the most essential part in this style.

Doffman (2008) defined the groove in his investigation about this essential element of jazz music. He stated that certain styles have the groove as more important aspect than others. Styles originally played by Black Atlantic rhythmic influences, such as Cuban, Afro-American popular styles and Brazilian, have a very strong emphasis in the rhythm as a common feature. Awareness and quality of timekeeping has, according to Doffman's analysis, a central position in jazz. Furthermore, this consideration of time-keeping as crucial expressive element of jazz, generates a mutual cooperation between the performers that transcends the originality of the language.

Here, Issie emphasizes the relevance of the groove in jazz. In the interview, she also mentioned how difficult it is to make jazz without a clear multi-rhythm. Currently, jazz music has adopted rhythms from other different popular and folk music styles that do not have these multi-rhythmic grooves. Rock, funk, blues, flamenco and Ragas are all styles that have forced this change. The self-expression features of this stylistic change indicate a remarkable adaptability of this musical genre.

Mayte Alguacil states that the familiarization with musical language changes the musician's perspective quite drastically:

"Giant Steps..., when I listened to it the first time, It seemed to me very strange and difficult. But when you get used to it, you explore the language and get to know the Coltrane figure..., then you realize that it is not so strange and difficult..., or Ligeti, who is neither strange when you analyse him." (Mayte Alguacil)

Task eighteen includes a development of different referent styles in a long solo, from jazz guitarists like Scofield, Metheny, Scott Henderson and Gambale. Here we show the development of the unknown and strange vocabulary of these musicians when an instrumentalist is learning their style, and how with the time it becomes an extension of our language.

Panken (2000) interviewed the tenor saxophonist Michael Brecker. In this interview, and in relation with the participant Mayte Alguacil's comments, he mentioned the process that he followed to obtain his accurate jazz language and expressivity to improvise. His sound is formed by the strange and difficult components to which my participant Mayte referred. He summarises this process: "I moved to New York in '69, and became involved in a loosely organized association of about 25 creative players who had been playing in each other's lofts, basically led by Dave Liebman with the assistance of Richie Beirach. It was called Free Life Communication, and we put on our own concerts, playing a lot of very free music. It was a special time to be in New York. That's when the so-called boundaries between what was then pop music and jazz were becoming very blurry, and those of us who experimented with combining r&b rhythms with jazz harmony began to develop a music that was a fusion, if you'll excuse the word, of various elements. We really had no word for it; at the time it was loosely referred to as jazz-rock.

The culmination of that for me was the group initially referred to as Dreams. Our milieu dispersed because we started getting gigs, and we all left that loft scene and branched out. My brother and I joined Horace Silver, and eventually moved on to the Brecker Brothers and all the studio work.

During the tour with Pat, Charlie and Jack, I experienced freedom differently than in the early New York days. It was such an open environment; the way they interacted, the way the music was conceptualized made me feel a tremendous sense of freedom, like I could play anything. There was a type of communication in present time on stage that I hadn't experienced before."

(Brecker, 2000, as cited in Panken, 2000, Pg. 3)

Mayte also mentioned the same concept when talking about the different language that occurs from different styles. Eventually, this participant seems to suggest that although it seems obvious, many people fall prey to the same mistake. The suggestion is that the key to changing our perspective on a subjectively new jazz language, as in the case of Michael Brecker, is to learn and develop it, regardless of how strange or alien it can originally seem. She also states:

"It is like everything..., you can also dislike the Copla music, or the Flamenco. " (Mayte Alguacil)

Similar to task eighteen, in task nineteen, we play a section of flamenco-jazz, showing the expressive development from the unknown or strange to the extension of our improvisatory language in this particular style.

Following this answer, she was then asked: What would you classify as strange jazz language, in terms of improvisation?

Since we were defining strange expressivity as the unexplored, Mayte supported this next definition.

"The hybrid formations, people who create a very interesting sound. It also happens in the classical context, where there is a respect for a particular form and then they break the form and look for another type of thing that tries to find textures." (Mayte Alguacil)

In task twenty, the band form has an uncommon structure, by introducing two unusual instruments in jazz, such as flamenco guitar and darbuka, in order to find a new sound and textures.

In addition, some contemporary jazz musicians like Mayte Alguacil support that bizarre forms of jazz can be achieved by altering the band form with atypical instrumentation. As mentioned before, there are various unconventional instrumentation choices that can be used to create interesting and eccentric means for the self-expression of a jazz band (Attarian, 2015). The most significant and common method to create unusual, and often quite extraordinary jazz is to use an uncommon instrumentation; adding instruments normally associated with other popular and folk music styles. (*These ideas will be*

more thoroughly discussed in my chapter on instrumentation, below from pg 99)

Some qualities of the jazz language can sound strange to us. One definition of strange can be given as "Unusual and unexpected, or difficult to understand". This definition can be used as metaphor to the jazz language, and it can be deduced that our ear needs to be trained and adapted to some aspects of a jazz sub-style in order to expand the expressive vocabulary and transform the ostensibly 'bizarre' language into routine and quotidian self-expression.

My participant Diaz also stated how he considers that the contemporary jazz self-expression is mostly returning to the modal approach:

"One of my passions is listening to others to test my music knowledge. Nowadays I listen to modern musicians, and I think, based on what I listen, that we are coming back to a modal era. I have been researching here and there, about rhythms, in Herbie Hancock's and Miles Davis' times,... that time when Miles Davis started a new way of playing in jazz..., I am talking about a creative jazz..., and it is a bit like that, a bit modal... with modern features." (Manolo Díaz)

In task twenty-one, there is a section of modal jazz with modern features in terms of sound and progression, to illustrate the most present side of this style, following Manolo Diaz's suggestion.

Moreover, regarding the orientation of present and future jazz language, we are mostly developing upon the modal era, leaving the be-bop and swing styles to rot. Modal jazz language with no chord progressions started being explored and developed during the 50's, alongside the atonality of free jazz. In addition, modal jazz and post-bop acquired the feature of non-functional progression. Free jazz and, again, post-bop went even further by also showing a lack of chords in their harmonic structures. Jazz has massively influenced other popular and folk music styles, as well as merged with various other genres creating fusion styles.

Contemporary jazz uses more modal techniques than tonal. As I have argued before, musicians such as Miles Davis and Django Reinhardt started this type of expression and the predominant contemporary impact of 20th century of jazz idiom takes this modal approach. In terms of this jazz idiom, Diaz compares the performers' language and expressivity of classical and jazz composers:

"I think that for a jazz musician it is much easier a composition than for a classical musician. You have a groove and you start creating. In composition, once you have a bit of knowledge, it is very creative, inside jazz. Everything goes from a line, in the shape of a rhythm or a harmony, over which you create. It is different listening to a soloist who developed as musician in the classical context than one coming from the jazz context" (Manolo Díaz)

For task twenty-two, we focus on creating a jazz groove. Here we demonstrate the capabilities of the jazz musician to create music on the spot without previous rehearsal.

Manolo also comments on the strength of every bar beat and how it supposes a difference between classical and jazz music expression in the contemporary context:

"Musicians coming from classical background see how many musical aspects that they knew, change. Instead of 1 and 3, now it is 2 and 4." (Manolo Díaz)

In task twenty-three, we will exemplify this aforementioned change from 2 and 4 to 1 and 3 in the rhythmic accent, from jazz to classical. This is here shown in a sequence, where first the music is played accenting 2 and 4, and thereafter, 1 and 3 bits are accented to feel this rhythmic antagonism.

We can say that classical and jazz music are contrary in terms of rhythmic expression. The participant Diaz, a music director of a jazz big band, states that his directing routine partly involves the understanding of several differentiating aspects. One of them is that musicians who come from a classical background have to develop and adjust their skills in order to improvise at the same level as musicians with jazz background.

The expressivity through the jazz language is conceivably different depending on whether we talk about a jazz practitioner or a classical trained musician. The articulation of creativity is differently approached in both cases. Classical music was improvised before jazz, with clear examples like J.S. Bach, Handel, Mozart, Beethoven, Chopin or Liszt among others. In that time, classical musicians would write the music but would perform it based on improvisation techniques, having the capability to change it from what was written on the score (Norman, 2002). It is remarkable to mention that currently classical musicians play pieces from past centuries using sight-reading, and that those musical tunes were at that time improvised.

With this last contribution, we have defined the idiosyncrasies of the jazz style when it is played by some classical rules. We have then noticed the contrariety that these two styles present in terms of rhythm and how musicians coming from a classical background need to readjust their playing and their thinking in order to sound as a jazz musician.

6.2.6 Summary

The jazz idiom can be considered an objective concept, but the way it is expressed by the different jazz instrumentalists varies this perception. Talking about jazz language does not mean speaking about a concrete idea. Instead, this means exploring a mix of cultures, tendencies and backgrounds in musical terms.

Improvisation can be seen as an individualistic task. Current studies seem to consider it as a process in which the soloist is informed and complemented by the rest of the band members. As we have mentioned before in this thesis, it is perhaps not only a matter of what we play, but even more importantly, with whom we play it. It is essential to emphasize that the soloist and the rest of the band members have an individual role in the process of a solo, and, in self-expressive terms, all of them could be considered as soloists that are working collectively to feed the language of the main soloist.

During this section, and as a main claim for this chapter, I have noticed a lack of new experimentation with the jazz idiom during the last years. This has been appreciated after speaking with my seventeen participants and has been experimented musically in the "Musical Experiment III".

In the following section, I am going explore the idea of *the idyllic improvisation*. In addition to this, we analyse my "*Musical Experiment III*", with particular reference towards the way in which it experiments with expressivity in relation to soloing.

6.3 The expressive features of an ideal improvised solo

- Musical piece: Musical experiment III: Blindly

The following section will focus on the 'ideal improvised solo', in the context of contemporary jazz. In particular, I will predominantly focus on the various factors that contribute to the expressivity of jazz solos. The primary claim of this section is that it is impossible to produce an *idyllic solo*. I base this opinion on the fact that every participant of this research has given me many different paths and ideas that can be implemented in order to achieve that solo. The resulting improvisation would be extremely difficult to achieve due to an excess of different and contrasting ideas as to what constitutes 'idyllic' in this context. However, I find the notion of the idyllic solo extremely helpful as a means of allowing me to interrogate the relationships between expressivity and soloing on a deeper level.

6.3.1 Existing gap and how it will be remedied

Despite my study of jazz literature, I have found no directly relevant information on the expressivity of the ideal jazz soloing. However, I have found a range of texts that help and support the argumentation of this section in more general terms. I find this gap important to be filled because expressivity is a pillar in the performance of the jazz style. Once we understand the expressivity used in the idyllic solo, then we can move forward and find better ways to interpret this type of musical passage. The way in which this gap is going to be remedied is by asking the contemporary musician questions about expressivity and soloing techniques and demonstrating the answers in a musical format. Here, many different musical tasks will exemplify the theoretical aspects studied during this section.

I deploy the data gathered from my participant interviews with professional jazz musicians. My participants have evidenced their advanced expressivity skills in contemporary practice, and I specifically directed my interviews to learn more about the fundamental components of improvised jazz solos. The following text is primarily based upon the results of my interviews. Moreover, a practical musical experiment has been composed to further evidence and elaborate upon claims made in this section.

6.3.2 Structure of this section

This section has been broken down in order to cover a number of sub-topics, as we analyse the expressive features of the ideal solo. We will start by measuring the importance of listening to the accompanying band and how this can impact the expressivity of the solo. Control of the instrument will be then considered as a crucial element, alongside familiarity with the specific musical language

being used. Variety, recognisable language and surprises in the solo are indispensable elements also under consideration here, followed by the importance of spacing between parts. The idea of looking to a tonic centre rather than to a group of scales and basing the improvisation on more intervallic approach will also be explored. Moreover, I will discuss how phrasing is considered to be the most important aspect of an improvised solo. We also unpick the fact that improvisation is a ubiquitous feature of jazz music and that jazz is therefore a significant genre in terms of high quality improvisation. The necessary relationship between melody and solo, the different types of communication between band members and an evaluation of the abstractedness of communication in this context are factors up for debate here. I then discuss the technique of 'responding to the environment' in order to express a context-sensitive musical message. Following this, timing and phrasing will be considered, as I posit the idea of narrative as a compulsory element of good solo practice. The act of causing the audience to hum a solo is here discussed as a sign of success and competent improvisation, and we also consider the crowd's attention as an essential factor for achieving the ideal solo. Finally, I will argue that spontaneity is one of the most important expressive factors of the improvised jazz solo.

6.3.3 Related literature

There are several works to be mentioned for their influence on the findings of this part of the chapter six.

Lewis and Piekut (2016) describe the ideal solo improvisation in expressive terms in an educational context, with particular focus on how it can be used to obtain musical freedom. After wondering whether soloing contains dialogue, they argue that the solo has an element of discourse within it; dialogue constituted between performer and listener, who may be the same person. He argues that there are two specific ways of listening in this setting. According to these researchers, the first listening approach suggests the translation of the auditor's musical imaginations into what the musician's fingers play. The second way refers to the perception and understanding of the musical ideas taking place during a performance and how this listener responds to it.

Bjerstedt (2014) discusses the character of the idyllic jazz improvisation and its expressive aspects by using a metaphor-based analysis. There are three components that Bjerstedt seems to consider the most relevant factors needed to achieve good quality improvisation: *resistance*, *imperfection* and *risk*. *Risk* needs to be there as it should be in a game; to introduce an element of competition. Many musicians find this the most interesting aspect of soloing when performing to new audiences. *Resistance* can also embody the concept of trying not to repeat oneself when improvising. To use conversation as a metaphor for this, when we converse with one another verbally, we will repeat

words and even sentences. Finally, it is interesting to note that Bjerstedt defines improvisation as an expressively *imperfect* act, meaning that the perfect improvisation does not exist; a mistake and its resolution is one of the most important parts of this musical event.

Love (2017) argues that the improvised solo is inherent to and indivisible from the soloist and the environment. He considers the themes of the solo as a stylistic element of the overall piece and not as a work in itself. According to Love, there are two main elements to consider and develop to achieve the ideal solo: the commitment and energy applied to the spirit of the improvisation and also compositional skills. The first factor is manifest in expressions of spontaneity, bravery and audacity, among other similar qualities; the second feature is an expression of musical coherence and compositional integrity.

Ramirez, Hazan, Maestre, and Serra (2008) developed an algorithmic compositional system to induce the ideal solo expressivity in a performance by a given skilled saxophonist. The main objective of this process was to identify how a particular saxophonist's playing could be assessed by an algorithm as it discovers regularities or performance patterns in their playing. This algorithm is developed as it evolves, guiding and interacting with the researchers throughout its evolution. This also means that there are different examples or outcomes resulting from the continued application of the algorithm at different stages in time. A non-deterministic model is then achieved, which evaluates improvised jazz solos and can unpick numerous interpretations from any single given song. With their computational research, the researchers achieve the methods of inducing an ideal performance in expressive terms. The developers of this algorithm have continued developing dynamical music possibilities with it and this system has been proven to collect data about musical expressivity with remarkable accuracy. This directly relates to my second research question about improvisation in this thesis and offers us a computational (one could argue cold and logical) approach to determining what expressive elements are needed in the idyllic solo.

6.3.4 Discussion with the participants and musical experiment III

In the following lines, I present a discussion with the participants about the expressive factors of an ideal improvisation.

My participant Dee reveals the significance of listening to the band, among other aspects, when discussing the components of her ideal solo:

"Dynamics; some kind of journey; narrative; shape; a feeling that shows that is listening to the groove". (Dee Byrne)

To demonstrate the aforementioned comment of Dee, in task twenty-four, the musicians play a forced interaction with the other members of the band, in the context of a free jazz setting.

Listening to the groove is presented here and in Booth's (2015) work, as the most important expressive factor for the ideal improvisation. Special importance is paid to the response that the soloist has towards the behaviour of the rhythm section, which could change their provisional expectations:

"...maybe expressing something like a feeling that you can engage with. I think it has to be expressive and has to be spacious and listening to the group and having a narrative." (Dee Byrne)

In task twenty-five, we can analyse how a group of musicians can express a clear sadness with a solo, in order to articulate a feeling, as Dee mentioned.

