SONIC ECOLOGIES: A JOURNEY THROUGH MUSIC, SPACE AND SENSATIONS IN JAZZ LIVE PERFORMANCES

Dissertation submitted to Universidade Católica Portuguesa to
obtain a Master's Degree in Culture Studies,
Management of Arts and Culture

By

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Faculdade de Ciências Humanas

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ABSTRACT

Music has become a dominant and popularised form of culture in the modern world, produced and reproduced by the masses. It seems that the idea of continuous separation of the 'human' with the 'nonhuman' created a deep gap regarding the conceptualization of organic and harmonious practices for sustainable development of the world's economic, cultural and social spheres. With this individualistic perspective, the idea of community and the connection between the outside world and humans have fallen into oblivion. Music culture and the music industries, powered by a massive technological and globalised process, have allowed an international travelling of sound with traits and characteristics of different cultures, rituals and ways of making music.

Music is a way of connecting with the world. Specifically, the jazz musical genre approaches change in musical and performative practices while preserving its connection to its roots, tradition and rituals. It distinguishes itself from other musical genres through its instrumental characteristics, musical dialogues, and intrinsic traits that refer to its history and sociocultural influence.

Aiming to reconcile the environment and civilisation, together with the intersection of the nonhuman and human world, the physical and the cultural spheres all mediated by sound composition, this dissertation explores the musical genre of jazz and its live performances in a given surrounding.

Following an extensive literature review, this work delves into the fundamental aspects of sound, music, audience, performance and performativity. It travels through sensations and relationships integrated into the ecological performative system. To question the way the spirit and sensation of a place, through an ecological approach affects the performance of a cultural product such as live jazz, and how this influences the performance/performers and audiences, the work approaches three main blocks: the social cooperation in music and its instrumental relationship, the intersection between actor and audience and the embeddedness of the performance in a specific environment.

Keywords: Sound, Music, Space, Audiences, Performance, Performativity, Jazz, Ecology

RESUMO

No mundo moderno, a música tem vindo a tornar-se numa forma de cultura dominante e popularizada, produzida e reproduzida pelas massas. Parecer que a ideia de uma separação contínua do humano em relação ao 'não-humano' criou um espaçamento profundo relativamente à conceptualização de práticas orgânicas e harmoniosas para um desenvolvimento sustentável das esferas económicas, culturais e sociais do nosso mundo. De acordo com uma perspetiva individualista, parece que a ideia de comunidade e elo entre o mundo exterior e o homem caíram no esquecimento. A cultura e as indústrias musicais, impulsionadas por um grande processo tecnológico global, têm permitido uma viagem internacional de som com traços e características de diferentes culturas, rituais e práticas de conceção musical.

A música é uma forma de ligação com o mundo. Especificamente, o género musical jazz aborda a mudança nas práticas musicais e performativas, preservando uma conexão com as suas raízes, tradições e rituais. Distingue-se de outros géneros musicais através das suas características instrumentais, diálogos musicais e traços intrínsecos que se referem à sua história e influência sociocultural.

Visando uma reconciliação do meio ambiente e da civilização, juntamente com a intersecção do mundo não humano e humano, as esferas física e cultural por intermédio da composição sonora, esta dissertação explora o género musical jazz e suas performances ao vivo num determinado ambiente.

Após uma extensa revisão da literária, este trabalho explora os aspetos fundamentais da música, espaço, público, performance e performatividade. O trabalho percorre as sensações e relações que se integram no sistema performativo ecológico. De forma a questionar como o espírito e a sensação de um lugar, por meio de uma abordagem ecológica, afetam a performance de um produto cultural como o jazz ao vivo, e ainda, como isso influencia a performance/atores e o público, o trabalho aborda três blocos principais: a cooperação social na música e sua relação instrumental, a interseção entre ator-performance-público e a inserção da performance num ambiente específico.

Palavras-chave: Som, Música, Espaço, Performance, Performatividade, Jazz, Ecologia

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INTRODUCTION

> *"Music is conceived, […] not as something directed from a stage at an audience by a master artist but as something we may all make in our quotidian lives, an activity that connects people, a way of being human. Persons sustain music, and music sustains people."* ***(Titon 2020, 155-156)***

We are part of a world constituted by different elements. Traditionally, there has been a separation of what is understood as human and nonhuman, but 'modernity' brought a shift in understanding these ideas not distinct but as one. Bruno Latour in *We Have Never Been Modern* (1993) argues that "[t]he notion of intentionality transforms a distinction, a separation, a contradiction, into an insurmountable tension between object and subject" (Latour 1993, 58). Nevertheless, we move in our surroundings through our senses, creating experiences, relationships, tensions, contradictions and harmony.

Seeing, listening, smelling, tasting, and touching are our ways of navigating the world. Sound, in particular, is a complex mechanism of understanding the world. Through its timbre, pitch, rhythm, we can retain hints of our surroundings. More so, sound is present in our everyday lives, and it is a fascinating field of study. Organising it in a particular form, we can create music, a cultural object with multiple dimensions, genres and history. As we will further observe through this dissertation, sound and music are forms of communicating and relating with the different elements of our environment.

These two fields of study have developments in cognition, physics, psychology, neuroscience and culture. Music, specifically, translates into different genres and subgenres that characterise cultures and subcultures carrying history and cultural significance. For that, works like Horkheimer and Adorno's "The Culture Industry: Enlightenment as Mass Deception" ([1944] 2002) and Lawrence Levine's *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America* ([1988] 2002) focus on popular music and how it affects culture and the difference between 'high culture' and 'low culture'. Nevertheless, in academic research on music, there is a tendency to dwell into pop and rock to understand

the relationships formed in the performance and how it moves masses.[1] Jazz, on the other hand, its study has focused on African American musical tradition, its improvisation composition and its 'jam session'[2]. Jazz is a musical genre that carries history while constantly evolving, keeping its tradition alive. This musical genre bears numerous contradictions, making jazz a fascinating music genre with several layers in its inherent relationships between music, space, spectators, and the musicians, all contributing to one final product: the jazz live performance.

We focus mainly on the musicians, even though a whole system is embedded in them when we think of performances. This system includes the space where music is played, the music played, the type of performers playing, and the type of audience attending the performance. Several music festivals and music concerts disregard the importance of some elements for the performance outcome, making the festival concert not reach its full potential. Talking about performance in this perspective, authors like Richard Schechner (2003) and Erika Ficher-Lichte (2008), while focusing mainly on theatre, develop the idea of performance as a communicative cultural product based on a relationship formed in the present moment. From this perspective, the studies on music are not very vast and tend to focus on metrics of its composition, the acoustics of space, but not as much on the relationship inherent to the musical performance.

The rise of the music industry provoked a merging of sound and music into the same: a cultural product with economic value. Music grew into an object of a functioning industry with a machine powered by creativity, with cyclic production, distribution, sales, increasingly aiming at a wider audience. Music became a recorded production and a small part of a circle in which different industries are included, namely live performances.

[1] The following works can be consulted for further exploration of the musical genres of pop, rock and their performance: Rick Altman's "The Material Heterogeneity of Recorded Sound" (2006), Andrew Goodwin's "Sample and Hold: Pop Music in the Digital Age of Reproduction" (1990), Steven Rings's "A Foreign Sound to Your Ear: Bob Dylan Performs 'It's Alright, Ma (I'm Only Bleeding)" (2013) and Mark Spicer "(Per)Form In(g) Rock: A Response" (2011).

[2] Reeves *Creative Jazz Improvisation* (2000) and Fernandez *From Afro-Cuban Rhythms to Latin Jazz (2006)* are examples of work that focus either on the technicality of jazz or its historical origins. Moreover, with a focus on the jam session, the author Ricardo Pinheiro, has several works on that matter (2013, 2014).

Concerts and live performances have been up to today spaces commonly understood as liberating grounds for cultural freedom and the release of constraints. These events are of economic and cultural value; they are "events that bring musicians and audiences together in one place at one time and involve performance on vocals or other musical instruments and technologies, or with music recordings" (Cohen 2012, 587). Concerts and live performances bring visibility to the artist and provide an experience to the audience. As argued in Simon Frith's paper "Live Music Matters" (2007), this form of producing music falls in the concept of 'authenticity', a paramount key for rock, folk and jazz. Where "the live show is the truest form of musical expression, the setting in which musicians and their listeners alike can judge whether what they do is 'real'" (Frith 2007, 8). More than the fabrication of a sound by recorded and produced music, live music allows diving into a whole bodily experience. Musical performance represents a social sphere—a gathering of people in space to experience the works of musicians.

Ecology comes to musical performances to understand the relationships between individuals and their cultural environment.[3] This perspective allows us to discern the social conditions applied to the making of live music, implying, consequently, the physical and the cultural environment where it is settled. Contextually, an eco-perspective on live performances focuses on the relationships between the groups of people and their surroundings, which includes social and cultural conditions beyond the physical and material. Felix Guattari in *The Three Ecologies* (2008) understands ecology from three distinctive blocks: the social, the mental and the environmental ecology that works transversally.

We consider the material and physical in various fields of studies, especially in aspects of art and sensations, the touch, the sight, the visual character of the event; we apply them to the system of sensations and emotions of beings. Sound specifically is being studied regarding its meaning and its impact on the rituals of beings, plus the sonic landscape it represents. In a world where the visual panorama is changing, that shift is also represented in the soundscape. Raymond Schafer in *The Soundscape: Our Sonic Environment and the Tuning of the World* (1994) states that the "[m]odern man is beginning to inhabit a world

[3] Authors such as Eric Clarke in *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning* (2005) have developed the notions of acoustic ecology and sound ecology, as a way of demonstrating the links between sound music and ecology, through their inherent relationships.

with an acoustic environment radically different from any he has hitherto known" (Schafer 1994, 3). The evolution of technology brought various new sounds that have substantially impacted the land we inhabit, both at the visual level and on a sonic one — the soundscape. The idea of soundscape is closely related to relationships formed between sound space and the bodies that inhabit the space.

Musical genres are distinct and evoke diverse sensations in the search for identity by multiple communities and individuals. Today we can identify a sea of genres, which resulted from multiple style fusions. We predominantly hear pop, rock, alternative, etc., due to music dissemination integrated into this so-called music industry. People easily reach this kind of music, via radio and music platforms, like YouTube or Spotify. The aim is to reach a wider audience. As humans are constantly evolving, so is music. Some genres, like pop, are fast-paced and associated with trends; others, like jazz, evolve in different ways. While challenging the music structure of the performance placement, they keep their traditional traits and foundations.

The genre of jazz, as it evolved, became narrowed to a smaller audience, targeting a specific niche, the "connoisseurs of music". Jazz was born through the influences of tribal culture and musical traditions from the West African population enslaved. It came from the frustrations and pains of the ones explored for profit, vetoed from keeping their cultural traditions. Jazz symbolises a creative approach to changing times; it represents a change in its multi-dimensions and never-ending variations. This musical genre is the product of social and cultural evolution, from the chants in the fields of cotton plantations in the south of the United States of America to the music used for hymns and spiritual purposes, finally reaching what started to begin resembling today's notion of jazz: Blues and Ragtime. It assumed the role of the liberation of a minority that, so far, had been oppressed and explored.

Jazz involves culture and history. It also relates music, spectators, space and performers within a musical ecosystem. Its sustainability is based on the space the performance takes place, on the experience music provides to the audiences and on the musical relationships created in a specific moment between the musicians. Overall, this dissertation intends to question how jazz influences social interactions between the audience, performers, and performative surroundings. Consequently, other questions arise: how does space, its spirit and sensation, in ecological terms, influence the performance of a highly cultural product

such as live jazz? Furthermore, how does this influence affect both the performances, performers and audiences?

Specifically, looking at the musical genre of jazz in its live performance format, we can identify a tripartite scheme. This scheme represents the jazz performance as a whole, and three interrelating elements power it: the music performed (the production of musical dialogue and relationship); the space where it is performed (the shelter that allows the interactions to happen); the people who produce the music and the ones to whom it is produced (they act and react according to the music and space, perceiving a particular reality). In this sense, this dissertation addresses how music, particularly jazz, space and the audiences relate to each other. It dives into the world of ecomusicology to understand the meanings and relationships that social ecology allows to carry in a cultural product. Its goal is to demonstrate how jazz, as a cultural product, can, in fact, portray a deep organic relationship, on a cultural and physical level, in the space where it is integrated/performed and to the people who experience it.

An extensive literature review was conducted and a theoretical analysis of sound, music, ecomusicology, jazz studies, performance studies, and emotion to improve the understanding of jazz performances. We begin from the particular elements of the performance – music, space and people, to then reach the live jazz performance as a whole, with its inherent relationships. Firstly, we will understand the role of sound, music, and jazz in individuals and communities' development. Secondly, the work introduces space as the setting that builds the foundations for social performance. Thirdly, we recognise how the audiences play a role in the performance *per se* by being the receivers and the producers of emotion and reaction. As to the notions of affectivity in the audience in live music performances, a survey will be conducted to understand the audience's emotional and affective reactions towards the musical performance. Finally, the jazz performance is assessed as a bodily experience that gathers music, performativity and social interaction in one place. For this, we will focus on the concepts of music and sound, space, emotions and sensations, performance and performativity, all integrated into the jazz genre. With a comparative analysis, we can understand how these transformations of physical variables affect the performance and relationships set between performers, audiences and space.

The first chapter, "Sound, music and embodiment in jazz", focuses on the concepts of sound, music, and embodiment as contextual foundations for the development of jazz as a style of music and respective performance. Sound travels through space; we can move in it and perceive a reality based on its characteristics withdrawn. Music is born out of the organisation of sound and, therefore, has profound cultural implications, as it operates as centrepiece of tradition and rituals, as well as carrier of the symbology of sacredness (as spiritual and religious musical interpretations) and profanity (from the association with nightlife, substance abuse and 'immoral' acts). Our emotions and senses are sensorial responses to events that stimulate specific areas of the human brain. We react to music through gestures, foot-tapping, a whistle, a head-nodding, through feelings and sentiments, with smiles or tears. These responses are brain phenomena that lead to periodic emotional reactions to music and sound. Hence, by firstly understanding a contextual position of both concepts and their differences, this chapter will correlate the terms in the cultural sphere as forms and vehicles of producing meaning and empowerment.

Inspired by the work of Jeff Titon in *Toward a Sound Ecology* (2020),[4] we understand jazz as a musical genre that represents a multicultural set of traditions and practices. While historically carrying technological advancements and cultural changes, jazz is still understood as a 'conservative' genre of music. This genre is still of great historical importance, and its variations mark achievements in the development of music. Jazz, through its musical and performative interactions, portrays a musical habitat.

The music industry has had rapid growth with numerous small industries related to it, namely, the branch industry that consists of the planning and organisation of concerts. The placement of a stage in a valley carries different sensations than a stage in a pavilion. Consequently, this conveys how essential the concept of space is in providing the right ambience to a live show. The second chapter, "The space, the setting and jazz in-between", explores the notions of body, sound and music concerning space. This section abides with understanding the

[4] In *Toward a Sound Ecology* (2020), music and sound are seen as an entire ecosystem with subsequent interrelations. Jeff Titon implies that "[t]he musical habitat includes both physical and cultural factors of the musical environment such as ideas about music, sound and sound-producing instruments, recording studios, media, venues, musical education and transmission, and the economics of music—indeed, music as cultural production and a cultural domain—which relate to the health of musical individuals, populations, and communities" (2020, 156).

organic relationship that music and space bring to enhancing a cultural product such as jazz. There is this common understanding that when one perceives a show, one tends to lose the notion of place. Therefore, how come space can impact the performance of a cultural object? What distinguishes space from a place? How can an environment bring out such emotions in us humans? What role do ecology and the notion of the environment play in the spatial placement of a performance? These questions arise from the necessity to define what space is and how it influences music and spectators. In *Non-Places***,** Marc Augé argues that space "is a 'frequented place', 'an intersection of moving bodies" (1995, 79), which means that we continuously include people in the process of perceiving a performative space.

The performance of jazz is an experience *per se*, lived by the musicians and the audiences, who receive the images, sounds and interact with the performance. If music chains a reaction in our brains as individuals, the act of creating an emotional response to it becomes a relevant action to highlight. The third chapter, "The audience and their response to live performance", explores the cognitive processes inherent to the musical performance, exploring the emotions and sensations triggered by the music. The audiences play an essential role in interpreting a performance; they give hints for the lead performer to conduct a story and understand the whole experience. In *Emotions, Senses, Spaces: Ethnographic Engagements and Intersections* by Susan Hemer and Alison Dundon, there is an acknowledgement of sensations and emotions as vehicles that, through our physical body, promote the understanding of our condition as humans and constitute a form of mediating the production of knowledge: "the senses emphasised communication and phenomenological experience grounded in the body" (2016, 3). Their presence in a specific space, for a specific event, acquires meaning and form, hinting, therefore, that "[t]he shift towards embodiment and the senses suggested new ways of understanding emotion and the need to return to the body to reconceptualise the sensual experience of emotion" (3).

Lawrence Nelson (1995) studied the social behaviours that established the jazz jam session. The author carried this understanding that one mechanism that helped to establish the structuring of the session would be the audience—the bodily vehicles. As pointed out by Ricardo Pinheiro, Nelson believed that "the audience members are equally important in the social configuration of jam sessions, as much as the musicians" (Pinheiro 2014b, 337). Through the notions of affectivity, placement and embodiment, instrumentation and

audiences, focusing on jazz performances, we dive into the understanding of the exercising of emotions and its role for a given jazz performance.

The last chapter, “Jaz as performative agent: Connecting music, space and people”, is, hence, dedicated to the jazz performance through an eco-approach**.** This segment incorporates the different elements of the previous chapters and connects all of them with the jazz performance. It explores jazz as a ritual and a form of dialogue within the performance. This communication is transposed to the audience, producing feelings and sensations through music—embedded in a space these relationships are allowed to form and grow. This chapter takes on an ecological approach since it is discussed through the lens of the relationship between physical and cultural environments.

Therefore, jazz as a cultural phenomenon with historical performative traditions, its innovative character, and its live performance represents the object of study of this dissertation. By first leaping into an analysis of its physical and cultural elements, the understanding of jazz live shows is studied as a performance and a form of ritual. The dissertation focuses on instrumentation, embodiment, improvisation, arrangement, and composition characteristics. We incorporate these elements into space, propelling a bodily experience. Finally, this last chapter assumes a position of jazz transgression, where jazz, as a socio-cultural dimension, is reclaimed as a form of politically and socially transmitting feelings and sensations, departing from an elitist perspective of the musical genre in question. Overall, throughout this dissertation, there is a close focus on the notions of music, space, and sensations concerning the performative character of jazz. Indeed, this last chapter materialises the organic relationships theoretically analysed into a concrete form in a live performance.

1. SOUND MUSIC AND EMBODIMENT IN JAZZ

1.1. Sound

My alarm went off, and I woke up with it. Still in the dark, I could hear the wind blowing and the rain falling outside; it was one more day of a misty sky. I got up, went to the kitchen, turned on the kettle and the toaster and started preparing my breakfast. The water is bubbling, and both appliances give out a click, letting me know that the water boiled and the bread is toasted. Even though my vision is blurred, and my mind is half asleep, my ears are working to guide me through this morning routine. I am predisposed to the sounds surrounding me, and they give hints on the timings of my tasks.

We, humans and animals, are born with predispositions to sound. Sound is a fascinating sense that approaches us in a 180-degree form. Hence, sound is a form of perception, where we create an image that corresponds to a patterned vibration sent to us. It is this complex mechanism that is incorporated into the physical body of many living organisms. It is a tool used since the primitive era as a defence mechanism, a mating ritual, a sonic representation of events and even as the base in creative practices such as music.

For most of the Earth's lifetime, the only sounds that existed were natural, meaning events, characteristics, and phenomena of nature, such as waterfalls, rain falling, thunderstorms, waves crashing, among others. Moreover, we know through science that everything started with a big bang,[5] a symbol of all the sonic and musical developments, "those unruly sounds that shatter the existing order, cause turbulence and even chaos, only gradually coalescing into a new stability" (Gioia 2019, 17). It was a unison sonic harmony that allowed the outburst creation of the universe we inhabit. Nevertheless, for sound to acquire meaning, it needs a sensorial apparatus to capture it, especially a mind to interpret it.

As living organisms develop, individual beings developed the ability to create, interpret and sense sounds in tandem. Sound is translated into vibrations, and these vibrations have shaped the evolution of human and animal brains. Seth Horowitz in *The Universal Sense: How Hearing Shapes the Mind* argued that "[v]ibration sensitivity was one of the first telesensory systems, one able to detect changes in the environment at a distance rather than directly on

[5] The movie *Fantasia* (1940), inspired by the music of Igor Stravinsky, aims to match sound with visuals with the intention of expressing primitive life.

or adjacent to the cell surface" (2012, 4). This vibration sensitivity can be found in primitive forms of life, between 400 to 500 million years before what we understand now as sensory hair cells, and it was paramount to grasp and recognise the space where these living creatures were embedded.

The way we listen is shaped by the context that surrounds us. From an early primitive perspective, hunters would track their targets and pre-prepare their attacks; listening would also help keep people safe from dangerous situations. With evolution, so came different ways of interpreting and understanding sound. About 200,000 years ago, the language shift allowed for a more profound social form of communication. It went from a burst of vocal intonations to a somewhat more articulated way of transmitting information. Sound transformed itself from a simple outcome of an action to a socially-oriented form of communication, as a need to communicate within the place of belonging. Bioacoustics and sound studies have allowed us to understand the fundamental mechanics of this thing we hear and call sound. Philip Dorrell states that sound "consists of vibrations that travel through a medium such as gas, liquid or solid. Sound is a type of wave, where a wave is defined as motion or energy that moves along (or propagates) by itself" (2005, 63). Depending on the matter through which sound travels, the compression waves (the vibrations of sound) move in the direction sound is being reproduced. Propagation is understood as displacement, which is developed perpendicularly to the function of time. This means that the vibrations can pass on through the different objects placed in the environment when sound is produced. For example, if we turn our speakers up and place our hands on them, we can feel the sound's vibration. If we place a water bottle in front of them, we can experience the vibration passing from the matter of air to the water bottle, making it tremble (63-64). Sound can travel far away, given that its length is dependent on the medium in which it is produced. It is a sensory input that is not limited, like vision. In fact, you can hear from 20 to 100 times faster than you see, and it can reach you from any given direction if the surrounding context allows it.

Three main aspects characterise a familiar sound: frequency, amplitude and shape of vibration. The frequency (Fig 1.1 and 1.2) of sound is measured in Hertz; it is the number of waves that arrive per second. Psychologically, it gives us the perception of pitch. The amplitude (Fig 1.3 and 1.4) regulates the sound's loudness and is measured by analysing the height of the wave. The greater the height, the louder the sound. Finally, the shapes of vibrations (Fig 1.5) are the representative curves of sound visualised on a time graph function;

it is a regular repetitive vibration that results from combining a particular frequency with a certain amplitude, resulting in a specific wave shape. This ‘shape’ is the psychological perception of the timber/tone of sound, also dependable on the frequency and amplitude and individual variation of a function of time.

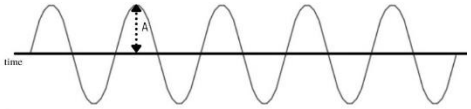

Fig 1.1- High Amplitude- Loud sound

Fig 1.2- Low Amplitude- Soft sound

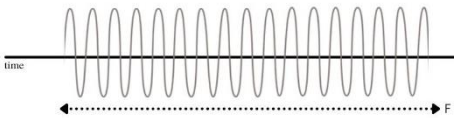

Fig 1.3- High Frequency

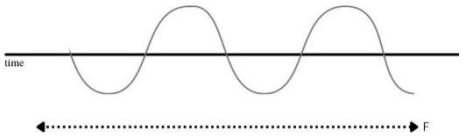

Fig 1.4- Low Frequency

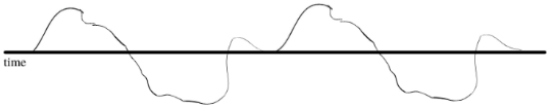

Fig 1.5- Composite wave (shape)

Sound is the consequence of an event. Imagine if a tree fell; its falling provoked the surrounding air to move, producing, as a consequence, vibrational waves of sound. These sound waves travel through matter, which in this case is air, reaching our outer ears; in the middle ear, the sound waves make a small membrane we have, called the eardrum, and the bones connected to it, vibrate. The middle ear then sends the information to the inner ear, where the cochlea processes the sound through tiny and different hair cells that group sounds by tones and pitches. The cochlear nerve system sends electrical signals to the cerebral cortex, where different brain parts analyse different elements of sound (Fig 1.6 and 1.7).

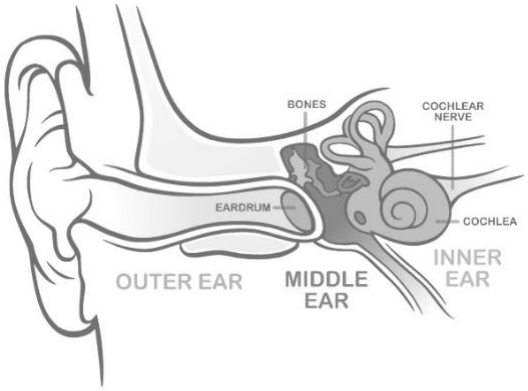

Fig 1.6- The function of the ear (McCollum 2019)

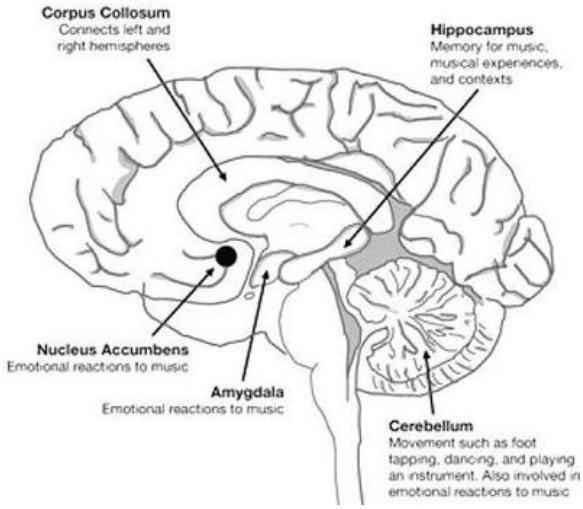

Fig 1.7- Constitution of the cerebral cortex and its functions (Levitin 2019, 271)

Thereupon, we reach to some important physical notions for the event of sound. The first is that we can only acknowledge sound if there is a physical body there to perceive it. Secondly, our brains play an essential role in the processing of sound; sound is processed in different parts of the brain where associations are made with memories, thoughts or emotions/feelings. As Daniel Levitin states: "If a tree falls and no one is there to hear it, does it make it a sound? [...] Simply, no—sound is a mental image created by the brain in response to vibrating molecules. Similarly, there can be no pitch without a human or animal present" (2019, 24).

Sound is the perceptual product of acoustic energy and translates itself into a spatial and a physical dominion. The spatial realm is where the conditions of the space we are in and its form affect the audible acoustic energy. In turn, the physical realm includes the material properties of what constitutes a surrounding. For sound to exist, we need space, physical bodies and an event.

Ultimately, we can perceive sound as a medium of integration in the community we belong to. Not only humans but everything on earth utilises the visual understanding of an event and uses sound to acknowledge the existence of other living organisms. "All living organisms communicate volumes without the use of sound, but sound is helpful. It implies a willful inclusion, a reaching out to notify others of participation and intention; an acknowledgement that others exist and are worthy listeners" (Stocker 2013, 136). Sound, as a product, sound as a creative and intellectual means of human development.

Sound is embedded into our lives through our sensory field as a vehicle of survival. Nevertheless, sound is also transformed into several cultural products through creativity and knowledge, namely sound art and music. Music and sound are often understood as a unity; however, music is a category within sound, with a world of groupings, meanings, and structures of its own. Therefore, focusing on the sonic product of music, we will further understand how music plays a role in shaping humans on an intellectual level as well as on social and cultural levels.

1.2. Music

Music begins when we develop the ability to organise sound in a specific way. Music is this perceptual illusion composed of a structure and an orderly sequence of sound. It translates itself as a cultural object, made by a combination of sounds that carry a bundle of conceptions. Sound and music tend to be seen as one, but the reality is that for music to exist, sound must be developed first into an understandable notion of sonority. Jean-Jacques Nattiez, in *Music and Discourse*, states that "we would not know how to speak of *music* without referring to sonority, *even when the reference is only implied*" (1990, 43). We all know what music is: we hear it, move to it, and play it. The way we perceive, study, and experience it varies and makes us dive into different fields of study to understand it.

From an evolutionary perspective, Steven Pinker states that the way we perceive music is a mere accident and that music is a pleasurable product with the intention to awake neural spots (1998, 528). Levitin argues that scholars such as Pinker consider "that survival and sexual-selection pressures created a language and communication system that we learned to exploit for musical purposes" (Levitin 2019, 106). The presence of specific vocalisations by early human forms is known to have started substantially earlier than the first instrument made. Like Charles Darwin (1871), some researchers believed that communication before language appeared as a musical form linked with the establishment of monogamy. Compared to birdsong as a form of mating ritual, he believed that singing helped male humans attract female humans. Thomas Geissmann (2000) from the University of Zurich related the four other primates who form monogamous pairs, namely lemurs, tarsiers, titi monkeys and gibbons with the musicality inherent to their forms of communication – they duet as a form

of mating ritual. The author suggests then that singing is, in a way, connected to the evolution of monogamy too (Barras, 2014).

Yet, it is still commonly understood that music plays an important role in shaping communities and identities. Nicholas Conrad (University of Tübingen) believes that music and art play an essential part in shaping the identities of primitive communities, a sense of belonging (Barras 2014). Indeed, the "shamanistic musical rituals of Siberia are echoed again and again in the practices of Native American tribes" (Gioia 2019, 42). Not focusing on the human migrations, we can assume a traditionalist and religious-like character of music, with practices taken up to today, in small indigenous communities.

Steven Mithen, in "The Music Instinct: The Evolutionary Basis of Musicality" (2009), understands that the sense of musicality has always been part of the human species and that there are four primary vital events in the evolutionary process of human musicality. The first one regards "the helpless baby problem". Human reproduction and an anatomically narrow pelvis do not allow the birth of a baby with a fully developed brain and head; this means that early human species would need to guarantee the safety of these newborns. Therefore, studies suggest that this brought, from an unconscious need for a sensation of safety, early humans to begin making singsongs (via humming) to communicate with the newborns (Mithen 2009, 8).

