Musical Ecologies

Heavy Metal in Rotterdam

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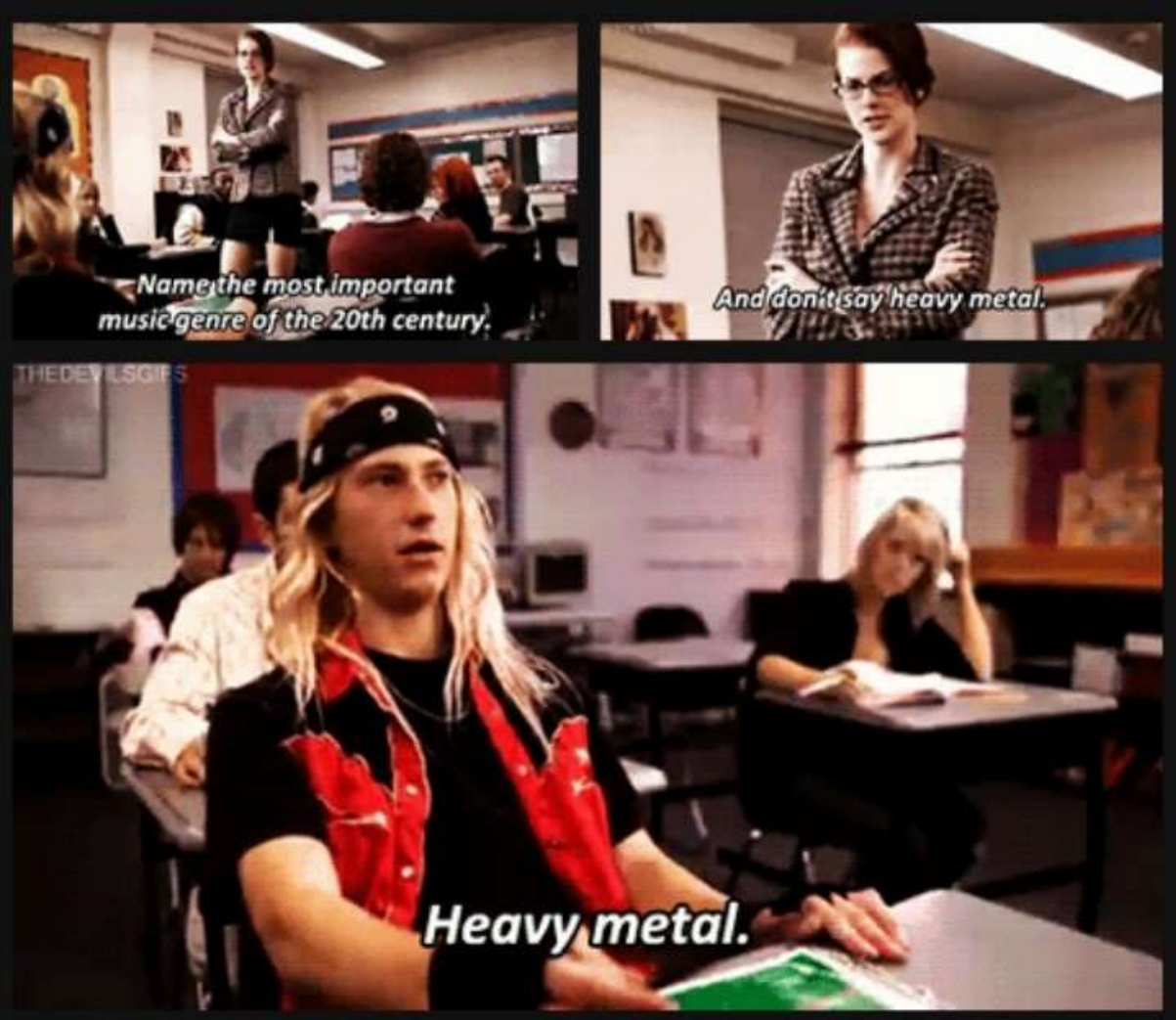Student Number: 505297

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Abstract.

Heavy Metal is a truly global phenomenon, one of the musical genres that has achieved long-lasting status. Although Heavy Metal and the Netherlands share a strong bond seen in the number of Dutch bands that have achieved critical and commercial acclaim worldwide (Berkers & Schaap, 2018), the gap of academic literature in this area is quite significant. Particularly concerning the musical cultures that can be located within cities. Besides the fact that the ecology approach that views music culture as musical ecosystems (Schippers & Grant, 2016) has had relevant developments within the academic field, the same type of studies focused on Heavy Metal have not been particularly popular. Next to this, studies on Heavy Metal music have been mainly focusing on the impacts of the music itself, particularly on minds in development such as teenagers, and on the notions and characteristics of the genre as a sub-culture. This project aimed to contribute to the academic discussion by developing new discoveries. We intended to discover if the Heavy Metal music culture of the Dutch city of Rotterdam could be assessed from a musical ecosystem perspective. Additionally, we have aimed to evaluate the conditions of said ecosystem, particularly in relation to sustainability. By conducting interviews with experts, actors within the musical culture of Heavy Metal (Venue directors, musicians, festival organizers, music journalists, community members), we found that there is indeed a presence of a Heavy Musical Ecosystem, however issues such as, limitations in infrastructure, few social gatherings, lack proper visibility, and mapping complicated our assessment on relation to sustainability. Besides this we found that because of the particular conditions of the Netherlands as a country and its efficient connectivity, the musical ecosystem could be understood more as translocal phenomenon than local. In that sense, members of the Heavy Metal community of Rotterdam can easily and through transport relocate to other cities where they could be witnessed to Heavy Metal events not offered in Rotterdam. We then advocated for future endeavors in the assessment of a Musical Ecosystem for Heavy Metal on a larger national scale to assess the Netherlands as a whole.

Key Words: Heavy Metal, Music culture, Locality, Translocality, Networks, Musical Ecosystems.

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"It's a very empowering kind of music, heavy metal is." Rob Halford

Chapter 1: Introduction:

Music was, is and will be one of the most important artistic expressions for man. And, just like man itself, music has grown and evolved in countless ways and will keep on doing so for as long as we exist. From the development and creation of new and varied musical instruments, passing through the capacity to record, distribute and publish music for commercial purposes, all the way to the rise of the live musical performances as live entertainment, the music industry has been solidified as one of the world's most popular cultural and creative industries. As such type of creative industries, it thrives and feeds directly from some of man's most abstract notions: creativity. This creativity has become one of the main drives behind the industry and its innovation, as countless genres have been developed and are still being developed on what would be seen as a daily basis.

Nowadays and thanks to the vast amount of technological developments that have occurred in recent years, we have access to an incredible amount of musical content without users having to step outside our homes. And while the consumers have benefited the most following an increase in music accessibility, the industry has not been entirely successful in regard to the adaptation required to maintain relevance in all sectors that make up the entire music industry. One of the areas of the music industry that has been the most affected by the new technological developments has been the one related to recording material. A notable consequence from the creation and rise in popularity of alternatives like streaming has been the significant relation reflected in a decrease of the economic revenues for recorded music since the early beginnings of this new technology at the start of the century (Nordgärd, 2013). And while accessibility of content is seen as one of the biggest strengths of the new technologies, the impact that this decline in revenue from music recordings has had in the industry can be seen across different actors. And as consequence of this, musicians throughout the sector have been forced to engage in a higher and more diverse number of activities in order to maintain a sustainable career (Berkers, 2018).