Expressing and emotional narrative is a key component of contemporary musical practice. My participant Gonzalo Del Val, an internationally renowned drummer, discusses how this attachment to a feeling is part of all his gigs and recordings. He says:

"...in almost all my composed or recorded albums, the music was dedicated to something. With this, I mean that the initial idea is very descriptive. I think in something that I want to describe. It can be a friend, it can be a moment, maybe an object. So, the first thing that I want to say about my compositions is that it begins in an idea that I want to share with the rest of the people".

There is a fractious relationship between what we want to express as soloists in a specific performance and what the audience actually perceives when they hear it. Various studies by Gridley (1978) demonstrated this fact, and explored how the anger of an improvised fragment can often express, in its sonic features, a contrary intention to what the performer aimed. When asked what is needed to express feeling with his instrument, Gonzalo discussed the idea of "absolute control":

"...when a musician has absolute control of the instrument...this is one of the things I have found most interesting always; also dynamic control, which goes inside the same pack than instrument control." (Gonzalo Del Val)

To illustrate this just mentioned characteristic of the ideal solo, in task twenty-six, all players of the ensemble make an extreme use of the dynamics on a minor chord.

Many players have achieved this "absolute control of the instrument". Looking back on historically successful jazz musicians, there are two common explanations for the achievement of this quality. One explanation is that many started to play at an exceptionally early age. Another considers their naturally gifted ears. Based on Polgar's (1989) psychological and pedagogical work, the key to achieve this difficult state of control is composed by two elements: effort and luck. These two elements are unequivocally indispensable to achieve that high expression in the ideal solo.

Now, to focus on the language that is necessary to achieve this, Gonzalo relates playing the ideal solo to the familiarisation with a particular language. He mentions when being asked about that perfect solo:

"...the musicians' interaction; the language in which the player is speaking; knowing that language."

In task twenty-seven, the musicians of the band "speak" the same musical language in three different stages, one after the other. In a guitar solo context, every player will use, first: pentatonic scales, second: melodic minor scale and third: exaggerated swing with any scale.

Familiarising oneself with the language is important. To draw again on the metaphor of verbal communication, we cannot converse with a French or an Italian person if we do not share a common language. We need to understand the musical language of the others to be able to interact appropriately. This familiarisation with the language and the concomitant capability of interacting with other players are the main features that the soloist needs in order to receive messages from the others and vice versa. This creates a type of act that we can call *a soloist's art* (Michaelsen, 2013)

My participant Felicity mentions the specific expressivity parameters needed to achieve this artful improvisation:

"I think a great solo has variety, using recognizable language, with some surprises in there. Phrasing and rhythm are important. No one wants to hear a constant stream of semiquavers even if the language is great; well, I don't." (Felicity Gorst)

In the task number twenty-eight, the double bassist performs a solo with "variety" as the core concept that shapes its articulation. This solo is forced to include surprises, phrasing and rhythm, in order to refer to Felicity's philosophy on this concept.

Looking back at these specifications for idyllic improvisation, we can deduce that retaining the interest of the audience is the main aim, as Felicity suggests. Surprises, recognisable language, among

other aspects, as mentioned above, are pleasing for jazz crowds. She also states the expressive relevance of giving space in a solo between parts, to acquire a higher level of accuracy in the ideal solo:

"In fact, the silence is as important as the notes played. Something simple and melodious with space is usually most enjoyable for me to listen to." (Felicity Gorst)

During the task twenty-nine, all musicians demonstrate a high use of silence to reflect on Felicity's contribution about the wise use of it, and how un-played notes are as important as the played ones.

Other participants of this research agree with this idea. For instance, as mentioned in section 6.1, my participant Dario Cortese took part in a Masterclass with Larry Carlton. In this masterclass, Mr Carlton took exactly the same perspective as my participant Dee regarding the expressive use of the silence.

Talking about other expressive elements as the most significant in that idyllic solo, space, repetition and development are among the most frequently sought components to be considered in the achievement of this musical passage. (Bjerstedt, 2014)

For instance, the participant Llorens explains how he looks at modality in jazz improvisation in order to achieve this idyllic solo:

"I think that the intervals are more important, and thinking more in a tonal centre than in modes or playing always with the same mode. If we play so many bars in the same mode, in my opinion... it helps for improvising in a compositional way... I don't believe much in modal jazz..., in terms of music creation. I think that it is more thinking about a tone and the intervallic relationship."

Reflecting on what has been said above by Llorens, in task thirty, the double bass grounds his solo in an intervallic motion, avoiding playing any mode.

Understanding the intervals, familiarising oneself with their sonority and developing them in various harmonic and melodic contexts is of great importance. Considering the intervallic structure with which a specific harmony has been built is an important addition to this, as it allows us to better understand the lower-level substrates of complex harmonic structure. (Cooper, 2010)

The importance of *phrasing* is brought to our attention by participant Phil Capone:

"Phrasing and build; I don't think techniques is important; phrasing, which includes rhythm, a good understanding of motivic development, melodic phrasing, good rhythmic phrasing and building the solo. You are not going to be bored with so much gymnastics. It is going to build and it is going to have good phrasing..., good phrasing is everything. It is the hardest thing to learn. You are going to be learning it and doing a lot of listening to other people."

My participant Kevin also mentions the relevance of timing and phrasing:

"I think, meanly phrasing, you know? It's got really nice phrasing, and it has a progression and a kind of story, and I like to hear, you know?... somebody taking about by chance or following an idea. For some reason I started thinking about Hank Mobley and his solos, especially in albums like Soul Station which is an old album but just as an example of something that has great phrasing and time and..., mainly time and phrasing and a nice melody structure; and anything else goes upon this, I think." (Kevin Mackencie)

In task thirty-one from "experiment III", a demonstration of expressive phrasing is given by the musicians. A solo based on "question-answer" is played by every musician in turn, focussing on a motivic and coherent narrative that takes place during two minutes of music.

Angus (2014) explored some expressive elements of phrasing in modern jazz, in order to demonstrate the main factors that contribute to the development of this technical skill. In one of the chapters of this work, he focused on three parameters, which he considered the most relevant. These are: off beat syncopation, on/off phrasing and phrase displacement. The first just mentioned pattern, off beat syncopation, has contributed to the development of the second: on/off phrasing, and consists of the use of syncopation as a fundament for improvising, where a link between weak and strong beat by legato becomes the most characteristic element. On/off phrasing is defined as the soloing technique in which the musician plays a phrase on the beat and then repeats the rhythmic figure of this phrase starting off the beat. In this way, the complexity of the phrasing increases and develops sophisticated rhythmic narratives. In the latter case of phrase displacement; we can mention the example of Herbie Hancock, who would use this technique as a core of his improvisations during his years of sharing stage with Miles in their quintet. Being very similar to On/off phrasing, this version makes the soloist repeat a musical phrase but starting that phrase not only off the beat but from any point of the musical bar, creating more variety of rhythmic and melodic results.

Phil also relates jazz to rock in improvisation terms, considering jazz as the main modern style in terms of improvisation:

"...that is what is it all about, it is an improvised music..., pop music isn't an improvised music. You don't really improvise in pop to be honest. Most guitar solos are written in pop music..., they are constructed; it is not an improvised element..., I mean even rock music now is constructed. If you go back to early rock like Led Zeppelin and Jimmy Hendrix..., that was improvised..., that was the closest that rock has been to jazz."

In task thirty-two, the musicians switch between playing music from a jazz to a rock feel. Every 40 seconds, one of the instruments takes the role of soloist. With this example we understand how close can jazz and rock be in improvisational terms.

Improvisation is not as predominant in rock as it is in jazz. Famous rock bands and artists such as Led Zeppelin, Phish, Joe Satriani, Primus or Nirvana use or used improvisation in their music and have had an important role in terms of expressive outcome. The band The Grateful Dead, who have inspired many musical ensembles since the 60s, have developed an improvisatory approach enriched by different styles and improvisational practices such as country, jazz, rock, folk and European improvisation (Malvinni, 2013). With this fragment of section 6.3, I want to reiterate that jazz and rock share different elements and that jazz-rock is an example of this mixture. Furthermore, here in this thesis, I have demonstrated how improvisation in jazz is closer to rock than to classical music.

Now, coming back to jazz, my participant Jaume speaks about the necessary relationship between melody and the idyllic solo.

"Don't play the melody and then a disconnected solo because it doesn't make sense. When we improvise, we do it because a melody has been played before and we want to say something else about that melody"

Relating the improvisation section entirely to the melody has been the main aim in task thirty-three. In this section, the musicians have played a modal melody and then an associated improvisation thereafter. Here, that relationship is illustrated.

Melody and solo should have the same expressive importance as fragments of a tune. The original improvisation was born from embellishments of the melody and, as Jaume said, the solo is played for a reason. This reason is predominantly the story told in that melody. This specific way to improvise started when jazz was born and has survived within the contemporary musical context as a powerful tool for improvisation. Examples such as Charlie Parker or Miles Davis can be mentioned as experts in the embellishment of melodies for their improvisations. (Drotos, 2017)

Jaume also speaks about the different types of communication to be considered when improvising:

"We need to be communicative; first of all with oneself, then with the musicians we are playing with, and finally with the audience, if there is audience. You may be doing it with complex concepts, to which the audience sometimes could not be ready; they did not prepare themselves for it; but even though this could happen, you can communicate. When you see an abstract, avant-garde, modern painting..., complex..., you may not understand it but you may nevertheless like it".

In task thirty-four, there is an expressive exploration of the communication needed to achieve that idyllic solo. First communicating with oneself, achieved with a drum solo, where a task of question-answer with himself demonstrates the above theory by Jaume. A total communication of all players in a free improvisation is then exemplified, and finally, the guitar, as a lead instrument, achieves a specific communication with the audience.

Woodruff and Cross (2009) speak about what the musicians' communication means to them. In generic terms, and in relation to Jaume's comment, they assume that music is a vehicle for communication in situations where spoken language is not able to express whatever a specific social context requires. In addition, they suggest that music and speech complement each other as resources for a complete communication. Woodruff and Cross explored this musical aspect and left a quote that identifies the importance of expressivity when communicating with the audience:

"Music is a universal human form of communication that has the capacity to overcome linguistic, physical, mental and cognitive barriers to understanding with others."

The concept of communication in the idyllic improvisation is also commented upon by Jaume:

"Nobody has the key to communicate or not to communicate; it is an aspect that goes together with the musical formation of each musician; audience is not always the same, they are different every time."

Every musician varies in the way they express and communicate perfectly a message to the audience, and their individual experiences contribute to their idiosyncratic approach.

Three types of communication (and therefore self-expression) were identified in a study realised by Dowling and Harwood (1986). In this work, they categorized these different types of expressivity using a coding system, in order to improve our understanding of this complex concept. The first type of expressivity, *iconic self-expression*, calls to the similarities between music and other forms of

signal, such as vocal expression or body language. The second, *intrinsic expression*, includes the syntactic interactions within the music itself. The third and last, *associative expression*, refers to a communication between the music and another object or event. Whether the performer/composer chooses one coding or another will vary depending on what emotion they want to express (Juslin, 2013).

Manolo explains the importance of *the message* when accomplishing the ideal solo and how essential it is to understand that virtuosity does not mean better:

"... a message, which can be hypocrite or honest; the easiest solo in the whole world, is the one that has the greatest meaning. We should depart from the feelings. If someone is starting to listen to jazz and you make her/him listen to Nicholas Payton, who has a very contemporary sound, and plays easier techniques, then it is easier for this listener to understand the music. That message is closer to that listener, and at the end, it is all about the message." (Manolo Diaz)

In task thirty-five, every musician plays a solo section. These solos have the main aim of being the easiest solos that they can play in this context, trying to nevertheless achieve a coherent message.

I cannot find any discursive context for the concept of 'the simpler the better'. It is my personal belief that simpler solos are more likely to be accessible to a greater number of listeners, while complex ones are not. In addition, simpler solos encapsulate an extremely sophisticated process, in that they can achieve equal or greater results with less musical articulation and consequently greater expressivity than virtuous solos. To refer to another turn-of-phrase, perhaps less is more in improvisational contexts.

Narrative is also a compulsory factor to achieve the idyllic improvisation, according to Kai:

"I would say that the solo has a beginning, middle and end, like a story. So you have a starting point and you are in a particular direction, you reach that direction, and you say 'Hey, I am here' and then finish." (Kai Hoffman)

To once again relate the perfect improvised solo to spoken communication, three elements of speech can add value to this analogy. Firstly, as a mental and physical process, the improvisation takes place in a fragment of time, as it happens with the speech. Secondly, as an interactive process: it requires dialogue, call and response and group synchronization. Lastly, as a semiotic process, it is formed by sonic symbols and signs that refer to other parts of a specific piece, other pieces or even to rhythmic aspects that could be interpreted, for instance, by observing the musician's finger motion. (Iyer, 2004)

With regard to Mike's following contribution, I personally find the expressive attribute "quirkiness" as the most essential element in the idyllic improvisation.

"A really excellent solo, is going to be melodic, is going to make me want to sing it, it is going to have dynamics in it, and it's got a rhythmic interest. ... any dynamics; it is gonna punch off on dynamics; it's got a lot of feel, loud in the right places and soft in the right places. A good solo should have a quirkiness that it should develop. It should always..., I don't like solos that don't fit on the chords, but sometimes if they are slightly off the chords, slightly, that can make it more interesting. (Mike Hatchard)

The lead instrument develops in task thirty-six, a quirky motif or musical passage in a solo from the beginning to the end of the improvisation with the help of the other players.

In a discussion of the perceptual qualities that are needed in order to recognise a high-quality solo, Sutton and Geeves (2015) explored the fundamentals with which any person (audience or musician) can develop these expressive attributes. As he tries to answer how the 'undertrained' audience can perceive an unsuccessful solo, two different types of ear training are identified: *active* and *passive*. Active standing for the listeners who analyse what they are listening and passive standing for people who listen to music for recreation without any analysis being carried out. After considering these two types of training, it seems reasonable to suggest that music is ubiquitous worldwide, with most people listening to it on a daily basis. This suggests that the majority of the world's population has, at least, a passively trained ear, and therefore the ability to recognise when a specific improvisation is a failure. Again in relation to the ear-training, Jaume suggests the relationship between melody and solo as another listening task that requires a well-trained ear.

"The ideal solo depends a bit on what you are playing. I always say to my students 'Don't play the melody and then the solo... because it doesn't make sense'. I mean, a solo comes because there is a melody, because there is a theme; it is absolutely joined one another, they are two things that work together. (Jaume Vilaseca)

In addition to this comment, Bjerstedt (2014) also explores this relationship between melody and solo. Here it is suggested that the perfect improvisation has two directly related factors: a melody that represents a lower level of importance in the musical piece, and the improvisation, which is more important in this context. Therefore, and according to this definition, jazz improvisation is at the core of the song, while the melody, although considered an important element, has less significance. With this claim, we come back to the importance of the relationship melody-improvisation and the weight

that understanding this conception, supported above by my participant Jaume, has in order to elaborate the expressively perfect solo.

Obtaining the audience's attention is for some jazz musicians the aim and the cause for their improvisations, as well as their motivation to realise the idyllic solo:

"I think that what it needs to have is a witty component so that it generates attention and interest to the audience who listen to it and who do not know much about jazz. If that person who doesn't know about jazz is not engaged with your improvisation, then you failed; playing scales up and down without attractive phrasing or memorable motives, means failure in the improvisation." (Fabián Barraza)

Duch (2010), like the participant Fabián, speaks about this failure in an improvisation. While Fabián believes that miscommunication with the audience is the key marker for success or failure, Duch explains improvisation as the mastery of a mistake; the ability to manage any possible situation in which instantaneous problem solving and the ability to correct oneself are vital skills. In other words, improvisation can be an emergency measure: "the plans failed and so I had to improvise".