Secondly, evolution brought a change in social relations between both genders and their mating ritual. In later hominins, females and males were similar in size and combined with the aspects of childcare. Females, then, were able to become more selective when choosing with whom to mate (Mithen 2009, 8). Moreover, Ted Gioia, in *Music: A Subversive History*, interestingly states that "[e]xperts have offered dozens of theories about the origins of music […], but the most persuasive hypotheses usually boil down to matters of sex or violence. That should hardly surprise us, if only because songs always seem to gravitate to those two subjects" (2019, 21).

Thirdly, with the migration towards lands outside of Africa and the contact with different natural sounds and landscapes, "it seems likely that the musicality of the natural world would have had an impact on the evolving musicality of the human species" (Mithen 2009, 9). By

understanding how other animals communicate, the human species would, through mimesis, incorporate these sounds into their dialogue.[6]

Finally, the last critical development that contributed to the enhancement of musicality came from the necessity of cooperation and community bonding. Mithen argues that just like we find group bonding by attending football matches, by dancing or going to concerts also "*Homo ergaster*, *Homo heidlebegensis,* and the rest would have engaged in group music making, although the direct evidence to substantiate this is elusive" (Mithen 2009, 9).

There is still an excellent space for discussion when it comes to the primary functions of music. What we know now is that music is a substantial cultural product that shaped and marked different generations. Music "is everywhere but it never occupies the same place" (Molino 1990, 114). It creates a sense of togetherness, community, and shared understanding. The infinite functionality of music draws a dependency on the situation that it is in. As Molino later states, the link between music and language, affectivity and the perception of reality, creates a bond between the body and the mind (115).

Moreover, Ivan Capeller, in "Sound, Signs and Hearing", states that "the history of music presents a great number of anachronisms regarding the history of literature and the arts, both aesthetically and semiologically, since music was the last of the classical arts to be fully codified and regulated by an ideal poetics of artistic representation" (Capeller 2018, 49-50). Even though there is still no concrete evidence regarding the veracity that music has been present throughout times, we know that humming, clapping and rhythm production, as a vehicle of community building, might have contributed to the evolution of musicality and today's understanding of music. Humans built a connection with their surroundings via mimesis; vocalisation came as an extension of mimesis of humans with the natural world.

We are all born with a predisposition to interpret sound. In the first years of life, the brain experiences rapid neural development and neural connections. When we reach mid-childhood, the brain begins to retain the information that it finds to be the most relevant.

[6] Merlin Donald, in *The Origins of the Modern Mind* (1993, 162-200), develops an interdisciplinary theory of human cognitive evolution, where it stages three transitions in the evolution of humans. The first transition (the one referred to here) talks about the mimetic culture involving mimesis of the natural world and the ability to mime and re-enact events. This mimesis led to a reconceptualisation of events that recognise cultural paradigms.

According to Levitin, “around the age of ten or eleven […] most children take on music as a real interest”, and at around the age of 18 to 20, the musical taste is formed in our brain (2019, 231-232). When we grow older, the openness to new and different experiences diminishes mainly because the ability to make mental connections reaches a peak during teenage years and because of neuroplasticity and the ability of brain reorganisation, which diminishes with age. Moreover, Levitin also states that “part of the reason we remember songs from our teenage years is because those years were times of self-discovery, and as a consequence, they were emotionally charged” (231). This charging is connected to the topmost we reach as teenagers, when we are constantly searching for brain connections, making an emotional discovery of the self in a given cultural context. From a neuroscientific perspective, the emotions we have connected to music result from the amygdala and neurotransmitters’ actions, marking the memories as an important event. The preferences that are formalised not only define us as individuals but also the community in which we are integrated.

One might associate music taste with personality and vice versa, “but to a large degree, it is determined by more or less chance factors: where you went to school, who you hung out with, what music they happened to be listening to” (Levitin 2019, 232). Preferences are based on a particular behaviour, not to say that they will never change upon reaching a certain age. However, they are highly dependent on the social and cultural context in which one is integrated and with which one identifies with. This identification with particular groups could result from parents’ influence, a group of friends that marked your upbringing, a change of country that broadens your view of the world, amongst other reasons.

The mystery of music remains in the relational connection between the neural structure and how we experience emotion as a reaction to music. The brain has detectors that gather information from the flow of sounds we perceive. Next, this information is combined as a coherent whole and is dependent in part on what the brain believes is hearing and, on the other, what it expects. The brain receives “a constant flow of information about what has been extracted so far; this information is continually updated, and typically rewrites the older information” (Levitin 2019, 104). Mainly, the frontal cortex works towards a prediction of what might come next when listening to music. The expectations come from the mental representations of musical genres, which are culturally informed, shaped and contain specific elements. The ability to expect what comes next in music is based on our familiarity with a

style of music. For example, suppose one is familiar with the genre of jazz. When hearing the use of syncopation, or the sequence in improvisation solos in jazz, one could understand when the solo will stop to give the floor to another instrument.

We have come to understand that sound can express emotions and/or sensations through its rhythm and frequency, for example, a mother's humming to a newborn to transmit safety and calmness. Slow sounds like the river running or the little crashes of waves on the seaside are usually associated with calmness, relaxation, and a sense of safety. On the other hand, disruptive sounds like a car honking or construction working sounds are associated with stress, pressure, or anxiety. In music composition, this understanding is applied, and bodies of sound are shaped in different constructions of timbre and the duration of notes to express different sensations to the listener. If we think of the song "My Funny Valentine", Chet Baker's version (1954), the voice sings the melody and stands out from the whole harmony that the piano follows. In the melancholic, low and dark intonation that Baker utilises, we receive a sensation of calmness and warmth. On the other side, if we take into consideration the piece "Truth" by Kamasi Washington, from the album *Harmony of Difference* (2017), it transmits, indeed, to the listener a harmonic transformation. Until minute six of the piece, one feels embedded in this harmonic conjugation that jumps from saxophone to piano, guitar, and drums. Six minutes in, the saxophone emerges, making us feel uneasy on the trail that is going. Finally, we reach a gospel-like vocalisation, making us attentive to what will happen next. Musicians use these different kinds of sounds for their own storytelling, a way to engage the minds and bodies of the ones who listen.

From a music theory perspective, Daniel Levitin understands that the difference between music and an isolated random sound is related to the way certain "fundamental attributes combine, and the relations that form between them" (Levitin 2019, 17). As stated previously, the essential attributes of sound are amplitude, frequency and shape of vibration. When analysing music, we can translate these three physical sonic aspects into the following fundamental attributes: pitch (the note or tone), rhythm (duration of a series of notes), tempo (pace of a piece), contour (shape of the melody), timbre (what allows to differentiate one sound from another), loudness (how much energy an instrument creates) and reverberation (how distant the sound is). "When we listen to music", as Levitin explains, "we are actually perceiving multiple attributes or 'dimensions'" (14). Our brain organises these multiple perceptions into meter, melody and harmony. Meter is the rhythmic structure of a piece. Our

brain extracts the information from rhythm and loudness and the way they group together to understand the piece's structure. Melody is usually the central part of a music piece and is often louder in pitch to make it stand out more. Finally, harmony corresponds to the relationships between the pitches of different tones. A group of notes are played at the same time, and contrary to the melody, they sound as one.

Music assumes the body of different genres such as jazz, pop, rock, classical, and punk. All of these categorisations assume different and specific characteristics, making the genre identifiable to our ears. This is how our brain processes the information; it does so by grouping sounds. In harmony, sound is perceived as one. For example, considering one trumpet, one saxophone, one piano and one guitar; if the four instruments play the same notes, in the same frequency and rhythm, the sound will be perceived subconsciously, as a whole. Only with selective attentiveness are we able to pinpoint the instruments that are being played.

By assuming different bodies and structures, the different genres of music can relate to an ecosystem of music. This ecosystem fundaments the economic, cultural and social practices of art in our society. Ecology understands the underlined relationships between humans and their environment and music acts as a bonding cultural object, therefore, we can understand how its sustainability can enhance the mind-body-environment relationships. The mind and body relate with instruments and with sound, and the environment can affect and participate in the interactions formed between musicians, music, and audiences, and vice versa.

Embodiment is an essential concept to highlight since it contributes to understanding how we, humans, relate to music and the environment. Embodiment is "the giving of human form to a spirit" (Albu 2019, 4.1). In cultural-artistic objects, the body becomes the canvas, the music or the play; what sustains the embodiment of art is how we locate ourselves in our surrounding environment.[7] Thinking of art and culture, the body is never the first thing to stand out, but culture is based on the human body (Csordas 1994, 6). Embodiment is articulated into music in the gestural sense. We have stated before that the first clues of music humans developed were through humming and abrupt vocalisations, always accompanied with gestures. This gestural practice is still visible today in the instruments being played or

[7] Donna Haraway (1991, 183-201) work on the understanding of the body by recognising the location as a way of interpreting the relationships, interactions, and communications with the surrounding.

in bodily movements created in reaction to music. The notion is a standardised and conceptual view of the body as a sign system, as we can witness in, for example, a jazz performance. Thus, "embodiment is thus an inter-play or collaboration with the body, incorporating its memory, habits, knowledge, and bringing them into a specific context" (Wilkins 2011, 7). Music relates with the body, with perception with cognition and with our surroundings. It does so by relating with sound production through bodily action or by affecting it through sound. Nevertheless, it is also music embodiment through our meaning-making process, which is based on our experiences (Clayton and Leante 2013, 191).

Still, regarding music embodiment and its relation within and its surrounding, Jeff Titon in *Toward a Sound Ecology* (2020) puts together a collection of essays that view sound and music from an ecological perspective. This is interesting since he uses concepts of sustainability and ecology, usually applied to the notion of consciousness about the use of our natural resources, towards the preservation of music culture. The work showcases an understanding of the group's total involvement with music.

Titon understands the behaviour of this music culture as an entire ecosystem that follows four main ecological pillars. The first one is the "Adaptive wave of diversity", where this multifariousness is seen as a contribution to human capacities of adaptation. The second ecological principle is the understanding that the "continuously expanding growth is unsustainable" – given the finitude of resources, the endless expansion becomes unbearable. We need renewability and the recycling of economies, goods, and also music cultures. Thirdly, "connectedness" comes as a need to keep cultural heritage alive through individuals and their embeddedness in their communities. Finally, the last principle focuses on "stewardship", where humans are seen more as caretakers of the natural world than the owners of resources (Titon 2020, 155-158).

These principles are applied to this vision of the musical habitat as an ecosystem. The "organism-complex" is constructed in three levels: the individual organism, the population organism and communities, which are the compositions of different groups of population. The world of music consists of the music culture that is social and ecological at the same time, since it portrays interpersonal relationships and the intersection of the physical environment with the cultural one. This, from an eco-perspective, corresponds essentially to the organism as an individual person with an individual musical mind; the population as a

group of people into music who share preferences, a tendency to jazz, punk, pop, etc; and finally, the community as where these different worlds of music interact with each other, on a shared knowledge basis. As Titon states:

> The musical habitat includes both physical and cultural factors of the musical environment such as ideas about music, sound and sound-producing instruments, recording studios, media, venues, musical education and transmission, and the economies of music—indeed, music as a cultural production and a cultural domain—which relate to the health of musical individuals, populations, and communities. (2020, 156)

Music is not just a bundle of industries, it is much more than that. It is an artistic form of expression with cultural heritage, with an ability to shape generations. With the rise of capitalism and mass production, music became a mere consumable object.[8] The internet, in general, created fast and easy access to all kinds of music from all around the world. These changes in technology impacted the musical culture, but to what point is this continuous growth sustainable? Today, we turn on Spotify, watch a video on Youtube, and we are experiencing, somehow, whatever music we want. Music festivals, concerts and pop culture are more predominant in our daily lives than ever. These events set trends and standards and influence attitudes, behaviours and fashions; nevertheless, mass popularisation of music has, in a way, created a disruption of certain intrinsic roots that music brings from tradition and adaptive ritualistic musicality.

The musical genre of jazz is commonly perceived as a more conservative form of musical culture. However, in what ways is jazz different from these other genres of music? How come is it conceptualised by many as an elitist form of culture, if its background comes from the oppressed working bodies of world communities? The following section will look closer into this genre.

[8] Max Horkheimer and Theodor Adorno's work on the Culture Industry refers to music as a product of the entertainment music part of a media-dominated society. The chapter "Culture Industry: Enlightenment as mass deception" discusses the concept of "culture industry" and refers to the commercial marketing of culture as the prominent phenomenon of late capitalism (2002, 95). The products of light entertainment (e.g., Hollywood movies or 'elevator music') are intended to fulfil the needs of mass capitalistic consumerism and entertainment. Adorno criticises the culture industry in the sense that commodifying culture is commodifying human consciousness. The culture industry uses a production-line mentality, with the production under the same scheme and patterns. (Horkheimer and Adorno 2002, 94-136)

1.3. Jazz

What is jazz? A multifaceted genre of music, a lifestyle, a feeling or an emotion? We cannot reach a full concrete definition of what jazz is. It means a multitude of things, making it hard to define it in a few lines. Jazz is a musical genre with deep cultural and traditional roots that has been reinvented over time. David Ake, in *Jazz Matters: Sound, Place, and Time Since Bebop* (2010), understands jazz as a relationship between the individual and where he/she integrates, a way to understand a sense of identity. The author states that "jazz always relates to individual and cultural senses of 'you' or 'them' as much as it helps to express and celebrate notions of 'me' or 'us' [...] so often serves as a crowded, even contentious, forum for what are widely called issues of *identity*" (Ake 2010, 3). Music, in general, is a vehicle of emotional development: on an individual level, to understand the sense of self; and on a collective level, as a form of creating a cultural identity that characterises ways of thinking, ideologies and ways of living.

This musical genre is claimed to be recognisable when one enters into contact with it. Nevertheless, the truth is that there are so many variations that it becomes hard to draw the line between what jazz is and what it is not. This musical culture has about 100 years of history with eventful creations from Buddy Bolden, Dizzy Gillespie, Keith Jarret, Louis Armstrong, Mary Lou Williams, Herbie Hancock, Duke Ellington, John Coltrane, Ella Fitzgerald, Miles Davis, to name but a few. We know these people performed jazz music, but the jazz they played varied from one to another, making us aware of the continuous renewability of the genre.

We cannot understand jazz without the context of its birth. The foundations of jazz date back to the 19th century; culture, art and music tradition were spread throughout America from Africa during the slave trade. Ted Gioia in *The History of Jazz* ([1997] 2021) begins the journey with the African ritual present in New Orleans as the pre-creation to jazz, where music and dance would fuse without any borders and delimitation. Hand drums, calabashes, voices and body movements represented forms of collective identity and escapism "to play a hand drum in 1819 in the United States, where overt manifestations of Africanness had elsewhere been so thoroughly, deliberately erased, was a tremendous act of will, memory and resistance" (Sublette quoted in Gioia 2021, 2). With slavery came movements of people, Africans, who were forced to abdicate their entire lives to work in a, usually, inhumane way.

Paul Gilroy points out in *The Black Atlantic* how music became a decisive turning point as a communicative system amidst "the protracted battle between masters, mistresses, and slaves" (1993, 74). Without a doubt, this conflict arose due to a loss in language and communication, bringing music as a new vehicle for expressing thoughts, feelings and ideas. With such exchanges, the western culture was Africanised, and African culture was westernised. Different forms of art blended in an ever so different way.

We understand the ritual as a form of keeping a tradition taken from colonised people—a survival tactic and communication inside the community. Messages coded in a musical format could be demonstrated through chants and hymns sung in a gospel-like format. It is not a surprise, then, that the progression of jazz comes from blues and spiritual music. On this topic, Ted Gioia refers to Alan Lomax, an ethnomusicologist, pioneer researcher of African American music, who claims the following:

> Blacks had Africanized the psalms to such an extent that many observers described black lining hymns as a mysterious African music. […] Instead of performing in an individualized sort of unison or heterophony, however, they blended their voices in great unified streams of tone. There emerged a remarkable kind of harmony, in which every singer was performing variations on the melody at his or her pitch, yet all these ornaments contributed to a polyphony of many ever changing strands–surging altogether like seaweed swinging with the waves or a leafy tree responding to a strong wind. […] It rises from a group in which all singers can improvise together, each one contributing something personal to an ongoing collective effect–a practice common in African and African-American tradition. The outcome is music as powerful and original as jazz, but profoundly melancholy, for it was sung into being by hard-pressed people. (Lomax 1993, 81)

Surprisingly, the economy somehow preserved some of the traditional roots of Africans working in the plantations in the United States. As far as religion is concerned, there is always some sort of ritual and spiritual activity associated with it, highly collective and integrative actions. In this case, the collective hymn harmonisation is portrayed as a ritualist sense in the calling for an escape.

From this pre-historic perspective of jazz, this musical genre evolved in renewable stages throughout the 20th century. The first stage of jazz started in New Orleans at the end of the 19th century and the beginning of the 20th, specifically in Storyville, known to be the birthplace of jazz. Ted Gioia explains that jazz being "[c]hastised as the devil's music" (2021, 36) might be more connected with religion than profanity. The rhythms played had more in common with the Baptist music, played in churches, than necessarily the city's nightlife. New Orleans was a relatively tolerant city compared to other places in the United States,

reflecting black people's relative freedom to utilise their traditional influences in creating this cultural product. These New Orleans groups were formed mostly by African Americans and mainly consisted of collective improvisation. However, there was not a lead member, soloist, nor individual set. The music, played live, explored mostly harmonic improvisation, through collective instrumentation. With ragtime and blues, the first formally known variations of jazz, Buddy Bolden and Jelly Morton would be the first names to be understood as the boosters of this genre (40-46).

Even though New Orleans is understood as the birthplace of jazz, by 1915 (with the closing of many of the nightspots) this style of music had to expand its locality to survive. Change and adaptation convey a revolution factor inherent to jazz; we know already that jazz comes from the struggles of an oppressed community. With the constant restrictions and censorship, this genre had to keep on finding new vehicles of expression. The "jazz age" (1920s) sustains the idea of change in jazz by revolutionising its structure – with the implementation of solos and the move from big ensembles (with parallel harmonisation) to a small group with musical individualisation.

The whole story and understanding of jazz could take years of research formulation. For this inquiry, and to simplify the understanding of the musical genre evolution, I will succinctly describe each stage, divided into the following matters: Hot Jazz Era, the Swing Era, the Bebop era, and finally, Modern Jazz.

The "hot jazz" era consists mainly of the influences and aspects integrated particularly through Louis Armstrong's work in New York. Hot jazz is marked by a fast-paced rhythm, experiential ground, and influences from Cuba and Latin America. It was also when the first recordings of jazz allowed the creation of an entire music business. By 1930, elements of European sophistication were added, evolving jazz into a larger group, with "short phrases and riffs, that was repeated over the chord changes. It was an easy-going, relaxed style of jazz" (Holmes 2006, xxiii).

This brings us to the Swing Era, a relaxed, danceable style with a noticeable melody. Count Basie and Duke Ellington are some of the most prominent artists of this era. They brought a complete body of sound that took jazz to the dancing floor and nightlife. Nevertheless, jazz, like other musical genres, in agreement with the way the world works, needs to be revolutionised as time progresses, the creative outcomes produced were differentiated

through individual mind processes and collective practices. The Bebop era (the 1940s) brought new structures and features to the table. Bebop "emphasised instrumental solos rather than hummable melodies" (Holmes 2006, xxiv). This jazz style focused mainly on the experimental character of music, with emphasis on the technique used, the different rhythms, and the individual solos. Bebop established a ground for the reinvention of music; the possibilities could be endless. That is what 'modern' jazz represents: a basis on traditionalism with the integration of the new, of the different, in a tolerant and inviting way. Modern jazz brought several stylistic flows such as Hard Bop, Model Jazz (pioneered by Miles Davis), Free Jazz, Cool Jazz, Fusion and Acid Jazz.

Up to today, jazz has been a bridge between the past and the future. Along with the changes in the world, this musical genre acts as a chameleon; it adapts itself in a creative, experimental, and traditional format. The jazz style "consists of a body of styles that are the source of continuing ideas and inspiration […]. Living jazz is an amalgamation of its own history, a music in which all styles continue to play a role in its growth" (Holmes 2006, xxv). Gospel, soul and spiritual music play a role in the fundamental foundations of what jazz ended up becoming.

The notion of the musicality of jazz comes from a known historical background and a collective gathering as ritual. David Ake in *Jazz Matters* (2010) develops this exciting idea of the jazz 'being' and the jazz 'becoming', two different personas that jump on and off from one to another. The intellectual, emotional individual as a "snapshot of the musical persona in one metaphorical state of mind or body in one particular time" (Ake 2010, 18) and the intellectual, emotional performer, where the "becoming personas can form only when musical events seem to emerge out (rather than merely follow) the previous material" (25). It is the depiction of the embodiment of music within the performer.

Nonetheless, when we think of the becoming of jazz, Coltrane, Miles, Ellington, or Hancock, we associate mastery and mysticism behind the persona that creates the solo and improvisation as almost an accidental good fortune. We can understand that beyond the sonic record of jazz, this style goes further than the sound; to be understood, we must ingrain an experience from the performance. "People do not employ sounds arbitrarily, haphazardly or unintentionally – though – 'intentionally' haphazard may itself constitute an important sort of sonic discourse" (Leppert quoted in Ake 2010, 39). In jazz, the stage is a key for creative

liberation in whatever format it might take, the production of sound in the present moment, even as intentional consciousness is translated into an unconscious meeting of the mind with the body.

This being and becoming is not just individual – for jazz to happen, a group must exist. This music ensemble is, at times, undervalued in favour of the individualised persona. "With few exceptions, the nature of jazz performance requires group interaction of the highest level. And much of the irony of jazz is that, for all its celebration of the individual soloist, it remains a music of ensembles" (Gioia 2021, 278). The different individuals who gather to make music in a performative matter act as to form a dialogue between them, without the use of ordinary language. Instead of English, Portuguese, French, or Chinese, the language of music and sensations is utilised, along with visual signalling, to communicate with each other and with their audiences, almost in a sonic telepathic way.

Jazz is a layered style of music with several characteristics. If one were to name them in a theoretical format, the following would have to be invoked: harmony and tonality, meter and rhythm, tempo and structure, groups and instruments, and texture. However, from a culture studies perspective, I will only focus on groups and instruments and their ability to improvise as a critical factor. Instrumentation represents a focus on a practice, a move from sacred vocalisation to sacred instrumentation. The art of learning an instrument takes time and practice, but the art of communicating through instruments is an even harder practice to employ in the performances: "only here it is musical sound rather than celestial new vision that is being 'instrumentally' produced" (Ihde 2007, 236). The move from mainly vocal to instrumentation portrays a dialogue through instruments, and bonds mind, body, and technology into the performance.

We tend to work to democratise music to make it accessible for everybody. However, we unconsciously set aside genres like classical or jazz music because we believe that, to appreciate it fully, one must be educated about it. This is the idea many people have of jazz – a genre stuck on a more conservative ideology – which goes against everything said so far on the adaptive capacities of jazz. Authors like Don Ihde (2007, 236-237) have argued for a conservative personality of jazz by stating that the new technology instrumentation in the genre is absent. However, let us analyse today's jazz. We can see that it has adapted, resorting to other musical styles and technology using *loops,* synthesisers, and computer

programs. An excellent example of this adaptation is the artist Jacob Collier, who, in a way, has tried to reinvent some foundations of jazz, with a focus on reharmonisation.

Jazz has all the elements that music from other genres have: melody, harmony, rhythm, and tone. Its improvisational character, though, sets jazz apart from other genres. A melody opens the piece, and the stage is given to each instrumental element to perform a solo. “My Favourite Things” (1961) by John Coltrane is a good example of how this improvisational dialogue works. Coltrane embarks in a known melody from the musical *The Sound of Music* (1959); from that, the player marks a tempo and a rhythm, making the others follow what was settled. Once harmonised together, it is time for the saxophone to shine in its solo while the others calm themselves in the background. Whenever it is time for a new solo, we, as listeners, embark on a sensation of expectation regarding what is coming next. By the end of the piece, the melody comes back as a return home.

One conclusion we can take from this is that jazz is more than just a song. This musical genre is an embodied experience achieved primarily through performance. One might state that we could claim this happens for most of the genres. Nevertheless, and as we will progressively see in this dissertation, we could argue that the creation of jazz is focused on the present moment through improvisation. In other genres, there is still a significant focus on composition that can be better reproduced. Jazz consists of a dialogue between the players and composers of the music and how they can create new emotions and experiences while on stage. This genre is grounded on a tradition but constantly aims to revolutionise what music can be and what it should be.

For the purpose of this dissertation, jazz is understood as an everchanging musical genre that rose from the shadows of a multitude of other roots and traditions such as African, Caribbean and French creole music brought by slaves to the United States of America. Jazz represents the liberation of an oppressed group of people forced to work outside of their roots. Jazz improvisation and music as a cultural statement allowed them to challenge the confinement of their culture and art, and fight for their acceptance as humans.

2. THE SPACE, THE SETTING AND JAZZ IN-BETWEEN

2.1. Space – Bodily relationships and experience

In the previous chapter, we have seen that sound travels through space via vibrational waves. These sonic waves can exist because air (matter) allows reverberations (reflection of a sound, causing its repetition). However, what is this thing we call space, and what does it mean to sound? Space is where we are, and it is everything that surrounds us: the four walls of the bedroom, inserted into another four walls of the apartment, which consequently belong to a building, part of a particular street. Still, what makes this street a familiar place is the meaning that we create in it. This meaning comes from the experiences, relationships, and moments we, individually and collectively, go through.

We can analyse 'space' through different lenses, namely, architecture, geography and humanism, and its conception will change accordingly. Nonetheless, they share the core understanding of space as perception.

When we talk about space as perception, it is on behalf of the body placement and how it functions to guide and create meaning from what we perceive. In *For Space* (2005), Doreen Massey puts forward three main propositions for studying space. Firstly, space results from interrelations, meaning that it grounds itself on relationships formed between different individuals, communities, and different identities (Massey 2005, 10). The second proposition, the concept of plurality, embraces and emphasises heterogeneity. This perspective comes from the view of history as something which is not linear. The history of space is not specific to the west or east history; it is not the story of white people or black people. History has different sides, which creates a plural existence in space and a diversity of understandings. To recognise the 'difference' in history is to recognise space as heterogeneous (10-11). Finally, the third proposition recognises space as a process, something in constant change. "*For* the future to be open, space must be open too" (12). Just like history must be open to new interpretation and information, space needs openness to new links and relations; otherwise, if all relationships were pre-established, we would enact a concrete closure of space. The idea of 'change' pervades this entire dissertation. Change not only represents sound and music as an innovative product in constant evolution but also

describes space. The evolution of space accompanies our relationships with the outside and inside; it represents future possibilities in action, representation, and relations.

Another author who developed the notions of space, place, and humans' positioning is Yi-Fu Tuan (1979, 387-422). The author conceptualises space as a constructed reality which varies according to each individual and the culture where he/she integrates. A geometrical space is the objectification of the reality we inhabit. When one is placed in a specific location and community, the objective space becomes a cultural space where reality changes according to the predominant culture. It was this constructed reality of space that allowed humans to control nature.[9] Thus, space becomes the product of a personal perception or a collective perception towards an objective reality where relationships occur. These relationships are not only between humans but also with everything that inhabits and belongs to Earth. With this, we can establish two different concepts that regard, in a way, the same idea: space and place.

Edward S. Casey (1997) criticises the usage of space instead of the notion of place because, in his perspective, space implies homogeneity and the acceptance of the void, the emptiness. He views the notion of place as the best way to situate in time and context. The author states that "[o]nce space is dissociated from the particular bodies that occupy it, it is bound to be emptied of the peculiarities and properties that these same bodies (beginning with their outer surfaces) lend to the places they inhabit—or that they take away from places by internalization or reflection" (Casey 1997, 197). If we strip the body from the space, we are left with emptiness, but if we assume that space is void, it is hard to create the possibility of place since it comes from the foundations of space.

Embodiment is attached to space in the sense of the placeness of the body in an environment. In *Outline of a Theory of Practice*, Pierre Bourdieu states that "it is in the dialectical relationship between the body and a space structured according to the mythico-ritual oppositions that one finds the form par excellence of the structural apprenticeship which leads to the em-bodying of the structures of the world" (2013, 89). Our body perceives a

[9] Bruno Latour's book *We Have Never Been Modern* (1993, 13-15) gives a broad perspective on the anthropocentric view of the world, rejecting the idea of superiority and detachment of humans towards nature and the environment.

specific environment through its spatial discovery experiences, relating it with mind and space—three different spheres gathered into one unity.

Space is where all the elements meet, and once those relationships are formed, and meanings are created, space can become a place. Memories take part once we experience moments, and from there, we can develop a sense of place from everything we lived in that place. "[P]lace is security" because it comes from memories and lived experiences, and "space is freedom" where the opening to experience occurs (Tuan [1977] 2001, 4).

Upon a more general understanding of space, three main key points are valuable to understanding this subject: the body, the relations, experience and time.

2.1.1. Body

Space implies finding a place. In Marc Augé's *Non-Places: Introduction to an Anthropology of Supermodernity*, a reference is made to the ideas of Michel de Certeau about space being a "frequented place (Augé 1995, 79), where moving bodies intersect with one another, and about place, on the other hand, as the "assembly of elements coexisting in a certain order" (80). The body is a necessary presence for there to be a meaningful space.

From a very young age, we move in space and create meaning in it. For example, a baby knows their crib as a safe place, as the location to rest. Since infants, we learn how and when space is limited and possible through the imposed divisions and movements we create. For example, a baby knows their crib as a safe place, as the location to rest. As infants, we learn how and when space is limited and possible through the imposed divisions and movements we create. Yi-Fu Tuan (2001) explains this idea as an intrinsic and biological factor of the human body. The perception of the place is a lot grounded on sight, and it is a capability that improves with time. Tuan states that "[m]oving the body along a more or less straight line is essential to the experiential construction of space into the basic coordinates of ahead, behind, and sideways" (2001, 20). The perception of our spatial positioning begins as infants with the mere act of looking straight ahead. As we grow, so does the analytical perception of the objective space. The biological notions of space allow us to develop relations with other

humans, animals, and things. It ultimately starts with one individual body, spreading into a population and then a community.

For Tuan, acknowledging the posture and structuring of the human body is one of the principles in understanding the complex notion of space. "The human being, by his mere presence, imposes a schema on space. […] He notes its absence when he is lost. He marks its presence on those ritual occasions that lift life above the ordinary and so force him to an awareness of life's values, including those manifest in space" (Tuan 2001, 36-37)

In *The Production of Space* (1991), Henry Lefebvre constituted space as a creation of living bodies, which constitute the self. For the author, the body is the representation necessary for recognising space and experience to happen. "A body so conceived, as produced and as the production of space is immediately subject to the determinants of that space […] the spatial body's material character derives from space, from the energy that is deployed and put to use there" (Lefebvre 1991, 195). The statement connects with the spatial body as it orients, positions and gives guidance to the world. There is still a prevalence of mind/body dichotomy because it is the physical motors of the body that trigger cognitive processes and allow guidance through space.