Amongst these new activities, live performances have risen and taken priority as "live music has become a major domain and structuring force in the economy of music" (Holt, 2010, p. 248). With this change, a new and complex network of actors both within the music industries and from sectors outside of it has come to fruition. And to understand the intricacies that this system has, parallelisms have been drawn to concepts from other academic disciplines such as music ecosystems (Schippers & Grant, 2016) and musical ecologies as proposed by Archer (1964). These original approaches take into consideration the interactions and strength of the relationships among the different actors involved (Webster, 2011) as well as the music infrastructure available to sustain a

wide "variety of places to play, rehearse and see all kinds of music" (Frith, Clooan & Williamson, 2009) in a given city to determine whether a music scene can be categorized as healthy or unhealthy.

Of course, within the center of all the changes and innovation that the industry has been through in the past decades, the musical compositions still remain at the core of everything. And among the many musical genres available for listeners, one has taken a particularly interesting development path, since its early days around the 1970s (Sinclair & Dolan, 2015, p. 424). Rather than aiming for commercial/mainstream appeal, this genre looms in the background of the musical spectra. Hidden. But still in plain sight, taking pride in the mystery and darkness that has been known to surround it and that has also become synonym with the music elements that conform it. Said genre is popularly known as Heavy Metal. And while it may have originated in Birmingham, England as many different scholars point the genre's origin to (Sinclair & Dolan, 2015, p. 424; Spracklen, Brown & Kahn-Harris, 2011) its popularity spread making Heavy Metal reach a global scale. Countries like Sweden, Germany, Brazil, and The United States began experimenting and developing their own styles within the genre to the point that "today, in terms of its sound, lyrics, audiences, and so much more, heavy metal is so diverse that is best characterized as meta-genre" (Weinstein, 2014, p. 36). Establishing itself as a niche but nevertheless popular music genre.

Among this global perspective of Heavy Metal, the Netherlands have become an important actor producing and exporting top quality heavy metal acts from a wide diversity of subgenres. Bands like Thanatos, Asphyx, Pestilence, Ayreon, The Gathering, Epica, After Forever and Within Temptation have all achieved worldly known status among the most representative bands from their particular genres. As demonstration of said reached status, the latter group of bands belong to the subgenre known as Symphonic Metal which "became internationally associated with the Netherlands and has become to an extent an important export product, receiving financial support from the national government" (Berkers & Schaap, 2018, p. 61). Yet, despite the relevant contributions made by the Netherlands in relation to heavy metal music, there is not an extensive amount of academic research done in relation to the genre and the country. And there is a significant gap in relation to the studies of the local scenes and musical ecosystems from the different cities within the Netherlands.

The main focus of this project is on the ecology of the live music industry, specifically in Heavy Metal. Within a specific city in the Netherlands, we aimed to assess whether the musical ecology fulfills the requirements to be considered a healthy musical ecology. Because of the aforementioned, the following research question was defined to serve as the main guide throughout the project:

Is there a Heavy Metal ecosystem in Rotterdam?
And to what extent is it sustainable?

1.1: And why does this matter?

While the live music industry and the concept of musical ecologies have a significant body of research (more on that on the following section: literature overview). Focused academic work on Heavy Metal has been mainly developed around the general presumption that Heavy Metal has negative effects and how the minds of younger listeners are affected by the genre. Establishing relationships between Heavy Metal music with reckless behavior, violence, anger and arousal (Arnett, 1991; Lacourse, Claes & Villeneuve, 2001; Gowensmith & Bloom, 1997) are among the most common results found when doing a literature search on the genre. Other sources of academic literature deal more with Heavy Metal in relation to concepts such as tribes or subcultures (Sinclar & Dolar, 2015; Spracklen, Brown & Kahn-Harris, 2011). However, recent contributions of academic work have balanced the debate by building a more positive case for Heavy Metal, where listening to violent music "does not lead to a desensitization to violence as depicted in images" (Sun, Lu, Williams, & Forde Thompson, 2019, p.8). Furthermore, metal fans also experience a sense of empowerment, joy and even peace when listening to their favorite music (Thompson, Geeves, & Olsen, 2018).

The musical ecology of Heavy Metal is not widely represented in the existing academic literature and therefore the scientific argument for the development of this research is to contribute to the academic debate by addressing an existing gap in the available literature on the genre. There is a need for studies on the live aspects of the Heavy Metal scene, the healthiness of its ecosystems, the social interactions and networks that are built thanks to the scenes. Not only does this helps diversify the academic pool available on the genre, but as the live music industry continues to gain dominance, the need for such studies not only holds significance for the academic field, but also for the scenes themselves as they have much to gain through the assessment of their existing strengths and the identification of possible areas of opportunity that would eventually lead to an improvement of the existing conditions of a scene. Having enough academic research on the ecosystems within a city can also contribute to the development of comparative research where scenes from different cities or even different countries are matched against one another based on common and already established indicators that could be easily identified and measure for their proper assessment.

While, the Netherlands possess a powerful Heavy Metal scene, there is very scarce literature on the subject for both The Netherlands as country and for the city of Rotterdam. Besides recent contributions (Berkers & Schaap, 2018), a lot of the scholarly work done on Heavy Metal, deals with

the birthplace of the genre: The United Kingdom, and to a lesser extent to the United States, both considered to be very powerful and relevant representatives of Heavy Metal music on a global level. However, and as previously stated, Heavy Metal is a global phenomenon, a musical genre that transcends borders, and because of this more academic work on the different countries with strong metal scenes is required. The rise of Rotterdam as a cultural city, with a thrilling and multi-layered musical scene full of diversity and a creative agenda makes an interest case of study for our research.

Additionally, Heavy Metal is a genre often looked over by the mainstream media outlets (McNamee, 2007), especially in comparison to more embracing genres like, Pop, Indie-Rock or Hip Hop. And although the very selective/niche nature of the genre makes it difficult for a more mainstream or center positioning within the musical spectrum, it is nevertheless relevant to contribute by generating insight in relation to musical genres that while still popular, often get neglected by a lack of coverage and attention. The importance of covering Heavy Metal would provide those who feel foreign to it a better understanding of the scenes, the genre and the subculture itself. Also from a social standpoint Heavy Metal has gained additional value recently, as according to TuneCore, global platform that helps artists distribute their music on a global scale through different streaming platforms, has revealed Heavy Metal to be the fastest growing genre in the world with an increase of 154% for the year 2018 (Kaufman, 2019).

The preference and popularity of the genre continue to increase, despite its isolated and non-commercial roots present from the very early days of the genre. And because it keeps on growing, evolving and attracting more fans, experts from different fields and disciplines should turn their attention to the genre as a source of academic curiosity. Which is something that is currently happening gradually but with significant advances. In March 2019, London was the host of the first ever World Metal Congress which counted with the support of the Arts Council England for its development. The congress brought " fans, artists, and key industry figures from every time zone together for panels, film premieres, live music, and important conversations about how to take our music and our culture forward" (WMC, 2019) These recent finds prove the need for a more diverse academic work on Heavy Metal that possibly will impact the current debate but that could also be used to understand its social value and the contributions that the genre has, both for the community and for the many different cultural landscapes that it encompasses within the cities where this genre is present.