In similar terms and in relation to the expressive element spontaneity, which is considered essential to improvised music, my participant Dario answers:

"Honestly..., spontaneity. I think people get really hang up on the "it has to be perfect". It doesn't, it really doesn't, and it is becoming more and more clear..., the more time I live as a musician... You know?... At the beginning there was more ego involved than we have now. I feel that the ego element decreased luckily; because at the beginning you wanted it to be perfect, because it is about you. But more and more it becomes about the music. Then you are not worried to appear perfect or not perfect; also because we are not perfect. The reason I said honesty, is because it is very difficult to be honest when one is playing. You, kind of want to please people..., you want to shine in a certain way. And the temptation to do something safe is very, very strong..., something that is not offensive to anyone. It is a lot harder to be absolutely 100% honest, and playing what you are feeling at that very moment. It is really, really difficult, I think." (Dario Cortese)

During this last task number thirty-seven, all musicians will play a free-jazz improvisation where the idea of "spontaneity" will be illustrated as the main articulated concept.

Regarding Dario's appreciation of spontaneity within the idyllic improvisation, Engel and Keller (2011) studied how this attribute can be detected and differentiated from a performance based on

different cognitive elements, where the piece has to be performed into a precise form and there is not space for spontaneity. According to these authors, it appears that spontaneously improvised music enjoys more expressive variability in rhythm and energy than previously rehearsed pieces. Additionally, listeners with a greater sense of empathy can more easily observe and appreciate these differences.

In their analysis, two different cognitive processes are associated with differentiating spontaneous and non-spontaneous recitals. The first one is based on the performance objective differentiation and how the brain processes these two types of performance, even when the listener does not know which is improvised and which is not. The amygdala operates in this task as detector of the cues to behavioural hesitating. In the second process, and with the participation of musically trained musicians, some brain activations were observed when swapping from spontaneous to non-spontaneous music.

Concluding this section, and according to these authors, we can say that certain regions of the brain are sensitive to cues regarding behavioural spontaneity. In addition, with reference to the expressive function of the musician brain, the more conscious analysis of spontaneity mostly rests upon the empathic skills of the listener.

6.3.5 Conclusion

In this section 6.3, we have unpicked the various aspects of expressivity required to produce an idyllic improvised solo in the context of contemporary jazz music.

There are some elements that, according to this analysis, seem to be of vital importance to achieve this subjective criterion. These are: listening to the band; absolute control of the instrument; familiarity with the specific musical language; adequate solo space between parts; focusing on intervallic, rather than modal motion; considering phrasing as the core of soloing; achieving a necessary control of the relationships between melody and solo; communicating in different directions: with the audience, with the musicians, with oneself; considering the "message" of the solo as a fundamental concept; avoiding virtuosity unless there is a clear reason for it; considering the great importance of a coherent narrative; pleasing the audience as a crucial technique and finally, using the spontaneity as the core component of the ideal improvisation. Considering this section's information, these are the components of an ideal solo in expressive terms.

Some attributes of the ideal solo have been emphasised and considered as more relevant than others. For instance, the control of the silence has been mentioned by several participants and is widely recognised as one of the most interesting techniques to be applied in improvisation. According to my participants, phrasing and narrative is another significant component. It is, considering the outcome of

this research, the most difficult aspect to achieve when trying to perform a high-quality improvisation. Furthermore, the ability to create a relationship between melody and improvisation has also been revealed to be one of the most relevant components of the ideal improvisation. Moreover, we can find communication in all directions; this aspect is practiced consciously and unconsciously during the pursuit of the 'ideal' improvisation.

My main claim for this section is that the idyllic solo does not exist in reality. This is because, after interviewing seventeen musicians and recording with another seven, it is clear that the potential idyllic solutions are so nebulous that it would be impossible to land upon an ideal solo. However, this idea has certainly presented me with a rhetorical point of departure that has been extremely useful throughout this chapter.

In chapter seven we are going to scrutinise the expressive elements that are illustrated in two compositional processes: instrumentation and modal jazz composition. Together with the text, I will provide examples of musical practice that fixate upon and evidence key claims of this writing, based upon the themes that I unpicked from my participant interviews. I will now start by exploring the use of expressivity through instrumentation.

Chapter 7: Expressivity through composition

7.1 The use of expressivity through instrumentation

- Musical work: Musical Experiment IV:
 - o Formed by three Musical pieces:
 - En mi sonarás (You will always sound in me)
 - Themes Song Eleven
 - Hechizo (Spell)

In the three songs for this section 7.1, there is varied experimentation with instrumentation. "En Mi Sonarás" and "Themes Song Eleven" were created solely by myself. Numerous themes from the interview data informed every action of these two musical pieces. Computer-sequenced instruments were added to the tunes, which were recorded contrasting with the other chapters were everything was recorded in live format and with musicians. These musical pieces can be listened and seen on pages 126, 130, 131 and 132.

The musical piece "Hechizo" was composed by the researcher of this project and recorded by a jazzrock trio. It was composed thinking in the skills of every performer and illustrating the themes from the data, as suggested by the participants. The performers of this recording were neither aware of my investigation about their skills nor about the musical piece themes. This fact contrasts with the music piece of chapter 6, where all the musicians were aware of the research themes. This song can be found in page 126 and seen on page 133 and 134.

7.1.1 Overview

In this section, I will focus on the way in which the instrumentation of existing compositions can be altered in new performances of jazz music. I analyse the contemporary relevance of this compositional technique and argue that different combinations of instruments can provide different expressive outcomes, even if the base musical material remains the same.

7.1.2 Aims

The primary aim of this chapter is to unpick relationships between instrumentation and expressivity. Secondarily to this, I also wish to explore specific types of instrumentation, both common and unconventional, in order to uncover the expressive potential of extant approaches to instrumentation in jazz. Moreover, I fixate on the quality, functionality and quantity of the individual instruments chosen in specific contexts, as I uncover the ways in which different combinations of instruments can lead to different expressive capabilities. The expressivity of an ensemble can be entirely transformed

when composers give themselves license to experiment with innovative combinations of instruments, and the following paragraphs will shed some light on this unique parameter of compositional expression.

Practically speaking, the aim of this chapter is to explore the expressive elements that play an important role in the process of choosing appropriate instrumentation to compose contemporary jazz. Instrument choice, the number of musicians, communication between musicians, and the different players' fluency levels are here considered as compositional decisions.

The primary claim of this chapter is that instrumentation and communication are strongly related when choosing the appropriate musical instruments for a specific performance. Choice of instrumentation impacts the ways in which musicians can communicate with each other. This consequently modifies the individual expressivity of each member of the ensemble, which in turn has a concomitant effect on the collective expressivity of the group.

7.1.3 *Covering a gap*

As stated above, this chapter will document certain differences in musical expressivity that emerge in response to different types of ensemble instrumentation. This subject is particularly noteworthy because it has not yet been explored in depth in contemporary jazz discourse, as I will evidence below. Moreover, there is a similar lack of research around the relationships between instrumentation and concepts such as *period*, *style* and *specific focus*.

The following chapter works to reconcile this gap with a practice-led exploration of jazz instrumentation. Three original musical pieces will illustrate the researched themes during the interviews. Different instrumentations in each of the tunes will be used to demonstrate aspects such as characteristics and outcomes of recording with computed instruments, instrumentation with low musical expression boundaries and pre-recording analysis of every musician's skills to elaborate the composition.

7.1.4 Chapter structure

Within this chapter, I will take different aspects of expressivity into account. Again, I will be using my interviews as a primary source for this research. Firstly, I refer to discussions with my participants about differences in expressivity that emerge when composing for trio, quartet, quintet and other jazz forms. After this, a jazz composition for sitar will be studied with reference to another composer who participated in my interviews. I use this to motivate an investigation into the concept of 'eloquence' when composing for rare musical instruments.

Following this, I present differing views on arranging jazz for rare combinations of instruments, such as a duo combination of double bass and voice. Finally, in relation to my own work, I document my own process of accounting for these expressive characteristics of instruments and performers as a feature of composition. This is practically articulated by three musical works pertaining to my Musical Experiment IV, which sonically evidences the argumentation of this section.

7.1.5 Related literature review

My research into instrumentation is informed by the work of Russo (1968). Russo explores different expressivity elements of jazz composition and analyses musical expression through an exploration of many composition techniques. Many different compositional features are explored, including melody, harmony and rhythm. Russo supports the extremely powerful characteristics that jazz music offers in instrumentation terms. He investigated the link between composition and expressive output and explored the progress of musical expressivity through composition methods developed up until the 60s. Cultural changes, social identities and audience demands have shaped the society and the musical composition techniques and this continuous change is reflected in Russo's work in the most technical manner. Rhythm, melody, harmony, modality, counterpoint, and chord progression are the most relevant aspects that he explores and exemplifies through written scores. This work has certainly impacted my understanding of my own compositional practice.

Attarian (2015) went further by exploring uncommon instrumentation techniques. Here, he investigated the musical idiosyncrasy of unusual and uncommon instruments in jazz. For instance, Rufus Harley was a tenor saxophonist who transitioned to the bagpipe for jazz performance. Moreover, Ritz began his career playing tuba and bass, but in the mid-50's became one of the first jazz musicians to start using ukulele. Dorothy Ashby was a pianist, who swapped her keys for the harp at the beginnings of her career, and recorded some be-bop albums using harp in the 50s and 60s. To conclude, Attarian claims that these examples demonstrate the fact that jazz is an exceptionally open art form. Aesthetically useful surprises and novelties can occur when musicians experiment with instrumentation.

Seminario (2015) developed an analytic work which examined the specific instrumentations used in the stylistic fusion jazz and salsa. Latin dance music and jazz were initially very separate musical styles, which did not have much in common. Prior to the birth of this fusion between salsa and jazz, musicians like Gillespy and Pozo fused styles to create the Afro-Cuban jazz in the late 40s. During the 60s, Latin and American musicians collaborated one another to create salsa. This creation of Puerto Rico and New York salsa music meant an innovative and attractive Latin sound, which experimented with pioneering instrumentation in this jazz style. Specifically, Seminario explores here the

instrumentation applied to the compositions of two relevant musicians of this fusion of styles, Luca and Barretto.

7.1.6 Discussion with participants and musical experiment IV

The expressivity of an ensemble evolves as a function of instrumentation. Sometimes, the instrumentation may impede this development...:

"I played in a trio, concept that I never tried before. I swapped from composing for quartet, quintet..., and when I started playing with the trio, I started composing songs. I realized that it was another world. Suddenly, a piano trio..., what I was composing for before, did not work, and from that point emerged, probably, my interest for Fred Hersch." (Gonzalo Del Val)

As Gonzalo states, adaptability is necessary to succeed in this style. Jago (2015) explores the emergence and adaptability of the guitar as a significant component of jazz style, a topic which has had comparatively little literature dedicated to it, and develops the idea that the guitar is a relatively new instrument that needs to be farther examined for its wide dynamic, timbral and textural capabilities. According to Jago, three main elements of adaptability need to be considered when changing from one instrumental setting to another in jazz. These are sound, density of texture and dynamic sensitivity, which can vary in accordance with instrumentation.

Communication

If you vary the instrumental format of a jazz band, the musical outcome will perceptibly change. The role of every musician in the band fluctuates depending on the format of this ensemble. Communication, a concept already discussed in this thesis (see Chapter 5), will change according to the size and structure of the band. The communicative process transforms all the expressivity aspects of the ensemble into something different when the number of musicians' changes, achieving a different musical outcome.

This is particularly relevant if we consider that the expressivity required to communicate with two other band members has different characteristics to the expression required when communicating with three or more people. As participants Llorens and Barrat mentioned, when considering instrumentation, it is important to value how it affects the communication and expressivity of the band. These two participants specifically study the musicians' skills before composing the piece, in order to obtain an appropriate degree of communication, and to reflect this in the sonic outcome.

In the first song for this section, namely "En Mi Sonarás", many aspects illustrate the participants' concepts. In the first musical contribution of this section, we can appreciate the following features: Composing for trio – guitar, bass and MIDI programmed drums as experimenting with a new band form; considering sound, density of texture and dynamic sensitivity.

Two main elements are developed during this task with reference to the contribution of participant Gonzalo:

- The composition is different to anything that I have recorded before due to the drums being played by MIDI while the rest of the band have been recorded via overdubs..
- o The communication in this band is affected by the way in which it is recorded.
 - First guitars, then vocals, keyboards, double bass, voice and then MIDI drums by computer. Because it is not recorded simultaneously, the gestural communication is therefore removed from this musical piece.

There are instruments that seem to restrict the harmonic and rhythmic expressivity in the band due to their functional characteristics, limiting the fluency of the other players of the band.

"So, Coming Home, I think that is different from the other songs, because it is much thought for the sitar, although it has some limitations harmonically speaking. In one hand, if you compose for sitar, you need to think on D, Db and no much more. It can be major, it can be minor or it can be also modal, but it needs to be always inside these keys. You cannot go further... and most of the songs are composed thinking on the sitar." (Jaume Vilaseca)

Indian jazz fusion

Farrell (1997) explains how Indian music and jazz fused through experiments with instrumentation, like in participant Jaume's case, and managed to reach coherence while keeping the most important expressive elements of both styles intact.

Farrell remarks upon the surprise of jazz musicians when they met the powerful improvisatory expressions of Indian music and the dedication of these players to the total control of their instruments (two features which are similar to jazz). When studying the Indian approach to improvisation, we can understand that the linear expansion of a melodic motive is one of the most characteristic aspects in both Indian and jazz music. This skill of linear expansion refers to the modal approach to harmony on which the melody or solo uses Indian Ragas or other Indian solo elements with certain similarities to the jazz modes. Moreover, we can understand then that a more cadence harmony-based fusion was not an appropriate approach for this blend between jazz and Indian music.

Moreover, fusions between jazz and Indian musical cultures can be found in the '60s. John Mayer's British band and Harihar Rao's sextet in United States are some examples of this. The instrumental constraints in these fusion bands were several as for instance the harmonic limitations of the sitar, which is limited to two keys: D and Db; and inside of these two keys there is room for various modes. These formations had mostly Indian rhythmic and scalar ideas, due to the mentioned Indian instruments' restrictions and the necessary adaptation of instrumentation and techniques required in this blend. As a basic factor, Indian and jazz improvisatory principles were kept in order to preserve the core expressive features of each type of music. (Farrell, 1997)

Demonstrating the surprising compatibility of these two musical cultures, Mayer released his album composed for alto sax, trumpet, piano, bass, drums, sitar, tabla, tanpura, flute, and harpsichord; while Harihar Rao presented a sitar sextet project. In these examples of jazz-Indian fusion, the structure of the songs was generally based on the typical jazz standard head-solo-head, and instrumentally speaking, the Indian fusion captivated other styles. Raga-rock was another style where the instrumentation adopted new forms, such as Indian instruments with three guitarists: Howard Roberts, Herb Ellis and Dennis Budimir.

Musicians like Shankar and Rao speculated about the future of this Indian-jazz instrumental fusion. They assumed that both musical cultures have meeting and collaborative factors to be developed as one artistic event. (Farrell, 1997)

As stated above, some instruments may need the rest of the band to change their playing style. The aforementioned album for sitar is an example of a technically restricted composition for five instruments, where the harmonic elements adapt according to the sitar's limitations. The musical self-expression in this case adopts a different role, where the result is a path full of boundaries that the composer and musicians need to be aware of in order to be expressive and coherent whilst creating music.

In the first song for this section "En Mi Sonarás", we reflect on the restrictions of recording a tune that uses computer sequenced drums, as an exploration of the concept of "recording with a restricting instrument". There are three main aspects to consider for this composition in this regard:

- With this programmed instrument, there is a loss of instant expressivity, and the communication has an emphasis on the sound, avoiding in this case the gesture and physical interaction.
- Another component with the aim to restrict the band possibilities and gestural communication is the fact that it has been recorded in various takes, one for each instrument, as contrasted to live recording.
- Finally, we need to consider that the dynamics can be constrained or opened depending on the capabilities of the software drums, whose musical abilities in this setting depend on the composer's MIDI computing skills and the quality of the software.