Nevertheless, the way human bodies are structured results in the sense of achievement where an order can be implemented; therefore, it creates a sense of control of the individual body's space. However, no matter how much a body manages to envision, analyse, and create a space with the sense of its presence, community relations allow the development of a place. In cultural productions, such as concerts, the space becomes meaningful by having bodies move with the music. People relate to one another, with the performance showcased and respective performers. The conception of space and the music produced affect the body's placement and perception of its reality in the present moment—through the sense of spaciousness and crowdedness. We can position ourselves in space according to the signals we receive.[10] We go through cognitive and physical processes, and it bonds the mind and body into one.

[10] Authors like Mark Johnson also developed the concept of 'body' in regards to subjectivity and the imaginary creation of reality. In the book *The body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason* (1987) the author uses 'body' as a term "for the embodied origins of imaginative structures of understanding, such as image schemata and their metaphorical elaborations" (Johnson 1987, xv).

2.1.2. Relations

Space imposes social relations which are powered by bodies. "[T]he relations (whether close or distant) between human beings" (Tuan 2001, 34) are another principle quintessential to understanding this notion of space. This complex concept varies according to each body, population, and community. In some way, it is also very much connected to the idea of identity, where space gets culturally divided into nations in which traditions, customs, tastes, and habits are shared.

Our linguistic communication includes spatial terms such as 'this', 'that', 'here', 'there'; these are terms of temporality, proximity and distance that also include levels of interpersonal intimacy and, at the same time, our geographical location. The terms 'we' and 'they' include transparency on how humans relate to each other, the sense of distancing or integration (Tuan 2001, 50).

These spatial divisions exist because the human body has significance. Its meaning is provided in the definition of space. In human relations, it creates integration, distance and inclusion. Tuan explores this theme by developing the idea of 'spaciousness and 'crowding'. For Tuan, "[s]paciousness is closely associated with the sense of being free. Freedom implies space; it means having power and enough room to act" (2001, 52). Space implies the ability to move and not be constricted. In musical performances, people relate through their perception of distancing, spaciousness or crowding. These notions are important because they affect the feels and senses of each concert, and the construction of space gives hints on social impositions. For example, a concert by the indie rock band The Kooks in, let us suppose, an outdoor setting, has a large crowd gathering. Even though many people might constrain our personal space, there is enough liberty in its spatial organisation for people to explore it. Contrarily, in a jazz performance like Vijay Iyer Trio, playing an auditorium with preassigned seats, the behaviour towards the musical performance is going to differ, in the sense of possibilities of relating to the other bodies' exploration of space.

Crowding is the understanding of the presence of others and that, somehow, they support us and foster a sense of caring and 'watching out' for one another. Human beings are inherently social, and the presence of others is appreciated to a point. Thinking of a music festival as an exciting event that gathers thousands of people, a crowd's presence is appreciated because

it creates a sense of a shared community, or, to use Benedict Anderson's terminology, an "imagined community". Anderson argues that "all communities larger than primordial villages of face-to-face contact (and perhaps even these) are imagined" (2007, 256). How physically close we tolerate or enjoy the presence of others, for how long, and under what conditions vary noticeably from culture to culture, though (Tuan 2001, 62). Nevertheless, once the festival ends, coming back home is a nostalgic journey, but at the same time, pleasant, calm, and serene moments are welcomed as recharging.

In agreement with Lefebvre's notion of spatial body, there is never just one body, our body in space. The multitude of bodies alters the perception of space from just material to also social. "Social space 'incorporates' social actions, the actions of subjects both individual and collective […]" (Lefebvre 1991, 34). For Lefebvre, the idea of social space constitutes the materiality of relations between different bodies; one individual might move from one group to another without any problems, constituting a social practice. Moving in a place is not solely dependent on one perspective. However, the relations that space sustains depend on other individuals and their perceptual reality of the place they stand.

The spatial division is biologically and culturally linked to the body, representing distance or proximity (spatial measurement) and links the expression of relationships with other humans. Tuan states that "[w]e may say of a forest that it is crowded with trees and of a room that it is crowded with knick-knacks. But primarily people crowd us; people rather than things are likely to restrict our freedom and deprive us of space" (2001, 70). The collective and the individual affect the experiencing of space in the sense that the social relations produced can change perceptions, and therefore, the cognitive processes. In musical performances, the relations created in space contribute to the experiencing of the performance; they influence the reactions of crowds as they vary according to each individual and culture; therefore, the perceptions and interventions in space change when crowding happens.

2.1.3. Experience and Time

Tuan (1979) analyses the structural space through the past, present, and future notions since the spatial experience require a categorisation in time. The consciousness of spatial relationships exists because of the individual perception of our surroundings and past experiences marked on our memories translated for future references.

Our experiences open a journey to understand and construct a given reality in the 'experiential perspective' since emotions, ideas, and thoughts shape the human experience.

"Experience has a connotation of passivity; the world suggests what a person has undergone or suffered" because "[t]o experience is to learn" (Tuan 2001, 9). Experiencing space is associating it with given situations where we can acknowledge lessons as outcomes of something that might have happened. Nonetheless, we perceive these situations from a merely human point of view. We do not think about what the trees might have experienced since we utilise human rationality to learn. We do the same with emotions and the embodiment of our physicality within a given space. We experience it through our individual and physical perspectives.

Times involves the notion of space since, as Tuan argues, understanding space and knowing it takes time. Familiarity with a specific place only grows as time passes, and "attachment […] is seldom acquired in passing" (Tuan 2001, 184). Hence, nostalgia and melancholic awareness are emotions prevalent in space and place since the past's desire sometimes overpowers the thoughts. It is not so much of going back to the places, but the time spent there with specific people who make fond memories, of a time never coming back. Even if it did, it would not be the same because time allows people to change and, consequently, our interactions will too. The knowledge of space in an intimate matter creates a deep attachment to it, directly involved with the memories of the experiences created in that place. When knowledge is lacking, the reality is ultimately lost in there too. Still, since space is freedom, there exists enough openness to create new experiences and memories.

A space translates into a place when significance is created as it displays a 'spirit' that makes it different from any other space. This 'spirit' turns out to be a foundation for all 'souls' and events that passed there, given that places are linked to impressions, relationships, affections

and emotions. Objects carry a spiritual symbology that leads us to create a specific personality of the place and produce the notion of a 'sense of place'. Tuan states: "space is formless and profane except for the sites that 'stand out' because spirits are believed to dwell in them" (Tuan 1979, 409). A unique personality is associated with each space, which develops based on fear-admiration and affection—feeling and sensing.

Raymond Williams explores the concept of experience by stating that it is "[…] the fullest, most open, most active kind of consciousness, and it includes feeling as well as thought" (Williams 2015, 84). Experience, for the author, involves sensing and feeling, and it is linked to past and present moments. He further reveals that "[…] that the grounds for reliance on **experience** past ('lessons') and **experience** present (full and active 'awareness') are radically different, yet there is nevertheless a link between them, in some of the kinds of action and consciousness which they both oppose" (Williams 2015, 84). These two understandings of experience are results of cognitive and physical processes our bodies go through in a given moment and situation, therefore, relating with time and space.

Further on, these concepts relate to cultural objects, such as music. The experience of musical performance differs from visual arts in its relationship with time and space. Simon Frith, in "Music and Identity", distinguishes these art forms with "the fine arts as organized around the use of space, and the performing arts as being organized around the use of time" (1996, 116). For Frith, the difference in the experience of fine and performative arts relies on the embodiment of the cultural object and the temporary experiencing as a process, respectively. However, this distinction is a mere understanding of possible approaches to exploring the "aesthetic experience" (Frith 1996, 116). Musical performances are experiences of time and space, even though the focus is on the momentary process.

Place and space are the nests for experiences and relationships, from the individual to the community. Bodies experience through the senses, and it is the body that, through the senses, guides one through space. "People demonstrate their sense of place when they apply their moral and aesthetic discernment to sites and locations. [...] However, other than the all-important eye, the world is known through the senses of hearing, smell, taste, and touch. These senses, unlike the visual, require close contact and long association with the environment" (Tuan 1979, 410). The sense of place is based on habit, practice, and routine, symbolically projecting itself on a particular place's knowledge and memory. Finally, to

know a place, and to feel it, is to perceive what surrounds us through hearing, touch, smell, sight, the senses that allow us to develop proximity, distance, or an association to the environment.

2.2. Connecting sound and music with space

We have seen, so far, that both sound and space are perceived by people and include ideas of relations, environments, interactions, and the placement of the body in a specific direction and location. Sound and space coexist; sound is spatial because "the process of audition attaches a spatial 'narrative' to each sound" (Eisenberg 2015, 193). Eisenberg describes both concepts' dependency by means of perceiving each idea without the other's existence. Space is necessary for sound to propagate, and sound is essential for the construction of space. The author alludes to the cultural character intrinsic to space as part of a spiritual transcendence, translated into cultural traditions. These cultural traditions that involve a spiritual awakening tend to capture "the experience of nonspatial sound through meditation and trance, and by harnessing the despatializing effect of physical reverberation for spiritual transcendence" (Eisenberg 2015, 193).

How structures create meaning in space have been the focus of many studies, and three main concepts arose from them: 'soundscape' by Shafer (1994), 'aural environment' by Truax (1984) and 'eventscape' by Blesser and Salter (2007). These concepts cover an ecological approach to studying sound and space, how nature and humans belong to a sonic habitat. 'Eventscapes' is the understanding of the interactions that sonic events develop in a given place and how these interactions work within space over time, emphasising how sound production comes from an event (Blesser and Salter 2007, 15-18). 'Soundscape', the merging of sound and landscape, is a notion popularised by Raymond Schafer to understand humans' perception of the composition of the acoustic environment. Therefore, this composition translates into a map that categorises the different combinations of sounds that arise from a given environment (Shafer 1994, 7-8). On the other hand,' 'Aural environment' portrays this sound mapping into a broader sense, where the notions of aurality and aural perceptions are added to a space's sound compositions.

The idea of ‘eventscapes’ by Barry Blesser and Linda-Ruth Salter is a middle ground between Shafer’s and Truax’s conceptions of sound and space. ‘Eventscapes’ is the fusion of events and activities perceived through hearing, vision, touch and smell, where these senses act as vehicles that allow placement in space. Blesser and Salter understand this idea as an adding point to soundscapes, including the place’s aural architecture. ‘Eventscapes’, as an aural event, carries both natural and technological connotations transmitted to the bodies that inhabit space. Furthermore, they explore temporal and spatial dimensions since space comprises sound producers contributing to sonic maps’ compositions, resulting from given events with given traits/characters.

Sound and hearing are unique. If there are multiple sources, the sound overlaps, creating, therefore, a composition. *Hearing* is an evolutionary characteristic that aims to fulfil the survival instinct and the social necessity of being human. 'Soundscape' is an 'eventscape', and the 'aural environment' is in the 'eventscape'; the natural habitat is conducive for creating sound since the events that occur carry a spatial location and a sense of place. Somehow, this idea of 'eventscapes' intersects the conceptualisations of space and place by Doreen Massey (2005) and Edward Casey (1995). It acknowledges the existence of a sound event where space, time and sound intersect in an exceptional matter, and the dependency of sound perception on the different productions of sound, its placement and who is receiving it.

Sound embeds in space; if we think about the different times we walked through spaces with no headphones and no technological distractions, there are always some sounds being produced: the leaves of the trees moving to the rhythm of the wind, the kids screaming while playing together, the casual car passing by, or just the slight sound of our walking. “Listeners react both to sound sources and to spatial acoustics because each is an aural stimulus with social, cultural, and personal meaning” (Blesser and Salter 2007, 11). Sound acts as a stimulus, and how we perceive this sonic production connects to our awareness of the spatial conditions in which we are embedded.

In their book *Spaces Speak, Are You Listening? Experiencing Aural Architecture* (2007), Barry Blesser and Linda-Ruth Salter explore the notions of space and place, focusing on space’s aural architecture. However, we can transpose some ideas to a more generalised understanding of sound and space, such as how auditory spatial awareness manifests. These manifestations are present in our social behaviour and influence how we navigate space; the

‘aural embellishment’ creates traces of ‘personality to a given space’. It is then that, as the authors state, “[t]he physical acoustics of musical space merge with sound sources to create a unified aural experience” (Blesser and Salter 2007, 11). Space, in this sense, becomes the reverberation of the vocalisations of musicality explored in it.

Two other essential perspectives on spatialisation and sound come from Denis Smalley (2007) and Don Ihde (2007). Smalley argues that “[a]cousmatic music is the only sonic medium that concentrates on space and spatial experience as aesthetically central” (Smalley 2007, 35). The author’s work approaches sound as a material and musical structure that travels through time. The critical point is that space perception is also related to sound production; therefore, spatial sound translates a sense of proximity, behaviour, and distance and travels vertically, diagonally and horizontally. Smalley develops a holistic take on space and sound, which comprises different sonic movements, including sonic vectors, meaning that a given space can correspond to a specific sonic habitat (37). For example, a waterfall in a natural park: the water falling with its respective fauna creates a sonic space that has, consequently, other sonic vectors as borders that interfere with this sonic habitat, such as a highway close to this hypothetical waterfall.

Ihde underlines the importance of the relational nature of perception and phenomenological events, which promote knowledge. The author proposes several principles that go from the human auditory focus and its local and directional vectors to the variable characteristics of sound, which focus and depend on the continuation of sound travelling through the different spatial shapes (Idhe 2007, 90-100). Nevertheless, the author seems to dismiss other sonic borders in terms of space. He states: “Although I may be ‘immersed’ in this ‘sphere’ of sound, I cannot find its boundaries spatially. The spatial signification of a horizon is obscure” (102). Idhe categorises the auditory field’s boundaries as, first and foremost, temporal.

Space does not need to be necessarily focused or a mere subcomponent of sound and music as an object. The studies of sound art, which carry a sonic composition and live performance, take the idea of space and externalise it. Space becomes the orchestra and the main focus of such artistic installations. Take, for example, Hildegard Westerkamp’s “Beneath the Forrest Floor” (1992). This sound art composition gathers sounds recorded in the Carmanah Valley on Vancouver Island. The composition ties together the sense of natural environment with foreign borders that intervein in its core. Westerkamp states that “[a]s we understand the

meanings we are placed more firmly within the context of this environment. We become part of it and stand in an interactive relationship with it" (Westerkamp 1988, 9). The track includes sounds from running water, wind, birds and ravens; these sounds are part of a habitat, a whole. One may argue that meaningful connections are created through this piece of art. It portrays body placement through acoustics and relationships with the surroundings.

Westerkamp's conception falls into a specific orchestration of space, placing the Carmanah Valley as the object and sound as the vehicle to demonstrate it. Georgina Born (2013, 16) distinguishes the orchestration of space into three different perspectives: firstly, the conception of an event and a work that focuses, through experientiality, on the performative space or situation; secondly, an orchestration encircling the surrounding environments or the acoustic ecology, "the system of relationships between organisms and their sonic environment with particular emphasis on functional balance or an attention to dysfunctional behaviour" (Truax 2012, 2). Finally, a conception through the transposition of digital technologies can portray virtual realities of space and the change in locations through humans' intervention (Born 2013, 16).

When we think of music, there is a tendency to draw definitive borders that separate it from space and its surroundings because music can fall on the conceptualisation of mass culture. In this sense, in what ways does space relate to the musical experience? For this dissertation, we understand space and sound as two notions that are dependent on each other. In a general way, they include part of the three distinctions stated before: the experiential performance, the surrounding environment and its acoustic ecology, and the human interventionism in creating a virtual reality of space.

Thereby, music, as organised sound, is placed in space, according to the acoustic, the dimension and accessibilities. Hence, musical ecology comes as a fusion between the study of place and music: how music changes according to the places in which we find it and how it "constitutes a virtual environment related in subtle or overt ways to actual environments" (Watkins 2011, 405). Music embodies its space, making it a living experience of place. In fact, space is present in music in its several creative stages, namely in the recording—a human-built space with the sole purpose of recording with the best possible sonic conditions, and in performing — live music considers several conditions that cannot be retaken, such as the weather (if outside), the acoustics, the capacity, and sustainability.

Music and space also impact the physical body. In *Ways of Listening* (2005), Eric Clarke understands sounds regarding the relationships between the listener who perceives it and the environment surrounding the body. He states that "musical sounds may specify the objects and events of a *virtual* environment" (Clarke 2005, 69) since listening creates a perceptual reality and context of one's placement. Understanding music and space is understanding its context on a psychological, cultural, and historical level. The musical space emerges as a symbiosis of the social relationships and objective realities of the spaces we integrate. To make music is to create a composition that includes different relationships that flow within that process, which includes the creation of a composition with musical dialogues, that ultimately reaches the masses, perpetuating both a sense of individualised and collective experiences of the product.

In the introduction to *Music, Sound and Space: Transformations of Public and Private Experience* (2013a), Georgina Born develops the association of music to a given space and how it translates into embodied experiences on a social and individual level. The author understands this duality as a rooted characteristic that goes hand in hand with technology's evolution (Born 2013a, 18). Born acknowledges the relational scheme of music, sound and space in three essential kinds of multiplicities. The first multiplicity regards the individual perception of an experience; a given location shapes this perception, with subjectivity and corporeity serving as a vehicle for sound, music and space: "any human subject's experience of music and sound as s/he inhabits a particular physical or virtual space, performance venue or site: music and sound as mediated by subjectivity and corporeity, as well as by a given location and by (potential) movement through it" (19). It is up to the individual to embody music, sound, and space through the surrounding physicality, the mental incorporations of music and the human movements. The second multiplicity abides with the social space's constitution, powered by the performative space conditions, where crowdedness occurs. "[T]he existence in the same performance space, site or event of many (diverse, often previously unrelated) human subjects, whose gathering, however, constitutes a novel set of social relations, and whose experiences of music and sound are variant" (19). The subject's multiplicity potentiates the constructions of relations between humans where experience is shared. Even though there are individual perceptions and experiences, the 'other' enhances the exchange of experience and the proliferation of energies and emotions. The third and last multiplicity forefronts time as a mediator of sound, music, and space relating "in any musical

or sound performance or work by the continually evolving sonic–spatial–temporal constellation composed of the mutual modulation […] of component sound events in a given, durative acoustic environment" (19).

Body, space, and time shape the perception of music displayed to the audiences. Music is generically associated with any space, whether we are just listening to a record in the bedroom alone or attending a concert in a massive venue with hundreds or thousands of people. The experiencing of music transports us to a virtual conception of the space in which we stand. By that, when attending a live music performance, we face an objective reality of what surrounds us. This physical space includes the venue, whether it is a natural setting, a concert hall, or just a tiny basement cafe/bar, with people watching the performance and the performers.

Furthermore, we have a virtual space, which is a space that results in the musical construction of the performance affecting the artists and audiences and the perception of space, which is likely to change according to the tone of the performance or if the performance is remote (e.g. in a recorded format). Lastly, we have a mental space: the personal space, the cognitive conception of what we interpret from the musical performance embedded in the space. That is why we tend to say that, in a musical performance, we abstract ourselves from space; we lose track of what surrounds us.[11] In truth, we create different perspectival constructions of where we are by marrying music and space.

In "Music, Space and Subjectivity" (2013), Eric Clarke showcases the conceptual theory of Johnson and Lakoff[12] in respect to the relationship between music and space by summarising it into five key points. The first regards our reality as an extension of our body's positioning because it is the material form that enables cognitive and perceptual processes of understanding our reality; it is the point of departure. Secondly, how the senses "emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our

[11] Additionally, we can develop the notions of abstraction and immersion with the conceptual idea of "losing track of time and space". These concepts are not exclusive to music, but are also present in other forms of art, as in, for example, cinema, theatre or even fine arts. Robin Curtis in "Immersion and Abstraction as Measures of Materiality" (2015) – with a focus on visual art – develops the way internal and external components of reality carry the responsibility of immersive experience and how abstraction takes place when art affects the spectator.

[12] Eric Clarke summarises Mark Johnson and George Lakoff's theory basing on the works *Metaphors We Live By* (Lakoff and Johnson 1980) and *The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason* (Johnson 1987).

manipulation of objects, and our perceptual interactions" (Johnson quoted in Clarke 2013, 103). Thirdly, human knowledge bases itself on simplifying and expanding primary interactions "building upon this developmentally fundamental embodied experience" (Clarke 2013, 103). Next, the assumption that the simplifications come from a cognitive process identifies sources and targets, creating 'conceptual metaphors'. "A metaphor in this 'experiential' sense, is a process by which we understand and structure one domain of experience in terms of another domain *of a different kind*" (Johnson quoted in Clarke 2013, 103). Finally, the fifth statement depicts bodily experience and how "experience is deeply and pervasively embodied" (Clarke 2013, 103). It is the imaginative perceptual structure of experience that bases the embodiment of human significance.

Music moves in space; it starts from our bodies and extends to musical materials: harmony, melody, rhythm, and instrumentation (Clarke 2013, 103). Eric Clarke extends the above five critical points into a conception of music from the perceptual experience of auditorial awareness. However, instead of targeting the material of music, Clarke targets the psyche. The author exemplifies this notion by analysing the song "Echoes" by Pink Floyd, which contains mainly instrumentation.

> As a listener to the track, I auditorily explore, or am auditorily presented with, an environment whose size and 'density and style of habitation' I experience through the spaces, textures and events of the music. The rather abstractly sonic and instrumental character of the track, and the comparative absence of voices (only 10 per cent of the track duration contains vocal sounds), mean that this sounds like a space not much inhabited by humans. (Clarke 2013, 104)

The absence of voice does not necessarily mean that humans do not inhabit the space; however, the association is less direct. Clarke dissects the track by categorising the sound through subjectivity and a sense of agency. Quieter sounds are associated with senses of loneliness or unknown places; solos portray a sense of agency; overlapping solos and steady rhythms/harmonies showcase subjectivity (Clarke 2013, 104). These categorisations indicate how sonic spaces depict agency and subjectivity in such musical pieces.

We can characterise rock music by instrumentation and a play between echoes, reverberations, and sonic intensity. We can say the same about jazz music, a musical genre that mainly contains instrumentation to trigger determined sensations to one or a group of individuals. Space for these musical genres plays a role in promoting the best conditions for

music to be performed. However, music also uses space to promote sensations, awareness, and social interactions for specific performances.

2.3. The placeness of jazz through performance spaces

Space and place include movements, time, meanings, and memories, translated into past, present, and future conceptions. For jazz, place is a vital concept because this genre is closely associated with space, literally and subjectively. Consider, for example, the meaning of singing in the cotton field or the "ambience" associated with dark, small places. For a long time, jazz was presented especially in places with deep cultural traditional roots, namely, in its beginning, in the cotton fields plantations, and then later in underground clubs where swing was predominant and bohemian life was present. Either way, place was essential for the construction of the idea of jazz. In "Space and Place in Jazz" (2019), Andrew Berish states that jazz style and structure are bound by the circumstances of the places where it grows. This dependability of the place is shown through most studies of jazz places by utilising the contextual frameworks of twentieth-century American cities (Berish 2019, 155). Nevertheless, the author suggests an approach that gives "way to an understanding of jazz as itself a spatial practice, a practice that shaped listeners' ideas about, and feelings for, the geography of their daily lives" (159).

To talk about jazz places means invoking the historical context of jazz and cultural roots embedded in it. There seems to be a constant association between the city and the music, and as the city develops, music evolves in tandem. This association is evident in the evolution of this musical genre, with touring being vital for the spread of jazz and with the urbanisation of jazz being associated with nightlife and underground movements. Ricardo Pinheiro, in "Jam Sessions in Manhattan: Scene, Ritual and Race", understands how bars and clubs (typically associated with nightlife) are places where jazz as ritual takes place playing "a crucial role in the process of establishing the professional reputation of musicians" (2014a, 4). The author also understands that these places create opportunities for "musician's artistic development, enabling them to achieve visibility in the context of the jazz scene" (4).

Howard Becker portrays how space influences jazz music in the chapter "Jazz Places" (2004). The author contextualises this musical genre's evolution with the availability of places and

the city's prosperity, which we substantially base on individuals' economic power. Becker starts by defining place as both physical and social: physical because it is in "a building (or part of one), or an enclosed place in the open air" (Becker 2004, 20), and social because it is "defined by its expected uses, by shared expectations about what kinds of people will be there to take part in those activities, and by the financial arrangements that underlie all of this" (20). This conception opens doors in recognising the jazz place as the city of jazz—in terms of history and contexts since it also integrates a sense of identity to the place's culture; or the nightclub of jazz—a specific location built for the purpose of playing jazz where a population gathers to experience jazz.

Nevertheless, for jazz to happen, movement must exist. Touring, performing, evolving, exchanging practices have all contributed to the globalisation of jazz. The paradox of jazz regarding place is that "jazz clings relentlessly to place—the jam session, this scene, deceit, the nation. Yet, jazz moves fluidly and fluently to other places—up the Mississippi River or across the Atlantic to the entrepot of exile" (Bohlman and Plastino quoted in Berish 2019, 156). Like popular music, jazz spread to the rest of the world quite fluidly, creating tensions between local and global issues. An interesting idea is how the notion of 'jazz consciousness'– social and musical engagement – created a global language for musicians through a "virtual space where we can confront, learn from, and even heal the contradictions resulting from social rupture" (Austerlitz quoted in Berish 2019, 156).

Thus, we associate jazz with ideas clashing: white versus black, individual versus the collective, popular versus the erudite, individual versus collective. Nevertheless, it is hard to detach its roots and reality from the contextualisation of space. Berish develops the notion of place in jazz as 'spatial imaginaries' based on the human need to control space. We are part of space, but as humans, we have the tendency to impose a particular order; the 'spatial imaginary' is different for each culture because traditions and cultural foundations shape it. Even though social patterns and social rules change and evolve, these cultural foundations prevail over time. According to our culture, Berish states, we idealise space with a specific order, homogeneity, and patterns of behaviour; therefore, a "white spatial imaginary" is different from a "black spatial imaginary" rooted in different historical contexts, perspectives and traditions (2019, 157).

Jazz has moved from a private sphere to a public sphere, meaning that it started in a tiny niche with private organisation promotion to a large assembly in a concert hall. We can take, for example, the works of Louis Armstrong and Miles Davis. The 1927 track "Hotter Than That" by Louis Armstrong & His Hot Five portrays the early stages of jazz swing. Swing demanded a specific relation with the space where it was performed since it evoked popular music, keeping a constant interaction with the audience's experience of music through their dancing. Swing dance and swing jazz were forms of escaping the harsh realities of the Great Depression in American society. The performance venues varied from ballrooms to hotels, allowing large crowds to experience jazz performance.

With World War II, many jazz musicians were called to war, and a lot of the liberal nightlife came to a cease. War and social restriction represented a demise in the swing era, translating into more restrictive musical formats. Bebop was born as art music; the artists tried to remove jazz from the idea of popular music and began performing not for entertainment but for artistic, intellectual, and cultural purposes. The performance practice focused especially on improvisation with complex rhythms and significant ranges. This shift in performance goals also changes the interaction and the usage of space for the performance itself.

Fast forward 20 years, the different currents of jazz innovatively evolved, constantly challenging the old views of the genre. Cool jazz is born as a reaction to bebop, with artists such as Chet Baker, Dave Brubeck, Miles Davis or Gerry Mulligan developing a more melody-oriented kind of music, changing the role of the performance to an individually-oriented experience instead of a socially-oriented experience. For example, Miles Davis's 1948 track "Moon Dreams" portrays an individualised sense of performance experience. The sociability is not promoted in the song's tonality as it happens in "Hotter Than That" (1927). However, it does not mean that there is no social awareness in the space where jazz is performed; instead, it means that the performance's real intentionality is different. Therefore, space must be different too to embrace music and space as a whole. This shift in the intentionality of jazz has led to how we see this musical genre today, in which space needs a suitable composition for it. Most jazz performances happen in a concert hall, a club/bar, or a music festival.

Ricardo Pinheiro (2014a) describes the jazz bars in New York, small concert halls whose layout promotes listening and makes the music performed the sole focus. The conditions of

space (dimensions, acoustics, light) can enhance the mental and bodily experience of those who perform and those who attend. To exemplify the way the construction of space can contribute to the performance of jazz, Pinheiro states how, in specific, the "Lenox Lounge bar is located in a room other than the one where musical performances take place" and "in the case of Small's, the stage takes on a central role in the layout of the space. The bar is located on the side, and in front of the stage there are chairs without any supporting tables" (Pinheiro 2014a, 4). There are various jazz places, and their construction contributes to the production of a different performative outcome. Changing the performative space to one that was not necessarily built for musical performances challenges the conception of performative space while also opening up new possibilities for the exploration of music in space. The layout of the spaces abovementioned contributes to a more intimate kind of performance, stripped away of possible distractions, such as tables. Moving the audience away from tables, in this case, hints that this is not a time to talk to each other or to socialise; it is a time to focus on the music being performed.

The jazz space today can vary from a large setting to a small intimate gathering. Ultimately, the shift in jazz's intentionality created also a change in the way concerts are organised. The goal is to provoke thought and innovation in the musical genre and not necessarily create places for pure entertainment. Where we place the stage, how we distribute the audience, and the acoustics of the place all contribute to the success of the jazz performance.

It is noteworthy that the meaning of space is acquired from the moment we choose that specific space. Street jazz and a jazz show are different; the disparity is connected to chance. Street jazz involves randomness; the audience is random and contributes to the movement as it passes by. There is a significance attached to the performance when the artist chooses that specific place to perform; however, meaning materialises through chance – if there are people taking part as spectators. In a premeditated jazz show, we attach meaning to space from the moment we choose it. The selection of space is associated with organising a performance and trying to meet the audience's expectations. The spectators usually associate a type of music with a particular space. For example, some festivals, like *EDP Cool Jazz* 2018's edition, tried to break these expectations by organising concerts in unexpected places, such as an outdoor park, and adapting a hippodrome to the performance. Nevertheless, when we attend a jazz bar, we generally expect to hear jazz – just like when we go to a nightclub,

we expect a specific type of music. The difference between random spaces and jazz venues lies in the fact that before the performance occurs, a whole study of logistics and organisation exists, seeing space as a particular composition (arrangements, acoustics, accessibilities, layout) contributing to the performance. It also takes into consideration the audiences who will be watching and the performers who will be performing.