Chapter 2: Theoretical Framework:

In order to conduct a successful research project, it is of the utmost importance to consult what has already been written about our topic. Said reflection of previous contributions not only works as a solid background by integrating what has already been established as the foundations of the project, but also serves further roles, by functioning as the material that will be referred to for the analysis of our empirical findings. However, it is also relevant and necessary to present a critical perspective while doing the review as it already provides insight by indicating the areas of academic research where more investigation may be necessary to improve our knowledge. Therefore, this section focuses on reviewing the existing literature on the relevant themes to our project. The review begins from the overall, general set of topics and concepts that this project is concerned with, moving into the particular and detailed specifics concepts used with the purpose of achieving a deeper and more detailed understanding.

2.1: Regarding Music

As established before, music is a very powerful expression. It provides mankind with a potentially infinite medium for expressing emotions, it works as an influential communication tool which allows for social and political sentiments to be captured and manifested through an artistic perspective. Contributions like the one from Roy & Dowd (2010) capture this notion and develop it further by stating: "Music is a mode of interaction that expresses and constitutes social relations" (p.2). In this construct the authors give specific relevance to the context and its social and cultural circumstances stressing the role it plays considering it "essential to understanding what music can do and enable" (p.2). A very interesting discussion blooms from the notion of what music is and what it can do, arguing that music has double or even multiple functions considering "how is shaped by and shapes, social arrangements and cultural assumptions" (Roy & Dowd, 2010, p.2). This is but one of many of the different studies and attributes that have been used with music attempting to improve the comprehension of what music is and what does it entail.

The role that music plays (no pun intended) in relation to identity and its construction is another topic that has been covered significantly in the academic field. DeNora (2000) explains: "music may influence how people compose their bodies, how they conduct themselves […] how they feel about themselves, about others and about situations" (p.17). From this we can see music as a resource in which we rely and which can contribute to our development and affirmation of both, individual and group identity (p.16). It can also serve as an extension of culture or plain and simple; music can function as a form of entertainment. As a consequence of this versatility and growth, music is not only an extremely popular medium as an art form or as leisure, but also music presents

itself as an intriguing subject for research which has caught the attention of a wide variety of scholars from different academic fields and backgrounds, creating the vast pool of scientific literature available on the topic today. From topics such as understanding the cultural impact of music, moving to analyzing the psychological impacts of specific genres, and even diving into the economics and the industry perspective. We continue this theoretical breakdown by emphasizing other notions in relation to the significance of music and expanding on the importance of an academic interest in pursuing research within the fields of music.

Burnett (2002) highlights the importance of music in the world and on popular culture drawing a comparison with McLuhan's concept of a "Global Village". Burnett develops the idea of living and listening to music through what he calls a "Global Jukebox" arguing that "it's probably fair to say that music is the most universal means of communication we now have, instantly traversing language and other cultural barriers in a way that academics rarely understand"(p.1). Is this final section regarding academics that holds relevance for this project. It was argued that before, music did not enjoy the vast and extensive body of academic literature that exists nowadays. Burnett (2002) argued that: "Academic research has traditionally shown little system interest in popular music" (p.3). We know as per the writing of this project that music now thrives as a source of academic curiosity and because of this, this specific review of literature could be seen as outdated. However, it is relevant to establish the change that has occurred within the field sprouting different research projects on music from different perspectives. We continue the development of this framework by referring to the influence that music has both as an artform and as a tool for communication.

Fitterman (2017) states, since the moment of discovery a strong connection can be established, developing bonds so powerful that individuals "will feel connected for the rest of their lives" (p. 3). In that same line, Hitters & Van de Kamp (2011) also argue for the power that music possesses in the sense that "music is a very powerful means of communication and symbolic identification and ties together subcultures, communities, nations and regions" (p. 211). Furthermore, Fitterman also argues that the deep and emotional connection that is established has an identifiable commercial appeal that is part of the success of the industry, where "exploiting this strong emotional connection to music has enormous potential for connecting brands (products and services) to bands (the artist who wrote and performed that music) in the music marketplace" (p. 3). It is fairly relevant to point out that being able to capitalize these abstract notions surrounding music has led to the establishment of powerful industries surrounding the commercial exploitation of music.

It is this commercial perspective, what lies, next to the music, at the center of what makes the music industry. Where besides musicians delivering a message to audiences and music serving as a powerful communication tool, these artists also seek to earn a living through music creation. Holland, Nosk & Sorensen (2010) state that the two main sources of income for musicians deal with recorded music and live performances. This notion is also backed by Rutter (2016) while presenting a practical overview of the industry. However, and while Rutter also argues for it, this representation can be considered superficial considering the complexity of the industry with more detailed diagrams providing a better description of the workflows. A significant debate has developed through the years circling around the definition of the music industry, and what that same term encompasses. This following section of this theoretical breakdown deals with the notion of music as an industry.

2.2: Music is my business….and business is good

Williamson & Cloonan (2007) argue that in order to accurately study and analyze the music industry, it is relevant to break it down all the way to the initial core concepts. Starting with "music industry" and trying to achieve comprehension as to what does this term actually entails. The authors then begin by providing the idea that the term "music industry" is "an inappropriate model for understanding and analyzing the economics and politics surrounding music" (p. 305). As they perceive it to be a generalization and oversimplification of the different mechanisms and relationships that work within music and as a consequence it really jeopardizes the scope by limiting the reach. Instead they argue for a plural notion where not only one industry, but a set of industries work within, having different aims but intersecting along the way due to commonalities and objectives. Complementing this approach of the term "music industry" as a simplistic perspective. Norgärd (2017) argues that "it maintains an image of a monolithic and homogeneous sector aligned around agendas and goals" (p.4).

When the existing complexities advocate for a different notion as the businesses that integrate the industry can collide due to differences in objectives. By opting to move forward with this description it further develops a simplification of reality as the term aims to present an homogenic and inaccurate approach of the industry considering that reality presents a more deep and complex perspective on music, with different actors and relationships intertwined. Furthermore, there is an argument that states that the term "music industry" is commonly and according to the authors wrongfully used, as a way to also and only refer to the recording industry. This approach neglects other sectors from the different industries, such as the live sector of music that deals mainly with the music performance through concerts and touring and also from other elements such as the publishing side (p. 306). The recording industry is but one part of the many different gears that form

the different music industries. Moreover, the need for changing the habit to use "music industry" as a substitute for the recording industry has gained more significance throughout the years as it has decreased considerably in throughout the years as a consequence of " the growth of the live music industry and the exploitation of publishing and synchronization rights" (Willamson & Coonan, 2007, p. 314). This change in how to refer to the industries by changing the approach from a single industry to multiple presents a relevant improvement that helps to recognize "the diversity within the industries and the inequalities that arise as a consequence" (Williamson & Coonan, 2007, p. 315).