A different type of self-expression is found in the following example where, in contrast with the sitar band, the boundaries are completely broken and the possibilities for fluency inside the jazz language increase.

"Because I am obsessed with drawing the harmonies like the instruments (while soloing), I found playing with only the bass the best way to do that. And in this way, the soloist needs to go through the whole harmony..., otherwise it does not sound right." (Mayte Alguacil)

The expressivity could enter in an unsafe, challenging and especially rewarding territory.

"They were tenor sax and double bass. It was unimaginable doing a project like that. It is too risky. Pablo and myself were meeting very often and one day I proposed him to record. He said: "the audience will see all the mistakes playing as a duo". We did a gig, and we were playing very safely. The first minutes were very difficult and Pablo was not sure about it, but we saw that it worked finally and Pablo said: "this works". We practiced a lot to record the album... It was a great experience." (Mayte Alguacil)

Other small instrumentations

Mendonça and Wallace (2004) explored the instrumentation-related processes that manifest within jazz duo performances. Primarily, they wished to illustrate how the musicians of various duos think about time and use their creative thinking while playing standards and free jazz tunes. They argue that temporal cognition is a necessary element when the musical structure evolves on an improvisational basis whilst being played. Clear preparation of the temporal reasoning must, therefore, be included in a jazz standard or free improvisation.

Motivic soloing is reflected in a skilled improvisers phrasing, as a relevant characteristic of duo performances. Whether these motives are conscious processes is still unknown. It is important to state that while doing this analysis, routine and non-routine problems arose from this duo interaction systematically.

Whereas with a big band we can talk about textures, colours and orchestration, with duos we need to emphasize the importance of such a fragile synchronization and the extra relative weight upon the two instruments. Musical eloquence seems to be here partly affected by an understandable panic created by the responsibility adopted by each performer. In a duet, 50% of the performance's weight would logically fall on each musician (although this weighting is liable to shift according to performance context, especially in the case of solos). Risk seems to play an important role in this situation. This

risk is added to two additional factors in the context of duo performance: the special expressive capacity of each musician and the engaging nature of this type of performance, which often creates a special interest in the audience.

I have used a duet ensemble format to illustrate the aforementioned concept of my participant Mayte; an emulation of her conceptual perspective. In this second original musical piece "Themes song 11" for jazz duet composed for this section 7.1, there is an illustration of the idea of using a band that is "low in musical expression boundaries". With this piece, we look to show three main ideas that contrast with the first song of this chapter, where restrictions shaped considerably the tune. The characteristics of the musical piece are:

- No constrains in harmonic terms, differently to the sitar jazz band.
- Rhythmic and harmonic possibilities of spontaneity, now with real instruments and with human interaction.
- Unsafe, challenging and rewarding experience because of its unusual jazz instrumentation of jazz guitar duet that experiments with an unusual type of expressivity.

In larger ensembles, the musical expressivity achieved through the process of instrumentation is seen as a subjective consideration. Exploring the specific musical self-expression of every orchestra player, in order to assign the appropriate musical role, is a challenging, painstaking and laborious process.

"I always think about who the player is going to be; this is why I find my music very interesting, because I am always writing for the personalities that I know. When someone asks me to write a piece for the Scottish National Orchestra..., I still always explore, and listen to recordings and who is playing which instruments, so I get to know for that analysis..., it is really important." (Issie Barrat)

Similarly, the participant Ernesto says:

"I personally think a lot in the player who will perform it and the other musicians that will play with her/him when I am composing. I do this because, as I said before, the communication between musicians is very important. If you have a very good communication with another musician, always musically speaking... I think that it is very important thinking in the people." (Ernesto Llorens)

Interactions between musicians can be defined as an expressive factor in compositional practice. This process happens not only physically and gesturally among the players, but also sonically. Furthermore, this activity occurs regardless of whether the musicians are recording together or separately. Considering the musicians' communication while writing the music can transform the

writing process into a more alive and creative activity. Empathising with the musician's expressivity is seen as a necessary process in the contemporary compositional practice, but it has also been practiced in the 20th century:

"It happens sometimes that a composer is unable to take into account all the technical, colorific and expressive possibilities of a master instrumentalist. Depending on the precision with which the composer estimates the instrument's potential one may talk of a sensitive or insensitive presentation of compositional details, and a good or bad instrumentation." (Samuil Feinberg)

In the third song for this section "Hechizo", we represent a concept that is associated with the last two contributions by the participants: "Composing thinking in the players that will record the tune". To write all the instruments for this tune, there has been a study of the musicians' possibilities and an adaptation depending on their musical capabilities.

The aforementioned technique has been applied in the following two musical works:

- o In the first song "En Mi Sonarás", only one musician has contributed to the recording of all the instruments. Computer-sequenced drums, double bass, keyboard, vocals, and guitar one and two have been recorded by analysing the expressive characteristics of one only musician.
- o In the third song "Hechizo", all instruments are 'real', i.e. non-computed. The bassist's, vocalist's, guitarist's and drummer's skills have been analysed to elaborate the composition according to their musical qualities. This was recorded as a live studio performance.

 Substantial expressive differences can be appreciated in this song, mostly in terms of interaction and response. For instance, in a live audio recording there is a type of synchronization that can emphasise the risk and the logical and cognitive response to the mistakes. In the computed versions, there is a lack of instant response and risk by all the players due to the more premeditated approach to material formation via MIDI devices and computer software.

7.1.7 Conclusion

The process of selecting between different instruments and their specific expressivities is here presented as means of influencing compositional outcomes. Moreover, it is sometimes necessary to change compositional approaches when we change the number of musicians in the band. Both of these processes can transform factors such as the communication between musicians, alongside the individual and collective expressive abilities of the musicians.

The musical expressivity of a whole band that plays with a technically limited instrument such as the sitar will adapt according to this instrument's boundaries. In Indian folk music, this instrument is generally recognised as a versatile device. Nevertheless, when we bring it to the western musical culture, it appears to need of an adaptation, which limits the musical alphabet to only D and Db keys.

Other types of musical self-expression simultaneously present challenge and opportunity. Performing jazz standards with a duet of voice and double bass is a high-risk musical activity. This suggests that the creativity illustrated with this band format of duet bass and voice, is significantly different for the audience when compared to the creativity achieved by a philharmonic orchestra. Risk, musician's creativity, coordination complexity and the interaction between performers are some of the crucial elements that may define this unusual project.

Thinking and researching about a particular musician when composing a piece can allow the work to acquire more dynamic features. Knowing their limitations, assets and – crucially – sound quality, will help us to achieve the wanted musical outcomes. This is necessary not only for the knowledge about the musician's expressivity but also to understand the best methods of using the composition to provoke communications between players. These expressive factors of communication can be considered and manipulated by the composer as they produce the piece.

As the primary claim of this section, I state that instrumentation and communication are linked when choosing an appropriate musical formation. The choice of instrumentation will change the individual and collective expressivity and will also impact their communication. Moreover, when the band is small, elements such as risk, musician's creativity, coordination complexity, and band interaction are further compounded and present unique challenges.

In the following section 7.2, I am going to talk about the use of expressivity in relation to modal jazz composition. I will cover the issues of comparing this type of jazz and tonal jazz; Indian modal music, Miles Davis and his contribution to modal jazz; the surprise-invoking and descriptive capabilities of modal jazz; thinking in intervals instead of modes; missing tension and release in modal music, and finally, the technique of blending of tonal and modal jazz.

7.2 The use of expressivity through modal harmony composition

- Musical piece: Al borde del precipicio
 - o Translation: On the edge of the precipice

The song "On The Edge Of The Precipice" was composed and recorded for the context of this chapter. The intention of the composition was to elaborate an experimental and modal musical process. I applied the most important data themes to the song, in order to experiment and illustrate the most relevant information about the investigated topic. This musical piece is explicitly referenced in pages 126, 135 and 136.

7.2.1 What is there in this section?

This chapter will address differences between modal and tonal harmony in the context of contemporary jazz music and how these can impact musical expressivity. My primary claim for this section considers the expressive differences between modal and tonal jazz. I argue that choices between tonal or modal approaches can dramatically impact the expressivity of jazz performance, and that this selection process can be utilised as an expressive parameter of jazz composition. Furthermore, I claim that modal jazz has the capability to describe more musical contexts than tonal and that in the practice of the jazz improvisation on modal harmony, there are three ways to think: thinking in modes, thinking in intervallic motion to a centre or a blend of thinking in modes and intervals.

Key expressivity differences include: modal harmony's ability to produce specific ambiences and atmospheres, and tonal harmony's exploitation of tension and comfort. Surprising changes happening from chord to chord and descriptive musical moods are other adjectives that distinguish modal jazz from tonal and other types of jazz.

Various perspectives are here developed in reference to published literature and my participant interviews. Moreover, a new musical piece will evidence the claims that I make throughout this section.

7.2.2 What is the aim of this unit?

The primary aim of this chapter is to investigate the unique musical expressivities that can be achieved through the use of modal techniques. I contrast these capabilities with those of tonal jazz composition. To do this, I develop a subjective perspective of what modal harmony means and how it is used to project a particular type of self-expression in contemporary jazz.

7.2.3 What is the existing gap on this aspect and how it will be filled?

In contemporary jazz studies, there is an abundance of literature that compares modal and tonal harmony. However, there is no research that considers the unique expressive potential of modal music. To fully ground my investigation into this new area, I will give an overview of key literature, and then build upon this framework with my own research.

I use my participant interviews to share a variety of perspectives regarding the expressive potential of modal music, and how it differs from tonal styles. Moreover, I refer to my own practice, as I demonstrate new musical work that considers the selection of modal harmony as a key marker for expressive control.

7.2.4 Section structure

This section has several themes. First, we evaluate whether jazz music sounds modal or tonal because of the harmony itself, or because of how the melody or solo draw upon the underlying harmonic framework. We will also explore Indian musical expression, which is mostly based on a modal approach (Farrell, 1997). Considering differences between Indian and Western approaches to harmony, we will discuss differences in musical expression that arise when a specific musical piece is played by these two different types of musicians.

We will then formulate two questions: Is Kind of Blue by Miles Davis a new form of expression or is it a synthesis of different techniques developed during the 60 years of jazz practice? Could it be both?

Following this, I make the following claim: Contemporary jazz composition is, in expressive and technical terms, a development of older jazz and nothing strikingly new. However, modal jazz articulates more unexpected and unpredictable sound behaviours than tonal jazz is typically capable of. Moreover, according to my interviewed participants, modal jazz is more *descriptive* than tonal, and can be better used to create harmonic and textural atmospheres.

My participant Ernesto claims that modal harmony is not a compositional approach. Instead, he argues that, when improvising, it is best to think in tonal centres and intervallic motion, in order to develop progressively the ideas. Following this theory, we will discuss how modal composition often avoids tension and release - a fact that does not appeal to one of my participants. Finally, we will look at how jazz form, and therefore its expressivity, has changed and has blended modal and tonal approaches and has become a unified common practice in certain contemporary contexts.

7.2.5 Related literature review

Tonal and modal jazz have had their prominence in different eras since the end of the 19th century. Between 1950 and 1955, tonal jazz gave way to a new style called cool-jazz. The rise of this meant the end of Be-bop and the extant tonal system in jazz. The first album that reflected these differences was Birth of the Cool by Miles Davis in 1949. Although this album had pioneering elements of a new type of harmony, it was with the release of Milestones and Kind of Blue in the late 1950's where the development of the modal approach and the emergence of a new style called modal jazz took place (Ramos, 2009).

Titus (2010) explores the individual and collective expressive elements of modal jazz. In this study he considers that scholarship elements of tonal harmony in early jazz can be applied to the study of modal jazz. He also investigates the tune "So What" as the birth of modal jazz. According to Titus, coordination and stratification are pillar elements that Miles used for the improvisations. In Titus' analysis, different kinds of interaction between the musicians who participated in that song are examined, considering the importance of musicians' communication in historical terms.

An experiment was carried out with improvised Indian music played by Western and Indian musicians. Raman & Dowling (2016) mixed different concepts of modal music. These findings converged with previous research in identifying three types of cues: 1) culture-specific cueschematics and veridical knowledge-employed by Indians, 2) tone-distribution cue-durations and frequency of note occurrence employed by both Indians and Westerners, and 3) transference of schematic knowledge of Western music by Western participants. It is relevant to state that eventually this project and previous projects culminate by deducing that there is a blend of musical knowledge and culture. As many times, jazz expressivity has gone beyond its capabilities and has adapted and transferred its resources to another style, in this case, Indian expressivity.

7.2.6 Discussion with participants and Musical Experiment V

I will now present a discussion of this section, linking the modal related concepts from the participants to my original musical piece. An interpretation of the data and a conclusion will also be given.

Asking our participants, we can appreciate how the contemporary jazz musician blends modal and tonal approaches and other compositional techniques as usual practice. In the contemporary context, jazz appears to be a more combined group of resources than it has never been before.

"I think it (whether composing using modal or tonal harmony) does not now really affect the improvisation, because the composition is not anymore a "head then a solo then a head". So in the

composition, there could be a section which has got quite a few of chords..., there could be an Em for solo, of duration of whatever she wants. Then the bass solo is going to be without any chords or any time on its own in the middle of the tune; so when it come back, it will come back to again the melody with the chords." (Byrne, 2015)

Currently, jazz music is articulated in various forms: tonal, modal, blended and atonal. Although at the beginnings of jazz, tonal expressivity was the most prominent, modal techniques have become more significant in avant-garde jazz. As my participant Dee suggests above, there exists a blending of concepts and harmonies in jazz, which includes of different materials from different periods as a key feature.

In the original musical piece assigned for this section "On The Edge Of The Precipice", based on the participants' comments, we are going to explore the concept of composing a structurally heterogeneous piece. Doing this, we avoid the standard system, expressing therefore modernity and experimentation. In order to examine this task, we will observe the entire piece, paying especial attention to the progressive and unequal piece structure.

Modal self-expression often avoids tension and release, a contradictory fact in our next participant's perspective:

"It is more difficult to me when it is modal and there are no changes than when it is tonal with more changes. When it is modal my head thinks in the II Vs cadences to be able to structure. I can do a scale once and once again, but if I do not have tension and release, it does not make sense.

Unconsciously, I am always thinking in the dominant or in the characteristic notes of the specific mode. I use them as cadences. Now, with the example of Cannon Ball, he plays again and again the II V cadence of the chord. At the end, it is the usage of the language that you apply. There is maybe more freedom in the modal music, but it should not be relevant." (Mayte, 2016)

Barret (2006) explains in his work and agreeing with the participant Mayte, that the modal expression can be played as a mix of tonal and modal with a wide range of various jazz resources. According to Barret, in *Flamenco Sketches* by Miles Davis, the composer would use five scales, illustrating a total modal approach to harmony, while the other players used different techniques, including improvisatory cadences, inexistent in the harmony, as the participant Mayte suggested.

Instead, focusing more on a central intervallic reference is an appealing approach.

"If you are playing a Mixolydian, It doesn't make sense not resolving it. What is important is the tonal relationship rather than the mode that you can play on a chord. I do not think that the modes are very important when improvising. They help a lot for learning, but when you are playing..., I think the intervallic relationship is more important than focusing in playing always with the same mode. If there are many bars in the same mode, it helps to the "composed improvisation", but I do not believe in the modal jazz in composition terms." (Ernest Llorens)

Wallmark (2008) agrees with Mayte in that any solo should have this motion of tension and release. In his work he establishes four expressive approaches to achieve this type of task: a melodic start that relates to the melody, the use of chromaticism, variety and polyrhythmic articulation and a cadence that leads to the beginning of another identical cycle.

Tension and release can become a key means of expression for jazz soloists. Avoiding this fairly inherent feature of jazz music can lead one to neglect one of the most important features of the dynamic jazz solo. Whether thinking in scales or in intervals related to a tonal centre, this changes our expressivity capabilities. This varies according to what type of instrument we play. After an investigation on several contemporary jazz players, we can state that playing guitar offers more ease for scale-chord soloing, whilst playing saxophone typically prefers intervallic soloing to a tonal centre. Bäckman (2013) argued (as my participant Ernest did) that focusing on a tonal centre can help to distribute our soloing. He considers that the jazz harmonic structure is historically based on a tonal motion of fifths, which shape the melodic structure.