Hannon Teal in *Jazz Places: How Performance Spaces Shape Jazz History* (2021) explores the evolution of jazz music alongside the evolution of spaces. In doing so, the author probes the narrative of contemporary jazz to the influence of memory, music, and space to develop history and change (Teal 2021, 2). Jazz is incessantly linked to a past; this heritage plays a role in the value and meaning of music and it "[…] helps to define and support the social good that makes possible the jazz-as-service framework" (3)

From Hannon Teal's work, we can derive some essential ideas from the study of jazz places. The first one regards the physicality of the spaces and their importance in shaping the live performance (acoustics, geographical locations). Secondly, the notion that places carry history and that the past can influence the present performance. Finally, alongside the dichotomy of individuality/collectivity in jazz, the same is transposed to the spaces where jazz is performed. The author states:

> collectively, jazz places show contested ideas about in varying experiences with what might be considered a large-scale, shared jazz community; individually, each venue holds different benefits, challenges, pathways, and barriers for every performer and listener who accesses music there […]. (Teal 2021, 8)

Moreover, we associate jazz with historical and traditional connotations in space, where creativity and flow of sound are allowed—the meaning attached to space changes according to the music and the intention of the style. A jazz performance from 1960 is necessarily different from one performed in 2021, given that political currents, social issues, and cultural practices have profoundly changed.

The study of place and space is a vast field of study. In this chapter, we have come to understand the differences between space and place. The first one can be associated with ideas of freedom and endless possibilities. In contrast, the latter is associated with the past and memory and has already attributed meaning. Several musicologists and ethnomusicologists have started to connect music with space, however, most of the studies

being produced, especially in jazz studies, are more connected with the evolution of the city and nightlife rather than the spatial character embedded into the music.

Nevertheless, the space of jazz constitutes the nest, the enabler for the relationships to form. The individual body guides each spectator and performance in space, but their plurality can influence the perception of reality. The jazz performance constitutes an experience in a present moment and a specific place. It is, therefore, associated with the notions of embodiment and situatedness. Jazz music in its place establishes an 'eventscape', creating sound mappings and notions of perception and 'aurality'. Still, achieving an optimum sonic environment for each individual is impossible; that is why "spatial music must be written in such a way that the composer is able to accept whatever it hears as a listener, regardless of his position in the hall" (Brandt 1955 quoted in Brandt 1967, 224). Jazz music, closely tied to historical places, challenges the conceptions of space by creating ambiences that enhance the reverberations of the music produced and the spectators' experience of this event.

When jazz music and space come together, a performance occurs; for performance to occur, audiences must exist. In order to continue understanding the way jazz influences social interactions between audience and their performative surrounding, we will focus now on the presence of the audience in performance – a plurality of bodies that move in space and experience the performative product through emotion, sensations, and bodily responses.

3. THE AUDIENCE AND THEIR RESPONSE TO LIVE PERFORMANCES

Sound as a perception, music as the organisation of sound into an orderly matter, space as a conception of reality, these are all notions we humans develop to make sense of the world we inhabit. These ideas set the body as the starting point to perceive the outside, allowing us to learn and understand the different interconnections and relationships formed with the events surrounding us. Therefore, the body is an integral part of constructing sound, music, and space. This body, in music performances, typically translates into a community body, known as audience or spectators, for whom the work is produced.

Attending a performance, a visual art installation, a theatre play, or a music concert implies, *a priori*, the presence of other people to experience the cultural production. In their absence, can performance be indeed a performance?[13] An event becomes an event if someone is there to experience it. In chapter one, we drew an example of a tree falling and how the absence of someone to hear it falling inhibits the recognition of sound production. Because there was no one there to hear the event, sound could not be present (Levitin 2019, 24). The same can be applied to the performance. It is important to state, though, that in this section, we are including not only sonic experiences but also the human sensorium system – touch, smell, sight, hearing. Performance becomes a spectacle when agents and subjects are present in the same space, experiencing different things but ultimately sharing a cultural production.

Jacques Rancière, in *The Emancipated Spectator*, sees that the performance sustains a critical relationship underlined in the act of agents performing to spectators (2009, 12). We ground this relationship on traditional pedagogy: active roles versus passive roles. Spectators are part of a relationship similar to the one between teachers and students, such that we pose the performance as, first and foremost, a vehicle of learning. Emancipating audiences is not the process of verifying equal intelligence between agents and subjects. A teacher does not teach his/her knowledge; teachers encourage their students to explore what they see, hear, feel, smell, and think about what they have seen, heard, felt and smelled.

[13] In the text "What is Performance?" (2004), Marvin Carlson explores the definition of performance and all the spheres that it involves, including the necessary presence of an audience. Later in this dissertation, we will explore the meaning behind performance and performativity and their different elements.

> Emancipation begins when we challenge the opposition between viewing and acting; when we understand that the self-evident facts that structure the relations between saying, seeing and doing themselves belong to the structure of domination and subjection. It begins when we understand that viewing is also an action that confirms or transforms this distribution of positions. (Rancière 2009, 13)

Rancière, focusing on theatre, understands that there is an emphasis on the performance from the perspective of the performers and the creative process; however, spectators experience something as valuable as the process of acting the performance out. Spectators create their play, music, concert, poem by shaping the reality of the performance into the frames of their interpretations.

Rancière rationalises that artists, as agents, intend to transmit the production of conscience, feelings, energy, and action through the performance; nonetheless, these agents assume uniformity in what the spectators understand and interpret, thus creating an "identity between cause and effect" (2009, 14). Supposed equality between cause and effect is grounded in the privileged conception that we know the proper distance and how to dissolve it. There are two distances we can identify: The artist-spectator and the distance in the performance itself "as a spectacle, an autonomous thing, between the idea of the artist and the sensation or comprehension of the spectator" (14). The assumption of known distancing emphasises the expectation on spectators to learn and be inspired by what the artist showcases. This expectation can lead to an unequal relation between artists and spectators, falling directly on the mystification of the artist as a genius who is qualified enough to provide the viewer with the gift of his/her art.

Here we can introduce the idea of social bond in the artist's work. The cultural product acts as a mediator between the artist and spectator, be it a theatre play, a concert or a visual art performance. The performance is the work of art; it is the spectacle that falls between the artist's conception and the interpretations and experiences of the audience. The spectacle is, as Rancière states, the "third thing that is owned by no one" (2009, 15), that is acknowledged by both parts and referred to for a common and shareable understanding of what they see, think, and say about it. This third thing is the means for intellectual emancipation falling between the master and the student, the artist and the spectator; it links both parts and at the same time separates them. Rancière sees this separation as a process that leads to the reappropriation of the relationship with the self (15).

Key elements are necessary for the construction of the spectator's performative reality. However, modern times tend to separate the performers from the spectator and from the performance itself. Rancière's approach to reappropriating the relationship with the self passes "by placing the spectators on the stage and the performers in the auditorium; by abolishing the difference between the two; by transferring the performance to other sites; by identifying it with taking possession of the street, the town or life" (2009, 15). As seen in the previous chapter, space integrates the audience and is part of our construction of reality. The process of emancipation is the dive into new forms of intellectual understandings and the allocation of the body in a place. This place is where the event takes place, and once again, it is how we navigate through senses of visual proximity or acoustic involvements.

The communion of the performance is based on a mass of individuals—a collective that gathers to attend a theatre play, concert or visual performance. The idea of masses intakes complex dichotomies and notions from a high-low social position to positive-negative conceptions from a political perspective. In *Keywords: A Vocabulary of Culture and Society* ([1976] 2015), Raymond Williams explores this in the sense that masses involve different fields but include the senses. The proximity, distancing and acoustics play a role in defining the senses we receive from a crowd. Williams distinguishes two forms of senses: the "[s]ense (i), of something amorphous and indistinguishable" (1983, 143) and "the positive sense (ii), of a dense aggregate" (144), where the first one gathers a negative aspect and the latter a positive with social connotations of solidarity. The masses, as a collective, is a perception we have of a group of people; it is an attempt to refer to anonymous individuals with whom we connect on an abstract level but never get to know.[14]

A common interest bonds individuals in a particular space; this is one of the main reasons for attending performances – more than watching something is the sense of collective body. The collective body emanates powers, relationships, and interactions that do not come necessarily from the collective, but more so with each individual contribution for a greater purpose. Bauman's definition of 'cloakroom communities' can relate to a further understanding of relations between humans in space regarding a cultural product. In the book

[14] On a broader sense, Benedict Anderson in *Imagined Communities* ([1983] 2006) from the point of view of the concept 'nation', sees the community as a social construct. The author states that "communities are to be distinguished, not by their falsity/genuineness, but by the style in which they are imagined" (Anderson 2006, 6). The people are bonded by the sentiment attached to a nation where they feel that they belong.

Liquid Modernity (2000), Bauman explains that the 'cloakroom communities' gather to attend a performance; therefore, interest in a common object gathers people together. Bauman creates an imagery of the cloakroom of a theatre, where, "[b]efore entering the auditorium they all leave the coats or anoraks they wore in the streets in the playhouse cloakroom" (2000, 200). It is the performance that brings people together in uniformity. When the performance is happening, everybody is attentive and experiences it together. Once it ends, they collect their coats, returning "to their ordinary mundane and different roles, a few moments later again dissolving in the variegated crowd filling the city streets from which they emerged a few hours earlier" (200). This image portrays the appearance and vanishing of the community built by the performance. Nevertheless, even if this community is momentary, that does not mean that it is not as important or as valuable. It is a different kind of community building that creates different experiences and emotions.

Acknowledging a collective body is understanding the participation everyone has in the community through the embodiment of power. The anonymous individuals contribute equally to the performance by contemplating roles in distancing, associations, communications and direct or indirect participation. For Rancière, this notion applies to the general performance of life, meaning that dialogues, presentations, theatre, concerts, teaching, and taking a role in a game are examples of performances where the emancipation of bodies in collective ways occurs assuming a position of power (2009, 17).

Still, ultimately, it is not about a transformation, or a drastic modification of the performance conditions – to make the performer a spectator and vice versa. It is about understanding that spectators are agents in their own story, meaning that, consequently, the actor plays the role of the observer in the audience's story. Spectators do not assume a passive role, nor is there a need to become active agents of the performance. The viewer plays a role in our life in general, not just a role in performance. "[A]s spectators who all the time link what we see to what we have seen and said, done and dreamed. There is no more a privileged form than there is a privileged starting point" (Ranciére 2009, 17). Emancipating the spectator is to understand that the limitations of our roles do not exist; acting, looking, listening, and feeling are all activities of passivity and action. These roles are blurred and jump between the performer and the spectator but are ultimately present in individuality and the body in its collective form.

Erika Fischer-Lichte in *The Transformative Power of Performance: A New Aesthetics* (2008) also emphasises the power struggles of passivity and activity in the performance and the sense of community from the gatherings of the collective body. The chapter "Shared bodies, shared spaces: The bodily co-presence of actors and spectators" (2008, 38-74) explores how audiences and performers interact and relate in a spectacle. Fischer-Lichte exposes the thoughts of Max Herrmann and how the performance condition involves the presence of two groups of people – the performers and spectators – that act as passive or active agents but ultimately gather in a specific place at a specific time, sharing a mutual ground and interaction, i.e. the performance (2008, 38). The author states that several experiments take part in the conception of the performance from the staging standpoint, highlighting three different processes: "first, the *role reversal*[15] of actors and spectators; second, the *creation of a community* between them; and third, the creation of various modes of mutual, physical *contact* that help explore the interplay between proximity and distance, public and private, or visual and tactile contact" (40). These different strategic processes create moments that lead spectators to participate by physically experiencing them.

Richard Schechner has developed several experiences in the field of participatory audiences. The studies that ground these ideas are based mainly on the performance in the form of theatre; however, they are crucial for understanding the role of the audiences for any given type of performance. Richard Schechner's experiences merge the studies on the audience participatory character with democratic participation of actors and spectators. Fischer-Lichte describes Schechner's work by saying that he "emphasizes the relationship between equal co-subjects […] and sets up an opposition between the aesthetic process of 'play' and the 'social event' created through audience participation in the performance" (Fischer-Lichte 2008, 41).

Community is present in the works of Rancière, Schechner and Fischer-Lichte, always with a prevalent fight between individuality and collectiveness, and this clashing comes as a response to history and our development as humans. Still, modern society has been bringing awareness to communal life. For Fischer-Lichte, a community is born out of the bodily

[15] Role reversal is the transformation process of the relationship between the subject and the object. This process acts as a negotiation between both parts, establishing a known relationship into new forms, and it is achieved through audience participation.

presence of both actors and spectators, who create some "feedback loop" (2008, 51). Individuality comes from the sense of community and collective life; that is why we construct the traits of our individuality based on the sense of community, making integration into society possible. The common traits are there, and personal characteristics are an extension of the collective (51).

A critical aspect to audiences as part of a performance or an extension of it comes from the de-objectification of spectators.[16] In general, removing passivity from the public and creating the performance environment produces infinite possibilities of agency for those who watch, transforming viewers into active agents who participate in a shared performative experience. Democratising the reception of the performance is the ultimate goal of the process of emancipating spectators. This goal is achieved by systematising methodologies that promote the participation and interaction of spectators in the performance's narrative.

Most authors, such as those mentioned above, have been developing their studies on performance and their audiences from the theatre standpoint. Only a few of these studies are on audiences;[17] the tendency is to stage the work of art and its producers as the most essential and crucial part of the performance. Performative art with similar patterns acknowledges a passive and an active agent and centres the work of art as a mediator between the performers and the spectators, indirectly creating a sense of community between both agents. Nonetheless, music concerts enhance these characteristics, making the construction of agency roles more evident to the naked eye and the predominance of the work of art as a mediator. However, this is not to say that these notions are prevalent in all music genres. Genres are different; therefore, their musical performance and respective aims will also be different.

Consider two different performances from different musical genres: Avishai Cohen Trio and Arcade Fire. The first one is a jazz project led by Avishai Cohen, who performed in 2018 in Centro Cultural de Belém (CCB) with Noam David on the drums and Elchin Shirinov on the piano. This performance took place in the Grand Auditorium of CCB, with a capacity of

[16] Spectators are objectified in the sense that, when we construct a performance, the audiences are not necessarily seen as part of the overall performance, but at the same time, they play a role in the economics of the performance for profit and entertainment matters.
[17] For further examinations one could explore the following works: Balme (2008), Doris, Schütz, and Nikoleit (2019) and Reinhard and Olson (2016)

1451 seats, and this night was full/sold-out. Here the audience integrates the performance in a seated position, in a place built to showcase performances. The way people interacted was guided through the music being played, meaning that the moments of silence happened when the music was being played; endings constituted moments of appreciation for the presented art form. My attention, as spectator, was divided between the performers and the person with whom I was attending the event. The reactions translated into facial and bodily expressions, like tapping my foot, moving my hands to the rhythm, smiling at the person next to me or opening my eyes in surprise. It was a calmer and contained experience. The music made me believe I was the main character of my movie. The reality was one I constructed, just like everybody there was building their own story and reality. The moments of appreciation reflected in the collective clapping turned out to be the translation of the warm sense of community that the performance enhanced.

On the other hand, the band Arcade Fire, an indie-rock group, performed in the formerly known Optimus Alive Festival in 2016. Contrary to the previous example, the performance took place at an outdoor location near the Tagus river. The presence of the audience, its constitution and placement, is different from Avishai's concert. There were no marked seats, and the spectators watched the performance from a standing position. The interaction intensified; body movements were more prominent and more vigorous because space allowed us to move in whatever direction we wanted. When closing the performance with the song "Wake Up", the entire audience started singing in a choir with the permission and incentive of the performers, making it more evident that the spectators were contributing to the general experience of the concert.

The emancipation of the spectator is very prevalent in music concerts. Music, like in theatre, can evoke different emotions and sensations; in the same way, musical genres can enhance different bodily reactions. Continuing to understand audiences and their roles, we also need to comprehend the processes we go through when listening to live music and how it affects our emotions, feelings and sensations, contributing to the whole experience.

According to Britannica, emotion is a "complex experience of consciousness, bodily sensation, and behaviour that reflects the personal significance of a thing, an event, or a state of affairs" (Solomon 2019). Emotions are universal and internal states of being; they are the elements that humanise us and categorically include several psychological phenomena. We

go through waves of emotions. They can be concrete to a particular situation or person; others are very general, like joy, depression or sadness, characterising a very general sense of being or state of being. Sometimes we can even have an explosion of emotion like embarrassment or anger towards something. Emotions can always be accompanied by bodily reactions like a facial expression, a hand clenching or blushing cheeks. We can group it into two different groups, the positive and the negative ones. However, this classification is subjective because it lacks the context of the source of the emotion. It is necessary to create a structure that rejects the idea that emotions are simply feelings with no logic or rationality.

3.1. The structure of emotions and the audience's experience

The book *Introduction to Psychology: 1st Canadian Edition* (2014) by Jennifer Walinga develops the ways emotions are organised. We identify the basic emotions as anger, disgust, fear, happiness, sadness, and surprise. The oldest part of our brain, the limbic system, determines these primary emotions; they are processed by the amygdala, the epithalamus and the thalamus. They are the main parts responsible for identifying the basic emotions we all feel regardless of our culture. When we experience an event, our physical sensations are processed as emotions. If we sense that our body is falling, the amygdala may process fear; however, we must consider the event's context. For example, suppose we stumble on something and fall, we sense a loss of power; the fear is, therefore, a fear of hurting ourselves. However, if we are in an amusement park riding a roller coaster, fear portrays excitement and adrenaline, which does not necessarily carry a negative emotion.

There are two pathways in the processing of information regarding emotions (Fig 3.1). The primary emotions are usually determined by the fast pathway, which is through the limbic system. Emotions processed by a slow pathway located in the frontal lobes are a more complex process of emotional recognition.

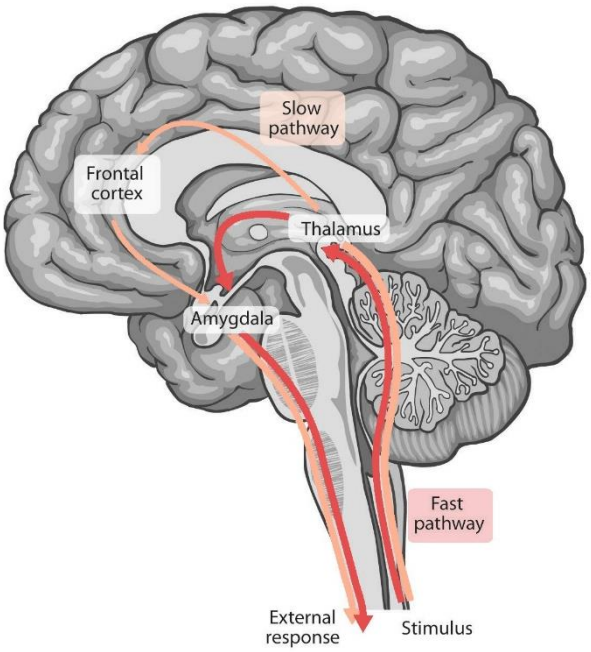

Fig 3.1 - Slow and fast pathways of emotion processing (adapted from Walinga 2010, 471)

These emotions, understood as secondary emotions, produce more intricate feelings and specific behavioural responses: “When we stew in jealousy over the loss of a partner to a rival or recollect our win in the big tennis match, the process is more complex” (Walinga 2014, 470). In this case, information processing occurs from the thalamus to the frontal lobe, where it is cognitively analysed and then integrated into the amygdala.

The Cannon-Bard theory of emotion argues that a feeling of physiological arousal complements the experience of emotion (Walinga 2010, 472). For example, suppose a car stops in front of us in a very abrupt manner. In that case, our reaction is to stop right away. The events inputted in us a sense of fear, leading to an increase in our heart rate. This increase means that the emotion is translated into physiological arousal, a physical and experiential aspect concerning emotion.

Understanding emotion requires an individual perspective; however, emotions are lived internally and regard the 'other' factor in processing and expressing emotion. Living in a community requires understanding the emotions of others via observation, which is done mainly by nonverbal communication. "Nonverbal communication includes our tone of voice, gait, posture, touch, and facial expressions, and we can often accurately detect the emotions that other people are experiencing through these channels" (Walinga 2014, 470). According to Walinga, nonverbal communication can be divided into six groups: (1) proxemics, the rule about the appropriation of our personal space; (2) body appearance, which regards the changes in the appearance of the body; (3) the position of the body and its movement, the expressions of our body communication (i.e. arms crossed, fast walking speed); (4) gestures, signs with hands; (5) facial expressions, the way our face demonstrates an emotion (i.e. smiling, crying); and (6) paralanguage – voice signals that hint at an emotion (Walinga 2014, 477).

Emotions as a category carry a lot of concepts and notions that are very deep on their own: "they involve feelings and experience, they involve physiology and behavior, and they involve cognitions and conceptualisations" (Ortony, Clore, and Collins 1988, 1). Ortony, Clore and Collins develop in *Cognitive Structure of Emotions* (1988) the understanding of emotions through a cognitive sphere. The authors outline their trail of thought based on the assumption that we develop emotions due to the events that trigger them and are mainly built by the individual who experiences it (Clore, Collins, and Ortony 1988, 1). Further on, the authors structure emotions into three different categories: the consequences of events, agents' actions, and the aspects of objects. Through these three starting points, we can understand how emotions are related to them. For example, in consequences of events, one can be pleased or displeased with their outcome, one can approve or disapprove of agents' actions and only really like or dislike objects because they do not act.

The structure of emotions is dependent on the field of study—neurobiology analyses what we feel differently from culture studies. The goals are different, and the structures will be different. In "Structures of Feeling" (2015),[18] Raymond Williams addresses the issue of

[18] Original text in *Marxism and Literature* by Williams (1977, 128–135). This version in *Structures of Feeling: Affectivity and the Study of Culture* (edited by Sharma and Tygstrup 2015).

feeling as a characterisation of what is understood as changes in feeling to emphasise the difference between 'worldview' or 'ideology'. Different generations bring distinct ways of living and feeling; however, traditions and values of society persist. It is a change that is more social rather than cultural; nonetheless, they affect culture too. 'Structures of feeling' are, for Williams, a structure of experience that includes a recognition of "specifically affective elements of consciousness and relationships: not feeling against thought, but thought as felt and feeling as thought: practical consciousness of a present kind, in a living and interrelating continuity" (Williams 2015, 23). For Williams, a structure of feeling requires a cultural hypothesis that goes beyond structurally social assumptions but is culturally evident through its historical contextualisation and perspective of the cultural process. The hypothesis arises to understand characteristic elements of the generation and how they interconnect with the period in which they live. Williams also highlights the importance of this hypothesis for art and literature. The social meets with the present affection and cannot reduce it to political beliefs or institutions. It is necessary to understand the feelings and rhythms experienced and, at the same time, "find ways of recognizing their specific kinds of sociality" (24).

Nevertheless, whether from a cognitive, psychological, or cultural perspective, we can identify some common grounds that we will use as our conception of the structure of emotions. As schematically presented in the figure below (Fig 3.2), there are three different

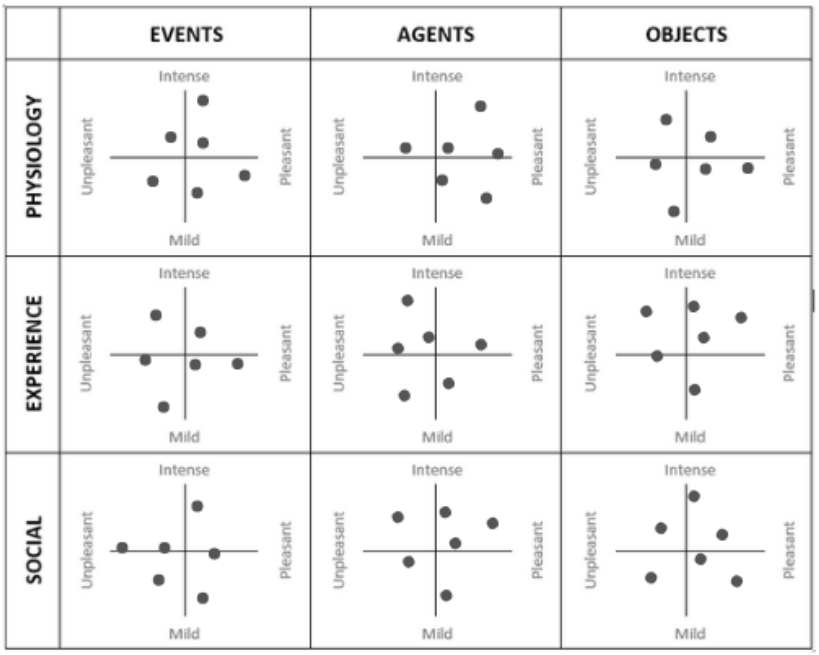

Fig. 3.2 - Organisation of the structures of emotion (adapted from Walinga 2012, 470)

purpose lines regarding emotions: the ones that reference the source of the emotion and the ones that include its reactions.

The first one can be emotions that develop as an outcome of an event, a reaction of agents' actions or from the presence of an object; the second line, dedicated to the reactions, can come from physiology,[19] the experience[20] and finally, the social structure.[21]

In live music, the leading cause of emotion is the event because live music is a performance. This performance is not a constant production of culture; it tells a story composed of moments of ecstasy and moments of melancholy that, consequently, influence the spectators' experience and allow them to create their storyline and perception of reality. We process perception and experience through our conscious minds. Consciousness produces emotions and reactions to the music we listen to and incentives a perpetual attentiveness. In live music performance, we pay attention to the music played, the performers who play the music, the others present in the same space, and the variants that can catch our sudden attention. This state is called the state of *shared attention*.

3.2. 'Attentive to me, to them and the performance' – The role of shared attention in the construction of the audience's reality

A common trait that we can identify is the prevalence of consciousness in the brain process that affects our attention to a given object and our responses to it. In *Space, Domains and Meaning: Essays in Cognitive Semiotics*, Brandt states that consciousness is "a highly active factor that causes important neural processes to happen and provides a necessary condition for most of our conceptual and material behavior" (2004, 203). Consciousness is the door that creates awareness on an individual and collective level. The collective acknowledgement of our presence in a given space, the presence of minds and interpretations of others create a "dynamic phenomenon of attention to things […] in such a way that one

[19] A physical structure that includes the behaviour and physiology of our bodies (i.e. an increase of heart rate, sweaty palms, nausea).
[20] The understanding of how the subjects live the emotions.
[21] The contextual and cultural sources – the social causes that affect emotional behaviour.

subject's attention to an object becomes a window for another subject toward that object" (203).

Brandt exposes this idea of a multitude of movements that have attention to an object. It is the understanding that if something catches the attention of person 'A', it becomes attractive for person 'B' and 'C', and, as a consequence, they will try to interpret the interaction that happened between 'A' and the object and try to relate to it in their manner. This multiple movement relationship is a system that is very much predominant in several forms of art. Art as "artful behavior or performance" (Brandt 2004, 204) is sustained in the focused awareness of both the performers and the spectators; it requires individual attention and collective shared attention as a way to experience the work of art. Brandt develops, in fact, another interesting parallelism that bases the interpretation of our experience of beauty when attending to some artwork to the experience of cultural ceremonies "which regularly have transcendent meanings, by which the beautiful is then also interpreted" (205). The ideas of ceremony, celebration and ritual are references to activities that are experienced as a community.

Garry Shteynberg, in "Shared Attention" (2015), portrays attention as a common phenomenon in different individuals and predominant in several events. The author argues that shared attention is present in "stadiums, public squares, and private living rooms, people attend to the world with others. Humans do so across the senses—sharing the sites, sounds, tastes, smells, and textures of everyday life with one another" (Shteynberg 2015, 4). Shared attention is grounded on the fact that people attend something together; it differs from shared attitudes since it does not require a standard belief system. Shared attention is a state of the "perception of in-the-moment attention to an object from a first-person plural perspective" (7). Shteynerg argues that in order for shared attention to happen, accuracy and efficiency must exist. The first one implies that the state of shared attention is active. When an individual is present in a situation where the collective action is probable and favourable for simultaneous co-attention, the cognitive resources must be tuned to recognise the environmental clues that open the door for shared knowledge (7). The latter relates to communication system efficiency where the shared attention state moves from the person 'A' to the 'first-person plural'. This shift from singular to plural allows the individual

spectator to understand himself and the other as one singular agent focusing on a particular event or object (8).

Shared attention sustains an essential social awareness of the world. It understands that a given reality is changed according to the individuals who experience it. The act of attending an event together influences their reality: "When group members prioritize simultaneously co-attended aspects of their environment, they achieve higher levels of intragroup similarity in knowledge, motivation, judgment, affect, and behaviour—thereby facilitating future collective action" (Shteynberg 2015, 19). In order to attend together, it is vital to understand how to act together; therefore, shared attention arises as a need to understand how the actions of others influence our role and how we, as a collective, can participate, and most importantly, influence the outcome of an event.

The ideas of shared attention and social and emotional bonds come from the sense of community the performers transmit with art as a mediator. The idea of *community* enables the exploration of musical transmission to create and shape new collectives.

3.3. Music, people and the rise of the musical community

In "Musical Communities: Rethinking the Collective in Music" (2011), Kay Kaufman Shelemay addresses how the notion of community provides an opening for dialogue in and outside academia on the understanding of performance as a medium of collectiveness. Shelemay evokes Thomas Turino, who marks a shift in ethnomusicology studies by analysing individual interactions' social aspects and physical surroundings. In *Music as Social Life: The Politics of Participation*, Turino suggests that to understand artistic and performative practices, one must "begin with a conception of the self and individual identity, because it is in living, breathing individuals that 'culture' and musical meaning ultimately reside" (2008, 95).

Once again, we have this deeply rooted idea that community is grounded in common beliefs prevalent in politics, religion, or ethnicity. These big blocks of identity shape our sense of culture. As forms of culture, we experience ceremonies and traditions like weddings, religious chants and funerals that portray a participatory, performative exhibition of the

culture we are raised in. Turino defines *culture* as "the habits of thought and practice that are shared among individuals" (2008, 95), and groups these individuals into 'cultural cohorts'– agglomerations according to characteristics such as gender, age, interests, and 'cultural formations'- the broader and established sharing of habits (95).

Currently, we face freedom in people's movement and a breakage in geographical boundaries. Globalisation has scattered cultural traits regarding religion, politics, and social standards for society. One could say that the sense of identity brought by music generates a cultural collective connected to the common interest or passion of a given artist or musical genre. That is one of the reasons why when we discuss the experience of music, we need to contemplate the sphere of the collective experience.[22]

Although Turino focuses on musical performance as social, the author does not focus on the notion of collective and community. Turino states that "[m]usic, dance, festivals, and other public expressive cultural practices are a primary way that people articulate the collective identities that are fundamental to forming and sustaining social groups, which are, in turn, basic to survival" (2008, 2). Turino explores the social side of the performance through musical participation and focuses on how participation in music does not come only from singing, clapping, or dancing. Participation also from the action of "[s]itting in silent contemplation of sounds emanating from a concert stage", which according to the author, "is certainly a type of musical participation" (28). Silence[23] takes part in transmitting sensations and emotions in musical performance and carries significance. In fully participatory occasions, the distinction between the artist and the audience is narrowed. The

[22] In "Music and Identity" (1996) Simon Frith examines how music and performance produce the identity of people and create an experience that can only make sense if we construct a collective identity. Frith bases his reflection in two assertions: first, "that identity is mobile, a process not a thing, a becoming not a being" and second "that our experience of music—of music making and music listening—is best understood as an experience of this self-in-process" (Frith 1996, 109). The author goes on to state that music creates experiences in our bodies, it is through them that it builds a sense of identity.