By recognizing the change in thought, acknowledging the differences that exist, both the quality of the academic work done and the understanding the industries improve as a result. Of course, not everything surrounding the music and its industries deals with attempting to define a better way to understand the different industries from within. There is also a considerable amount of external forces that indirectly or directly influence the shape and define the possible paths that the industries will take as they evolve across the times. One of such said factors that has influenced music and its industries countless times throughout history is technology (Nordgärd, 2017; Christensen, 1997; Moreau, 2013). From the previous contributions we can understand that technology has influenced different aspects of music, from how it is produced and recorded, moving to how consumers and fans throughout the world get access to their favorite music. Whether as an innovator or as a disruptor the relation that technology has with music remains a constant factor and will continue to be as such moving forward (Butz, Stifel, Schultz, & O'Neill, 2017).

One of these changes, as addressed by Holland, Nosko & Sorensen (2012), deals with the impact that digital technologies have in recorded music, and although for a time both recorded and live music represented the two main sources of income for musicians, new trends such as file sharing "eroded the profitability of selling recorded music" (p.6). Because of this, there has been a switch where musicians have an "incentive to reallocate effort away from recording new albums, instead performing more frequently and/or more extensive concert tours" (p.6). Holt (2010) even claims that live performances are the main element within the economy of music and to be considered as the main source of revenue for artists moving away from recorded music. This is something that reflected in longer and more numerous tours by different musical acts, the emergence of music festivals as well as through the explicit statement of musicians arguing against the decrease of income coming from records. Consequently, an interest for live music, has emerged among different spectrums, including the academic field.

2.3: Live After Death

As the music industry changes due to circumstances both internal and external, the notable rise of live music and what it can entail has been covered from wide amount of disciplines, each

providing its own perspective to the on-going debate. There is a vast body of literature that even dwells into the different types of live music, as the concepts by Besseler (1959) of participatory music and performance music. This complexity is also acknowledged by Holt (2010) who described it as "cultural and aesthetic category that informs musical life on many levels" (p. 245). While at the same time providing a simple definition that mainly refers to live music as a term often used to differentiate a performance from that of a recording. Webster (2011) presents a social approach to live music, giving relevance to the social interactions that occur during these performances. Her definition states that "two or more participants gather to listen live music in public space and react in real-time to the music being heard" (p. 11).

An interesting contribution that backs and improves the case for the rise and for the importance of live music in the current landscape is the notion of it been seen and understood as a unique experience. Coonan (2011) argues that one of the most valuable aspects behind live music is that it could be described as "something intangible – an experience" (p.83). This argument can be understood as the antithesis of current developments which see that as a consequence of technology everything leaves a record that can be consulted or viewed countless times. Instead the author provides this idea of live music as "the ultimate un-reproducible experience". This approach, Coonan continues, has also been adopted by live music promoters in order to brand their events in a more unique way hoping that it would eventually lead to more revenue in ticket sales. It is important to also recognize, that it is still part of an industry that requires economic support in order to be sustained. And that while the idea of live music as an experience is seen as something unique, this same uniqueness is what is being exploited for commercial purposes, considering that in the end, part of its complexity and fascination lies on the notion of intangibility.

Emphasizing on this notion of unique experiences, Frith (2007) goes forward by adding extra significance to the live performances. Stating that: "a live concert is not simply a transitory experience but also symbolizes what it means to be a music fan" (p. 5). Through this it can be understood that live music also represents the opportunity for people to gather and interact around something that is cared and dear for people, which in the end adds another layer to the value and meaning of the live performances: they also fulfill the purpose of acting as social gatherings of sorts. These assemblies do not only provide the experience discussed before but can also contribute to the affirmation and sense of belonging for music fans regardless of the genre that they follow. Additionally, live concerts help with the legitimization of the performers and the listeners by advocating for genuineness or truth. Here Frith (2007) argues: "the live show is the truest form of musical expression, the setting in which musicians and listeners alike can judge whether what they do is real" (p. 8). This is particularly true of the live scene of the genre selected for this research.

Yet, this intangibility, un-reproducible experience that also provides validation and truth needs to happen somewhere. A physical location is required for live music to take place, which as well influences and is influenced by the live music performances to some extent. As developed by Frith (2010): "Live music is particularly significant for understanding musical locality and place. Live music has to happen somewhere" (p.3). And because of this, the different places that hold live music performances ranging from small, medium, large and massive scales eventually become actors that also play a significant role within the live music scenes and their development. Frith goes onward on this stating: "The changing spaces of musical performance contain their own technological, architectural and ideological accounts of what people have understood as good sound, a good performance, a good listening experience, a good night out" (p.3). Whether intentionally or not the places the host live music performances, regardless of the size and scale develop and identity that is assigned to the place and fully integrates to the live music spectrum.

Besides the locations, a significant amount of talent is required for the live music industry to function properly and live music promoters are only one of a considerable number of new actors that have emerged in this new landscape. As live music takes center stage within the music industries, the live scenes take a totally new meaning by becoming music hubs that host international talent but also contribute to the development of local talent that could eventually thrive and grow into professional status. And in order for such sector to remain sustainable and commercially viable, the need for new relationships and networks of actors from different sectors is required not only within the music industries but also from periphery industries and organizations. From venue owners, to programmers and bookers all the way to policy makers who help regulate the live music sector performances through cultural and artistic policy development.

This latter point has produced relevant research, that mainly deals with regulations and the role that local, regional or national authorities play in relation to live music scenes. Thanks to the contribution by Frith, Brennan, Cloonan & Webster (2010), a better understanding of the role of policy makers and how they can influence and help shape the live music industry has been achieved. And although policy is a relevant point for the study of live music, it is not the center of the project, however, and as it has been established, it does help in introducing a variety of actors from within and outside live music that play a role in the scene. The interactions among these actors, and the networks that are formed as a consequence have sparked the interest from intellectuals which has been translated into new academic research that has been developed with the objective of understanding this new landscape.

2.4: Musical Ecology & Musical Ecosystems

One of these types of research takes the approach of considering music scenes as consolidated microcosmos or ecosystems where the live scenes are but a fraction of a bigger picture. Analyzing the relationships and interactions of the actors of the musical communities it proposes the notion of identifying the conditions or current qualities of a particular musical culture through the assessment of the interactions that happen within it. This pays attention to the way in which a musical community is organized and how it works to keep on existing. It is important to point out that the sustainability factor plays a central role in this type of assessments. It is of course based on the understanding of music cultures as ecosystems and the ecosystems have the aggregated value of being designed in a way that guarantees their own sustainable development, activities and progression. These ecosystems are not only composed of the live music elements but range across the different sectors of the music industries.

Schippers & Grant (2016) provide five main pillars or domains to better understand the ecosystem approach. They refer to "systems of learning music, musicians and communities, contexts and constructs, infrastructure and regulations finalizing with media and the music industry". (p. 451). The authors also recognize that while the main five domains are intended to function as a possible measuring tool or identification of the sustainability within the musical scene, the process is not an easy task to perform as the authors argue that "it also gives fair warning that there will be no simple solutions to understanding or influencing the sustainability of specific music practices" (p. 451). The authors further elaborate on some of the setbacks of the ecosystem approach stating that "any model of this nature runs the risk of suggestion gran narratives and a one-size-fits-all system of understanding music sustainability" (p.457). The main use or application of the model argues for a guideline approach where the different musical cultures will, due to their diverse nature, be composed of different elements which translates to different indicators to take into account, which in turn generates different results depending of musical community and genre.