According to the next participant's opinion, modal expressivity is more descriptive than tonal; it is easier to create atmospheres by using this approach:

"...so this song, is in Bm, logically modal; and I was very sure that the song had to be modal, because this concept allows me to change the atmospheres... with something more modal, I feel more comfortable in terms of creating atmospheres. Let's put as an example a Phrygian song, which is what I wanted to demonstrate with my stay in New York. I wanted to show that side towards the Spanish, towards the Phrygian in that moment. No chord progression can give me that feeling. So when what I have worked on, is being made from the modal point of view, in my case, I work with a more stable, more fixed, more descriptive aspects than when working with tonal concepts. Let's say that the composition can go to many more moments, atmospheres and colours." (Gonzalo Del Val)

Ramos (2009) explored the under-researched area of the modal jazz. Based on his research, it is assumable that the means of self-expression that tonal and modal techniques offer are different. Tonal music gives a more tension-release type of expression, while modal is better able to describe different

ambiences and contexts. Tonal can play more with expectation inside the tension-release paradigm, while modal can give us more surprise due to the change of context every time we move from chord to chord.

Modal vs Tonal

In relation to sound terminologies, and as stated above, modal jazz articulates more surprising qualities than tonal. Modal music is potentially more surprising and can feature sudden changes of musical atmospheres. Historically speaking, there are older approaches to modal harmony, which transport us to many centuries ago. For instance, much Indian music uses modal expression. The Phrygian dominant is another example of a descriptive group of notes, used often in Flamenco music, and with characteristically unstable features. Its sound reflects this instability and tension mostly because of two notes: the minor 2nd and the major 3rd, which transforms the mode in one inside the family of the mixolydians. This group of seven notes illustrates a specific sound, style, name, culture and a geographic scene. In the case of the Phrygian mode, this scale includes the necessary notes to achieve the called "Gypsy toque". This scale is played in flamenco in styles such as Bulería, Rumba, Soleares and Siguiriyas, and as mentioned before, it has its own sonic identity.

There are three different versions of my original tune "On The Edge Of The Precipice", with three different solos in order to illustrate the above discussions on modal expressivity. From 2:25 to the end of the song, we can listen to the following aspects:

First solo played with no restrictions or guidance at all; naturally.

The second improvisation has been played based on II V cadences towards every chord of the sequence, although there is not such cadence in the background modal harmony, as Mayte suggested. Here we can appreciate how drawing these inexistent cadences in the harmony with the solo, we can make it sound more tonal and less modal.

The third and last solo is based on one of my participant Gonzalo's idea. He considers that when having space with modal chords, the articulation of the solo enjoys of more descriptive and narrative features. The soloist here uses the assigned mode for every chord, giving to it its natural and descriptive character.

Modal expressivity is more descriptive than tonal. In this song we create a more atmospheric musical passage by jumping from key to key using chords without any functional relationship one another. In the verse as it happens in the bridge and the chorus, we show a modal type of approach to harmony

by playing the same species of chord in a semitone movement upwards and downwards. Contrasting with this, in the outro solo, the modal motion is made by changing the species of chord from minor 7th of melodic minor to major 7th of Lydian major but keeping the route all the time while the solo is being developed.

How modal jazz was created is still a blurry theory, as we can appreciate here:

"Currently, because I am playing a very clean style, I always use classical composition techniques, obviously. I don't use II V cadences as I would do in Bebop. I think, coming back to this again..., that Django Reinhardt composed modal pieces; there is a song called "Apey Indirect", which goes like that (he plays it, showing the modal approach); and we are talking about the 30s. Therefore, we can say that the contemporary composition may have come from long time ago. As for instance with this tune (he plays several Django songs from the 30s with modal features) See if this is modern or not. (Do you think that the modal and tonal feel are going to be always different?) Yes, clearly. A modal song is always going to be more surprising; with surprising changes". (Barraza, 2016)

While some of the writers mentioned in this research support that Miles Davis invented this concept, there is evidence that musicians like Django Reinhardt were composing and developing modal jazz expression already in the 30's. We can name the example of the tunes "Appel direct" or "Flèche d'Or" as a clear example of this developing concept (Cugny, 2014)

Taking into consideration my participants' comments above, for the musical piece of Section 7.2, I composed a modal part for the solo-outro, where surprise is the most prominent element. Contrasting with functional jazz, here the move is made without tension and release with two chords such as Dbm7 to Dbmaj7. The lack of resolution seems to make this section more surprising and unexpected, as the participants mentioned.

Is Kind of Blue by Miles Davis then a new form of expression, or is it a development of different existing approaches?

"All songs are key based..., look at the jazz standards..., the melody will be in the key, but there will be lots of modulations around that..., but it is still in that key. So you can play a solo that is basically on the pattern of major-minor style, and you don't have to think that much at all. For the most of the strings, especially for a guitar player, you just get a pattern and then we play it. Real improvisers don't do that, you know? I just think modal things are overblown. And if you go back and listen and transcribe the early Miles Davis..., they are playing bebop lines. They are not just playing Dorian over Dm in So What. Everything is in there, the whole shooting, chromaticism, everything will be on a faster changes piece." (Phil Capone)

As we will see below in this section, musicians need accuracy skills in order to blend modal and tonal improvisation when playing over either modal or tonal background. My participant Phil (see the paragraph above) reveals what most jazz professionals will likely practice in order to go on stage every night. Barret (2006) mentions that in Kind of Blue, two songs of Miles' work are essentially considered as modal, as it is the case of "So What" and "Flamenco Sketches", assuming that the first song is based on D Dorian and Eb Dorian and the second is an extended improvisation based on five scales. Furthermore, this author explains that there are two songs in this album, "Free reloader" and "All Blues" that are differently based on the Blues system. A total agreement on the exact definition of modal jazz is unlikely. Three different examples of defining it are expressed by Barret. The first is an extension of improvisation based on scales; the second is playing over static harmony, and finally, playing over a non-tonal harmony.

In the original tune assigned to this section, an illustration of some specific techniques developed during the last 60 years of jazz existence in terms of harmony can be heard. To achieve this, I composed this jazz piece with melodic swing, jazz vocals, typical of current North-American popular jazz, and modal mixed features that illustrate an evolution of jazz.

One of the participants explained his empirical perspective on modal harmony, by comparing Western to Indian culture. According to Fonfria, Indian music expression is based on modal approach, which differs in the way it is performed to the Western style.

"Though, in the modal improvisation, let's say that the most important concept, you know? is this, the relationship scale-chord, and making understand the modal sonority of every moment, with the modal notes. The Indian music roots are modal; the study of the Ragas over a chord, over the Swara, over the tonic... They develop a notes sequence. According to how they play them, they are expressing one feeling -a Raga-, or another. Then they have, a part of the Raga's basic notes... I am going to say Raga and not scale, because it is not the same, you know? Is the order of notes, how you play them. They produce one sensation or another and they are very strict with that. There is much improvisation, but they are so strict. It is not like in Jazz, that you have a scale-chord relationship, and when you improvise, you go out and come back. They don't, they do not go out. They only go out with the melodic changes, with the microtones. There they do go out and come back, but the important notes have to be very clear, you know? It is a bit stricter. They have a tonic, normally depending on the instrument will be one or another. In the Sitar, it is normally C#, but then you have maybe the Bansuri in F#. But as they do not think in notes, but in degrees..., their way to think is modal, in degrees, their tonic is Sa, and according to that tonic, then they create a scale." (Fonfría)

Clements (2009) explored how John Coltrane modified his musical expressivity after developing his techniques through learning about Indian music modality and phrasing. He developed a modal approach in his playing, partly leaving the more tonal and chord changes method behind, in search for freedom and new structures. In this learning journey and through the study of Indian ragas, melodic ingenuity, rhythmic flexibility, and energy were the factors that Coltrane included in his jazz improvisations. The use of these three elements is at the core of the Indian improvisation and has been developed due to the lack of harmonic modulation of this music.

In my musical piece for this section, I explore the obtained feeling that every chord of the solo and its actual modes create to the listener. With this task we can achieve similar aim than with the raga, although it will always miss some important features to acquire the exact outcome. Indian musical expression is based on modal approach, which differs in the way it is performed to the western modal music. The raga has as the main aim "colouring the mind" and affecting the emotions of the audience. This musical process has similar practice in the Western culture, with the Doctrine of Ethos (ancient Greece) and the Doctrine of the affections (early Baroque period).

In the solo for the outro, we performed two chords. In the following lines, I show the feelings that each of the chords present in union with the soloing melody:

Chord 1 (Dbm7) Mystery, melancholy.

Chord 2 (Dbmaj7) Happiness, pleasure.

This process can be heard from 2:25 to the end of my musical piece.

Whether these solos sound modal or tonal may not depend on the harmony but on how the melody or solo draws upon it. Whitty (2014) mentions the answer that musician Michael Brecker gave after an engaging solo over modal harmony, with tension and release elements on non-existent cadences in background harmony:

"What is that you're playing?" Mike would often reply, "Oh, I don't know. It's basically a half-step up, half-step down kind of thing." "That may have been the case, but it was also Mike's gentle way of saying that what he was playing was hard to describe in words"

(Brecker, as cited in Whitty, 2014, pg. 1).

This answers a possible question of what some virtuosos think when improvising in a modal harmony. In the case of Michael Brecker, we have the case of sporadic use of the non-existent cadence tension and release. The resources applied on modal improvisation vary depending on what instrument we are playing as well as the capability to articulate musical elements that do not appear in the background harmony.

7.2.7 Conclusion

In this section, we have examined the use of expressivity through modal harmony. We started by looking at the differences between tonal and modal kinds of expressivity and the contemporary practice of blending both types. Moreover, tension and release in modal jazz was discussed and considered as indispensable by the participant Mayte and unnecessary by the participant Gonzalo. In addition to this last point, and according to the interviewee Ernesto, thinking about tonal centres and about an intervallic motion to that centre, instead of thinking of modal development is a more efficient way to improvise in this context.

Moreover, I compared Western and Indian modality. Participant Fonfría, who has been developing his expressive skills in India, explained his experience and the learning process by mainly focusing on the raga. In this section of the discussion, we could appreciate that Indian music does not have scales but 'moods' and these 'moods' can be defined as scales played in specific ways, in order to achieve one sense or another. In addition, we can state that Indian music is all modal with static harmony.

Finally, at the end of this discussion, we considered whether the melody has the ability to change the music from tonal to modal and vice versa, and consequently a musical piece has been presented showing this appreciation.

For the primary claim for this section, I have considered the differences between two approaches to jazz harmony, namely modal and tonal. Choosing between modal and tonal harmony will modify the musically expressive outcome. I support the fact that modal jazz has a better ability to describe musical contexts than tonal and that in modal jazz improvisation, I find three ways to think: thinking in modes, thinking in intervallic motion to a centre and a blend of thinking in modes and intervals.

In the final chapter, Chapter 8 of this thesis, a conclusion is given. I will start by explaining what has been achieved within this research project. Following this, a reminder of the research questions is also presented. The musical achievements of the practical part of this thesis will be also summarised, and the limitations that have been found during the process are also illustrated. Finally, an assessment of the gap of knowledge to be covered in the future, as well as my plans for future research, will complete this final conclusion.

• **Chapter 8** – Conclusion

This thesis project has investigated and experimented with the practical use of expressivity within jazz composition. I have examined this concept from the perspective of four musical processes, which were used to provide a framework for investigation: *communication*, *improvisation*, *instrumentation* and *modal composition*. This framework has been developed in order to fill a substantial gap in current literature about the way the jazz musicians use expressivity. In doing this, I have opened up a new field for debate around the deliberate control of expressivity as a component of jazz composition. I performed this investigation for personal and academic reasons.

Firstly, I am a professional musician who enjoys experimenting with composition, improvisation and the use of expressivity in jazz music. Furthermore, on an academic basis, this gap in the literature has given me the chance to open and explore new territory around expressivity in jazz. I hope that this research will be useful to myself, to other practitioners and to other researchers, as we collectively develop our understanding of what it means to be expressive in jazz music.

After spending several years working on my research, I have noticed that no substantial literature has been presented about expressivity as a tool for composition in jazz. I see this gap as a problem when I consider the potential importance of expressivity in jazz music; a musical practice which is so reliant on communication, improvisation, personality, style and technique, as expressed by groups of socially interacting musicians.

Several steps have taken place in order to fill this gap. First of all, the primary aim of this research has been to develop a theoretical framework that can inform the practical development of new works of jazz music. This theoretical framework has been developed from my reading and my participant interviews (*please see* Methodology *for further information*) and is specifically focused towards the notion of expressivity in jazz music. In order to demonstrate the practical value of this framework, a variety of musical performances have been recorded with the purpose of illustrating key theoretical concepts that have emerged throughout my investigation. I have elaborated upon each key theme of my research with the composition of a new musical work.

I needed to fill this gap for two reasons. Firstly, because of my professional compositional practice, which has always explored how to use the expressivity in my compositions. The second reason is that I consider this concept of expressivity the core of any performance or composition. Understanding it in the musical act can give us important abilities to control and experiment with new sounds and types of music.

Within the context of this aim, there are four questions that worked as the foundational pillars of this thesis. Specifically, this project answers the following: *How does expressivity impact upon communication between players? How do jazz musicians understand the relationship between expressivity and improvisation? How do composers of contemporary jazz talk about expressivity in relation to instrumentation? How do contemporary jazz musicians discuss expressivity in modal composition?*

Each question is linked to a specific musical experiment. The first research question has been illustrated by *Musical Experiment I* and *II*. The second research question has been practically addressed with *Musical Experiment III*. Finally, the third and fourth questions have been represented by *Musical Experiment IV* and *V* respectively.

As I move towards my conclusion, I refer to the introduction of this thesis, where I referenced some works that have been key to my understanding of this project. I cited Attride-Stirling (2001) and I have used her "Thematic Networks" as the analytic tool to process the data from semi-structured interviews and I have therefore developed a schematised diagram from where the whole thesis has been supervised and optimised.

Furthermore, I analysed the work of Sakata, Wakamiya and Hachimura (2009) and how they suggest that the expressivity of a performance is the addition of both sonic and body motion. They support the idea that the union of both processes is necessary in order to understand the expressive elements of a performance. The bodily element of the music has consequently the power to modify the expressivity of a given musical passage. They consequently assume that there are two main factors in the performance, namely power and aesthetic quality. Power quality stands for the sound effectiveness of the performing band and aesthetic quality stands for musical meaning of the body and facial gestures in that performance.

Furthermore, in my project, there is a comparison between the two suggested versions of performance: a concert with crowd who could witness the bodily motion of the performers, as in "Musical Experiment III"; and a concert without this framing of bodily activity, due to the absence of audience, as in "Musical Experiment I, II, IV and V". This research by Sakata, Wakamiya and Hachimura has given me insights about how sonic and body motion expressivity depend from one another in order to obtain a complete performance. Furthermore, they have suggested me the aspect of how weak a music passage can be when we separate these two musical qualities.

My introduction also explored the work of Woody (2000). After studying musicians that have finished music college, he argues that the musician better develops her/his expressive skills in private lessons than in collective lectures. According to his study, the students who go to private lessons spend more time practicing the mastery of expressivity and feelings than those who rely solely on

group-based learning. Considering the importance of these attributes, I claim that the ideal learning configuration is a mix of the two types of lesson: namely private and collective. The private lesson offers the learner the control and mastery of self-expression and the collective lesson is more focussed on finding our expressive musical identity in a social context.

I refer now to the work of Cochrane (2008), which was also mentioned in my introduction. He claims in his work that the contemporary musicians have suffered an evolution: we have evolved to express other musicians' feelings as well as ours. In addition, and somewhat contrasting with this claim, I state that a musician is not always able to interpret a particular feeling. This is demonstrated in my musical work for this thesis. My musical work evidences the fact that what we want to express is not always what we express.