[23] The notion of Silence is of interest in the sense that silence is meaningful in conversations and in music too. Linking silence with music is extending the discussion to the voice and dialogues, where pausing means something, where it is not silence but silent music. "Silence in a musical work begins with the space before the first musical sound is heard and ends with the space after the last musical sound has finished" (Sutton 2002, 30). Silence creates meaning and momentum to musical pieces. Other works like *Silence, Music, Silent Music* (2007) edited by Nick Losseff and Jenny Doctor and "Silence in Music" (2006) by William O. Beeman, further explore the use of silence as manifestations of power.

attention is focused on sound and kinesics, communication through bodily movement, and individuals enhancing social interaction.

The 'feeling of music' focuses inward to develop the instinctive reactions that music gives to us. "[T]he quality of the performance is ultimately judged on the level of participation achieved. Quality is also gauged by how participants *feel* during the activity, with little thought to how the music and dance might sound or look apart from the act of doing and those involved" (Turino 2008, 29). When we listen to music, we experience chills, goosebumps, happiness, and tears; however, these emotions and the 'feeling of music' is still very subjective in scientific terms.

Feelings and emotions are associated with the body and its movement. The body is the conductor of cultural experiences. In spite of this, there have not been many studies that regard the cultural factor in understanding the relationship between the body and the experience, especially in music. In the article "Music scenes, Space and the Body" (2014), Christopher Driver and Andy Bennett explore the development of the notions of music scenes and how they involve several spheres of the body and culture. The authors recognise that there have not been sufficient studies that tie culture as a vital part of the environment; nevertheless, "organisms play a co-constitutional role in the shaping of the environments they inhabit (see Casey, 2001)" (Driver and Bennett 2014, 103). We understand these cultural environments concerning music as *scenes*; they were studied in isolation from socially obligatory everyday practices and associated with the core of leisure practices. This tendency has led to exceptional attention to different identities, where the agent must consciously respond to the different performative manifestations of identities. This multiplicity of identities emphasises the potential actions of the scene members and the various possibilities present in the body and social practice. This idea is linked to the notion of social praxeology by Bourdieu (2013) and 'habitus' by Driver (2011). Driver states that music scenes as the communal participation in music reintroduce:

> the 'immediate, lived experience of agents in order to explicate the categories of perception and appreciation (*dispositions*) that structure their action from inside' (Bourdieu and Wacquant 1992, p.11, their emphasis). To access the habitus is to access the embodied residue of lived histories, for bodies are defined by their dynamic powers of perception and action incorporated from their being-in-world (Casey 2001). (Driver quoted in Driver and Bennett 2014, 105)

Music scenes are forms of collective gatherings where music is the central focus. As Shelemay reminds us, the Oxford English Dictionary definition for community starts with naming it a "body of people or things viewed collectively". It also "links a group to a single geographic setting, as 'a body of people who live in the same place, usually sharing a common cultural or ethnic identity. Hence: a place where a particular body of people lives'" (Shelemay 2011, 356). We use the ideas of body and space to localise the group of people who, in return, get together by sharing certain beliefs. These beliefs can go from religion to just tastes of music. Music communities grow from the need to find a place to comfortably explore the possibilities of sound, creativity and social musical interactions.[24]

3.4. Audiences in jazz – Jazz culture, community, and emotion

The culture of jazz is highly embodied in the collective form and festivalisation of jazz. From its beginning to today, music plays an enormous part in defining our tastes and social life. Despite its cultural origins, mainstream audiences consume jazz mainly through their participation in the performance by dancing, playing, singing, or even socialising. Understanding the spread of jazz acknowledges the participatory character of the agents who take part in the performance. These jazz performances are rituals designed to guarantee a state of 'communitas', states of mutual support, participation and constructions of reality. In this sense, Turner (1974) has linked the concepts of 'communitas' and 'flow': "Communitas has something of a 'flow' quality" (Turner quoted in Currie 2019, 305), with 'flow' representing the transformation of the structure into 'communitas'. This concept of flow is also associated with Csikszentmihalyi's (1975) notion of flow[25] that, when the focus is solely on the performative objective, we release the attachment to our ego (Currie 2019, 305).

[24] We could further understand the sustainability of music scenes as music communities, as the first concept lives as clusters of individuals who share a musical taste. Taking the genre jazz as an example, jazz players and afficionados, consistently gather in the same places, creating, therefore, a supporting network where jazz is the linking tie. Other terms explored in "Musical Communities: Rethinking the Collective in Music" by Kay Kaufman Shelemay are the concepts of 'subculture', 'art worlds' or 'musical pathways' (Shelemay 2011, 360-361).

[25] Another author that explores the notion of flow, in specific in jazz, is Elina Hytönen-Ng in *Experiencing 'Flow' In Jazz Performance* (2013). Here 'flow' refers to an experience through consciousness and the author seeks to understand the fundamentals of flow in jazz, based on the question of experience.

As Scott Currie states in "Individual, Collectives, and Communities":

> the institution of the jazz festival has influenced 'collective understandings and practices' of jazz with respect to three key orientations laid out in Roche's influential formulation (2011, 127): space, as redefined by currents of transnationalism, cosmopolitanism, and globalisation; time, via staged realizations and revisions of evolving historical narratives; and agency, through identity-affirming communal participation in the performative instantiation of deeply held, collectively shared ideals. (2019, 304)

This statement regards the jazz performance as a means to foster the sense of 'communitas' through stimulating the development of a participatory cycle—where the performative flow is incorporated into the social structure.

Generally, when we approach jazz, we focus on the artists, the performers who detain a broad range of jazz music capabilities. This tendency leads to worshipping jazz artists and a resulting decrease in the importance of the spectators. Artists such as Miles Davis embraced a distancing posture from the public, assuming particular positionings – like playing with his back facing the audience[26] – that created a distance from the audience and dissociated the artist from the art. Miles Davis is a terrific example of the impersonation of the myth in jazz music.

Today, the music industry is primarily based on a machine that is in constant production of songs. These songs fall on the relatability spectrum, and the more the chorus and rhythms are stuck in our heads, the bigger the artist's probability of engaging more people. Jazz is considered to be different because it is mainly an instrumental expression based on improvisation, meaning that the song evolves as a dialogue between different instruments. Moreover, this style is a vast genre of music; there are different niches inside the jazz genre, which means that different types of individuals can favour different subgenres of jazz. For example, Joshua Redman and Esperanza Spalding: the first one is a saxophonist who produces mainly instrumental pieces of music, the latter is a singer who incorporates much neo-soul into her jazz interpretation. These two artists appeal to different audiences because their interpretations fall into different sets of the jazz spectrum. Their musical instruments and influences differ, which leads to different musical outcomes.

[26] The article "Grappling With the Cool and Rage of Miles Davis - Culture - International Herald Tribune" (Broeske 2006) describes Miles Davis's performative persona.

Jazz has an "intellectual element, embodied by the high-minded conceit that this is simply a music that falls beyond the basic intellectual ken of the average music listener: that jazz is simply too deep for most" (Jenkins 1999, 357). Again, we fall into a conception of jazz mainly targeted to the 'connoisseurs' of music. This notion is obtained primarily because of a lack of achievement in communicating and educating people towards a more approachable jazz view.[27]

When writing this dissertation, I recognised a need to understand what the public, in general terms, feels regarding jazz live performance. For that matter, I conducted an informal survey[28] through the platform phonic to understand the feelings, sensations and ideas that jazz audiences have towards jazz live performances. The survey was disseminated through social media from March 10th to 15th of 2021 (Facebook and Instagram) to get a diversity of respondents who had already attended a jazz performance. However, the scope of the survey is limited in its dimensions and in the objective responses since one can never truly consciously understand their unconscious reactions. We cannot be fully aware of our response when wholly embedded into the performance.

The survey consisted of eight questions for a population of twenty-seven respondents (see Annex). About 70% of the population identified as male, 22% as female, and 4% as *binary* and *queer*. The predominant age group was between 18 to 29 years old. Finally, the occupation background of the participants was positively varied. Based on the answers on "occupation", the data were grouped into four fields: arts and culture (41%), social sciences (18%), hard sciences (37%) and other[29] (4%). One important detail to highlight is that about 19% of the population was composed of musicians or jazz students. The interpretations of

[27]Two other ideas we could develop are 'Highbrow' and 'Lownbrow', highly explored in Lawrence Levine's book *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America* (2002). Levine argues that in the last half of the 19th century the cultural unanimity that existed was corroded by an attempt to separate 'art' from 'popular culture'. Levine defends that 'highbrow' and 'lowbrow' are distinguishable through culture, with the first term being the representation of highly cultured individuals (often from higher social classes) and lowbrow being the exact opposite. To add, the book *Notes on the Death of Culture: Essays on Spectacle and Society* (*La Civilización del Espectáculo*) by Mario Vargas Llosa (2016), gives a reflection on the art and popular culture, together with the popularisation of art which can contribute for further discussion of jazz and its spread.

[28] The survey is labelled an informal survey because it was not my goal to create an intricate project regarding audiences, their relationships and sustainability, but to have a perspective besides my own on the way audiences feel as part of (or not) a live jazz performance.

[29] In 'other' it was included participants who did not detail the specific information of their respective background.

these participants' answers bring the audience perspective and showcase answers that embody both the role of the performer and spectator.[30]

Jazz is an interesting case; either people fully embrace it, or people do not understand it. Why does this musical genre fall into this mythical idea of music? Why are people so attracted to it (or not)? In the first question of the survey, "what are your motivations to attend jazz live performances?", most of the answers fall into a conception of the jazz genre as, ultimately, an experience, with interactive connections between the musicians transposed as almost a theatre play. As stated by one of the participants: "Attending live jazz performances is a much more real experience in terms of sound quality. You can also feel the emotions of those playing through their expressions and movements. Being surrounded by people who enjoy jazz also elevates the experience because you feel that everyone is there to enjoy the music" (Annex, Q1, Henrique). The performative interaction is where the dialogue between the performers takes place and is highlighted as the crucial part of the jazz performance. The interaction is what triggers the experience of the audience.

As developed before, the presence of audiences for any given performance emanates a sense of community. This sense is highly prevalent in the jazz culture: the sense of integration and unity that a musical performance gives to different people with different realities and perceptions gathered into one space connected only by sounds. Interestingly, jazz music is evoking "the direct representation of the unconscious, materialised through a musical language" (Annex, Q1, Gaia). In fact, Marcel Hénaff, in "The *Mythologiques*: Between Linguistics and Music", develops this idea of the music language which, just like literature, represents a narrative, a succession of events, as "the narrative of the myth, just like the performance of music, only exists as it unfolds in a temporal succession" (2008, 28). Music constantly activates the bodily rhythms of the listener; this creates sensations and emotions in the spectators. The presence of scales, tones and rhythms directly affects our sensory system, which produces the "intelligible operation of music" (28).

The survey participants analyse the jazz performance success by stressing the importance of the acoustics of place (Annex, Q2), ranking it, on average (4.19 out of 5), as the most critical

[30] This embracing of both the role of spectator and performer can also illustrate the common association between jazz appreciation and connoisseurship, in the sense that the role reversal is embraced by mainly jazz students or musicians.

aspect for the success of a live jazz performance; this reflects the importance of embeddedness and incorporation of sound in a space. The questionnaire showed a greater recognition of the acoustics, location, and quality of music as factors that determine the authenticity of the performance, devaluing the choice of the people we want to attend with, and the specific line-up proposed. For jazz music, what stands out the most are the reverberations, the setting, the improvisation, the musical dialogue created on stage by the artists. This idea of the musical dialogue persists throughout the understanding of jazz as a significant cultural product.

It is not easy to put into boxes what everybody feels when attending music performances. Nonetheless, if we remember concerts we have attended in the past, there was always a certain excitement and even nervousness associated with it. The survey participants were asked what emotions and feelings they experienced when they attended jazz live performances. There were thirteen choices, and they could choose how many they wished; when analysing the responses, we place the emotions on an axis that varies from intense to mild and pleasant to unpleasant, as portrayed in the previous Fig 3.2. From the answers collected, more than half (60%) are emotions and feelings that fall into the mild-pleasant category (Annex, Fig A3.3). One conclusion we can draw is that the experience of jazz performance is more contained than other musical genres; this might happen because of the institutionalisation of jazz as a highbrow musical genre whose taste is acquired with certain knowledge and understanding of music. When questioned if another feeling was experienced, one of the participants stated that attending a live jazz performance included "a feeling of lightness as if your soul just hovered when listening to the music" (Annex, Q4, Liliana). This comparison is a good portrayal of how jazz also embodies a sense of calmness. Jazz is highly associated with mild-pleasant emotions enhancing emotions related to lightness, calmness, and peacefulness.

The most exciting collection of answers would have to be those related to the role of the audience in the live performance (Annex, Q5). It seems that we have two sets of answers that focus on different things, namely, the relationship and the art form. There is an acknowledgement that jazz music performance is not necessarily produced to create powerful instinctive reactions and participations to music; it exists as a musical production that incites emotions and feelings but in a more contained form. Audiences act as silent performers – they contribute to the existence of the performance, but they are not constant

intervenors. As one of the participants states: “The audience feels […] more as a privilege to watch what is happening up there […]. I feel like the audience is setting their own atmosphere, and then there are the performers. That is the other atmosphere, I always felt there is quite a distinction” (Annex, Q5, Lucie). There is an acknowledgement that the audience’s presence is important and that “when the musicians are on stage, they can feel the audience’s energy” (Annex, Q5, Gaia), thus leading us in concluding that audiences can, in fact, influence the performance. However, we create a separation between the world of the spectators and that of the performers; each has its atmosphere. Spectators are allowed to intervene in the moments of pulsation and remain silent during each musical piece but still emanate energy to the musicians.

Still, regarding the role of the audiences in jazz performances, we follow up with two more answers collected from the survey. Firstly, “the audience is there to be taken and guided by the artists throughout the whole performance. If there is no interaction apart from the music itself, you should listen and focus on what the artist tells. If there are other forms of interaction, you should be open-minded and trust the performers. ‘Give back to the artists’ as it will probably enhance the overall experience” (Annex, Q5, Rui). This acknowledgement is based on jazz’s interpretation as an elitist form of music; it centres on the artist who produces the music and glorifies him/her as the sole conductor of the entire performance. For some, the audience role is secondary and less a contributor to the final product. Still, as one of the participants exposes: “any live performance be it music or theatre, cannot exist without an audience. […] I am the receiver of the art, of the music. But I am also giving back to the musicians my reactions, my feelings, my energy, my applause” (Annex, Q5, Ioan). The work of art (the performance) is the main focus, the mediator and bridge between the performers and the audiences. The audiences carry a significant role because the audiences’ reaction fuels any live performance, and jazz does no different.

However, some jazz performances are felt as if the audience cannot get in because what prevails is simply the musicians’ relationship on stage. They are so focused on each other and reacting towards each other that the audience does not matter. The different perceptions of the performance sustain the different atmospheres. These atmospheres make a clear distinction between the audience’s world, the performer’s world, and the worlds of each individual.

> I think what makes it different is that jazz […] becomes only truly alive live. […] It does not need to imitate anything or be better than anything. It just "need to be there and be present". We want other genres, looking at rock, pop, funk, they have other settings, especially in the recording age. It became something that was more readily accepted as a recording and, therefore, had to live up to certain standards during the performance, having to perform certain songs in the right way or in that specific way. People learn to know more the recordings than the actual performance, which is also quite debatable if that is good. I feel jazz is just allowed to be present in the moment. It allows for mistakes as well, and therefore it is very different to music from other genres. (Annex, Q7, Lucie)

The analysis of jazz music can fall into the perspective of classical music insofar as both are born out of musical genres and tradition and serve as the foundation for the emergence of other musical genres – but are appreciated by a smaller group of individuals with enough knowledge to understand the music. What we can gather the most from jazz is the 'feel' of the music. Since jazz involves an improvisational key, we are left to understand the feel of the music. The 'feel' of the music is associated with the pitch, tempo, rhythm, melody of the song. 'Feel' is closely related to a sense of groove, which can be inherent in a person or not. Authors like Levitin develop the sense of groove concerning live performance as 'feel', thus being linked with "some element of the unexpected" (Levitin 2019, 173).

Moreover, Zbikowski, by emphasising 'feel' with the construction of the performance, states that musicians must understand the basis of the context to build a "sort of feel, a framework that includes knowledge about how rhythmic and pitch materials are organized and how members of a musical ensemble will realize this organization" (2004, 297). The jazz performance is embedded in a spatial atmosphere that enhances versatility and opens space to future possibilities. The standard for jazz is not the recording but the live performance: the possibility to create something different but good in one specific space in a specific time; it is about the "musician's sensibility to communicate in a manner that is intelligent and, more importantly, emotionally meaningful, in a wide span of possibilities of expression" (Annex, Q7, António).

Finally, the jazz performance, seen through the lenses of both agents – the performers and the audiences – strongly differ from other musical genres, especially if we take as an example a specific kind of jazz performance, known as 'jam sessions' (further developed in the following chapter). The 'jam sessions' briefly consist of a jazz performance where what is ahead is unknown; therefore, a performance based on improvisation. As a 'jam session', the practice allows the performers to play with different musicians invited throughout the

performance, challenge the interpretation of songs, and explore different melodies and sounds. For these performances, the audience tends to become the outside since the spotlight is on the musicians' interaction. The *Emancipated Spectator* by Rancière, previously discussed, explores how the audiences' emancipation begins with challenging the active and passive roles of the performance agents (2009, 13). In 'jam sessions', this challenge of roles is more evident in the role switch of some audience members and performers. People gather in a collective, and the performers are not necessarily fixed throughout the entirety of the performance. Musicians can assume the role of spectators and then change to performers at a given time. Having something to contribute to the performance, one can change his/her role from passive to active.

Overall, we can add that jazz music is a form of participatory music depending on the subgenre and performance style. The sound and music bring people together in a space to attend a performance at a given moment in time. The audience's sense of community evolved from recognising jazz as popular music to a small musical niche. This small gathering grew to be focused on the quality and interpretations of music, continuously based on ideas of freedom, innovation and exploration of this genre. After understanding the different individual takes necessary for a performance to occur, the next chapter will explore the performance as a whole.

4. JAZZ AS A PERFORMATIVE AGENT: CONNECTING MUSIC, SPACE AND PEOPLE

4.1. Performance and performativity: acknowledging the eco-performance

As already established, when we attend a concert, a theatre play, a sports game, a religious mass, we are in the presence of some sort of performance. Let us imagine a wedding; this ceremony joins two people together by celebrating a "contract". We honour this "contract" through a religious or civil vessel. The way the ceremony is performed varies according to the beliefs of the individuals. A Hindu wedding is different from a Catholic one; the colours vary, the placements differ, the language and the rituals are distinct. However, the fact that the ceremonies are different does not undervalue one or the other as a celebration of matrimony; they are both valued, even if performed differently. We can apply the same idea to a concert. A musical performance by the group Badbadnotgood in Portugal, Lisbon will be different from their performance in China, Beijing, but why is it different if the songs are the same? One might say that the feel of the cities is different because their architectures are distinct, the tradition, the rituals and the social norms change according to each culture; different countries will call for diverse approaches.

Performance is a vast concept. Nevertheless, it covers different levels of our lives, from school to work, art to productivity. Humans possess a consciousness that allows us to act in the best form according to each situation. The 'performance' consciousness is present in several situations and is adaptable, moving "from the stage, from ritual, or from other special and clearly defined cultural situations into everyday life" (Carlson 2004, 70). As we grow, we become conscious of the exact role we play in our social and cultural context.

> The recognition that our lives are structured according to repeated and socially sanctioned modes of behavior raises the possibility that all human activity could potentially be considered as "performance," or at least all activity carried out with a consciousness of itself. (Carlson 2004, 70)

There is a distinction between the act of doing and the act of performing. If we state that we are writing a text, we are implying the production of something or the act of doing something because writing involves an action. We can associate the act of 'performing' with a final or best outcome of something done. For example, in a concert, a theatre play, and even product

analysis, one is always expected to produce something with an outcome that can fail or succeed. For Carlson, the difference between doing and 'performing' lies in the attitude of the individual, which also sustains the idea that it is through consciousness that action can carry the quality of performance. However, there is an idea of doubleness in consciousness; this means that the accurate execution is confronted with the mental representation of the action, which usually is a more idealised image of the object of the action (Carlson 2004, 71).

Moreover, essential for the notion of 'performance' is "the sense of an action carried out *for* someone, an action involved in the peculiar doubling that comes with consciousness and with the elusive 'other' that performance is not but which it constantly struggles in vain to embody" (Carlson 2004, 71). By dissecting the previous statement, we understand that there is always an 'other'. This 'other' can be interpreted as the idealised form of a given performance constructed by those for whom the performance is for. Nevertheless, in a performance, there are several 'other' factors. The other body in performance can be another character on the stage, the surprise encore in a concert, or even a competitor cell phone of the market whose performance is more well-rounded.

Richard Schechner in *Performance Theory* interprets performance in a wide range of forms, making it an "inclusive term [...] that reaches from the ritualization of animals […] through performances in everyday life – greetings, displays of emotion, family scenes, professional roles, and so on – through to play, sports, theater, dance, ceremonies, rites, and performances of great magnitude" (2003, xvii). For the author, performance can be interpreted by a fan and by the web. The fan defines 'performance' as an extension of activities such as rites, ceremonies, shamanism, the outcomes of a crisis, the performance of everyday life events, a play, the process of making art and ritualisation. On the other hand, the web characterises a dynamic system that does not have a specific order but portrays performance interactions with other activities and contexts. It connects everyday life with the environment, history, rituals, and even the psychotherapies of our bodies (xvii-xix).

Schechner sees the performance as a disruption of reality through the loss and regaining of control to construct a new reality. "[P]erformers specialize in putting themselves in disequilibrium and then displaying how they regain their balance, psychophysically, narratively, and socially – only to lose their balance, and regain it, again and again"

(Schechner 2003, xviii). Still, we apply this perspective to those who perform and attend the performance; however, the spectators are only in control of the reality they construct and the knowledge they acquire from the performance.

Schechner's construction of the performance involves four main qualities: (1) time, (2) objects, (3) non-productivity and (4) rules. (1) Time is subjective and so it is characterised according to context. We can characterise it as the event time: "when the activity itself has a set sequence and all the steps of that sequence must be completed" (Schechner 2003, 8); a set time, when we must excel our performance in a previously established amount of time; and finally, we have the symbolic time as the understanding of time differently, "when the span of the activity represents another (longer or shorter) span of clock time" (2003, 8).

The (2) objects of everyday life are assessed differently: on how practical they are, their rarity (in case of jewels), or even age. Even if the objects may not have extreme value, they are acquired by emphasising their use in a given context. In music, the objects are fundamental for the execution of the concert (e.g. the drums, the piano, the saxophone, the voice); without them, there is no possibility to perform the music live. One might say that there is always a recording to fall back on; however, as we will see throughout this chapter, improvisation and unpredictability are also accounted for in performance since they can rapidly change the course of the performance and the spectators' perspectives.

The idea of (3) non-productivity regards the "separation of performance activities from productive work" (Schechner 2003, 11). The notion of performance is seen as an activity of leisure outside of productivity, separating reality and imagination and consciousness from unconsciousness. However, this separation disregards the economic processes inherent to the performance: the budget, the hiring of actors, producers, directors and the rental of venues.

Finally, in every performance, there is a given set of (4) rules that "persist because these activities are something *apart from everyday life*" (Schechner 2003, 13). Our world, dictated by humans, is a world of social, economic, cultural and political rules. We live in the condition of complying with a given set of rules to maintain order and organisation in day-to-day life. These rules also apply to any performance; we know that when we go to a theatre

play, we are supposed to maintain silence until further notice; a football match contains a set of rules that, when broken, the players are penalised accordingly.

For a performance to happen, action must occur regarding a time, an object, a disruption of routine, and displaying a specific pattern. This idea brings out the construction of performance that provokes a change in everyday routine and a sense of familiarity through guiding lines. Nevertheless, we can draw two different notions that relate to each other: the notion of performance and the notion of performativity. For this dissertation, we will focus on examples regarding cultural performances.

In the book *The Transformative Power of Performance* (2008), Erika Fischer-Lichte develops the notions of performance and performativity while sharing similarities with the thoughts of Richard Schechner. For Fischer-Lichte, the notion of performativity entails connotations of transformation and dichotomic relationships. The known dichotomic pairs such as subject/object and signified/signifier are challenged in the performative aesthetic since they are put in movement, leading to a loss in transparency and distinction. The author develops this idea by analysing the works of John Austin (1955) and Judith Butler (1988). Nevertheless, for this work, it is essential to highlight crucial notions drawn by Judith Butler in "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory" (1988). In this essay, Butler develops the field of culture as a performance by establishing a parallel between gender identity and the concept of performance:

> the body is not merely matter but a continual and incessant *materializing* of possibilities. One is not simply a body, but, in some very key sense, one does one's body and, indeed, one does one's body differently from one's contemporaries and from one's embodied predecessors and successors as well. (Butler 1988, 521)

The author includes bodily actions in the performative, which are non-referential because they cannot refer to something that already exists or experience a pre-existing identity. It is the bodily action of the performative that creates its meaning attached to an identity (Fischer-Lichte 2008, 27). The body produces a successive repetition of movements as a bodily language, which develops the critical characteristics of one's identity.

There is a tendency to use theatre play and performance art as the leading examples of performance. We think automatically about the classical plays of Shakespeare or Marina Abramovic's daring art performances. The embodiment in theatre and performance art is

prevalent in the sense that there is an embracing of another persona and entity to portray a story in its limitations and contexts.

> As an intentionally organized materiality, the body is always an embodying *of* possibilities both conditioned and circumscribed by historical convention. In other words, the body *is* a historical situation, as Beauvoir has claimed, and is a manner of doing, dramatizing, and *reproducing* a historical situation. (Butler 1988, 521)

Along the lines of Judith Butler, the embodiment is not consigned to individual action, but to the creation of a belonging feeling, which is the result of a "shared experience". Thus, Fischer-Lichte draws the importance of community, where physical pressure is applied to individuals, but simultaneously, the possibilities to grow and shape the individual identity are greater. As performance exists in everyday life, the performative acts of our bodies are present in everyday actions and the shaping of our identity. The performative actions are part of a "shared experience" because they were pre-existing in thought.

> Consequently, the repetition of an act comprises a "reenactment" and a "reexperiencing" based on a repertoire of meanings already socially instituted. Cultural codes neither inscribe themselves onto a passive body nor do the embodied selves precede cultural conventions that give meaning to the body. (Fischer-Lichte 2008, 28)

Suppose we put forward the case of a jazz concert. In that case, the possibilities of improvisation in a solo are numerous but necessarily framed by a musical structure. The staging, the lighting and even the location may vary according to the people who are constructing the performance. Each change can impact the outcomes and idealisations of the performance. As previously stated, there is a tendency to separate the art from the artist. Thus, music is embodied into a person the moment it is performed. The musical performance becomes an act that brings people together for a "shared experience" between the individual spectator and the performer and in-between the different individual spectators.

Fischer-Lichte argues that our body is framed in a given space and acts within its constraints. Consequently, it indorses each interpretation within the boundaries of each cultural and social route. As initially stated, the performative aesthetic is the path to achieving the performance. It is manifested through performative corporeal actions based on embodiment processes. It intends to provoke a transformation by challenging artists/spectators' performative roles and defying social and cultural constructions.

The notion of performance arises as a "genuine act of creation: the very process of performing involves all participants and thus generates the performance in its specific materiality" (Fischer-Lichte 2008, 36). Performance is an event in a specific place and time where the performers and spectators gather. For long, the academic reflection of performance established its focus on the written text or on the mythology that contextualises the performance itself. Both Erika Fischer-Lichte and Richard Schechner draw this significant parallelism in reflecting performance with ritual instead of myth. The research moved from myth to ritual, literary text to theatre performance, and therefore from musical composition to musical performance. Then, as ritual takes place as a "social reality of a community" (Fischer-Lichte 2008, 31), also performance acts as a social gathering with cultural connotations.

Throughout this dissertation, we have been trying to grasp the contributions that sound, music, space, and people have on a performance and how a place's communal spirit and sensation influence that performance, specifically the musical, cultural product of jazz. We have already become aware of how sound acts as a vehicle for creating meaning, whether in its crudest or its most organised form, created with a purpose, rules and boundaries, as is the case with music. Sound is a sensory aspect that acts as a "language", a form of communication, in its earthiest form. Music is also a form of communication; it is sound constructed in a given manner that intends to convey a message. The presentation of music to the public produces numerous interpretations and perceptions. Nevertheless, it is the interest in it that unites people. Sound and music affect our sensory system; therefore, they can produce or induce emotions and sensations, eventually becoming an embodied experience.

Sound and space influence each other through the dimensions of space, various amplitudes of sound and the resonance caused by sound and space. Space is a place where bodies are in constant movement with a purpose. The space can become a place of meeting, of gathering when we choose it. It is when lived and experienced the space acquires meaning. For example, when we experience sound and music in a particular space, that space achieves meaning from the moment it is chosen to present a given cultural product. There is a suggestion of auditory awareness with space, where it is possible to detect sound and its variations. The sound in a given space creates an environment conducive to experiencing

emotions and behaviour. Thus, musical products can emphasise preceptive experiences of auditory awareness, with variations in perception and interpretations depending on the space where it is lived, with whom it is experienced and the respective mode (recording, live, amongst others).

Time, sound, music and space trigger the performance, but the co-presence of actors and spectators is the significant enabler for a performance to happen. "For a performance to occur, actors and spectators must assemble to interact in a specific place for a certain period of time" (Fischer-Lichte 2008, 32). The work of art acts as the bridge in the communicative system that occurs between performers and spectators. The audience becomes a collective body (or, through the ecological perspective of Jeff Titon (2020), a population) united by a familiar taste. Humans are animals who, like many others, are susceptible to outside sensory stimuli, which influences emotions and provokes sensations. Therefore, a musical performance that occurs in a specific place is performed for somebody according to a given set of "rules that govern the performance" (Fischer-Lichte 2008, 32).