This approach of perceiving musical cultures as ecosystem and assessing for sustainability takes its origin from ecology and was first connected to music by William Kay Archer (1964) and has be used to address to music cultures from different perspectives. The authors then proceeded to write about the music ecology by presenting Archer's view: "We expect a music [culture] to be shaped by climate, natural resources, by the incidence of certain diseases within the population […] by economy, by the type of political bureaucracy, by the capacities of technology (p.2). This approach considers the role that the natural world plays to help shape a musical culture. However, and more in line to what came after regarding seeing music communities as costumes, a more relevant approach for this research project deals with "the connectedness between human-

constructed sounds and the social, political and economic environment" (Keogh, 2013, p. 7). As previously discussed, it is the set of actors, networks and relation which are found to be at the center of this project.

But how to define a musical ecosystem or musical scene as sustainable? What are the measurements? Providing a satisfactory answer to this issue has the possibility of becoming a proper research on its own. As the five pillars indicated before may not be present all the musical scenes and even if they do, the results could lead to more questions than effective answers. An effort that has been done to relief and most importantly to grant a degree of clarity to this issue of measuring sustainability, is provided by Schippers & Grant (2016). For them one way to work with sustainability is through the measurement of "health" or vitality (p. 458). By doing so, they argue for the identification of weak elements within musical cultures and the degree of said weakness. Through this work of creating a "vitality assessment may help indicate which of the various factors in its sustainability (as identified within the five-domain framework) are playing key roles in its predicament" (Schippers & Grant, 2016, p. 458).

Furthermore, Schippers & Grant (2016) conceptualized a visual model (Figure 1) that places an emphasis on providing visibility among the areas that make up a musical ecosystem, the multiple interactions that may develop among them, and reflect on the quality of such relations to assess the general conditions of the ecosystem as a whole. Something that must be established is that despite being a detailed model that could help improve the performance of an assessment, there is the need to acknowledge that the measures or indicators can vary depending of the musical genre that is being assessed. Arrangements need to be made to include additional indicators, or even discard some others as their presence may differ from genre to genre (Schippers & Grant, 2016).

Figure 1.
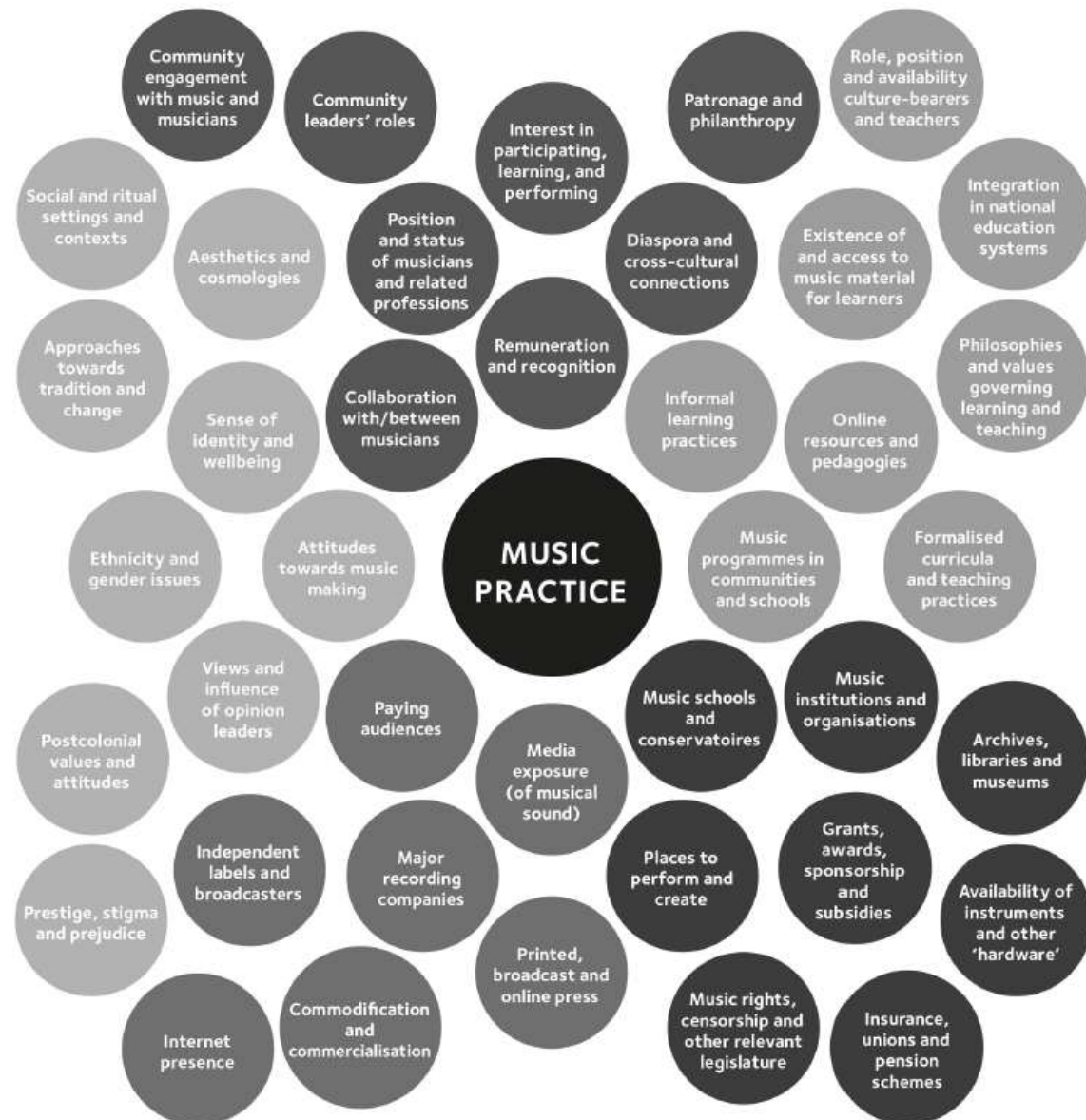
Source: Schippers & Grant, 2016, p.456

Allowing for the assessment to identify flaws as well as possible causes for this, provides a more profound notion of the conditions of a musical ecosystem. Said ecosystems represent combination of existing infrastructure with the different actors that help shape the community surrounding a specific music genre. Since every musical genre is different, the actors, places and interrelated networks and relations that sprout from them are also varied in their nature. With this in mind, it is also important to reflect that the approach of studying the conditions of a local music culture, regardless of the genre, from an ecology and ecosystem perspective constitutes only one of the many available tools that can be applied to achieve a better understanding of music, the networks that surround it and the positive or negative conditions it may be in. It is important to highlight another approach to understanding local music that deals more with the social aspects that

surround musical genres (Woo, Rennie & Poyntz, 2015). This approach will be detailed as the next section of this framework.