A fluid demonstration of this occurred in task twelve of Experiment III, in which a solo was played twice and assessed sonically. Audience and musician rated the improvisation and the results evidenced that what the musician felt about the solo was different to what the audience did in that particular case. In another example of my musical work, specifically task twenty-five, the three musicians of the band play a "collective sadness", which is demonstrably achieved.

Nevertheless, there are some seconds in that task where we can notice the musicians searching for that sadness. It is not achieved at every moment of the task but differently, there is an exercise of synchronisation in order to eventually obtain that specific feeling.

Through this research project, I have had the chance to observe and evaluate expressivity from a number of different practical viewpoints. In the context of contemporary jazz music, I have been able to experiment with jazz players in order to learn more about how contemporary practitioners think about and practice expressivity in their work.

My practical contribution yielded 120 minutes of experimental music practice. These experiments have been split into five pieces. The first and second pieces include a demonstration of how contemporary jazz musicians use their expressivity within the communicative processes between musicians on stage. The third piece has reflected on the use of expressivity within improvisation. Finally, the fourth and fifth experiments have shown how avant-garde musicians can use expressivity in the processes of composition in their manner of using modal harmony and by experimenting with ensemble instrumentation.

As I answer my first research question: *How does expressivity impact communication between jazz players?* in *Chapter 5*, it is relevant to seriously consider the expressivity of each jazz player within an ensemble. By using communication as a vehicle for composition, I have unpicked some general rules that I can use to better understand my practice. One is that the individual personality of a musician is going to alter the expressivity of the ensemble as a whole. Another argues that the

development of our ear is a very important practice in order to improve our ability to communicate with the rest of the ensemble. Furthermore, and concluding this discussion of communication, I claim that the jazz musician is a person in constant evolution, and that this evolution affects her/his expressivity as they change through time. For this reason, a musician will never play an improvisation twice in the same way. The concept of 'undressing ourselves' also functions as another expressive element of this personal musical evolution. This concept refers to the open disposition and sincerity between players that is necessary in order to communicate effectively and develop one's personal language.

By answering this first research question and looking at the results of this thesis, I recognise that other logistical or conceptual situation could have modified the results of this section. I designed the study to reveal a particular set of results, with the understanding that this would preclude other approaches. This design that I am mentioning here has been achieved by applying a particular approach during the creation of the original music applied to this section. In this Musical Experiment I and II, this main factor was keeping the musicians unaware of the aims of the thesis. This did not happen during the other three musical experiments, where all musicians knew about the thesis aims. By doing this, this section enjoyed of a different approach to its elaboration and by this a contribution to the element variety in this project has been achieved.

In chapter 6, my second research question: *How do jazz musicians understand the relationship between expressivity and improvisation?* mapped out relationships between expressivity and improvisation. In particular, factors such as risk taking, player dynamism, the jazz idiom and the 'idyllic solo' have contributed to the argumentation of this chapter. Within this unit, key concerns included relevant aspects such as: the use of silence, changing the harmony with the melodic improvisation, and the use of spontaneity.

A variety of ideas have been given to conceptualise and work towards the expressively idyllic solo. Following this analysis, it appears that every musician has a different perspective on what is the most important component in that solo. Furthermore, I state that it is impossible for a musician to repeat the expressivity of an improvisation in the same way twice. This conclusion is based on the complex web of behaviours exhibited by the human body when undertaking this task, even when playing a relatively simple improvisation that lacks features such as risk and dynamism.

In terms of expanding the jazz idiom, little innovation in current jazz music has been observed during this research, considering the information after interviewing seventeen successful musicians.

According to what we debated, only one stylistic jazz element stood out as innovative in the last period of jazz music. As mentioned previously "orchestrating an improvisation" has been the innovative musical process that has emerged as relevant in this thesis. By discussing the relationships

between orchestration and improvising in the moment, I have opened up a new discursive field in relation to contemporary jazz expressivity. In order to accomplish this research, I have studied the process of adding instruments to an improvisation in real time in an orchestral context.

Moreover, my thesis has proved that an 'idyllic improvisation' is a pointless thing to pursue. I stake this claim on the fact that all the participants have described many different attributes of that idyllic solo. This massive quantity of responded features has therefore suggested that it is impossible to perform such an idyllic improvisation.

For this second research question, it is noted that I could have taken different logical and conceptual approaches. For instance, in the musical implementation of this task, I did not experiment with changing the format of the band during the experimental performance Experiment III. Tasks such as orchestrating an improvisation or copying different standard jazz bands are among the tasks that could have required different resources and produced different results. Although this could have positively impacted to the research outcomes, I decided that a jazz trio was more than capable of musically interrogating all the researched theories. There was therefore no need to call more musicians to the act.

Instrumentation and modal jazz composition have been mapped to my third and fourth research questions respectively. My third research question is: *How do composers of contemporary jazz talk about expressivity in the instrumentation activity?* And the fourth research question is: *How do contemporary jazz musicians discuss the use of expressivity in modal composition?*

In this practice-based research, I have personally experimented with instrumentation. I argue here that jazz is and will always be open to any type of expressivity in relation to instrumentation variations. I have tried to push the instrumentation at the edge of this musical style, but it appears that jazz includes expressive experimentation almost as a defining stylistic feature; it does not reject any instrument or type of sound. In addition, when choosing the instruments, the musicians' communication appears to be a crucial element for the composer to consider. The collective and individual expressivity of the ensemble is a direct function of the instrumentation that is chosen. Furthermore, when considering this communication in a small band, the elements of creativity, risk, interaction and the complexity of coordination will be very different and present more difficult challenges than in a big orchestra. This is due to the increased amount of focus on each individual musician.

It would have been possible for me to produce different results by taking a different logical or conceptual approach to working upon my third research question. To elaborate on this, in order for me to answer the primary question of this chapter, I recorded three different pieces. In the first one,

everything was recorded by a single musician who played drums and bass that had been sequenced by a computer, alongside guitar and vocals. The two other pieces recorded to address this question used, respectively, a duet and a quartet. Although in my initial designs I had no interest in recording a jazz big band format, I recognise that I could have pursued this as a means of expanding the insight of my research question. However, the chapter itself reveals a strong enough thread of argumentation for me to be able to base its primary claim upon the musical examples that I recorded.

In chapter 7.2, I make the claim that modal jazz is generally considered to be more expressive than tonal jazz, by drawing to attention the unique expressive potentials of modal harmony. This claim is corroborated by the information gathered from my participant interviews. In my practical component, several musical tasks have demonstrated this sonically. Various musicians have tried to work with their modal and tonal expressive tools, typically acquiring more descriptive sound in the modal type of harmony. For instance, in the "Musical Experiment V" of this thesis, there is one piece with three versions where we can compare between different types of solo. From the minute 2:25, the improviser for this task played the solo with three different aims; playing:

- 1-with no restrictions, where the soloist played freely. (version 1)
- 2-over non-existent cadences, where the soloist used appropriate II V cadences that were inexistent in the harmony of the piece. (Version 2)
- 3-with descriptive and narrative features, where the soloist used a more modal type of soloing; using only the modes assigned for every chord. (Version 3)

Throughout chapter 7.2, I have considered the expressive differences between tonal and modal jazz. Considering the many expressive differences that I have suggested in this thesis between modal or tonal jazz, I argue that this choice can be used as a compositional tool with significant expressive results. Moreover, I claim that modal jazz has more expressive capabilities than tonal jazz and that in the practice of jazz improvisation over modal jazz, the soloist can think in three ways: thinking in modes, thinking on intervallic motion with more freedom or a blend of both.

Although I am satisfied with this chapter's results, I have noticed a couple of slight changes that could have been made to the interviews regarding modal harmony. As I came to analyse my interviews, I noticed that I kept wanting more information about the ways in which my participants develop their own expressive techniques that utilise modal harmony. I believe that additional follow up questions could have improved the exploration of this topic. However, it is clear that the interviews work well enough to support the argument that I develop throughout this chapter.

The two most significant limitations of this research have been the availability of the interviewed musicians and the quality of the venues that I chose for the interviews. In some cases, musicians like Pat Metheny and Scott Henderson could not make it due to their busy professional life.

Moreover, certain venues forced me to improvise in order to achieve good sound quality and a comfortable experience for the interviewes. I used a variety of different locations for the interviews, including: university rooms, bar-restaurant, Skype and the house of participants. In some of these venues, the limitations of sound and conformability for the musicians have been a challenge and has required some improvised creativity in order to make it work. Luckily, in all cases the data could be saved and then analysed.

Considering the gap of knowledge in present literature that this thesis has occupied, other studies could emerge from my doctoral project. I have provisionally sketched out two potential avenues for further research in this area. Firstly, I would be interested to study and compare the expressivity of musicians with and without mental illness. This could allow us to observe whether this component of personality is reflected whilst playing music or if it is separate from the instrumental capabilities of the individual. A variety of musical 'geniuses' have been diagnosed with numerous mental illnesses, as mentioned before in this thesis. This attracts my interest as researcher, by suggesting the questions, does mental illness help musicians to be creative? In what way?

I would also like to develop a project called "The expressivity of the silence". Here I intend to interrogate the idea that silence can be more important than sounding notes. The groundwork of this new investigation can be found in this thesis, as some of my participants considered this musical aspect to be essential for achieving a lucid performance.

This doctoral project is especially relevant to jazz composers. Nevertheless, composers from other styles will find here relevant material for their musical practice. In the theoretical as well as in the practical scope, this thesis offers many different resources about how to use expressivity in composition. This conceptualisation of expressivity has allowed us to understand contemporary jazz from a very human-sensitive point of view. In addition, it has challenged us to consider the complex range of idiosyncratic technical, social, cultural and musical factors that intersect when jazz musicians meet in performance. The unique expressive capabilities of these various relational qualities can be channelled in the design of new musical practices which privilege expressivity as an explicit motivation for musical composition.

Annexe I: Musical Compositions

Composer: Jorge Pallarés Catalán

- Musical piece "Experiment I": Se fue la tormenta
 - Translation: The storm is gone
 - Link to the song:
 - https://www.youtube.com/watch?v=u7hXA_iSvGM
- Musical piece "Experiment II": Recuerdos
 - Translation: Memories
 - o Link to the song: Classically trained soloist version:
 - https://www.youtube.com/watch?v=0oNKMNBLGpU
 - o Link to the song: Jazz trained soloist version:
 - https://www.youtube.com/watch?v=gyWlw_X8HfI
- Musical piece "Experiment III": Blindly
 - o Link to the project/graphic score:
 - https://www.youtube.com/watch?v=a7H74tGEfLA&t=4282s
- Musical piece "Experiment IV"; formed by three pieces:
 - o 1- En mí sonaras
 - Translation: You will always sound in me
 - https://www.youtube.com/watch?v=NstBPOcjAcI
 - o 2- Themes song 11
 - https://www.youtube.com/watch?v=H9mT0vZynHU
 - o 3- Hechizo
 - Translation: Spell
 - https://www.youtube.com/watch?v=mI8QiMegIqQ
- Musical piece "Experiment V":
 - o Al borde del precipicio
 - Translation: On the edge of the precipice
 - Version 1, with no restrictions
 - $\circ \quad https://www.youtube.com/watch?v=CXux7OdEBY4\\$
 - Version 2, with non-existent cadences
 - $\circ \quad https://www.youtube.com/watch?v = uR0bOPbC9xs$
 - Version 3, with descriptive and narrative features
 - o https://www.youtube.com/watch?v=UXiMFWWlYaw

Se fue la tormenta (The storm is gone)

(The storm is gone) Swing and Bossa Nova Jorge Pallares Catalan 153 bpm **INTRO** ВЬ Bb/A Gm7 Gm7 Gm7/F ВЬ Gm7 Gm7 4 TIMES Eb9 **D**9 C9 Gm7 % E**þ**9 D9 Gm7 Eþ9 D9 $F\,maj\,13$ (A) 4 TIMES Melody 1st Chorus Gm7 F maj 13 E♭9 D9 Gm7 F maj 13 Eþ9 D9 Gm7 F maj 13 E69 D9 Gm7 F maj 13 Eb9 D9 To Coda Gm7 F maj 13 <u>D</u>9 Gm7 D9 E69 F maj 13 F maj 13 Gm7 F maj13 D9 Gm7 **♦** CODA B♭maj 7 C9 Gm9 Gm9



- AFTER 2ND CHORUS
- Aprox. 2 minutes of FREE IMPROVISATION informed by the tune
- Then CONTINUING SOLO over (bar 13 to 28) then over (B)(A)(B)
- Then 3rd CHORUS from \$\infty\$ to \$\oplus\$ (with repeats)
- Then INTRO (bars 1 to 4) x 2
- Then SOLO OUTRO over (bars 5 to 8) x6
- END WITH [Eb9 I D9]



En mi sonaras (You will always be in my music)

Swing: 135 bpm Jorge Pallares Catalan **D**\(\bar{7}\) Db7 В♭7 **E**♭7 **A**♭7 Ebm7 AA7m7(\$5) **B**♭7 В♭7 E♭7 Fm7 To Coda Gb7 Gm7(\$5) **A**هٰ7 E♭m7 Db7 Db7 Cdim7 **B**7 **B**7 Db7 **D**b7 C9 **B**7 **B**7 **D**b7 Db7 **B**7 **B**7 **D**\(\bar{7}\) **D**\(\bar{7} $D \dim 7$ **B**7 **B**7

En mi sonaras



Themes song 11

Jorge Pallares Catalan

130 bpm Free improvisation Dmaj7 C#maj7 D#maj7 Dmaj7 12 bars D maj 7 C#maj7 D#maj7 C#maj7 D maj 7 Dmaj7 Free improvisation Dmaj7 Dmaj7 C#maj7 6 bars **O** D#maj 7 Dmaj7 C#maj7 Dmaj7 Free improvisation 7 bars C#maj7 D#maj7 D maj 7 Dmaj7 Lead Inst. Impro Dmaj7 Cmaj7/G# Dmaj7/A Cmaj7/G# Dmaj7 Dmaj7/A **C**6 **C**6

Jazz-rock





Al borde del precipicio Swing 135 bpm (On the edge of the precipice)

Jorge Pallares Catalan





Annexe II: Interviews questions

- 1. How would you define jazz composition in the contemporary context?
- 2. What would you say are the emerging contemporary techniques for composition in jazz? and what do you think are the emerging contemporary techniques for improvisation in this same setting?
- 3. Based on your compositions, what would you say are the main steps to create a musical piece?
- 4. How important is the musicians' communication for you in the live improvisation task?
- 5. Some theorists consider improvisation as a type of composition, or in other words "composition in real time". How would you define the relationship between composition and improvisation?
- 6. Looking at the personal inspiration as another composition and improvisation technique, how important would you say is this concept to you in the everyday musical duties?
- 7. At what age did you start composing and improvising? Could you talk a bit about it?
- 8. Who have been your most important music influences? What are the reasons why they were so important to you?
- 9. We can define modal-jazz as jazz that uses the modal changes instead of key based chord progressions as framework. In which way are your compositions and improvisations affected depending on which of these two approaches to harmony you choose?
- 10. What do you think are the main problems when you have to create a jazz composition?
- 11. What do you find as the main problems when you have to record a studio improvisation in comparison with a no recorded live improvisation?
- 12. Which would you say is your best jazz composition? What elements would you stand out from this piece?
- 13. What are for you the attributes of an excellent improvised solo? And what are for you the attributes of an excellent composition?