All of these elements are connected through the performance. Specifically, in music, its live character attracts audiences through the bodily experience that derives from the musical performance, and its liveness is a performative format. We may thus conclude that performance is only a performance if the performative object is presented with the co-presence of actors and spectators in a given space and time. We can hear music through different channels – streaming platforms, CDs, vinyl, or concerts – and the experience we take from each varies. Therefore, we may argue that the performance as a live performance enables a sense of community, enhancing motivations, physical contact, and the reversing of roles; however, these notions are only possible under the condition of liveness.

Fischer-Lichte highlights that the performance in its live format is what we popularly see as the proper form of artistry that "fights" the mainstream current of commercialised art. The author states that the live performance "seems to carry remnants of an 'authentic' culture that fortifies the opposition to mediatized performance as product of commercialism created by market interests" (Fischer-Lichte 2008, 68). Distinct performance formats affect us differently. Indeed, our experience from recordings can never be identical to the one we get from attending a live performance.

Allow me to think, for example, of the time I attended a Jimi Tenor's concert in Zagreb, Croatia, at the Museum of Contemporary Art. The experience I was able to take from it can never be reproduced. My body was present in another country, attending this jazz performance based on improvisation, with people I will most likely never see again. This is an example of how the live character of performance creates such an impact on performing, for it can never be reproduced or repeated. This impossibility happens because, firstly, the interactions created on stage between the orchestra and Jimi Tenor are unique to that present moment. Secondly, his interactions with the audience will differ in each performance because the probability of having the same people attending the same performance in the same space and reacting the same way is minimal. Thirdly, the time will never be the same. Finally, the intrinsic characteristic set on Jimi Tenor's jazz improvisation implies that its outcome will never be the same each time he performs.

Therefore, as illustrated in the example, performance lives in the present. In *Unmarked: The Politics of Performance* (1996), Peggy Phelan develops the notion of liveness as the gatherer of people and art in a space and time. Although Phelan focuses on photography, painting, film, theatre and anti-abortion demonstrations, an idea that pervades any performance is that its reproducibility goes against its core pillars. The soul of the performance, as a whole, comes to life with its disappearance.[31] The author states:

> Performance cannot be saved, recorded, documented, or otherwise participate in the circulation of representations *of* representations: once it does so, it becomes something other than performance. To the degree that performance attempts to enter the economy of reproduction it betrays and lessens the promise of its own ontology. (Phelan 1996, 146)

Let us take the case of Chick Corea's 2018 performance at Scullers Jazz Club in Boston, Massachusetts. We can watch the entire live performance on Youtube because it was recorded (Jazz Night in America 2018); we can even have the privilege to see close-ups of the musicians, see how they react to one another and their bodily experience while playing the music. Nevertheless, we are losing the essence of the performance, of its live format. This loss happens because the recording cannot capture other spheres, such as the presence

[31] This notion is in itself poetic, thinking of the fact that we can only really appreciate a performance the moment it stops existing; it is art imitating life. Other works like Walter Benjamin's "The Work of Art in the Age of Mechanical Reproduction" (1969) refer to the idea of reproduction of art as devaluing the meaning of art *per se*.

of the audience, the feel and sensation that the space gives us, and finally, the presence in time and space. Since the performance happened in the past, we can never say we experienced it at its fullness, but we can only honestly wish we were there.[32]

Even so, under all these conditions, when attending any type of performance, there is some sort of "spirit", "soul" attached to it, and at a point, it melts, uniting the performative object with us, the spectators. Experiencing a live performance entails the development of certain feelings, emotions and sensations. This phenomenon is partly due to the liveness – presence – associated with the performance in which actors and spectators are fully invested. The other part is associated with the notion of resonance. This concept has become vital because it represents the glue that ties all the parts together: the performers, the audiences, the art, the space.

The use of resonance tends to depict the way culture functions, in other words, "why certain discourses, messages, or other cultural objects have advantage over others because they fit—or resonate with—prevailing cultural worldviews of the audiences who receive them" (McDonnell, Bail and Tavory 2017, 1). We base resonance on the relationships between objects, humans, spaces, and events attached to people's resonating experiences. Thus, it is an understanding of how individuals interpret their surrounding world and establish certain relationships.

Performance works with signs as a medium of producing meaning. Because resonance develops the process inherent to the experience with the object, we also need to consider the ones who interpret the object. Each spectator thinks and acts differently; in this sense, resonance implies cognition and interaction, which emphasises the relationship between people and art, space and the remaining surroundings. This notion goes hand in hand with the ecology of performing, the importance that relationships take in understanding culture and cultural products.

[32] Technological advancements profoundly impact the experience of live performances. Societies are growing dependent on technology and social media and, especially in mainstream/pop concerts, people feel the need to record the event to post it or remember it later. They experience the performance, above all, through their cameras. Therefore, the concert becomes a mediated experience from the beginning, which differs from the truly live experience of the performance.

Notwithstanding, Veit Erlmann, in "Resonance" (2015), applies this concept to sound. The author showcases how listening can be divided into two forms, the first one that can recognise a sign (signification), and the second one which is the listening that produces new signs without producing any meaning (signifying). Erlmann explores the evolution of the research on the concept of resonance and its implications on sound and music, understanding that it "has become part of a rich metaphorology that seeks to replace the binaries of structuralist thought with a notion of discourse that is diametrically opposed to a distancing and objectifying form of knowledge" (2015, 175). The author exposes how resonance creates a bonding between the objects of art and the people who experience them.

Bonding art with people implies a process of aesthetic judgement. Well, resonance, in music, acts as a mediator between the judgmental and scientific spheres. This process is possible because, as we know, sound is a consequence of an event produced through vibrations and experiential relations; these two together make resonance possible. Sound is an object with multiple layers intertwined through resonance, and music arises through the relationship between affective and material (organisation of sound through pitch and rhythm with meaning) resonance.

Once again, underlined in the relationships between people and objects is resonance. We formulate meaning out of the influence of signs, "and such effect cannot be encapsulated by an analysis of cultural objects but must also take into account the habits of thought and action through which an interpreter experiences such an object" (McDonnell, Bail and Tavory 2017, 3). These relationships require an understanding of their context – the 'why', 'how', 'when' and 'where' – since performance outcomes directly relate to the people who experience it and the culture in which they are brought up in.

Furthermore, McDonnell, Bail and Tavory state that resonance is both a cognitive and interactive process (2017, 6). Firstly, resonance implies a cognitive process of creating meaning through the metaphors inferred in cultural objects.[33] Secondly, to cognition and meaning-making, we also associate emotions, which are essential in the relationship with

[33] For example, the musical performance as a cultural object is the vehicle through which the audience interacts. When audiences attend a live performance, they go with certain expectations and presuppositions. In the present moment of the performance, they go through different processes to select, dissect and highlight particular aspects. The cognitive process bonds the new information with the expectations of the audience.

cultural objects. Like emotions, resonance is a cyclic process that moves up and down; it is not linear and "[s]ituations of heightened emotion may make objects or messages resonate, when they might not otherwise, by priming people to find solutions that justify their feelings" (6).

Thinking of musical performances, the music itself reverberates with people's emotions and heightens them, allowing resonance to happen more clearly. That is why when we intensely experience a concert, there is a sense of connectivity with the music, environment and people that surround us. Nonetheless, as a creative act, performance involves performing with the involvement of both the spectators and actors in their materiality. The performance, then, is unified by resonance where "problem situations, objects, and even people themselves are redefined throughout interaction" (McDonnell, Bail and Tavory 2017, 7). The rules that oversee performance are "negotiated by all participants – actors and spectators alike" (Fischer-Lichte 2008, 32).

Music performance, which we typically call concerts, is grounded in musical and human interactions, ritual and performance. "[T]he humans' musical interactions resulted from a combination of pre-existing social and cultural factors and from the immediate context of the performance" (Boyle and Waterman 2016, 29). It is the result of human musical interactions that, just like a theatre performance, include specific parameters, rules bounded by the space where it is performed, the audiences that attend and the musical dialogue produced by the artists.

Live music performances are a significant part of our culture. We attend them because we appreciate the music being played, the setting where it is performed, and being part of a group of individuals who intend to experience collective involvement. Simon Frith acknowledges the importance of the live music experience to consolidate music culture, with history attached to cities and specific places that prompt the local "musical soul" (Frith 2007, 9). There are always externalities associated with live music performances. Types of externalities like the condition of space where the performance takes place can profoundly impact sound propagation; for example, in concerts held outside, the weather, like rain or wind, affect performances and sound propagation conditions. Likewise, in concerts held inside, the venues' characteristics and setting display can also impact acoustics.

Nonetheless, as argued by Boyle and Waterman, "[t]he characteristics of songs and performances are influenced by environmental factors" (2016, 28). This notion applies to all sides; the music of nature, animals and humans, are all dependable on their surrounding environment.

> The "music" that birds make is dependent upon the environmental context and the nature of their audience. Intrinsic and extrinsic factors affect both how and what sounds are produced (or "performed" in the language of musicology), and how and what their audience experiences—findings that parallel musical performance. (Boyle and Waterman 2016, 28)

The "natural" responses, interactions and communications between animals portray parallelisms with a musical performance. This parallelism is one of the reasons why we can talk about and establish connections between ecology and musical performance, as musical and sonic ecologies.[34]

Referring to an ecological music performance means emphasising the interaction created amongst the different elements of it. To recognise how musical performance can be ecologically performative means understanding "how it affects, and is affected by, the cultural, social and physical environment in which it is manifest" (Boyle and Waterman 2016, 31). Jeff Titon argues the same in "Music Sustainability: An Ecological Point of View" (2020), with the notion of ecology referring to a broader range of relationships in-between our ecosystem and everything that is its extension. For Titon, music culture refers to people's involvement in music, and its behaviour is similar to one of our ecosystems. The 'organism-complex' is built by individual organisms, populations and communities (more than one population). This 'organism-complex' in the world of music represents the different hierarchical interactions included within: the individuals, who interact with each other in terms of music, the groups of people that interact amongst them in terms of one form of music and finally a "higher, community level involves the interactions among the various worlds of music" (Titon 2020, 156). This conception is not linearly strict like a scientific

[34] For further information consider "Table 2.1 Factor affecting choice of sonic gesture" from Alice Boyle and Ellen Waterman , "The Ecology of Musical Performance", in *Current Directions in Ecomusicology: Music, Nature, Environment* (2016, 30). The table portrays comparisons between ethnomusicology and behavioural animal ecology, which identifies the different factors that influence the 'sonic gesture'.

notion of the ecosystem. In the world of music, an individual can belong to different music populations, like the world of jazz and the world of rock.

> The musical habitat includes both physical and cultural factors of the musical environment such as ideas about music, sound and sound-producing instruments, recording studios, media, venues, musical education and transmission, and the economics of music – indeed, music as cultural production and a cultural domain – which relate to the health of musical individuals, populations and communities. (Titon 2020, 156)

One could argue the limitations of this view of a musical ecosystem, questioning the correlation between the musical field of studies and the science behind ecology. Nevertheless, and as previously argued, the view of ecology can be broadened to a humanistic perspective that considers the relationships of humans and their environment. The musical performance ecology gathers individual concepts and ideas, such as sustainability, relationships, interactions, resonance and modes of communication, and perceives them in unity. Music performance is part of a communicative system, and in this system, the performers present musical ideas recoded from their original state, the spectators recode them from their sonic state to ideas shaped by their perspective. The way the performers showcase, in a live setting, their musical pieces influence the audience's perception. Sometimes the recoding can be planned, and other times it is not; this is the case of improvisation, a vital characteristic of some live performances or genres, which is the case of jazz.

4.2. Eco-jazz in the world of performance, the reunion of space, music and people

The idea of eco-jazz embraces the performance of jazz from an ecological perspective. It emphasises the performance as substantially based on the relationships formed at the present moment in time. The process of jazz performance, based on sustainable relationships, involves cognitive and perceptual processes. The jazz performance is embodied, enactive, extended and embedded. Therefore, it is a cognitive process, and a kinesthetic one since it involves bodily activity. Therefore, we will perceive the jazz performance in unity – travelling from the space, music and spectators' perception of music – through this notion. Resorting to concrete examples, we will understand how a presence in time and space enables the performance. Moreover, how it is sustained on ritual, culture and ecology. These

understandings, overall, contribute to a conception of the performance as, ultimately, an (ecological) experience.

4.2.1. The jazz performance: The cognitive, perceptual and kinesthetic process through sound, time and space

This dissertation grounds jazz ecology in the ultimate understanding of performance as an interactive and communicative system. Different types of jazz performances, contexts, venues and dimensions will influence the performance of the jazz players. It is hard to compare a performance in a jazz festival with that in a particular known local jazz bar. The festival attracts more people since it presents a robust and diverse lineup. This lineup might contain different subgenres of jazz, which will attract different niches. An individual might not know artist 'A' or 'B', but because artist 'C', whom they want to see, performs after 'A', they might stay to attend the performance. Moreover, the festival[35] usually attracts more people beyond jazz enthusiasts, thus creating a more diverse audience. As we have understood throughout this work, "[c]ultures provide contact with, and information about, music, but they also inculcate attitudes about musical perception, consumption and participation" (Eisentraut 2012, 20). Even though we are individuals with particular characteristics, our education and experiences shape us and create similar forms as a collective. This uniform shaping depends on the culture the individual belongs to. It is this sense of collectiveness and shared experience that attracts audiences to festivals.

On the other hand, the local jazz bar presents a different atmosphere. In Lisbon, Portugal, we see the effect of the local jazz bar as a place that gathers jazz enthusiasts. The 'Cascais Jazz Club', the 'Hot Club', and even the 'Titanic Sur Mer' are examples of places that have gained the connotation of 'jazz places', where people get together to appreciate the musical format of jazz. Ricardo Pinheiro, in "Jam Sessions in Manhattan as Ritual" (2013), talks about the "jazz scene", which, generally speaking, is a "socially built stage on which a number of players and institutions relate to one another. Musicians, audiences, and other

[35] The focus of this dissertation is on the idea of live performance. Nevertheless, the concept of festival involves different fields of study and can be one to further develop. Authors such as Alessandro Falassi in "Festival: Definition and Morphology" (1987), define it as "periodically recurrent, social occasion in which, through a multiplicity of forms and, a series of coordinated events, participate directly or indirectly and to various degrees, all members of a whole community, united by ethnic, linguistic, religious, historical bonds, and sharing a worldview" (Falassi 1987, 2).

agents of the milieu, for example critics, interact musically and socially in musical venues, universities and other jazz-related institutions" (Pinheiro 2013, 133). These local bars have common characteristics: smaller venues and darker ambiences, which create a more intimate performance between musicians and spectators. Jazz grounds in tradition and history and is associated with night(life), obscurity, and smaller spaces. Therefore, local bars that host weekly sessions become places of the rite, of gatherings to perform and attend a ritual. The configuration of the space ends up carrying a significant influence on the development of the jazz performance.

The two types of jazz performance stated before are good examples of the importance of the location and surrounding environment to the performance's outcome, feelings, and sensations. The local jazz bars typically perform jam sessions, which are based on the improvisation format. Individuals get together to play together; the outcome of the performance is unpredictable. It is "a set of actions with symbolic value, configured by norms that shape jazz performance, and by decisions of the actors involved" (Pinheiro 2013, 133). As the idea of performance, it is compared to a ritual, with a particular sequence, time, gestures, objects, and performed in a specific place.

The literature focused on the ecological performance of jazz is not extensive. Instead, we are presented with more musical theory analysis of jazz and its representation of a communicative system, which is consensual amongst authors. In "The Ensemble as Plural Subject" (2017), Hagberg emphasises the interesting notions that, as stated before, make jazz plural, even though it is shaped in individual parts by individual minds. He states:

> The *collective* nature of the intentional-improvisational project of jazz performance seems, at a glance, impossible: minds have intentions, and even though we readily recognize that minds can enter into social relationships and interact with the external world, nevertheless at a fundamental level and anterior to any such relational interaction, minds are by definition—autonomous, private, and hermetically contained. (Hagberg 2017, 300-301)

The author acknowledges that the mental process of music creation in jazz requires thought and practice and is acquired by intense studying. This process is primarily individual, and the development of the improvisational performance is also individual. However, the fascinating point is that blending individual minds collectively is the core of the jazz performance. Moreover, considering the minor assembly of jazz and jam sessions, Pinheiro

(2014) makes interesting reflections on the academic literature of this matter. Pinheiro states that authors such as Cameron (1954) and Nelson (1995) reinforce an idea that the jazz performance process creates a sense of detachment between performers, audiences and society, which contributes to "the problematic stereotype of amoral, non-literate, impulsive and instinctive characters" (Pinheiro 2014, 341) associated with the jazz performers.[36] These notions oppose the core of this dissertation because they devalue the importance that each part contributes to the performance, glorifying the musical process and repressing the importance of the ecology of interaction embedded in the performance.

A crucial part of the jazz performance is improvisation. The jazz ensemble and their improvisational performance goes through a cognitive a perceptual process. Frank Tirro, in "Constructive Elements in Jazz Improvisation", designates jazz improvisation as a "mystical art of performing music" (1974, 285), which represents a cognitive process and creative artistic practice. The jazz player can utilise part of his or her past work; the musician does not necessarily start on a blank page but creates musical cycles with a beginning and an end. Typically, a jazz improviser can create a specific sound identifiable to his or her persona. However, the group works in individual mental processes in the jazz performance by following the rhythm and formulating their solos to create a collective, cohesive performance. Frank Tirro describes in an evident form how the jazz group works to create a musical piece:

> Jazz improvisers commit the changes to memory, and these soloists depend upon the rhythm section—usually piano, bass, and drums—to maintain this structure throughout the performance of a piece. In this way, the soloist becomes responsible to "make the changes," […]. Likewise, the rhythm section has its own responsibilities. The drummer "keeps time," that is, "lays down the beat." If ever a concept of invariable tactus were valid, its practical application is demonstrated by the jazz drummer […]. The concrescence of piano and bass with the drum completes the substructure, which organises and measures the improvisation, for the bass sounds roots at structural points and the piano adds complete chords in a variety of manners depending on the style and the individual. […] [T]wo elements of a schema that define form are invariable: time and changes. (1974, 287)

Nevertheless, some essential processes inherent to the jazz performance need to come forth.[37] Ed Hutchins's article "Cognitive Ecology" regards "the study of cognitive

[36] To further explore these ideas of separation of jazz musicians and the audiences, see Howard Becker (1951), Alan Merriam and Raymond Mack (I960), and Aaron Esman (1951).

[37] By no means do I intend to dive further into the technicality of jazz improvisation. Works like Ted Gioia's *How to Listen to Jazz* (2016), Mark Levine's *The Jazz Theory Book* (1995) and Frank Tirro's "Constructive Elements in Jazz Improvisation" (1974) broaden the understanding of the musically technical side of the jazz live performance work

phenomena in context" (2010, 705), which means that we apply a contextual understanding of the cognitive phenomena considering the environments where it functions. Research on the concept "4E Cognition" has been developed on the role of the body in thinking. It tributes the contact between the organism and the environment and the role of emotion in conceptualisation processes. These processes happen mainly through placeness and the sensations of our bodies. "4E Cognition" stands for embodied: the cognitive process centred in bodily experiences; enactive: because it depends on characteristics of the activity of the individual organism; extended: since the minds extend in physical form through time and space; and, finally, embedded: for cognition depends on actualities regarding the relationship of individuals with their environment (4E Cognition Group n.d.).

Improvisation is musical bodies telling stories, communicating in a language that is not speech but music. It consists of a cognitive, perceptual process that results in a bodily experience. Like the 'cognitive ecology' and '4E cognition' concepts talk about the mental process when relating to the environment; also, jazz represents a mental process intrinsic in producing improvisational pieces. Vijay Iyer understands the improvised performance as a cohesive cluster of individuals minds into one body (2004, 395). Music perception and cognition represent embodied situated activities because they are dependable on the limits of our bodies and the ecological, social and cultural contexts of our surroundings. The environment affects not only the music produced but also the audiences' listening and experiencing abilities.

Talking about the sensations our bodies go through when attending a live jazz performance, is talking about the concept of 'kinesthetics'. Kinesthetics in jazz improvisation portrays the "sensation of bodily position, presence, or movement resulting from tactile sensation and from vestibular input" (Iyer 2004, 397). Therefore, we rely upon kinesthetics for physical activity. In a jazz musical performance, we treat sound and kinesthetic dimensions as an interaction that considers the relationship between the space and the body; playing an instrument involves the coordination of the body, hands, fingers, and breathing. Thelonious Monk is an excellent example of increased aural imagination to explore the different possibilities in relating the body with the instrument. Iyer describes Monk's pieces as full of:

> explicitly pianistic peculiarities, including the repeated use of pendular fourths, fifths, sixths, and sevenths (as in "Misterioso" and "Let's Call This"), whole-tone runs and patterns ("Four in One"), major- and minor-second dyads ("Monk's Point," "Light Blue"), and rapid figurations and ornamental filigrees ("Trinkle, Tinkle"). (2004, 398)

These musical characteristics are created by the hand of the pianist. Monk utilised simple musical patterns in unconventional forms, exploring rhythm and melody into new improvisational potentials. In this sense, the musician's embodied cognition (exploration of the cognitive processes of bodily experiences) is intensely based on how he/she relates with the instrument, communicating the relationship through sound and music. It is not just a pre-planned performance but an expression of the connection between musician and instrument.

The jazz performance embodies cognitive, perceptual and kinesthetic processes. The experience we take from it can only reach its true full potential when it is experienced live. The recording of jazz allows for experiencing the music, however, the intakes we receive from the presence in time and space with people in a community allow for meaning-making and bodily experience. In the jazz performance, besides the musical dynamics as meaning-making, we add meaning through the body that produces music and the body that receives it, leaving traces of feeling, emotion and sensations of placeness. The jazz musician, by improvising, can create his/her own aesthetic, which is valuable for their recognition—having a 'sound' does not refer only to the timbre, rhythm, melody, but instead to a whole musical personality embedded in the performance. As the musician George Lewis argues, sound, the personality of the musician and their sensibility towards music, space and others, are intrinsic to their musical performance, stating that "[n]otions of personhood are transmitted via sounds, and sounds become signs for deeper levels of meaning beyond pitches and intervals" (Lewis 1996, 117).

Furthermore, associated with sound and space in the sphere of music and performance, there is time. The body in the environment needs time to situate, to become aware. Just like the performers need time to situate in space, warm up, and understand the feel of the audience, the spectators need time to get in touch with the music, the rhythm of the performance, and their surroundings. Talking, theatre, playing a game, and musical performance have in common the sense of "shared time" between the performing people and those attending (Iyer 2004, 401).

Therefore, jazz performances embrace a world of characteristics that are common to our experiences in life. The book by Paul Rinzler, *The Contradictions of Jazz* (2008), explores the dichotomies of jazz and how even when carrying oppositions, they do not clash but complement each other. Improvisation and experience, in Rinzler's perspective, share a "real-time process" inherent to on spot creation. The experience and improvisation of jazz share time; the action takes possession of a specific temporal moment and, once it begins, it cannot be changed. Although a performance manages to transcend time because the perception of reality is influenced by music, its experience is taken in the present (Rinzler 2008, 159). The live jazz performance and life experience are not repeatable because they are unique in the time-space-people spectrum. The idea that a musician could recreate "note for note" is almost unattainable even if the "improviser played an improvisation from memory, it would not be an improvisation, it would be merely a memorized performance" (Rinzler 2008, 160).

Two other vital notions are the idea of unity between mind and body and the concept of 'embodied'. Rinzler states that the mind and the body do not work independently but instead function together. The mind and the body are trained to act as one, with improvised music that is not "mentally conceived and then executed very quickly after its conception, but is music that is mentally/bodily conceived and thus executed" (Rinzler 2008, 161). Moreover, embodiment comes as the understanding of the cognitive processes inherent to the mind/body and the perception of the world through the senses, which once again unite the mind and the body (Rinzler 2008, 162).

Even though we understand jazz music as a higher form of music, it is still attached to traditional, ritualistic, cultural, and ecological grounds. It connects sound, people, and space, into one united whole, making it a fascinating case study with contradictions and questionings of how it influences social interactions in the perceptual relationships humans detain with art, the senses and our surroundings.

4.2.2. Exemplifying jazz live performance

The way jazz performance is analysed covers how the interaction between performers, with audiences in space and time, creates the best possible condition for the establishment of the performance. We know so far that several factors can affect the outcome of the performance and the way it touches the audience; such factors can be the length, rhythm, rate, and style of the piece. Unfortunately, attending jazz performances in different places with different styles has not been an option due to the world's sanitary crisis. The Covid-19 pandemic questioned our everyday routines, challenged our mindsets, and deeply defied the traditional arts and cultural practices. Now, let us imagine the pandemic without the use of technology. We would not be able to keep anything going. Education, businesses, leisure, everything stopped, and we transferred everything to online formats due to mandatory confinement. The cultural and artistic sector was one of the most harmed since the impossibility of performing was a certainty, even though technology was used as an alternative means to perform. Later on, confinement regulations and restrictive distancing legislations imposed limitations on the typical constructions of the traditional performance. Nearly two years of social and cultural constraints deeply affected the production of performing arts. Nevertheless, it also propelled the creation of innovative ways of providing arts and culture to the millions confined in their home.

Considering the physical limitations and the current crisis, I have chosen to analyse three different examples of past jazz performances in other parts of the world, spaces, times, and contexts to portray the jazz performance's cultural ecology. The choice was calculated firstly taking into account the social restrictions imposed by the Covid-19 pandemic and secondly on the possibility of analysing a diverse set of performance spaces, time and contexts. Choosing a jazz performance that I attended and grounding the analysis on my experience would generate biased thinking since it would be built upon my personal preference and experience. The goal is to perceive the performance from an outside point of view. Nevertheless, as we can conclude from what was stated previously in this dissertation, we cannot truly understand the experiences of the people who attended. The aim is to understand the behaviour generated by the performance and space on both the audiences and performers. The three chosen examples are the performance of Thelonious Monk Quartet at Palais des Beaux-Arts in Brussels (Ebjazz93 1963), Kamasi Washington at the Regent Theatre in

Downtown L.A, Washington (KamasiWashington 2016) and Gregory Porter's performance at the Rheingau Musik Festival in Germany (Melody Heart 2018). They represent the jazz performance as a whole communicative system powered by three different parts: music, space and people.

The performance of Thelonious Monk Quartet at Palais des Beaux-Arts in Brussels (1963) represents a jazz concert with a particular context and time. It takes place in the 60s in Brussels at an auditorium built for performances. In the 60s, jazz music was no longer popular music; jazz was understood as erudite music falling into the same conception as classical music. This stylistic shift began in 1930 with the rise of modernism and the birth of bebop. Thelonious Monk represents change and challenge in jazz history, namely on the piano conventions in jazz performance.[38]

Nevertheless, Monk's truthfulness to his jazz traditions made his music not as appealing to the mass population as popular jazz. The spaces and concerts of jazz were dependent on the stylistic fragment of jazz being played. Monk's performance mostly implied sitting in a designated place, creating an ambience where the sole focus is on the cultural product being presented. This organisation reminisces the concept of 'cloakroom communities' (Bauman 2000, 200), the audiences dressed for the occasion and gathered for the common purpose of watching Thelonious Monk perform.

Monk's style is unique in its form, given the choices of notes in improvisations, its rhythm and its absent presence. Candace Allen's article for *The Guardian*, "The Demons and Obsessions of Jazz Genius Thelonious Monk" (2017), refers to his "habit of getting up and dancing to the solos of his bandmates" as "they postulated shaman mysticism and voodoo ritual rather than simple exultation and grooving to the beats" (Allen 2017). This description of the way Monk supported and reacted to his peers' solo illustrates how a performer is both a musician and a spectator. Despite Monk's bodily reactions to his peers' solo, the audience's experience is more restricted in bodily expressions. This does not mean, however, that the music performed does not evoke emotion or expression. The 'feel' of the music is what differentiates musical genres, and it is based on the construction of the music and respective stylistic choices. Still, in this performance, the spectators, in their seated position, observe

[38] The book *The History of Jazz* by Ted Gioia (2021) explores the evolution of modernist era of jazz in the chapter "Modern Jazz" (2021, 237-326).

and absorb the music produced, even if in a contained form. The seat assignment creates impositions on how the performance is perceived. Each seat will have different sonorities because the sound propagation and visual perspectives also differ, creating various perceptions on the same performance.

Moreover, attention is shared between fewer elements. Since there is no freedom of movement in space, the focus is mainly on the music. The spectators will absorb the music being performed through mind and body processes, reacting accordingly. In contradiction, Monk as a performer moves freely through space, in a physical way—getting up, dancing through the stage; and in a sonic perspective—occupying the compositional space, with moments of silence and simple melodies.

Thelonious Monk's music and improvisation are simple in notes but complex in musicality, attracting more people because of his mysterious approach to music. His music varies in how the jazz school has progressed to today's standards. The evolution of music explores other genres, allowing fusion and opening possibilities in constructing sound—Kamasi Washington's performance at the Regent Theatre in Downtown L.A (2016) presents a different feel from Monk's, especially in the way the music evokes the expression of the audiences. In the first example, the jazz performance is portrayed as more restrained, having the audience in a seated position, a 'cloakroom community' of jazz connoisseurs. In Washington's case, the feel changes. It resembles more a pop concert where people are standing, moving and dancing to the music.

Kamasi Washington's sound varies from Monk's by brushing his jazz with gospel, pop, and R&B strokes. His performances remind us of Baptist masses, with choirs and rhythmic chants. Contrarily to most jazz sessions or concerts, some of Washington's performances have the audience standing, contributing to a more inclusive atmosphere (since his music works as a spiritual awakening). In this performance, we are talking about a smaller space filled with people standing, creating a closer ambience in the relationship spectrum of audience-space-performers. In the article "Kamasi Washington Review - Spiritual Sax That Packs a Punch" (2018), Empire describes Washington as "a welcoming musician". She states that "[w]hile rigorous, his atmospheres are inclusive, not elitist; you get the feeling this band leader is more of a shepherd, not an ego with airbags" (Empire, 2018). In Washington's performance at the Regent Theatre in Downtown L.A. (2016), we can see, in a clear way,

the aspect of sustainable ritual relationships produced in Kamasi's performance. The space is filled with people and music in an organisational and dark ambience that enhances the possible experiences of both audience and performers. In the dark space, with no designated place or order of spectators, the closeness between individuals and the performance induces the ritual to form. Nevertheless, this performance still complies with the historical jazz narrative, as an underground show – in dark, small spaces – almost as outcasts of society that gather in community to experience jazz.