2.5: Scene

To approach the study of a musical culture as a scene requires a shift in the thought process. Woo, et al (2015) explain that "rather than focusing on aesthetic or cultural criticism of musical texts, the scene perspective drew attention to the field of social relations in which music circulated" (p.287). Simply meaning that the musical songs and compositions, are not the main subject of study but rather they take a back seat with the interactions surrounding the music becoming the focus point. Adding to this idea the approach by Bennett (2004) reflects on the use of the term scene "by musicians and music journalists to describe the clusters of musicians, promoters and fans, etc., who group around particular genres of music" (p. 223). From the previous statement we could emphasize on the notion of group for a better understanding of scenes as these groups and their characteristics are the source that feeds the remaining elements of the musical culture.

The concept of place/space is of significant interest if seen from a scene perspective. As with the rest of the elements, the place is developed as a product of the interactions done by the groups which help assign an identity to the place; "scenes invest spaces with meaning, anchoring social and cultural practices in particular places" (Woo, et al, 2015, p. 290). Matters normally associated with places and more specifically musical spaces like capacity, structural conditions, and acoustics are more pertinent indicators when approaching musical culture from an ecosystem perspective. Furthermore, analyzing from a scene perspective has additional challenges that are rooted in the nature of the concept. There is a considerable degree of flexibility when implementing this approach while conducting research. Woo, et al (2015) argue that "in the hands of different analysts, these might include spaces, organizations, and infrastructures […] networks and practices that make a particular scene part of the texture of a place". This flexibility or lack of defined parameters is something that has been criticized by scholars (Hesmondhalgh, 2005) and it is also the reason of why an ecology approach was preferred over the scene perspective for this research.

Both of the approaches mentioned represent different frameworks which grant access to different areas within music, one is more focused with the overall perspective considering aspects of production, infrastructure, and networking, while the second one deals more in detail with the social happenings that are present in music. And they should be seen as tools for assessment. However, and as briefly mentioned, variations are present from genre to genre and this is also true for the genre in which this project is focused. It is not only a genre that holds a unique place in the music landscape for not embracing the mainstream or commercial approach but rather rebelling against it, but regardless of taking this approach has managed to transcend borders since its early conception

legitimizing itself as an intriguing example of a musical genre that has managed to transcend limits to become a global phenomenon. The following section contains a brief breakdown of Heavy Metal and the multiple and varied academic contributions done by the different fields.

2.6: Kings of Metal

Heavy Metal is a popular genre among researchers. Spracklen, Brown & Kahn-Harris (2011) argue for the rise of the term "metal studies" within academics as it implies "the view that the study of metal constitutes a multidisciplinary field in its own right" (p. 211). We find a considerable amount of diversity in the studies of the genre particularly in the fields of health sciences as the music can be stigmatized due to its very nature. It has been briefly mentioned how studies trying to find links between the genre and alienation, depression, suicide, and violent behavior (Arnett, 1991; Lacourse, Claes & Villeneuve, 2001; Gowensmith & Bloom, 1997). However, Suhay (2015) identifies positive effects in relation to anxiety. The study argues that the music "appeared to match their psychological arousal and result in an increase in positive emotions" (p.1). Furthermore, and as previously established on earlier sections a more positive approach surrounding the effects that the music has on its listeners has joined the debate on Heavy Metal and the violent notion of the music in which listening to violent music "does not lead to a desensitization to violence as depicted in images" (Sun, Lu, Williams, & Forde Thompson, 2019, p.8). Additionally, metal fans also experience a sense of empowerment, joy and even peace when listening to their favorite music (Thompson, Geeves, & Olsen, 2018).

Sub-Culture research is another branch that has taken significant interest with Heavy Metal, particularly the use of sub-culture "as means of understanding the collective appropriation and use of music itself" (Bennett, 2004, p. 223). Through it, connections have been made between the genre and the working class (Bennett, 2004), to a point where it almost seems to be an exclusive genre of the working class. However, Sinclair & Dolan (2015), also argue that the use of sub-cultures in Heavy Metal is mainly preoccupied with the existing stereotypes of the genre and even question the genre's place in "civilized society" (p.424).

Most of the academic work done on Heavy Metal, comes mainly from the genre's birthplace, the UK. Harris (2000) presents the case for Heavy Metal and global scene with bands like Brazil's *Sepultura* mentioned as relevant examples of the strength and reach of Heavy Metal beyond the U.K. and U.S.A. The scope of Heavy Metal as a global phenomenon is widely recognized by both academics and non-academic individuals. It can be attributed to the malleability of music which regardless of the genre is there. Said malleability "has always facilitated its export and import" (Harris, 2000, p. 13). Interestingly enough, the author also recognizes the impact and contributions of specific local scenes in the development of Heavy Metal and the subsequent subgenres that

followed as years passed and the genre evolved. Notable mentions for the Bay Area of San Francisco as one of the pillars for the development of Trash Metal. Florida and Stockholm as two cities that developed their own style of Death Metal. Oslo and Bergen as the responsible for the more obscure and controversial Black Metal and of course Birmingham, England, considered to be the birthplace of Heavy Metal itself.

Speaking about countries, there is also a general consent as to which have been the countries that have contributed more to Heavy Metal's growth and diversification. A general list composed of mainly western countries as USA and European nations as German, Sweden, England, Norway has been recognized as the pillars when it comes to Heavy Metal music. However, there is a gap in the literature regarding the Netherlands and their prolific scene. Berkers and Schaap (2018) make a case for the Netherlands, as a country that not only has a strong and relevant relation between Heavy Metal and a sense of place, reflected in the "Netherdeath" genre (p.64), the country's own take on Death Metal, similar to what was done in countries like the USA and Sweden. Producing top quality acts as Pestilence, Gorefest, Thanatos, Asphyx, Hail of Bullets and Sinister that have managed to achieve international acclaim.

2.7: Dutch Connection

Besides this, and with a more commercial approach was the critical and commercial success of the Symphonic Metal subgenre with bands like Within Temptation, that for a while "became internationally associated with the Netherlands" (Berkers & Schaap, 2018, p. 61) The success of this genre both with audiences and critics has become "an important export product receiving financial support from the national government" (p.61). The value of the contributions of the Netherlands to the heavy metal genre is not only focused on the country's ability to produce top quality acts that succeed both locally and even internationally. The Netherlands as a country provides a solid ground through its infrastructure which translates to venues and festivals (Berkers & Schaap, 2018). Which becomes more interesting considering the size of the country and the relative short distances among cities. However, the study of local music scenes and more importantly, studies from an ecosystem approach are lacking. Both topics in which this research focuses on.

"Heavy metal is a universal energy, it's the sound of a volcano. It's rock, it's earth shattering. Somewhere in our primal being we understand". Billy Corgan

Chapter 3: Research design & methodology

The following step is to go into detail into the design and methods of research chosen to conduct our project and provide a robust answer to our main research question. As it was previously addressed, this project seeks to answer the following research question:

Is there a Heavy Metal ecosystem in Rotterdam?

And to what extent is it sustainable?