Annexe III: Diagram of themes

| Basic themes | | Organizing | Global themes |
|--------------|---|---|----------------------|
| | | Themes | |
| - | Communication importance | 5.1 <u>Defining</u> | Chapter 5: |
| - | Individualism | <u>communication</u> | Expressing |
| - | Sonic communication | <u>in</u> | communication |
| - | Collapsing communication with "The ego trip" | <u>contemporary</u> | |
| - | The stable band to improve the communication | <u>jazz</u> | |
| - | Communication lead | | |
| | Sounding like others Sounding like yourself Refreshing our own sound Jazz or classical background Playing safe Influencers on our personal sound Playing beyond our possibilities as dishonest Appropriate mental state to play jazz Personal and musical evolution | 5.2 <u>Development</u> of the personal language and its communicative features | |
| - | Musically undressing Improvisational honesty | | |
| _ | Risk in live improvisation versus studio | 6.1 Risk-taking and | Chapter 6: |
| _ | Mistake as part of the music | the use of | Analysing musical |
| _ | Fixing mistakes as source of improvising | <u>dynamics</u> | expressivity |
| - | Playing out and modifying the rhythm as common | | through |
| risk-t | aking practices | | improvisation |
| - | Free-improvisation section as risky play in a tonal | | mprovisuitoti |
| or mo | odal piece | | |
| - | Studio and live recordings as different sources of | | |
| expre | ession in terms of risk | | |
| - | The risk of musically living the moment in live | | |
| performance | | | |
| - | The use of silence | | |
| | | | |

| - Mu | sicians' interaction as a dynamic factor | | |
|------------------------|---|--|--|
| - Dyı | namics taken to the extreme | | |
| - Wil | ll never play twice in the same way | | |
| - The | dynamic musician's journey | | |
| - The | e dynamic routine | | |
| | | | |
| - | Audience feedback importance | 6.2 <u>Jazz language</u> | |
| - | The melody informs the improvisation | in the 21st | |
| 1, 66 | Every musician feeds the improviser | <u>century:</u> | |
| differently background | Groove as the most identifying jazz element | defining it as an improvised idiom | |
| - | Familiarization with the language | | |
| - | Modal jazz as avant-garde | | |
| - | Jazz and classical musicians' expressivity | | |
| - - - | Listening to the band Expressing a feeling Dynamic control Musicians' Interaction | 6.3 <u>The</u> <u>expressive features</u> <u>of an ideal jazz</u> <u>improvisation</u> | |
| _ | Knowing the language | | |
| - | Language variety | | |
| - | Using the silence | | |
| - | Intervals instead of scales | | |
| - | Phrasing is everything | | |
| - | Improvising in rock | | |
| - | Relationship melody-improvisation | | |
| - | Types and importance of communication for | | |
| the idyllic s | the idyllic solo | | |
| - | The easiest solo | | |
| - | The narrative | | |
| - | The quirky solo | | |
| | | | |

| - Creating interest in the audience | | |
|--|--|---|
| - Spontaneity in improvisation | | |
| Looking at sound, density and texture in order to adapt the instrumentation Some instruments constrain the compositional possibilities of the band Using bass and voice instrumentation as a way of breaking compositional boundaries From unsafe and challenging to rewarding experience Exploring every individual expressivity's qualities | 7.1 How contemporary jazz musicians adapt the instrumentation to obtain a specific musical expression | Chapter 7: Analysing expressivity through instrumentation and modal harmony |
| - Blending tonal and modal jazz - How the lack of tension and release affects the musician's playing - Intervallic process instead of modal - Modal music recognised as more descriptive than tonal - Modal jazz start: Django Reinhardt or Miles Davis - Miles Davis Kind of Blue: new approach or blend of existing material? - Comparing Western with Indian Modal music - How the soloist can make sound modal a tonal song and vice-versa | 7.2 The use of expressivity through modal harmony | |

Annexe IV: Participant Consent Form

This template is designed primarily for those doing qualitative interviews with adults from non-vulnerable populations and dealing with non-sensitive topics.

The form would be different in the case of focus groups or quantitative research. If conducting research with vulnerable populations and / or sensitive topics please see Research Ethics Committee website for further details.

The points listed on the template below are for illustration only. You may alter the wording to suit your project as you see fit.

A consent form is not simply about a person giving you permission to involve them in research, it is an agreement between the researcher and the research participant outlining the roles and responsibilities they are taking towards one another throughout the whole of the research process.

The researcher should retain one copy of the consent form signed by both themselves and the participant. The participant should also be given a copy of the consent form as a record of what they have signed up to.

Even if a person has signed a consent form consent should still be re-established at the point of doing the interview.

Template

[Title of project]

Consent to take part in research

- I..... voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that participation involves...[outline briefly in simple terms what participation in your research will involve].

- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity will remain anonymous.

 This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in...[list all forum in which you plan to use the data from the interview: dissertation, conference presentation, published papers etc.].
- I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities they will discuss this with me first but may be required to report with or without my permission.
- I understand that signed consent forms and original audio recordings will be retained in [specify location, security arrangements and who has access to data] until [specific relevant period for students this will be until the exam board confirms the results of their dissertation].
- I understand that a transcript of my interview in which all identifying information has been removed will be retained for [specific relevant period for students this will be two years from the date of the exam board].
- I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above. I understand that I am free to contact any of the people involved in the research to seek further clarification and information. Names, degrees, affiliations and contact details of researchers (and academic supervisors when relevant).

| Signature of research participant | | |
|--|--|--|
| Singular of a distribute | | |
| Signature of participant | Date | |
| Signature of researcher | | |
| I believe the participant is giving info | ormed consent to participate in this study | |
| | | |
| Signature of researcher | Date | |

Annexe V: Research, ethics and knowledge exchange committee aprobal form

The University of Edinburgh

Edinburgh College of Art

RESEARCH, ETHICS AND KNOWLEDGE EXCHANGE COMMITTEE

Self-Audit Checklist for Level 1 Ethical Review

The audit should be carried out by the Principal Investigator, except as follows:

- Postdoctoral Research Fellowships: the applicant in collaboration with their mentor
- Postgraduate Research (MSc, MScR and PhD): the student in collaboration with their first supervisor
- *Undergraduate dissertations and student projects*: the student in collaboration with their dissertation/project supervisor

Title of Project: Expressive Musical Process:

Exploring Contemporary Jazz Musicians' Views On The Use Of expressivity In The Compositional Practice

Funding Body (if applicable):

Principal Investigator/Supervisor Name: Professor Raymond MacDonald

Student Name and Matriculation Number: Jorge Pallares Catalan (s1462284)

Type of Student: PhD

1. Protection of research subject confidentiality

Are there any issues of confidentiality which are not adequately handled by the normal tenets of ethical academic research?

NO

These include mutually understood agreements about

- Non attribution of individual responses
- Individuals and organisations being anonymised in publications and presentations, if requested
- Feedback to collaborators, rights to edit responses, and intellectual property rights and publication

2. Data protection and consent

Are there issues of data handling and consent which are not adequately dealt with and compliant with academic procedures?

NO

These include well-established sets of undertakings for example, regarding

- Compliance with the University of Edinburgh's Data Protection procedures (www.recordsmanagement.ed.ac.uk)
- Respondents giving consent regarding the collection of personal data
- No special issues arising confidentiality/informed consent

3. Moral issues and Researcher/Institutional Conflicts of Interest

Are there any special moral issues/conflicts of interest?

NO

For example

- might the researcher compromise the research objectivity or independence in return for financial or non-financial benefit for themselves, a relative or friend?
- are there any particular moral issues or concerns which arise, for example, where the purposes of research are concealed, where respondents are unable to provide informed consent, or where research findings impinge negatively/differentially upon the interests of participants

4. Potential physical or psychological harm, discomfort or stress

Is there a significant foreseeable potential harm or stress for those involved in your research?

NO

Is there significant foreseeable potential for physical harm or stress for those involved in your research?

NO

Is there significant foreseeable risk to the researcher?

NO

5. Bringing the University into disrepute

Is there any aspect of the proposed research which might bring the University into disrepute? NO

6. Vulnerable participants

Are any of the participants or interviewees in the research vulnerable, e.g. children and young people?

NO

Overall assessment

If all answers are No, the Self-assessment has been completed and confirms the absence of reasonably

foreseeable ethical risks. The following text should be emailed to the relevant person below

Text "I confirm that I have carried out the School Ethics self-audit in relation to my proposed

research project [insert name and funding body] and that no reasonably foreseeable ethical risks have

been identified."

Research grants, Postgraduate Research and Undergraduate Research – PI should email the text to the

School Research Office and provide either an electronic or paper copy of their completed form

If one or more answers are Yes, Level 2 assessments is required.

Signed

Date...25/03/15

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Bibliography

Alterhaug, B. (2004). Improvisation on a triple theme: Creativity, Jazz Improvisation and Communication. [pdf] Studia Musicologica Norwegica. 30. Available at: https://www.researchgate.net/publication/237554106_Improvisation_on_a_triple_theme_Creativity_J azz Improvisation and Communication [Accessed 24/09/2017].

Angus, Q. (2014) Phrasing and polyrhythm in contemporary jazz guitar: a portfolio of recorded performances and exegesis. PhD. University of Adelaide.

Ankney, K.L. (2014). Master Jazz Teachers' Noticing and Responses to Students During Improvisation Activities. [pdf] Evaston, Illinois: Northwestern University, 1-24. Available at: https://search.proquest.com/openview/1a4f06161218a9591fced758fb82ca30/1?pqorigsite=gscholar&cbl=18750&diss=y [Accessed 17th/07/2018].

Arcos, J. Ll. Guaus, E., & Ozaslan, T. H. (2013). Analyzing musical expressivity with a soft computing approach. Chicago. Fuzzy Sets and Systems, 214, 65.

Attarian, H. (2015) Rare And Unusual Instruments In Jazz. All about jazz, [Online], Pp. 1-4. Available at: https://www.allaboutjazz.com/rare-and-unusual-instruments-in-jazz-by-hrayr-attarian.php Accessed [12/10/2017].

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. London: SAGE Publications, Pp.385-405.

Bäckman, K. (2013) Evolutionary Jazz Improvisation - Jazz Harmony and Solo Improvisation Created by Means of Evolutionary Algorithms with Automatic Fitness. 1. [pdf] Trollhättan: Horizon Research Publishing. Pp 67-74. Available at: http://www.hrpub.org/download/20131107/SAJ2-19900932.pdf [Accessed 11/09/2017].

Barret, S. (2006) Kind of Blue and the economy of modal jazz. Popular Music. 25(2), Pp 185-200. Available at: https://www.cambridge.org/core/journals/popular-music/article/kind-of-blue-and-the-economy-of-modal-jazz/7D6C03CE903928B438DC4ED487D5A3D2 [Accessed 24/08/2018].

Becker, H.S. (2009) The Etiquette of Improvisation. Mind, Culture and Activity, Volume 7, 2000 - Issue 3, 171-176.

Benedek, M., Borovnjak, B., Neubauer, A. and Weber, S. (2014) Creativity and personality in classical, jazz and folk musicians. Elsevier [Online] Pp 117-122. Available at: https://reader.elsevier.com/reader/sd/pii/S0191886914000919?token=D5ADBEDE2E2578ADCC37E 7825F4200166B3B08B8898766DE2C09661C6FA6B4332D7986473A7F503AF7E65054769DC19D [Accessed 12/12/2018].

Benjamin, A. (1981) The helping interview. Boston: Houghton Mifflin, Pp.1-200.

Berliner, P. F (1994) Thinking in Jazz : The Infinite Art of Improvisation (Chicago Studies in Ethnomusicology Series) Chicago: University of Chicago Press, Pp 1-303.

Bernstein, L. (2004) The Joy of Music Leonard Bernstein. New York: Amadeus. Pp 35-250.

Bertholf, G. J. (2006) John Coltrane: Jazz Improvisation, Performance, and Transcription. Masters. Colby College.

Bjerstedt, S. (2014) Storytelling in Jazz Improvisation: Implications of a Rich Intermedial Metaphor. [pdf] City: Malmö: Lund University, Malmö Faculty of Fine and Performing Arts, Department of Research in Music Education, 3-300. Available at:

http://portal.research.lu.se/ws/files/5827225/4387742.pdf [Accessed 16th/07/2018].

Black, P. (2017) On being and becoming a jazz musician: Perceptions of young Scottish musicians. Volume 15, number 3. [pdf] London: London Review of Education DOI. Pp 339-357. Available at: https://doi.org/10.18546/LRE.15.3.02 [Accessed 27/04/2018].

Booth, T.D. (2015) From Columbia Studio B to Carnegie Hall: The Studio-to-Stage Creative Trajectory in the Fusion Jazz of Miles Davis. Masters. Massey University and Victoria University of Wellington.

Boyatzis, R. (1998) Transforming qualitative information: thematic analysis and code development. London: SAGE Publications Ltd. Pp. 20-120.

Bryman, A. and Burgess, R. (1994) Analyzing qualitative data. London: Routledge, Pp. 47-232.

Campbell, J. (1996) The picador book of Blues and Jazz. London: Trans-Atlantic Pubns. Pp.1-416.

Carruthers, A. (2013) The aesthetic of classical music recording & mixing. Songs from so deep [Online] Pp1-3. Available at: https://songsfromsodeep.wordpress.com/2014/09/07/the-aesthetic-of-classical-music-recording-mixing/ [Accessed 23/04/2018].

Ciorba, C. (2009). Predicting Jazz Improvisation Achievement through the Creation of a Path-Analytical Model. Bulletin of the Council for Research in Music Education, (180), 43-57. Available at: www.jstor.org/stable/40319319 [Accessed 09/04/2018].

Clements, C. (2009) John Coltrane and the integration of Indian concepts in jazz improvisation. 2(2). [PDF] New York. Jazz Research Journal, Pp 155-175. Available at: https://indiamusicweek.org/files/coltrane.pdf [Accessed 13/02/2019].

Cochrane, T. (2010) A Simulation Theory of Musical Expressivity, Australasian Journal of Philosophy

[Online] 88:2,191_207.Available_at:_https://aap.tandfonline.com/doi/abs/10.1080/000484009029412 57?journalCode=rajp20&#.XAFpAzhKjIX [Accessed 12/01/2018].

Cooper, S. (2010) "Lighting Up the Brain with Songs and Stories." General Music Today 23 (2): 24–30.

Connolly, B. (2015) The Inner Ear As A Musical Instrument. ASA, [Online] Pp 1-2. Available at: https://acoustics.org/5amu1-the-inner-ear-as-a-musical-instrument-brian-connolly/ [Accessed 02/07/2018].

Cortazar, J. (1959) El perseguidor. Buenos Aires: Editorial Sudamericana. 5-200.

Cugny, L. (2014) Flèche d'Or Django Reinhardt: why was not heard? Scielo. [Online] Pp 1-3. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1517-75992014000200002 [Accessed 19/06/2018].

Culicover, P. (2005). Linguistics, cognitive science, and all that jazz. Linguistic Review. [Online] Volume 22, Issue 2-4. Pp 227-248. Available at:

 $https://pdfs.semanticscholar.org/bb91/4d3bd7e16658667768c4819af08938b6f6c2.pdf?_ga=2.121601416.1614464047.1572447235-746889138.1571910958 \ [Accessed 24/02/2019].$

Davis, C. (2007) Jazz as Musical Conversation: How do Jazz Musicians Communicate with Each Other? Evaston: Northwestern University. Pp 1-4.

Doffman, M. R. (2008). Feeling the Groove: Shared Time and Its Meanings for Three Jazz Trios (Ph.D. Thesis). The Open University, Milton Keynes.

Dowling and Harwood (1986) Music cognition. San Diego: Academic Press. Pp 5-250.

Duch, M. F. (2010) Free Improvisation - Method and Genre. Norwrgian University of Science and Technology. [Online] Pp 1-5. Available at: https://www.researchcatalogue.net/view/110382/110383 [Accessed 04/02/2019].

Drotos, R. (2017) The disappearing art of improvising on a song's melody. [Online] Let The Music Flow. Available at: https://keyboardimprov.com/the-disappearing-art-of-improvising-on-a-songs-melody/ [Accessed 11/12/2018].

Ellenberger, K.J. (2005) Materials and Concepts in Jazz Improvisation. Grand Valley: Grand Valley State University, 10-127.

Engel, A. and Keller P.E. (2011) The perception of musical spontaneity in improvised and imitated jazz performances. Frontiers in Psychology. [Online] Volume 2, pp 83. Available at: https://europepmc.org/article/med/21738518#free-full-text [Accessed: 30/02/2018].