Facing a different style of jazz, we have Gregory Porter's work. Gregory Porter is, in my opinion, one of today's jazz artists that most resembles the swing era of jazz. His tone, rhythms, and stylistic choices go along with artists like Nat King Cole (who was an inspiration for Porter), Ella Fitzgerald, Glenn Miller and Sarah Vaughn. Instead of complying with the typical idea of jazz concerts (dark and small spaces), Gregory Porter's performance at the Rheingau Musik Festival in Germany took place in a beautiful outside setting, the Wiesbaden Kurpark. The placeness of jazz performance in an outside setting can create a different atmosphere because more elements are involved. We learned in the third chapter how shared attention contributes to the perception of the music performance by audiences. A jazz concert in an outside setting has musical dialogue and possesses other elements such as incorporating the surrounding nature into the performance, the visual aspect, and the sonic one. In this last example, the audience's perception is also affected by the trees, birds and water, ultimately taking part in the performance. The attention is shared by the music, performers, the other spectators, and the surrounding natural elements.

Nevertheless, even though the show takes place in an outside setting, which gives audiences the freedom to explore the space with music, the spectators take a seated position, thus revealing a contradiction regarding the association of space with freedom. The audience members interact with each other, and the performers interact with them; there is enough liberty to move and explore spatial possibilities. Even so, we face a more restricted interaction compared to Kamasi Washington's performance. Similarly to Thelonious Monk's performance, the biggest agents in interaction are still the performers, who act and react to the sound produced. The jazz performance still establishes a form of division between the artists and the spectators.

Space, people and music relate through cognitive processes with the mind and body as one. The space choice can affect the sound propagation, contributing to a change in the perception of the musical performance. An outside setting has a different feel and ambience from a small, dark, underground bar. Gregory Porter's performance at the Rheingau Musik Festival (2018) demonstrates these contradictions inherent to jazz: the freedom to explore space and relate to the surroundings and the ability to relate in a restricted form with jazz music. Nonetheless, the organisation of the space combined with Porter's warm melodic voice and nostalgic music brings back almost a past soul into the present moment creating a humble, calm and harmonious performance.

These concerts are moments of gathering with cultural significance. People get together bonded by a common musical taste. Because music enhances our senses and emotions, it can also heighten the feeling of belonging to a place, to a group. We can withdraw some essential aspects from these examples, firstly, how the choice of space resonates with the music performed—the choice of the venues for artists and vice versa is not random because specific musical genres fit better in particular places. Kamasi Washington's concert at the Regent Theatre, given its physical conditions, can contribute to a greater sense of ritual. At the same time, Porter's performance at the Wiesbaden Kurpark creates a more serene and cinematographic feeling. Secondly, how the space organisation contributes to the performances' perception, the allocation of the stage, the spectators, the bar contribute to the experiencing of the performance. At the Wiesbaden Kurpark, Gregory Porter's stage is located next to the lake, not in front of it. The spectators are also next to the lake, not in front of it or with their backs to it, demonstrating the intention to include outside elements in the performance setting. Thirdly, the posture of the audience towards the performance and the way it changes according to time and context. Kamasi Washington's performance was more inclusive than the other two examples in the sense of the impositions given by the space and the performance itself—the organisation of space, seating, light/darkness. Comparing Thelonious Monk's performance and Gregory Porter's, the 60s jazz, understood as high art, imposed a conceptual restriction on the audience's posture towards the performance. Finally, the last aspect regards the way sonority and musicality affect the audiences' overall reaction and, therefore, the perceptual outcome of the performance. Jazz music evolved as other genres blended with it, which is why the performance became more inclusive. Kamasi Washington's conception of jazz bonds with gospel and R&B, Gregory Porter explores jazz

in what is understood as ‘popular jazz music’. In the words of Ted Gioia, “the jazz musician soon proved to be a restless soul, at one moment fostering the tradition, at another shattering it, mindless of the pieces” (2021, 238). These three artists showcase different jazz musicality. The rhythms, volumes, progressions, and solos differ, which evokes different sensations to the one who experiences it. They challenged jazz instrumentalisation and were able to transform it, whilst still keeping it traditional.

These examples of the jazz performance portray how sounds integrate into different spaces, with unique people in distinct cultures, generating unique cultural and ecological performances based on the relationships with the intervenients. Music performance and how viewers bodily experience it vary according to the musical genre. Anyone who experiences classical music does not feel it in the same way as pop, jazz, or rock music. Rock musicians and spectators have a much more prevalent physical reaction than classical music, and jazz lies between these two. In jazz, the body responds with complicity through kinesthesia as “[t]he patterning motifs in a jazz musician’s work represent a meshing of kinaesthetic and cognitive representation” (Johnson 2002, 106). These jazz artists develop and portray their art relying upon the cognitive processes inherent to music-making, improvisation, and the body’s interaction with space and objects.

Hence, we come across the depiction of the communicative system underlined in the live performance: the individual cognitive process of mind/body, the collective musical experience and improvisation, the community gathering of musicians and spectators and finally, the integration and relation of the body with the surrounding space.

4.2.3. Jazz: Ritually grounded, culturally embedded and ecologically sustained

Jazz prioritises the sonic sense of communication, a collective improvisation through individual cognition, and a collective experience regulated by social, cultural, and political contexts. Jazz is understood as the epitome of African American music, rooted in the struggles of African Americans as they fought for their human rights and in the musical revolution powered by globalisation. Like many other genres, jazz is constantly evolving and reinventing itself. Great names like Miles Davis gained recognition as jazz icons by powering change in jazz, even though today there is still a struggle to make jazz heard

amongst the other sounds that fill our lives. Like Johnson states in "Jazz as Cultural Practice":

> Apart from the unpredictable contributions of other musicians in the band space, most jazz performances occur in the relatively unregulated soundscapes of pubs, dances, restaurants, malls, picnics or promotions, where they have to negotiate with audience interactivity, conversation and sounds such as dancers, dinnerware, glasses, poker machines and the intrusion of street noise. (2002, 105)

The idea built upon artists like Miles Davis, John Coltrane or Thelonious Monk, of the jazz player as a genius (whose art form is solely focused on the artist), falls short concerning the actual reach of jazz music. The condition for its creation relates more to the sonic and acoustic conditions of the space and awareness of the audiences to whom the performance is for, regulated by a time and moment that vanishes and cannot be precisely reproduced in a live format. Performing jazz involves a communicative system; the soundscape is for a jazz performance what the text is for a theatrical performance. The space, people, and music are all necessary conditions for the performance to happen.

Today, it still prevails the notion that to understand jazz one must be a musician;[39] that jazz is music played from musician to musician. In reality, jazz, previously understood as popular music, brought people together because the sound raised a sense of community and shared social struggles. This musical genre is about opposing but not mutually excluding the notions that characterise it: it is individual, but it interconnects people and the environment; it is about taking the initiative but also about being receptive to ideas; it is about freedom of expression but also about carrying responsibilities and obligations towards others; it is about exploring creative possibilities but also about committing to the tradition and history that jazz conveys (Rinzler 2008,10).

Jazz music is the genre that can most easily have a parallel with everyday sounds and silences. Its performative characters are fascinating because of the constant contradiction yet harmonious blend as a cultural practice.[40] We refer to the jazz performance as ritualistic and

[39] See Gerald Early and Ingrid Monson "Why Jazz Still Matters" (2019).

[40] Once again, referring to Paul Rinzler's *The Contradiction of Jazz* (2008), four dualities are imposed as the representation of jazz: individualism and interconnectedness, assertion and openness, freedom and responsibility, and creativity and tradition. Thereby, understating these oppositions guides towards the association of jazz with experiential event, that, even if representing dualities, portrays a unified whole in the form of musical performance.

ecologically grounded since it showcases a form of ritual, maybe not in a literal form, but as a reference to activities that happen as a community. Rachel Harris and Barley Norton, in "Introduction: Ritual Music and Communism", refer to ritual as a "space for ethnic identity, social action, resistance, nationalism, and political and state authority and control" (2002, 1). The authors emphasise this notion of ritual music addressed to musical performance since performing music can partake into traditions, religions and routines. Just like Schechner dissects performance by signalling key characteristics that allow it to happen, Harris and Norton also highlight aspects that make music a source of power, social and cultural ritual. These aspects are the time, the space, the social values, the expression of emotion, the promotion of healing and the invocation/repelling of spirits (Harris and Norton 2002, 1). The ritual music and the ritual performance are samples of "shared time" and "shared ideas" in the sense that a common interest brings people together, building relationships and communities

On the other hand, Richard Schechner draws the example of the *kaiko*, a celebration by the Tsembaga Maring tribe in Papua New Guinea (2003, 113). As the author explains, *kaiko* means dancing. It is a celebration demonstrated through dance performance inspired by transforming martial techniques into art; it lasts for a year and follows the cycle of agriculture and production of goods. This performance was described as entertainment and represented the groundwork from an entire economic and political relationship between the different groups within the Maring (113). The rituals of Tsembaga are an example of how people communicate, how motivations and experiences influence behaviour and, finally, how there is a performative connotation implied in any sort of relationship and interaction.

This performative ritual embraces a social phenomenon and is applied to different perspectives and 'boxes'. "The rituals of Tsembaga are ethological as well as cultural. They are also ecological: the kaiko is a means of organising the Tsembaga's relationship to their neighbors, to their lands and goods, to their gardens and hunting ranges" (Schechner 2003, 117). The *kaiko* represents a cultural phenomenon because it demonstrates an assortment of messages that are put together to create a communicative system that is specific to this group; they all share the *kaiko* experience and values. In the same thought, the *kaiko* ritual is ecological since it deals with different levels of ecology: the social, the mental and the

environmental, where it "questions the whole of subjectivity and capitalistic power formations" (Guatarri 2008, 35).[41]

Music is a form of art embedded into this communicative system which we are grasping. It involves a mental, a social and environmental sphere through music, people and space. So, it connects to our experiences. Raymond Williams (1965) believed that art's central role was to convey an experience. The goal of transmitting to the spectators an experience is embedded into the processes of mind/body, and the spectators, to whom art is produced, receive it by living the present moment. Williams exemplifies with the use of rhythm by stating that:

> rhythm is a way of transmitting a description of experience, in such a way that the experience is re-created in the person receiving it, not merely as an 'abstraction' or an 'emotion' but as a physical effect on the organism – on the blood, on the breathing, on the physical patterns of the brain. (Williams 1965, 40-41)

Rhythm, tempo, melody, movement, breathing, attention, light, and darkness; are all ideas of jazz live performances. Even in recording form, a live jazz performance can only truly be experienced at the present moment, from a group of musicians to a group of spectators. Jazz affects the social interactions between spectators, performers, and the surrounding through its musical structure and mind/body relationships.

Jazz is a complex musical heritage that constantly evolves into something new and different, even though it still carries traces of its origins and traditions. Still, the study of the jazz performance from an ecological point of view deserves more interest and development since the attention is usually attributed more to its structure, stylistic choices and musicality, leaving aside the spectators and environments in which the performance is embedded. It is

[41] *The Three Ecologies* (2008 [1989]) by Guattari reevaluates our everyday practices and social and aesthetical values. To do so, Guattari divides the notion of ecology into three branches: The mental, the social and the environmental ecology (2008, 19-20). The "mental ecology" is an ecology that essentially concerns a relational act between subjectivity and objectivity. It is the understanding of our body and how it relates to the outside world. Thus, this mental ecology becomes more of a perceptual ecology, perhaps by trying to understand how the world is constituted, with subjects relationally creating responses to objects. In this ecology, there is mediation as our bodies, senses, and perceptions allow for sociability between other subjects and objects. The second ecology is called the "social ecology", where social relations are questioned. We recognise that we, as humans, have a role within the environment because we interact with what surrounds us. Here we include the subjectivity of our relations, experiences and what they mean to us as individuals and communities (39). The relation between objectification and materiality, exemplified as "environmental ecology", approaches a scientific perspective on ecology; it is the observation of the visible and palpable world: we are part of it, but at the same time, we can distance ourselves from it and observe, analyse and reflect on it.

my contention that a performance is based on a performative object presented in a particular time-space spectrum by a group of actors for a group of spectators. All these parts are indispensable for the achievement of a given performance. The relationships formed between object, space-time, spectators and actors demonstrate culturally relevant interactions with ecological connotations. There is an elaboration of relationships between objectivity and materiality, subjectivity and sociability and finally, the perceptual mediation based on the subject/body relationship. The jazz performance involves showcasing a performative object (jazz music) that involves a relationship between the space where it is performed, the object performed, and the co-presence of actors and spectators. We base the performative relationship on the different perceptual interactions that go through a transformation from shared experiences and by the destruction of dichotomies at the performative level.

Under what conditions could we possibly understand the internal connotations of the experiences we go through when attending a jazz live performance? Space, music and people impact cultural productions. Nevertheless, there is still room to explore this topic further. Jazz demonstrates a sustainable musical dialogue by unifying individual minds in musical performance through its specific musicality and improvisational character, but the 21st century technological evolution impacts the transformation and progress of musical genres. Today, we are witnessing the rise of artists embracing musical globalisation and, therefore, incorporating it into their sound. In pop or rock, sound changes according to trends, as they use synthesizers in music to produce an '80s sound'. For jazz, however, improvisation, solos, jam sessions, particular keys, and compositions are part of a cultural legacy and of the goal of keeping traditions and musical heritage alive. As Ted Gioia states: "Such an attitude defies casual experimentation. […] Of course, musical practices have evolved over time, even in traditional cultures, but at the slowest of paces" (2021, 237). Jazz reflects culture and musical tradition and evolves with the possibilities of reinventing itself while keeping its tradition alive.

CONCLUSION

Jazz live performances are fascinating cultural products that provide moments of gathering and experiences of music. This musical genre carries history and tradition, and at the same time, it is constantly reinventing itself. This dissertation explored the live jazz performance and its implications in sound, music, space and people.

Music is an essential part of our lives; it is part of our evolution as humans and our development as individuals. Music is an internationalised phenomenon with cultural, social, economic and physical impacts and, academically speaking, its study has been married to its cognitive and political-cultural character. Moreover, concerts and performances are important moments of sociability and for building a sense of community; even if that community is momentary, the sensation of integration still prevails. Departing from the notion that concerts and performances have significant cultural importance, jazz was chosen because it portrays a different perspective than most genres regarding its performative traditions. Jazz is an innovative musical genre but at the same time traditional; it is collective but also individual. Its audience usually displays a contained posture, and they are seen as 'connoisseurs' of music, thus differing from other concert-goers merely looking for entertainment.

Based on the interdisciplinary approach of Culture Studies, this dissertation elaborated on the notion of jazz live performance as fundamentally based on music, space and people. Through the literature review, we have understood music, performers, and audiences in separate forms. Nevertheless, Humanities and Social Sciences emphasise relationships. As argued throughout this dissertation, the goal is not to separate the material from the subjective, subject from object, mind from body or humans from the environment. The aim is to understand the performance through the relationships inherent in it. To understand the ways jazz influences social interactions in each performative surrounding and how space affects the performance is to look into a scheme composed of three ends: jazz music, audience and space, which belong inside a sphere called performance.

Firstly, we developed the notions of sound and music regarding the evolutionary importance of musicality in humans. Music is organised sound embodied into different categories that

produce emotions and sensations. The musical habitat, like our ecosystem, is sustained through the relationships between individuals and populations where they interact and share knowledge. To understand jazz in specific as a musical genre is to understand the context that resulted in its birth. It evolved from a form of popular music to a state of high art. It extensively focuses on the mind/body relationships between the musicians and their instruments; it is not about following a specific composition but 'feeling' the rhythm and following it through improvisations. As stated in the first chapter, jazz music still carries the predominant weight of the past generation innovations. Yet, it still evolves in our globalised era, even if blended with other influences and genres.

Secondly, for every performance, there is a space where it takes place. This space can be different for each performance: the street music musician will have a different ambience than, for example, Wynton Marsalis. Humans relate to space by perceiving it, moving in it and creating their notion of reality. We do so through our senses; that is why sound is so essential to understanding space – we can understand the dimension, how filled it is, and its possibilities by hearing and being attentive. As far as jazz music is concerned, space has great importance, not only for the ability to travel, since it moved from city to city, from the local bar to concert hall, but also because the space dimension will convey familiarity or more intimacy in a given concert. An outdoor jazz concert provides more freedom to circulate, which can be good to explore the possibilities of establishing relationships with different sounds like water or birds, but it can also distract audiences from the music. Nevertheless, we associate small and dark spaces with jazz music, creating a propitious ambience for the musical relationships.

Thirdly, we explored the audiences. Music is played to an audience; however, jazz live music still carries some contradictions. These contradictions refer to the understanding of this musical genre as an individualistic form of music, focused mainly on one soloist, which diminishes the importance of spectators to the performance. Nevertheless, we cannot conceive an idea of performance without the presence of an audience. Spectators are individuals that affect and are affected by the music being played. Their structure of emotions in a live performance is caused by experience in social events. In a concert, we must understand that the spectators are provided with a cultural object whose attention is shared with the other individuals and the space where the performance happens. Jazz live performances create a musical community through a bond between individuals based on

their musical preferences. Jazz audiences are characterised by a standard search for an experience provided by the type of jazz music, even though compared to other musical genres like rock and pop, jazz audiences do not participate as actively (they act as silent performers guided by the music). Still, they can influence the musicians to change their rhythm, melody, and tempo through their reactions to the music.

Finally, the great focus of this dissertation was on the musical performance itself, which is composed of music, the performers and the audience. We explored the performance in the performativity in jazz music as a bodily experience for both the musicians and audience, which takes place in a space-time spectrum. Performance in its live format carries a different significance than a recorded one because we experience it in the present moment. However, analysing it can be a challenge since we want to explore it not from a personal opinion and point of view but from an outside perspective.

As this dissertation tried to argue, the jazz live performance is sustained by the ecological relationships between music, space, and the people who gather. It embodies the individual cognitive processes and the social processes inherent in the moment of the musical performance between musicians, audiences, and space.

The proposed tripartite scheme shows interactive influences on each end because music, instruments, and musicians create a musical dialogue that affects the audience's perception, emotions, actions, and sensations. Audiences, in turn, contribute to the performative environment by filling this space with their presence and responding to music with movement. This environment influences the music being played by altering the acoustics and propagation of sound with other elements present in space, contributing to the produced sound.

However, the process of developing this work turned out to be an intricate one since literature, as stated, focuses intensely on the subject or object and not on the relational system that is the jazz live performance. There are limitations on this research that extend to the subjectivity of the arguments, mainly when referring to reactions to music and emotions felt since the process of attending a musical performance challenges the conscious and unconscious acknowledgement of our bodies. Moreover, the extension of the concepts developed here is immeasurable. Music, space, individuals and performance are transdisciplinary ideas, vast and complex. They all allude to other concepts like the body,

mind, experience, and time, which refer to conceptualising the meaning-making process through relationships. Nevertheless, for this dissertation, I had to rely significantly on critical thinking to draw connections in specific for the jazz live performance.

The last two years have challenged all forms of performance, technological advancements, creativity, resilience, and the strength of humans. The Covid-19 pandemic proved to be an awakening of systemic problems in our society. Whether it is the ways income is concentrated in one part of society, how the budget distribution is focused mainly on businesses or private investments, the diminishing importance we give to culture and even systemic racial discrimination. Musicians, performers, and small artists all suffered tremendously by not performing and not showcasing their art. New methodologies, practices and technologies born out of this sanitary crisis are also elements of value for further research and analysis on digitalisation and embodiment in digital performances. Understanding that new technologies and means of performing impact the social, cultural and economic spheres of live performances, specifically in jazz, where the live performance is the epitome of the experience, what does it mean to have it through a different technological means? And how does it change the outcome of the performance?

Nevertheless, challenging times called for creative measures, online concerts on different platforms took place, and collective music was produced in individual homes. The inability to attend music concerts turned out to be a significant barrier in diving further into this research. I could not truly appreciate the sense of live performance in different places with different people since everything was mediated by a computer or a cell phone. Understanding the limitations of this work is also understanding how we could further develop this transdisciplinary research. How can jazz, as such an influential musical product, relate further and more explicitly with individuals? Jazz is slowly evolving, now challenging the traditional rules of the performance and the genre; artists like Kamasi Washington challenge the conservative conception of jazz by bending the border of musical genre and creating 'his jazz'. How can we innovate space by creating a layout more propitious to intimate, interactive relationships between musician-music-spectators? These are ideas we could integrate on a phenomenological study that targets the musical performance of jazz into distinct scenarios: a natural setting, a symbiosis of natural with man-made infrastructure and finally, a set done solely for the intention of performing. This proposal could help organise a jazz performance to understand how space enhances or

influences the performance and how audiences and musicians relate to the performance in the different settings.

These relations are relevant for numerous fields: culture, performance, economic, political, sociological, and cognitive studies. The relationships we form are an integral part of the experience in any performance. While there are some studies regarding this matter to jazz music, there is still room to explore further and develop the spatial and bodily relations with music in the overall experience of the live performance. Space represents freedom and numerous possibilities. Music is in constant evolution, and jazz live performances are opportunities to express emotions, create relations, and explore the options of relating space, people, and music into one whole. Thus, we can say that jazz represents a significant cultural product with numerous opportunities to explore and create new conversations.

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ANNEX

Q1 "What are your motivations to attend jazz live performances"

#	Name	1
1	Pedro	To attend not only to the main concert, but also the possibility to attend two new bands and, at last, it is always a format that "breaks" with the everyday freedom of who lives in the city centre
2	Rui	The first motivation is to experience the imagination and creativity of the artist on that particular moment. The second reason is the sound of live instruments and their resonance on your body.
3	Mats	To experience something new - although to entirely new to be honest. To get a good feeling - inspired, happy, sad - all that music can. I listen to other sorts of music as well, so jazz enriched in the way that there is something exciting in the unknown, surprises etc. To be a part of the feeling in the audience - to belong in a way. To learn something - I play jazz too.
4	Karlo	Live music - generally to "feel" music and relax with the flow
5	Inês	I feel that jazz, in part due to its origins as the music of the black individual in the US, is full of feeling and emotion, it carries the pain and suffering of the black American slave, but also the joy of liberation. Hence, jazz live performances have the advantage (in comparison to the recorded mediums) of allowing the establishment of connections between musicians and audiences on an emotional level. (However, one must also state that in general, and according to my perception, in the Portuguese \"scene\" most of the musicians are white and are part of the higher classes of society, given that both the cost of the instruments and attending a music school are reserved to a social elite that can afford them.)
6	Ar Michelle	The smoothness of the music and musicianship of the band. The atmosphere.
7	Veli	Sense of improvisational music appeal me. I believe that improvisation reflects pure emotion of performer.
8	Teresita	My main motivations were because it was a live jazz performance of music included in Woody Allen films. I liked that interdisciplinarity of being able to relive and maybe even see clips while listening to live music.
9	Nuno	for taste, or work occasion.
10	Liliana	the musical style is unique for the possibility of improvising in general. Any theme can be played twice in a row, but its interpretation can always be different. The environment and energy of the musicians define what is being played. It is undoubtedly special.
11	João	I listen a lot of times jazz... and when we have a good record all is different. Currently we have many kinds of formats available in market... but all start in the studios. When the sound is well recorded... the sound in our equipment is superb... like as live.
12	Diogo	Enjoy the experience the musicians bring through their interpretation of the music.
13	Bruno	Especially the atmosphere and the music.
14	Hal	I love seeing the collaboration and interaction between the musicians as they both listen intently to one another and simultaneously create art in real time.
15	Simon	That is a very good question. So, I am a jazz musician, and for me it is, I think, that this idea changed in the last couple of months where it was not possible to go there. But so, the energy coming from the stage and the exchange with the musicians between the musicians. So, I like to sit in the first row just in front of the stage to get us most of the energy that happens on the stage as possible, and especially in small concert in small clubs where musicians can react to each other and where the audience is close to the stage, that is what I really like.
16	Aleksandra	It can be a relaxing, stimulating & inspiring experience; the uniqueness/novelty of the live performance is attractive too; it can also be an opportunity to interact with people we share common interest with; I like to support the artists

17	Lucie	what I love about just live performances. I think, while my motivation is to see it live right, it has become such a different character than listening to it on a CD or on your phone or your stereo at home. It is something you need to experience, right? So, I guess my motivation to attend is to get a glimpse of that experience.
18	Pedro	For 30 years whenever I visit European cities, I need to look for jazz clubs common to leave the music a deliberating environment, you feel more than what you're able to explain. it is almost like an addiction. music, small spaces, intense vibration, noises, music, silences, outbursts of pleasantness, ecstasy.
19	Sérgio	Enjoy the possibility of seeing great musicians and their interplay.
20	Rita	For entertainment and social reasons. For both times I have been I went with friends that were fans of jazz or that played. Both times I've attended jazz performances they were in bars/pubs, and they were open call improv sessions which made the environment feel causal and social
21	Ioan	I really like, the atmosphere at jazz concerts. Especially when maybe there, somewhere outside, in a smaller venue. I find that jazz music has the power to create magic, and closeness amongst strangers. So, yeah, I like I associate jazz music and jazz gigs with good night out with friends and good wine. And, yeah, I am not an expert in jazz music, but I love to participate in, in this kind of events from time to time.
22	Francisco	The first times I went to watch live jazz performances I would say that mainly out of curiosity, it was not the first genre of music that I started to get used to but because of my curiosity I ended up there. Eventually I realized that there were some details that interested me, and I think that nowadays what makes me more interested in these types of concerts are those same details that I only really have the opportunity to experience at these events.
23	Vasco	Listening to live music, listening to different interpretations, different acoustic that I have at home.
24	António	My motivations to attend live jazz performances are generally related to the quality of musicians. Jazz music is a mix of craftsmanship, emotion, and creativity. When a musician is able communicate some kind of emotion with a discourse that is aesthetical it is very pleasing both to the mind and the heart
25	Erik	Because it don't mean a thing if you ain't got that swing.
26	Henrique	Attending live jazz performances is a much more real experience in terms of sound quality. You can also feel the emotions of those playing though their expressions and movements. Being surrounded by people who enjoy jazz also elevates the experience because you feel that everyone is there to enjoy the music
27	Gaia	Because people need art to give meaning to their life. Jazz is the direct representation of the unconscious, materialized through a musical language. My first motivation to attend a jazz live performance is to be inspired.

Fig A 1.1- Answers Question 1

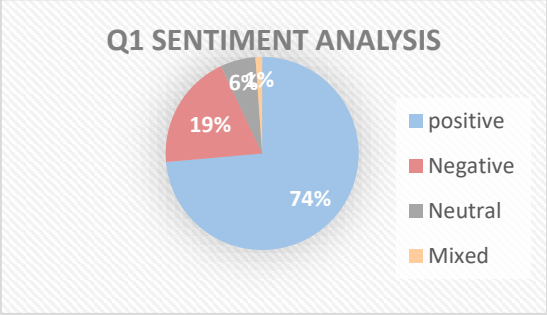

Fig A 1.2 – Sentiment Analysis Question 1

Fig A 1.3 – Word Cloud Question 1

Q2 **"**What makes a jazz performance successful?"

#	**Name**	The Line Up	The setting of the performance	The acoustics of the place	The interactions produced between the musicians and the audiences	The people I go with
1	Pedro	5	4	4	5	3
2	Rui	5	5	5	2	1
3	Mats	3	4	4	5	5
4	Karlo	1	4	4	5	1
5	Inês	4	3	2	5	4
6	Ar Michelle	5	5	5	5	3
7	Veli	1	3	5	5	2
8	Teresita	3	4	5	4	5
9	Nuno	4	4	4	5	3
10	Liliana	5	5	3	3	4
11	João	5	5	5	4	3
12	Diogo	4	3	4	3	5
13	Bruno	3	5	4	5	2
14	Hal	2	3	4	1	5
15	Simon	4	4	5	5	2
16	Aleksandra	4	4	4	4	2
17	Lucie	1	5	3	5	5
18	Pedro	4	3	4	5	2
19	Sérgio	3	3	5	4	3
20	Rita	4	3	5	5	5
21	Ioan	4	5	3	4	5
22	Francisco	3	4	4	2	5
23	Vasco	5	5	4	5	4
24	António	5	4	4	5	2
25	Erik	5	4	4	1	4
26	Henrique	5	5	5	3	3
27	Gaia	1	3	5	4	2

Fig A 2.1 –Question 2's rankings

	1	2	3	4	5		AVG
The Line Up	4	1	5	8	9	27	3.62962963
The setting of the performance	0	0	8	10	9	27	4.03703704
The acoustics of the place	0	1	3	13	10	27	4.18518519
The interactions produced between the musicians and the audiences	2	2	3	6	14	27	4.03703704
The people I go with	2	7	6	4	8	27	3.33333333

Fig A 2.2 – Totals and averages on the rankings of Question 2

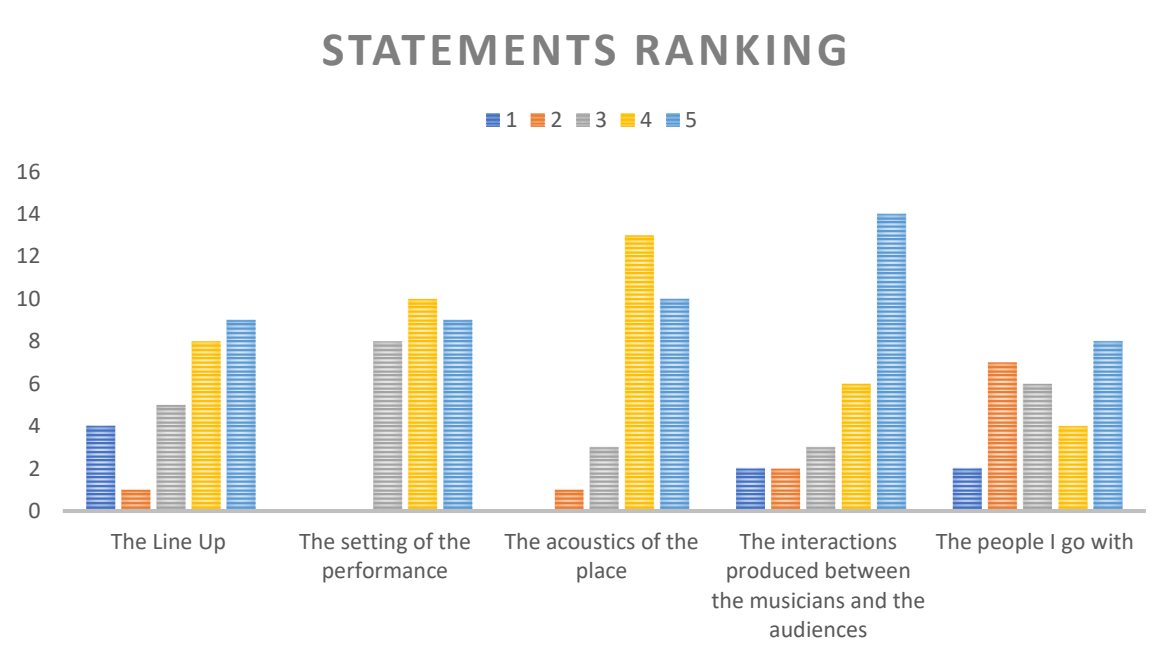

Fig A 2.3- Graphic Statement Ranking of Question 2

Q3 "Remind yourself of the last jazz performance you attended. What were the main feelings and emotions you experienced?"