This project followed the scientific approach known as inductive research. This method is mostly seen when embarking on research projects from a qualitative perspective. In inductive research, according to Neuman (2013) to work from an inductive perspective "we begin with observing the empirical world and then reflecting on what is taking place and thinking in more abstract ways" (p.70). So rather than having a main set of theoretical approaches as the guidelines for our project, we first work with our empirical observations, which take place in the world and then step back and reflect. The author also argues that it is particularly challenging since there is a certain degree of uncertainty as the details of our analysis are not known as we begin. However, one of the added values of inductive research, Neuman continues, is that it "encourages a slow, flexible evolution toward a specific focus based on what you learn from the data" (p.195).

Besides the deductive approach, the research question followed the established intention of conducting exploratory research which can be understood as the type of research that "is a broad-ranging, purposive, systematic, prearranged undertaking designed to maximize the discovery of generalizations leading to description and understanding of an area of social or psychological life" (Stebbins, 2011, p. 3). Sandhursen (2000) differentiates exploratory research in the sense that "exploratory studies result in a range of causes and alternative options for a solution of a specific problem". This approach benefits from additional flexibility, compared to other type of studies like conclusive which, Sandhursen continues: "identify the final information that is the only solution to an existing research problem". However, and to provide a deeper understanding of the selection, besides our main research question, an additional Sub-Question has been introduced to help better diagnose our main research objective.

As it was previously mentioned briefly, this project also followed a qualitative approach rather than quantitative. It was not part of the design to transform the empirical data into numbers, nor was it to quantify the variables developed. The qualitative approach suited better to the project, due to two main points; Firstly, for data collection, we chose to rely on in-depth interviews which followed a semi-structured approach as this design allows for the possibility of emphasizing on

specific points or developing newer inquiries that are based upon the respondents contributions. And secondly, to analyze the data obtained from these interviews we decided to work with thematic analysis. Both techniques, our data collection and our data analysis fit the qualitative tradition, as semi-structured methods and also in the sense that the empirical data that has been collected can come in different ways, such as spoken words and actions (Neuman, 2013, p. 204). Besides, the design is iterative (Mack, Woodsong, MacQueen, Guest & Namey, 2005) which allows for the flexibility to adjust the data collection in accordance to the findings and "what is learned" (p.3).

3.1: Data collection & sampling

As previously stated, our main data collection technique was in-depth interviews, which we chose to conduct with experts. An initial decision of fourteen participants and consequently fourteen interviews was considered taking into account the actual size of the projects and the time constraints attached to it. Since the project sought to address the concept of the musical ecology of Heavy Metal in Rotterdam, the objective is to interview people that belong to the musical ecology, ranging from venue directors, music bookers, musicians both amateur and professional, festival organizers, local music journalists with an interest in Heavy Metal, music support organizations members and finally scholars who have done academic work in relation to Heavy Metal and the Netherlands. These specialists integrated our sampling, which has been established through nonprobability sampling and more specifically purposive or purposeful sampling. Talking about the logic behind the selection of purposive sampling Patton (2015), states that it lies on "selection information-rich cases for in-depth study…from which one can learn a great deal about issues of central importance to the purpose of the inquiry" (p.264).

Furthermore, the following statement synchronized with our project on a deeper level. Van Manen (2014) established that: "purposive sampling is sometimes used to indicate that interviewees or participants are selected on the basis of their knowledge and verbal eloquence to describe a group or (sub) culture to which they belong". Just as previously mentioned, since our aim is to analyze and understand Heavy Metal in Rotterdam from an ecology perspective, gathering our empirical data by conducting our interviews with the people who are to some extent involved with the genre locally provided our best alternative for getting valuable findings to analyze and reflect upon. In relation to our participants, we started with one existent contact which was suggested as a potential interviewee, after the initial contact was done, the next step was to ask for recommendations of future possible interview candidates, thus triggering snowballing sampling. On this method and of the justification for this project, Biernacki & Waldorf (1981) stated: "The method yields a study sample through referrals made among people who share or know of others who possess some characteristics that are of research interest" (p.141).

Out of the initial established participant, subsequent ones followed, a total of fourteen candidates were then suggested as potential participants, these were later profiled and evaluated in terms of relevance and possible contributions to the project and later contact was established asking for their participation. The recruitment phase took place in the month of March, and a total of fourteen requests were submitted, out of which we received ten positive replies, three were non-respondent and one was not able to participate due to time constraints. With our positive responses, we immediately began the scheduling procedure. This process mainly took place in the month of April with two exceptions assigned for the month of May due to conflicting schedules. Out of the ten interviews conducted, nine of them took place in Rotterdam, face to face and at a designated location chosen by the interviewee, with the remaining one occurring remotely as geographical limitations did not allow for a face-face meeting.

The ten interviews were conducted without any concerning issues arising, having an average duration of one hour, with a couple of them timing below the hour mark but not low enough to be considered irrelevant and others with durations slightly above the average; however, it is relevant to point out that an interesting development took place within one of the interviews. While initially conceived and agreed as a one-to-one face to face interview, moments before the commencement of the meeting, additional participants (notified by the initial interviewee) were added to the meeting, expressing their interest in taking part as participants of the project. A total of three more persons for a final total of four, including our initial interviewee. Considering the unexpected development, reflecting upon the added value of the additional input, and seeing their areas of expertise, we proceeded to meet with the participants, handling the meeting with a different method, shifting from an interview to an approach more appropriate for a focus group. Because of the relevance and the input gathered there, it was decided to include the findings as a part of the data for this project.

The ten interviews (and the thirteen participants) provided quality data for our analysis and consequently to the project and can be considered as a quality and relevant sample. Addressing the established and tailor-made set of questions developed for each of the participants depending on their field of knowledge from a defined general topic list, they were able to provide relevant answers based on their unique experiences and interactions with our main topic. Their different areas of expertise, ranging from accomplished musicians, project managers, bookers, programmers, venue directors, music journalists, festival organizers, up and coming metal musicians, local Heavy Metal community members, combined with their local experiences of Rotterdam and the personal interactions that each one has had through the years helped shed light upon significant findings for

our main project topic, as they provided insight into what is wanted to be learned throughout this research.

We chose to conduct in-depth interviews because of the advantage that this method provides in relation to the level of detail that can be obtained in the information (Boyce & Neale, 2006). And since the data we are looking for can be provided by the individuals that are related or partly related to our area of interest (Heavy Metal musical ecology), their perspectives and thoughts will be of significant value for the project. Added to this, the decision to work with expert interviews lies on the identifiable benefits, as this type of interviewing "offer researchers an effective means of quickly obtaining results" (Bogner, Littig & Menz, 2009, p. 2). By aiming to speak directly to the experts, we were seeking to optimize our data gathering process as well as attempt to improve the quality of our findings. The interviews have been recorded with the interviewer's smartphone and with the prior approval of the interviewees (see the appendixes for the consent forms of each of the participants), the audio files created from each interview have been safely stored and kept by the interviewer at all times and once the transcripts have been completed and with no additional value to be obtained from the recordings, the files will be deleted.

For the interviews the following preliminary topic list has been followed. The main themes were based on several academic contributions of what constitutes a healthy/unhealthy musical act; variety of places that enable to see and play music (Frith, Cloonan & Williamson, 2009), the connections and networks that surround a live music scene and the different actors that are involved in said networks (Webster, 2011) and the knowledge sharing process (Schippers & Grant, 2016). Particular importance has been held by the latter authors, as their previously mentioned contribution concerning the five domains to better understand music vitality and viability (p.451), provided the main framework from which topics and questions were later developed with the additional authors functioning as complementary work. Not every interview had the exact same set of questions as the activities and roles of our participants varied, however the main themes were adapted to fit each participant. It is from this list that the questions for each interview has been developed, with the use of probes as a complementary technique in an attempt to obtain more information or specialized data on a specific topic.