Fabian, D., Timmers, R., and Schubert, E. (2014). Expressiveness in music performance: Empirical approaches across styles and cultures. Oxford University Press. Pp 30-350.

Farrell, G. (1997) Indian Music and the West. Oxford: University Press. Pp 10-256.

Feldman, M. (1995) Strategies for interpreting qualitative data. London. London: Sage, Pp. 12-71.

Filippova, D., Fitzgerald, M., Kingsford C. and Benadon, F. (2012) Dynamic Exploration of Recording Sessions between Jazz Musicians over Time. International Conference on Privacy, Security, Risk and Trust (PASSAT), pp. 368-376. Available at: https://www.computer.org/csdl/proceedings-article/passat-socialcom/2012/06406377/12OmNyY4rhF [Accessed 24/02/2018].

Graubart, M. (2000) Musical Hermeneutics: The 'Authentic' Performance of Early Music. Philosophy Now, A magazine of Ideas, [Online] pp. 1-2. Available at:

https://philosophynow.org/issues/28/Musical_Hermeneutics_The_Authentic_Performance_of_Early_Music [Accessed 12 Nov. 2016].

Gridley, M. (1978) Jazz styles: history & amp; analysis. Fourth Edition. New Jersey: Prentice Hall, $Pp.\ 15-442$.

Gridley, M., Maxham, R., and Hoff, R. (1989). Three Approaches to Defining Jazz. The Musical Quarterly, 73(4), 513-531.

Hague Paul N. (1993) Interviewing. London: Kogan Page, Pp. 20 – 153.

Hansen, C. (1962) The Dave Brubeck Quartet Time Out & Time Further Out: Includes music from these two hit albums. 1st Edition. New York. Charles Hansen Music, Pp 8-40.

Harris (2011) Music and Expression: musicking in the instrumental lesson. [pdf] Lectorate Lifelong Learning in Music & the Arts. Pp 4-18.

Heinitsh, H. (2013) The jazz multilinguist: John Scofield's universal improvisational approach. PhD. M.M. William Paterson University.

Hsieh, S.C. (2009) Cognition and Musical Improvisation in Individual and Group Contexts. [pdf] London: Institute of Education, University of London. 10-250.

Huovinen, E. & Pontara, T. (2010) Methodology in aesthetics: the case of musical expressivity. Volume 155, Issue 1, [pdf] Mineapolis: Springer Netherlands.Pp 45–64

Iyer, V. (2004). "Exploding the narrative in jazz improvisation," in Uptown Conversation: The New Jazz Studies, eds R. O'Meally, B. Edwards, and F. Griffin (New York, NY: Columbia University Press), 393–403.

Jago, T. (2015) The role of the jazz guitarist in adapting to the jazz trio, the jazz quartet, and the jazz quintet. PhD. University of Miami.

Juslin, P. N. (2013) From everyday emotions to aesthetic emotions: Towards a unified theory of musical emotions. Volume 10, Issue 3. [PDF] Amsterdam: Elsevier Pp 235-266. Available at: https://www.ncbi.nlm.nih.gov/pubmed/23769678 [Accessed 10/11/2018].

Knight, J. (2011) The intersection of Improvisation and Composition. PhD Thesis. Queensland Conservatorium.

Kristoffer, J. and Marchetti, E. (2010). A Meta-study of musicians' non-verbal interaction. The international journal of technology knowledge & society, 6(5), pp 1-12.

Kronland-Martinet, R., Aramaki, M., Merer, A. & Ystad, S. (2007). Semiotics of Sounds Evoking Motions: Categorization and Acoustic Features. Springer Link, [Online]. 139-158. Available at: https://link.springer.com/chapter/10.1007/978-3-540-85035-9 9 [Accessed 14/01/2019].

Levine, M. (1995) The Jazz Theory Book. Petaluma: Sher Music. Pp 10-450.

Lewis, G. E. and Piekut, B. (2016) The Oxford Handbook Of Critical Improvisation Studies. Vol 1. Oxford: Oxford University Press. Pp 15-585

Liebman, D. (1989) Developing a personal saxophone sound. 2nd Edition. Medfield, United States: Dorn Publications, Pp 7-56.

Lopata, J. (2014) Creativity as a Mental State: An EEG Study of Musical Improvisation. Electronic thesis and Dissertation Repository. Ontario: University of Western Ontario. Pp 113-117 Available at: http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=134A904AF2D86B3C2C2F09B8D97E143 B?doi=10.1.1.670.9838&rep=rep1&type=pdf [Accessed 13/03/2018].

Love, S. (2017). An ecological description of jazz improvisation. Psychomusicology: Music, Mind, and Brain. [Online] 27. Pp 31-44. Available at: https://www.researchgate.net/publication/315320479_An_ecological_description_of_jazz_improvisati on [Accessed 17/04/2019].

Lussier, M. (2011). The Philosophy of Improvisation. Critical Studies in Improvisation / Études critiques en improvisation. 7. 1-3.

McDonough, J., Danko, H, and Zentz, J. (2007) Rhythmic structure of music and language: an empirical investigation of the speech cadence of American jazz masters Louis Amstrong and Jelly Roll Morton. [pdf] Rochester: University of Rochester and 2 Eastman School of Music. Pp 45-55. Available at: https://www.semanticscholar.org/paper/RHYTHMIC-STRUCTURE-OF-MUSIC-AND-LANGUAGE%3A-AN-OF-THE-McDonough-Danko/786e8e52c32cf3597846638791a545aecf45fd14 [Accessed 01/02/2018].

Malvinni, D. (2013) Grateful Dead and the Art of Rock Improvisation. Dublin (USA): Scarecrow Press. Pp 137-201.

Mendonça, D., & Wallace, W. A. (2004). Cognition in Jazz Improvisation: An Exploratory Study. Proceedings of the Annual Meeting of the Cognitive Science Society, 26. Retrieved from https://escholarship.org/uc/item/46v6s1qk [Accessed 12/12/2017].

Michaelsen, G. (2013) Analyzing musical interaction in jazz improvisations of the 1960s. PhD. Indiana University.

Miles, M. and Huberman, A. (1994) Qualitative data analysis: an expanded sourcebook. 2nd edition. London: Sage. Pp 7-297.

Monson, I. (1996) Saying something: jazz improvisation and interaction. Chicago: The University of Chicago Press, Pp. 12-253.

Morton, B. (2006) Miles Davis. United Kingdom: Haus Publishing. Pp 9-93.

Murphy, P. (2013) Extended Techniques for Saxophone. PhD. Arizona State University.

Nolan, K. K. (2008) 'Book and DVD Review: Jazz: A Film by Ken Burns', Journal of Historical Research in Music Education, 30(1), pp. 69–72. Available at: https://journals.sagepub.com/doi/abs/10.1177/153660060803000108?journalCode=jhrb#articleCitatio nDownloadContainer [Accessed 29/10/2018].

Norman, L. K (2002) The respective influence of jazz and classical music on each other, the evolution of third stream and fusion and the effects thereof into the 21st century. Doctor. The University of British Columbia.

Omry, K. (2009) Cross-Rhythms: Jazz Aesthetics in African-American Literature. London: Continuum. Pp 25-100.

Palavicini, A. N. (2015) A Comparison and Contrast of Instrumental and Vocal Approaches to Idiomatic Phrasing, Articulation and Rhythmic Interpretation Within the Jazz Idiom. PhD. University of Miami.

Palmer, M. (2016) Instrumental Jazz Improvisation Development. [pdf] Muncie: Ball State University, USA, 360-378. Available at:

http://journals.sagepub.com/doi/abs/10.1177/0022429416664897?journalCode=jrma [Accessed 18th/07/2018].

Palmer, G., Sloboda, J., Saul, B., & Hathaway, M. (2012). The reciprocal relationship between jazz musicians and audiences in live performances: A pilot qualitative study. Psychology of Music, [Online] 40(5), 634–651. Available at: https://doi.org/10.1177/0305735612448509 [Accessed 15/12/2018].

Panken, T. (2000) Shades of Soul. Down Beat. [Online]. Pp 1-3. Available at: http://www.michaelbrecker.com/oldWebsite/interviews.htm [Accessed 11/05/2018].

Plake, B. (2014) Improvising: Why You Need To Be Comfortable Taking Risks. Bill Plake Music, [Online] Pp 1-10. Available at: https://billplakemusic.org/2014/02/07/improvising-why-you-need-to-be-comfortable-taking-risks/ [Accessed 25/4/2018].

Plake, B. (2015) Improvisation: Using Silence As A Part Of Your Expression. Bill Plake Music: Clearer Thinking For Better Performance [Online], 1-7. Available at: https://billplakemusic.org/2015/12/13/improvisation-using-silence-as-a-part-of-your-expression/. [Accessed 18th/07/2018].

Polgar, L. (1989) Rayse a Genius. Original Edition [PDF] Vancouver: Gordon Tisher, Pp 10-110. Available at: https://www.scribd.com/document/365769004/Raise-a-Genius-Polgar [Accessed 11/09/2018].

Pressing, J. (2003). Free jazz and the ava Attarian nt-garde. In: M. Cooke & D. Horn (Eds.), The Cambridge Companion to Jazz. Cambridge: Cambridge University Press, 202-216.

Raman, R, and Dowling W. J. (2016) Real-Time Probing of Modulations in South Indian Classical (Carnātic) Music by Indian and Western Musicians. Vol. 33 No. 3 [PDF] California: The Regents of De University of California. Pp 367-393. Available at: https://mp.ucpress.edu/content/33/3/367 [Accessed 23/05/2019].

Ramirez, R., Hazan, A., Maestre, E. and Serra, X. (2008) A Genetic Rule-Based Model of Expressive Performance for Jazz Saxophone. Computer Music Journal. 32. Pp 38-50. Available at: https://ieeexplore.ieee.org/document/6791883 [Accessed 01/12/2017].

Ramos, D. C. (2009) Advanced Modal Jazz Harmony Applied to Twentieth Century Music Compositional Techniques in Jazz Style: a practical guide for students. Nacogdoches, Texas: Stephen F. Austin State University.

Ramsey, P. (1999) Jazz in American Culture. American Music, [Online] vol. 17, no. 2, p. 205. Available at:

https://go.gale.com/ps/anonymous?id=GALE%7CA61551816&sid=googleScholar&v=2.1&it=r&link access=abs&issn=07344392&p=AONE&sw=w [Accessed 13/03/2018].

Ramshaw, S. (2006) Deconstructing Jazz Improvisation: Derrida and the Law of the Singular Event Critical Studies in Improvisation/Études Critiques en Improvisation, Vol. 2, No. 1. Pp 1-19. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2041321 [Accessed 12/05/2018].

Roulston, K. (2001) 'Data analysis and 'theorizing as ideology'', Qualitative Research, 1(3), pp. 279–302. Available at:

https://journals.sagepub.com/doi/abs/10.1177/146879410100100302#articleCitationDownloadContainer [Accessed 06/02/2018].

Roze, J., Aramaki, M., Kronland-Martinet, R. and Ystad, S. (2001) Data analysis and 'theorizing as ideology. SAGE Journals, volume 1, Pp. 279-302.

Russo, W. (1968) Jazz composition and orchestration Jazz. London : University of Chicago Press, Pp. 50-730.

Sakata M., Wakamiya S. and Hachimura K. (2009) Effect of Body Movement on Music Expressivity in Jazz Performances. In: Jacko J.A. (eds) Human-Computer Interaction. New Trends. HCI 2009. Lecture Notes in Computer Science, Vol 5610. Springer, Berlin, Heidelberg. Pp 159-169

Sammler, D. and Bianco, R (2018) Miles Davis is not Mozart: The brains of jazz and classical pianists work differently. Max Planck Institute. [Online] Pp 1-2. Available at: https://www.cbs.mpg.de/brains-of-jazz-and-classical-pianists-work-differently [Accessed 30/09/2018].

Seddon, F. A. (2005) Modes of communication during jazz improvisation. Northampton: British Journal of Music Education. 22(1), Pp. 47-61.

Seminario, A.M. (2015) Enrique "Papo" Lucca and Ray Barreto's Latin Jazz Harmonies And Instrumentation As Applied In An Original Salsa Music Arrangement. Masters. California State University.

Sepuru, P. (2015) The acquisition of jazz improvisation skills in South African jazz musicians: an IPA study. Masters. University of Pretoria, Department of Music.

Silverman, D. (1993) Interpreting qualitative data: methods for analyzing talk, text and interaction. Loodn: Sage, Pp. 12- 224

Smith, B. R. (1986) Musical composition. Oxford: Oxford University Press, Pp. 8-188.

Smith, R. (1986) Musical composition. Oxford: Oxford University Press. Pp 10-196.

Frisk, H. and Östersjö, S. (2013). (Re)thinking improvisation: from Individual to Political Listening. Lund: Lund University, Pp 1-104.

Sutton, J. and Geeves, A. (2015) Embodied Cognition, Perception, and Performance in Music. 9, 3-4 [PDF] Macquarie University, North Ryde, Pp 247-253. Available at: https://pdfs.semanticscholar.org/eff5/0c6a3ac5351cc45fcb703fd6b88c546fe94f.pdf [Accessed 01/11/2018].

Taylor, A (2014) Using interpretative phenomenological analysis in a mixed methods research design to explore music in the lives of mature age amateur keyboard players. Taylor & amp; Francis, volume 17, Pp. 437-452.

Titus, J. R. (2010). Miles Davis' "So What" as Modal Jazz Case Study. PhD. University Of Rochester.

Vaartstra, B. (2017) How to Use the Melody of a Jazz Standard to Develop Solo Ideas. Learn Jazz Standards. [Online] Pp 1-4. Available at: https://www.learnjazzstandards.com/blog/learning-jazz/jazz-advice/use-melody-jazz-standard-develop-solo-ideas/ [Accessed 13/06/2018].

Wallmark, Z. (2008). An alternative temporal approach to jazz improvisation in the music of Andrew Hill. Tijdschrift voor Musiektheorie [The Dutch Journal of Music Theory], 13(1), 69–75.

Wetzel, N.D. (2007) Development of a New Jazz Method: Learning Jazz Language, a Curriculum for Beginning Improvisers. Columbia: Teachers College, Columbia University. Pp 7-40.

Whitty, G. (2014). Tension and Release in Solo Development, 40 [PDF] New York: American Psycologycal Association, Pp 28-30. Available at: https://search-proquest-com.ezproxy.is.ed.ac.uk/docview/1621442421?accountid=10673 [Accessed 11/11/2018].

Williams, T. (2011) Stepping out: A guide to playing outside (Part one). Guitar messenger. [Online] Pp 1-6. Available at: https://www.guitarmessenger.com/lessons/styles/fusion/stepping-out-a-guide-to-playing-outside-part-1/ [Accesed 25/06/2018].

Wills, G. I. (2003) Forty lives in the bebop business: mental health in a group of eminent jazz musicians. British Journal Of Psychiatry. [Online] 183, pp. 255-259. Available at: https://www.addiction-ssa.org/wp-content/uploads/2019/11/Wills.pdf [Accessed 11/03/2018].

Woody, R. H. (2000) Learning Expressivity in Music Performance: An Exploratory Study. Volume: 14 issue: 1, [pdf] Pp14-23. Available at: https://journals.sagepub.com/doi/abs/10.1177/1321103X0001400102?journalCode=rsma [Accessed 23/4/2018].

Woodruff, E. and Cross, I. (2009) Music as a communicative medium. In: R. Botha & C. Knight. 1st Edition. Oxford: Oxford University Press. Pp 113-144.

Zabor, R. (1981). Contemporary's Jazz. Musician, Player, and Listener (34) [PDF] Boulder, United Kingdom. Emerald Expositions LLC. Pp 83, 85. Available at: https://search-proquest-com.ezproxy.is.ed.ac.uk/docview/962640204/fulltextPDF/93DF5DD17A064D89PQ/1?accountid=10 673 [Accessed 07/11/2018].

Zijl, J.W. (2014) Performers' Emotions in Expressive Performance: Sound, movement, and Perception. Finland: University of Jyväskylä. Pp 31-50.