#		REACTIONS
1	Pedro	Happiness Calmness Appreciation Excitement Nostalgia
2	Rui	Curiosity Happiness Anxiety Appreciation Excitement Attentiveness
3	Mats	Happiness Appreciation Excitement Attentiveness
4	Karlo	Calmness
5	Inês	Curiosity Appreciation Excitement Attentiveness Nostalgia
6	Ar Michelle Veli	Happiness Appreciation Attentiveness Nostalgia
7	Veli	Curiosity Appreciation Excitement
8	Teresita	Happiness Appreciation
9	Nuno	Curiosity Confusion Appreciation Excitement Attentiveness Nostalgia
10	Liliana	Happiness Calmness Appreciation Excitement Nostalgia Other
11	Joao	Curiosity Calmness Appreciation Sadness Nostalgia
12	Diogo	Happiness Calmness Appreciation Sadness Attentiveness Other
13	Bruno	Happiness Calmness Appreciation Excitement
14	Hal	Happiness Appreciation Excitement Attentiveness
15	Simon	Happiness Appreciation Excitement Attentiveness
16	Aleksandra	Curiosity Happiness Calmness Appreciation Excitement Attentiveness
17	Lucie	Curiosity Calmness Confusion Appreciation Excitement Nostalgia
18	Pedro	Happiness Confusion Appreciation Excitement
19	Sérgio	Curiosity Happiness Appreciation Excitement
20	Rita	Curiosity Confusion Appreciation Excitement
21	Ioan	Happiness Calmness Appreciation Nostalgia
22	Francisco	Curiosity Happiness Calmness Confusion Appreciation Disappointment Excitement Sadness Attentiveness Nostalgia
23	Vasco	Curiosity Happiness Disappointment
24	António	Curiosity Happiness Appreciation Excitement Attentiveness
25	Erik	Happiness Appreciation Excitement Attentiveness
26	Henrique	Happiness Calmness Appreciation Attentiveness
27	Gaia	Curiosity Happiness Calmness Appreciation Nostalgia

Fig A3.1 - Emotions Selections of Question 3

+	Curiosity	13
-	Stress	0
+	Happiness	20
-	Anxiety	1
+	Calmness	12
-	Confusion	5
+	Appreciation	25
-	Disappointment	2
+	Excitement	18
-	Sadness	3
+	Attentiveness	13
+	Nostalgia	10
	Other	2
		124

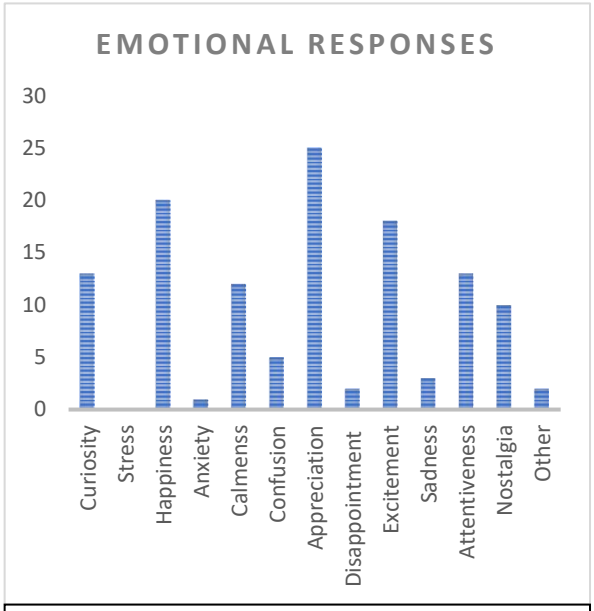

Fig A 3.2- Grouping of Emotional Responses

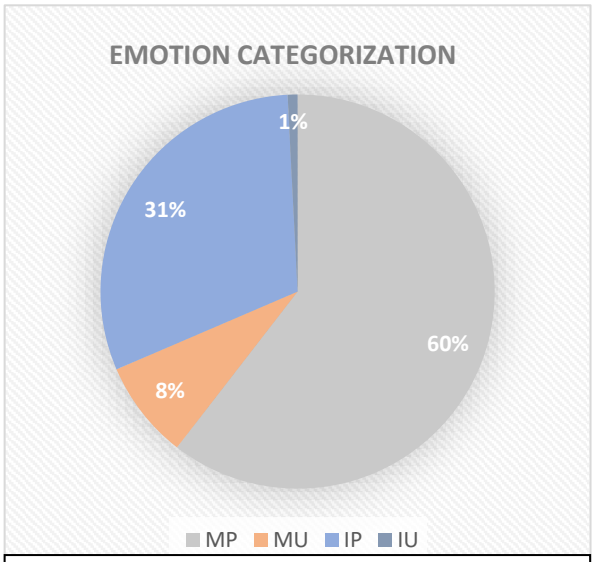

Fig A 3.3- Categorization of emotions

Q4 "If you selected the option 'other' in the previous question, please state below what alternative feelings and emotions you experienced, in a jazz live performance."

	Name	**4**
1	Pedro	-
2	Rui	-
3	Mats	Belonging
4	Karlo	-
5	Inês	-
6	Ar Michelle	-
7	Veli	-
8	Teresita	-
9	Nuno	-
10	Liliana	The sensation of attending a unique moment. A feeling of lightness, as if your soul just hovered when listening to the music
11	João	-
12	Diogo	A visceral feeling, I get when listening to some music.
13	Bruno	-
14	Hal	-
15	Simon	-
16	Aleksandra	-
17	Lucie	-
18	Pedro	-
19	Sérgio	-
20	Rita	-
21	Ioan	-
22	Francisco	-
23	Vasco	-
24	António	-
25	Erik	-
26	Henrique	-
27	Gaia	-

Fig A 4.1 –Answer to question number 4

Q5 "Could you briefly describe what role you believe you play, as an audience member, in a live music performance?"

#	Name	5
1	Pedro	I am just another who enjoys the same musical genre, the same references and the same stage environment
2	Rui	The audience is there to be taken and guided by the artists throughout the whole performance. If there is no interaction apart from the music itself, then you should listen and focus on what the artist is telling. If there are other forms of interaction you should be open minded and trust the performers. "Give back to the artists" as it will probably enhance the overall experience.
3	Mats	Since I think it is important for me myself, I would say that the role is to communicate to the musicians (appreciation) after numbers and after solos) and to my fellows in the audience so that we can all feel that we are part of and share something precious.
4	Karlo	n/a
5	Inês	Here I will be considering the scenario of a live music performance that occurs in a space where the musicians can see and interact with the audience without any barriers - they can be spatial gaps or accentuated height differences, or even more "imagined" barriers, created through formal social protocols -, given that I believe that is the only way that a relation between musicians and audience can take place. In a context like the one I described, I believe that the role I play as an audience member (and the role of the audience as a whole) can deeply influence the musicians' performance and emotional state during a performance: if the audience is engaged with the performance and demonstrates to be liking it, the musicians will absorb those emotions and play them out in the music. In other types of spaces, where the gap between the audience and the musicians is more real, the relation is more artificial, more formal, and thus I believe that the role of the audience does not matter as much to the musicians, since they become only spectators and never are a part of the performance.
6	Ar Michelle	Being able to tell others about my experience. It is truly important to be able to paint a clear picture of what you heard and saw.
7	Veli	As an audience, I believe we have an important role on musician's motivation. And ı believe for a musician It is like expression you are feeling to a good friend who can really understand you and empathy with you.
8	Teresita	Merely spectator, there was no interaction.
9	Nuno	a listener is also a performer. He has a great responsibility; the message is also present in the listener
10	Liliana	The energy of the audience is essential for a concert, and I am not talking about the applause, all the attention and tension created between audience and artist is essential for the concert to happen. The role of the spectators is to fully enjoy each moment. Let every emotion, that moment can bring you, flow.
11	João	I usually listen to the music and saw the musicians.
12	Diogo	I believe the audience fuels the performer.
13	Bruno	I am not an expert on jazz but I know a few things. While with other genres I look for a specific artist, in jazz I value more the vibe that is transmitted by the artists. In other words, at a jazz concert, I like to sit quietly in the back of the room enjoying everything however I usually applaud loudly at the end of each song.

14	Hal	Listening attentively, staying quiet during the performance, and responding with applause after solos and with interaction with the musicians.
15	Simon	Yeah, As I am a jazz musician, I know how important the exchange between the musicians and the audience is, although I think the audience is not always aware of it. Um, I think it is important that you give attention to the people on stage. I think it is important, that you somehow interact in a good manner. It can also be too much when people start shouting too many things happening on stage, but it is always so, it is always a big difference. It really depends on the setting. If you are on a festival and maybe it is an indie festival and the jazz band place there, it is, and people start dancing. That is totally different than when you are in a club in a jazz club, where the audience is supposed to sit and just clap for the solo ways. And at the end of the performance. Um, I think it is totally important, and there is always a two-way communication
16	Aleksandra	Providing feedback to the artists that what they do is valued by attending and being attentive to their performances, supporting the continuation of this art form by engagement and potentially providing financial contributions (i.e. by paying for attendance)
17	Lucie	I would like to say it's a big role, because any kind of live performance live from the reaction of the audience, right? and I believe jazz is no different in that aspect. Although, thinking about it, I already attended some jazz live performances where I felt the audience I could not get in at all because I was not part of it, because just simply the musicians on the stage. We are so focused on each other and really reacting towards each other that the audience did not matter too much. because they interact so much. It's not like a band that has, you know, rehearsed it before and can focus on the audience experience. It sometimes seems more of this exclusive performance status of being on stage and communicating with each other. The audience feels more, sort like, more as a privilege to watch what is happening up there. I think that is something I experienced a lot in jazz performances, less inclusive but more privileged to be there, but not in a bad way. I think the audience member More as a contribution and setting the atmosphere around it. Right? Depending on their calmly reacting towards on stage or they go completely crazy. I feel like the audience is setting their own atmosphere, and then there are the performers. That is the other atmosphere, I always felt there is quite a distinction.
18	Pedro	The spectator that radiates joy, but at the same time knows how to practise the right containments in the right moment, it exists 1000 atmospheres that enables us to act in thousands of moments in a performance like this, maybe the mystique of all in presence, environment, main actors (musicians), secondary actors (audience). or aren't we all just one?
19	Sérgio	Enthusiast; connoisseur
20	Rita	My first thought was to say a passive role, but since both sessions were improve sessions, the musicians probably reacted to the energy/reactions from the audience
21	Ioan	Well, I think, as any live performance be it music or theatre, um cannot exist without an audience. So basically, I am the receiver of the art of the music. But I am also I'm also giving back to the musicians my reactions, my feelings, my energy, uh, my applause, of course. But also, I think jazz is very connected to emotions and to listening and hearing. And yeah, so I think the audience plays a very important role in the I know symbiosis of a jazz performance.
22	Francisco	I think my role varies a lot depending on the performance I'm watching live, more specifically in the jazz performances in my experience they give me some freedom in the choice of my role and I can have a more participative attitude or a more introspective attitude where I am I feel free to explore the details that interest me the most.
23	Vasco	Without the musicians' request for interaction, I am just a listener!

24	António	An audience member participates through enrolling with the music. In jazz that may mean dancing, if the context is appropriate - if the music is more upbeat like bebop, or if the concert is standing - or just paying quiet attention to the music. Generally, in jazz, people cheer at the end of each musicians' solo
25	Erik	I just keep quiet during the bass solo and say "Yeah" and clap when it's appropriate
26	Henrique	My role is to support the artists by cheering them up whenever they play well, so that they feel grateful
27	Gaia	The audience can greatly determine the performance itself of the musician. When the musicians are on stage, they can feel a lot of the energy of the audience. So the main role that in my opinion the audience has is first of all to respect the performance and the musicians, and secondly to contribute positively to the feedback of energies.

Fig A 5.1 –Question 5's answers

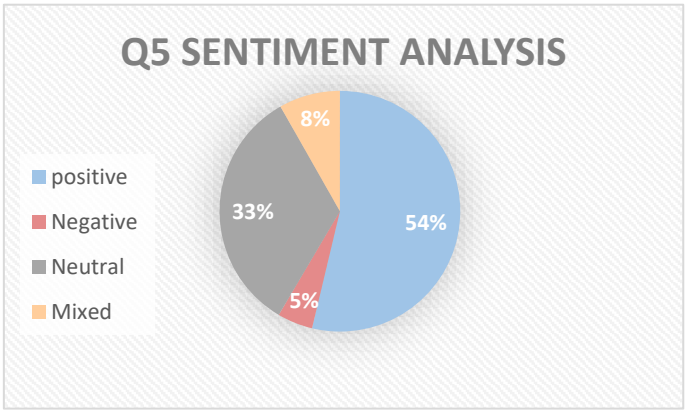

Fig A 5.2- Sentiment analysis to Question 5

Fig A 5.3 – Word Cloud of Question 5's answers

Q6 "Think about your experience in a jazz live performance. What main reactions/responses do you have as an interaction with the music being played?"

#	Name	
1	Pedro	Body movement
2	Rui	Body movement Foot tapping Voice expressions
3	Mats	Body movement Foot tapping Voice expressions Clapping
4	Karlo	Body movement Foot tapping I just observe
5	Ines	Body movement Foot tapping
6	Ar Michelle	Body movement Foot tapping
7	Veli	Foot tapping I just observe
8	Teresita	Clapping Foot tapping
9	Nuno	Body movement Foot tapping Voice expressions Clapping
10	Liliana	Body movement Foot tapping Voice expressions Clapping
11	Joao	Voice expressions I just observe
12	Diogo	Foot tapping Voice expressions
13	Bruno	Body movement Foot tapping I just observe
14	Hal	Body movement Foot tapping Voice expressions Clapping
15	Simon	Body movement Foot tapping Clapping
16	Aleksandra	Body movement Foot tapping Voice expressions Clapping
17	Lucie	Body movement Foot tapping
18	Pedro	Foot tapping Clapping
19	Sérgio	Foot tapping I just observe
20	Rita	Body movement Foot tapping
21	Ioan	Foot tapping Clapping
22	Francisco	Body movement Foot tapping I just observe
23	Vasco	Body movement Foot tapping I just observe
24	António	Body movement Voice expressions Clapping
25	Erik	Body movement Foot tapping Voice expressions Clapping
26	Henrique	Body movement Foot tapping Clapping
27	Gaia	Body movement Voice expressions Clapping

Fig A 6.1 – Question 6's selections

Body movement	20
Foot tapping	23
Voice expressions	11
Clapping	13
I just observe	7
	74

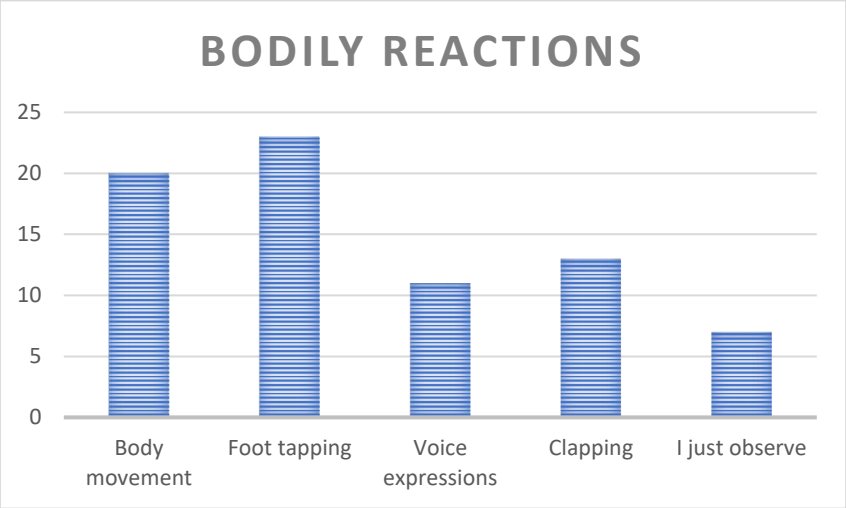

Fig A 6.2 – Bodily Reactions

Q7 "What do you think makes a jazz live performance different from performances of other musical genres?"

#	Name	7
1	Pedro	The musical style itself, from its composition, the contrast of rhythm, space for greater improvisation / spontaneity, the articulation between the notes, and a different relationship with the audience (+ intimate)
2	Rui	The level of concentration of the audience, the respect for the other participants in the experience, being the artists and the audience. "Fado" also shares this characteristic. Also, no show is equal to another, the solos will be different and the way the musicians interact with each other will be different.
3	Mats	First, I want to say that there is a vast variety of jazz live performances as with other music performances. My ideal of a jazz live performance is a not to big jazz club where the audience is close to the musicians. I have attended live performances that were large but still could sustain a good communication between musicians and audience. What I appreciate with jazz is both the interaction with the musicians and that with others in the audience (you do not have that in opera or classic music). It can work with rock concerts, but it is not the same thing as a club (I have attended rock live performances in clubs and that is good). What jazz provides besides all the others are the improvisational aspect of the performance. Jazz is improvisation of the music, which can include ones etc as well as bodily expressions of the performing artists. However, it is the musical improvisation that stands out (often sustained by bodily expressions) and provides something that evoke emotions etc in the audience. I am sensitive to the interaction between musicians here because it can give me a sense of being part even of that if the musicians are communication well between each other's, but that could also happen in a rock concert although it is more likely among jazz musicians and especially in a club setting.
4	Karlo	Simply the interaction between musicians
5	Inês	As I mentioned in the first response, jazz is a music style that can convey emotion in a way that I believe is accessible to most people, making it a music style that is easily likable and felt by the public. Beyond the emotional aspect, jazz performances tend to adapt to the audience and the context of the performance through improvisation, not conforming to a perhaps more limiting idea of a song.
6	Ar Michelle	It creates an atmosphere that allows you to either be social, or just kick back and relax and enjoy the jazz. No pressure to stand up and get involved. You are able to create memories.
7	Veli	Freely improvisation is the main difference.
8	Teresita	The live component, being able to improvise.
9	Nuno	Freedom, integrity, and interaction
10	Liliana	It is a very specific style. Not everyone likes or has an interest in listening to a Classic jazz concert, even with all the influence that jazz has in practically all musical styles. I think what makes it so different is the versatility within the genre. There are so many variants of jazz, there are immense interpretations of the same themes, and all this wealth of information makes the musical style more interesting.
11	João	Sentimental music to describe the problems around of the main Subject.
12	Diogo	The improvisation mostly.

13	Bruno	Honestly, I think it is really the atmosphere created between the artist, the music, and who is watching. Creating a perfect triangle that takes us to a nice place.
14	Hal	It is the improvisational nature of the artform, and the strong focus on collaboration and communication between the musicians in real time in front of a live audience.
15	Simon	there is so much that is created on the spot in the very moment that depends on the whole environment. Um, so the audience, the venue, the location, everything that happens there has an impact on the playing. And I think this. This is also true for other, styles of music. But because so much of jazz's performance happens in the moment and it is not fixed. It is not really fixed before it is important. The level of spontaneity and the experience of the moment is higher than in music that has less interaction.
16	Aleksandra	improvisation, uniqueness of each performance & novelty that it provides; complexity of the music
17	Lucie	I think what makes it different is that jazz. For me, it is supposed to be live. It does not need to justify a live performance. So, what I mean by that is it becomes only truly alive. I feel the same time. Music. Sure, it is when it is played live right. It does not need to imitate any recordings or because often there are no recordings nowadays there are. But it does not need to imitate anything or be better than anything. It just needs to it just "need to be there and be present". We want other genres, looking at rock pop funk. They have other settings, right, like especially in the recording age. It became something that was more readily accepted as a recording or, and therefore had to kind of live up to certain standard during the performance that had to perform certain songs in the right way or in that specific way. Because people learn to know more the recordings in the actual performance right, which is also something quite debatable, if that is good or not. But I feel jazz is just allowed to be in the present in the moment it is allowed to. It allows for mistakes as well and therefore it is very different to music from other genres
18	Pedro	everything, the environment, the interaction, in a performance of a small band that takes us to X Izzy with small solos and swing.
19	Sérgio	Musician's level of music knowledge, as well as high level of technical capacities
20	Rita	From my experience, the improv has made them different as well as less clear song structure in a way
21	Ioan	I think it is much more intimate. It creates a connection between musicians and the crowd. Somehow, I cannot imagine jazz, playing on a big stage. Of course, I know there is a lot of, uh, concerts and festivals and whatever, but I think jazz is music That creates a very strong bond between the musicians, uh, and the audience and, I always enjoy it and look for it in smaller settings.
22	Francisco	In my opinion art in general is about details. What makes Jazz different is its details. I think it is up to each person to pick up the details that he finds interesting for himself, making it impossible to get an objective idea of what makes Jazz different. The details that I am most predicted are undoubtedly around the technical capacity of the musicians and this correlation with an audience. In jazz concerts they explore rhythms, tempos and scales in a super interesting way that is not done in other genres.
23	Vasco	Interpretive freedom, and normally not be amplified
24	António	Jazz performances are different because there is a huge mix of influences to the expression of the musicians. So, in the end, it is all about the musician's sensibility to communicate in a manner that is intelligent and, more importantly, emotionally meaningful, in a wide span of possibilities of expression.

25	Erik	The spontaneity and freshness of every performance.
26	Henrique	besides the kind of music, the dynamics of a jazz performance are also unique - the solos, the interactions between the players are more profound
27	Gaia	Personally, what I really like about jazz performances is the intimacy that is created between the musicians and the audience.

Fig A 7.1 –Question 7's answers

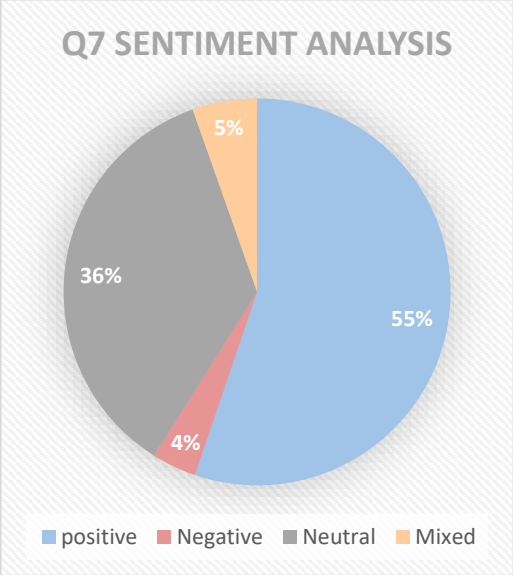

Fig A 7.2- Sentiment analysis to Question 5

Fig A 7.3 – Word Cloud of Question 7's answers

Q8 "How do you think the space, where the performance happens, influences both the performers and audiences in their reaction and actions?"

#	Name	8
1	Pedro	It influences the possibility of a closer / closer relationship with the artist or the band; acoustic quality, which ends up contributing in the way the audience later interacts / relates with the band.
2	Rui	smaller places tend to make the audience quieter. There is a bigger focus on the artists themselves and not on outside distractions. I think the artists tend to be more genuine when in small venues, more vulnerable.
3	Mats	The space or even ambiance of the place have impact on the interaction between people in the audience as well as between the musicians and the audience. Small cosy clubs are best I think - closeness. In larger places I think distance as well as "level" (small difference in how high up or down musicians are in relation to audience is important - to much distance/level difference prevents communication - that is bad for all. I am sure professional musicians can do a good job on a stage if they have communication, thus providing a good show, but then I would be more of a spectator. It I could have a nice time together with others in the audience - that would be great, but something would still be missing. In that case I could as well be in a cinema where they played a recorded concert.
4	Karlo	Space influences both audience due to ambient and acoustics and musicians if the place is dark and quiet - simply they can tell better story
5	Inês	Definitely: more formal spaces tend to lead to more formal reactions - like staying quiet during the performance and only clapping when it is over -, and more informal contexts enable more genuine reactions from the public - like tapping your foot, humming, perhaps even singing and dancing.
6	Ar Michelle	It greatly influences it. If it is a large venue it doesn't allow the performance to feel personal. I like the personal intimate experience of a live jazz concert. Small venues or parks.
7	Veli	Acoustic quality of the space effects on sound quality. It effects both sides at least subconscious level.
8	Teresita	Usually where the room is smaller, it tends to be cosier, and people feel more at ease. Usually in small performances also cocktails and food are served and that makes people even happier when watching a performance.
9	Nuno	The acoustics of a room, or even outdoors, can condition the work of the performer. The acoustic aspects that were worked within a given rehearsal space may not be the same as in the place where it is played. Even with the soundcheck, it is one thing to have an empty auditorium, and another thing to play with the room full.
10	Liliana	A concert is a sensory show, and it is essential to activate the maximum senses in the viewer. Hearing is the first and most important, but the vision makes everything that the viewer is hearing "visible". The image that is transmitted at the concert, by the stage and by the artists, creates the story that we are hearing in the music.
11	João	Calm... darkness... Magic
12	Diogo	The setting sets the mood for the performance. A small room in low light will bring the people together it will make for an intimate experience on the other hand a larger room fully lit is more suited for a "party" like show.
13	Bruno	Having already had the opportunity to experience a concert both inside and outside. And they really are different experiences. Outside was an experience, I would say, more relaxed and with more distracting elements, which sometimes leads to not being able to enjoy the music as much as I would like. However, inside, the feeling is that we are there to enjoy the sound.

14	Hal	I enjoy a more intimate setting, not only from an acoustic perspective, but also in terms of the interaction between the musicians and the audience, and the ability of the audience members to fully appreciate the nuances of the music.
15	Simon	It is different when a band plays in a squat house or in a large jazz club. So, the ambiance, um, the food that has been served before. If there is food, the way the musicians are appreciated in that venue, the way, if there is a bar, people talking, and so I think everything influences the performance and the audience, and it is a two-way communication.
16	Aleksandra	I think that space is very important in creating the right atmosphere, setting for the performance, i.e., in smaller, cosy venues an intimate, interactive atmosphere between the performers and audience can be created which would be much more difficult in a huge concert hall for instance
17	Lucie	for me as an audience member, the space matters a lot. I do not know why, but for me, especially when it comes to jazz like probably, I am, I do not know, I just follow some typical cliches. But if I come to this tiny, smoky bar, we had this great bar in Berlin, which was tiny, and you had to go down the narrow staircase and you had the tiny bar space where we are serving only three different types of drinks, and you were sitting there in these old, crooked chairs and there was just one light lighting up the stage. That is for me, beautiful. It sets my tension attention span as well and my intimacy with the music I am about to experience, right. For me, jazz is a lot about creating this intimate atmosphere, which I think is beautiful, which I was lacking a little. Here in Lisbon, I do not remember the name of the club down in *Cais*, right that also has, like, these Monday jazz evenings. It is also great, but for me it was a bit too, too being to create this intimacy in this stage is high up there, like the musicians were removed from the audience quite drastically, which for me impacted the atmosphere. So, and my reaction to the music writer felt not as eligible to be there and live the music, and I felt more removed. So influences a lot as a musician. I am not sure against I guess as well, right, Although I, as I said in an earlier answer, always feel if it is a larger ensemble of jazz musicians, even if it is just two, they seem so absorbed in their own communication and interaction, they hardly ever seem to really care too much about what is going on around. Of course, that is just my outside perspective. I think it does matter for a musician where he, she, um, is playing.
18	Pedro	Jazz spaces are mythical clubs with a history of generations that carry other generations, it may be a new space, but it carries all the weight of Jazz itself. Jazz is a state of mind.
19	Sérgio	The acoustics, the general ambiance (if it is a historic venue, a beautiful building, who has played there before...) can be very inspiring for the musicians.
20	Rita	The environment will make people react in a certain way or have a certain attitude even before musicians go on stage. Hence it plays an important role on the general feeling of the room / audience
21	Ioan	I think spaces is very, very important. Because if you think of, for example, I do not know a big concert hall. Usually, this type of concert halls is, rather, I do not know, clinical somehow, very clean. Very neat. Very, not personal. I think, it is much harder to create a good connection. And of course, you can have beautiful concerts in huge, huge spaces, like concert halls or whatever, but I think, jazz, concerts are way better in smaller settings. In bars, you know, like we see movies and we read about the history of jazz where it started in smaller bars and New Orleans or on the streets. Or it is a very intimate, intimate experience and very intimate music. So, I think it is very influenced. The performers also, and the audience, right? The space definitely
22	Francisco	A live jazz performance is a production of an event like any other where the setting, the place and space have a strong influence. An afternoon concert in an open space will never be like a concert in an enclosed place in late hours.
23	Vasco	yes

24	António	I believe the space has a crucial role in determining the closeness, or distance, between musicians and audience. If the venue is small, like *titanic sur mer*, the participants are physically close and, therefore, more able to interact. Also, this provides a warmer ambient. When the concert is in a big venue like a theatre, there is less possibility for interaction and the audience fills a role that is merely observant. Also, if the audience is sitting, there is no chance to move
25	Erik	The space in itself is only as important as it contributes to the atmosphere of the performance, in the way it enables certain moods to come more easily to fruition, and how it affects the acoustics.
26	Henrique	they complement the music with the visual aspect
27	Gaia	I am sound engineer so for me, one of the vestments that is most important is the acoustics of the room, which can greatly determine the type of sound that will be perceived. Regarding the question posed; the smaller the space, the more intimacy will be created between the two parties, the opposite will happen if the space is very large (but in this case the interactions between the people themselves will increase, and automatically less attention to performance).

Fig A 8. 1 –Question 8's answers

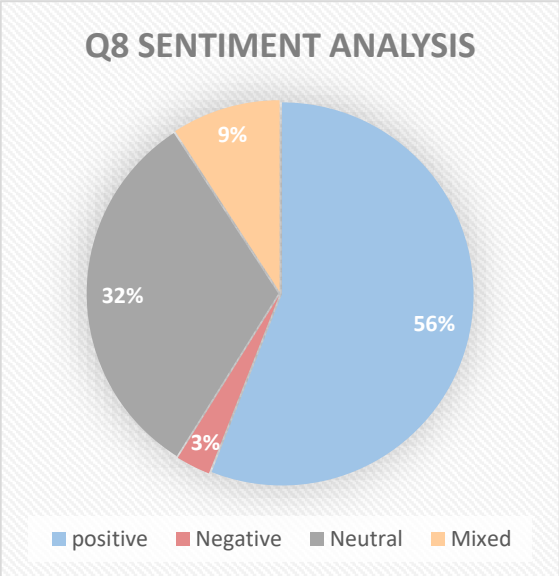

Fig A 8.2- Sentiment analysis to Question8

Fig A 8.3 – Word Cloud of Question 8's answers