Venues

- · Relevant venues (Heavy Metal)
- · # Of Heavy Metal Shows
- · Presence of local bands
- · International shows
- · Non-fixed venues (festivals)

- · Opportunity for new/amateur bands

Musicians

- · Professional musicians
- · Amateur musicians
- · Formal training

Other actors

- · Policy support (Culture policy, government sponsorship)
- · Cultural Agenda

Communication

- · Means of diffusion
- · Media presence (type of media, frequency, awareness)

After the interviews had been conducted and properly transcribed (transcripts of the interviews are provided as an additional appendix entry), having the data collected, the next step was to analyze the data. We have established thematic analysis as the tool to conduct the analysis of our empirical data. These techniques allowed us to organize our findings, arrange and group information based on "patterns of meaning (themes) across a data set" (Braun & Clarke, 2012, p. 57). Furthermore, it allows us to understand the differences or similarities, depending on the data, in terms of how a subject is discussed which in turn feeds and guides the review and reflection of the findings, highlighting specific directions to help understand the topics and provide answers to our main research inquires. By breaking down the data, establishing categories based on similarities found and assigning our pieces of data, we managed to simplify our initial and raw base of data and managed conduct a more efficient analysis.

3.2: Analysis

The simplification of data, considered to be one of the key elements of qualitative content analysis (Schreier, 2013), can be achieved through the construction of a coding scheme. An open coding scheme has been followed, which Boeije (2010) defines as the process of breaking down, examining, comparing, conceptualizing and categorizing data, in this case the ten interviews conducted. This will allow us to summarize our findings by assigning codes with attached meaning to relevant pieces of information from the answers provided by our respondents. Additionally, and in line with our inductive approach to the project, conducting Thematic Analysis and proceeding to construct a coding scheme, has also been done taking into account an inductive perspective or approach. Braun & Clarke (2012) state the following on the matter: "An inductive approach to data coding and analysis is a bottom-up approach and is driven by what is *in* the date" (p.58). However,

considering the process to be of mixed nature, the implementation of the main themes has a strong base on academic literature which corresponds more the deductive approach. On this notion the authors argue: "coding and analysis often uses a combination of both approaches. It is impossible to be purely inductive, as we always bring something to the data when we analyze it" (p. 58).

To carry out the thematic analysis, once our data collection phase was complete, and the interviews had been transcribed, the next step was for said transcripts to be compiled in preparation for our analysis. The transcripts were imported into a qualitative analysis software (Atlas Ti) for easier access and manipulation. Once there we proceeded to re-read our data, beginning with our initial analysis stage by identifying the main topics to be found among all our data and searching for the main common threads in relation to what was said that could in turn represent the most relevant findings for our project. We then proceeded to segment our data by developing a set of key words and thus began the process of coding the data. This process was initiated as established, through an open coding scheme. This was the first step taken to summarize and divide our data, highlighting the most relevant segments of information on our data for easier access while analyzing on the later stages. Afterwards, the initial codes were grouped into main categories or themes based on the similarities in relation to a topic or to a specific perspective or view of a particular subject.

Themes like SUPPORT, LACK OF SUPPORT, DIVERSITY OF VENUES, LOCAL LIMITATIONS NETWORKS, KNOWLEDGE EXCHANGE, and LIMITATIONS OF HEAVY METAL where developed from within the data, following the inductive approach. After these concepts were conceived, similar themes were then grouped together on larger categories. The creation of these larger categories takes a more deductive approach as they are based on the five domains for understanding musical ecosystems and sustainability proposed by Schippers & Grant (2016). The five domains are: "Systems of learning music; musicians and communities; contexts and constructs; infrastructure and regulations; and media and the music industry" (p. 451). The diagram provided by the authors Schippers & Grant 2016 to help visualize musical ecosystems, the components and the possible interactions and networks established, also served as the source base for the indicators looked for in our research (Presented on our theoretical framework).

3.3: Validity

Finally, to close this section, addressing validity is something known to always present an additional challenge when conducting research from a qualitative perspective. Various issues rise to the surface in relation to what could be considered as the best way to achieve this task. Creswell & Miller (2000) define validity as "how accurately the account represents participants' realities of the social phenomena and is credible to them" (p.124). An interesting detail that has been pointed out by the authors is how the concept of validity has to do not so much with the information gathered

but rather with the reflections and interpretations that the researcher draws from them while conducting the analysis and if whether the conclusions created are truly proven to be valid. Besides this, the authors (Creswell & Miller, 2000) provide different methods used by researchers in order to deliver in this important aspect of research. To complement the project in this important aspect, we chose to work with two of the multiple methods proposed by Creswell & Miller (2000).

Firstly, we decided to implement researcher flexibility, which is mainly focused on the perspectives of who is conducting the project. According to this method: "individuals reflect on the social, cultural and historical forces that shape their interpretation" (p.127). This enables readers access to a deeper understanding about the perspectives and beliefs that may influencing the way in which the project is being conducted by the researcher. The authors state: "it is particularly important for researchers to acknowledge and describe their entering beliefs and biases […] to allow readers to understand their positions" (p.127). A supplementary section called "Role of Researcher" has been included in this project which covered that notion (See appendix A). Additionally, and mainly aimed at our results section we used a rich description when reflecting and signaling relevant findings from out data to provide a better and more accurate context. Working with this approach aims to "produce for the readers the feeling that they have experienced the events being described in a study" (p.129). This was done with the objective of improving the credibility of our research by portraying with additional contexts our findings and reflections. The interpretation and reflection of our main findings are presented in a latter section of this project called results.

"Since its very beginning heavy metal has surprised in the best sense of the word". Sir Christopher Lee

Chapter 4: Results

This current segment focuses on reporting, reflecting and interpreting the main findings that have come as a result of our data collection and analysis phases. As it was established on our previous section concerning our selected methods of research, we conducted expert interviews to obtain the necessary information that would help us provide an answer to our main research question. Reviewing on our elected method and since this is a qualitative research, we chose to work with interviews as our data gathering method. The structure of said interviews was focused on conducting in-depth interviews with a semi-structured approach that would allow us for additional inquiries and potential supplementary questions depending on the interviewees' responses (the full transcriptions of all the ten interviews have been made available as part of the appendix of this work). In relation to our respondents, we spoke with different individuals whom all have some connection or role in relation to the activities of Heavy Metal in the city of Rotterdam.

Reviewing our sample once more, the interviews were conducted with multiple Heavy Metal musicians of already established local bands, one programmer and director of a venue that hosts alternative music genres, among them Heavy Metal. Musicians from new and up and coming bands, a member of a local organization which supports music local music talent among all the genres, Heavy Metal included, small festival organizers, a local music journalist with special interest in Heavy Metal who also hosts a monthly radio Heavy Metal show, a couple of academic scholars who have done research on Heavy Metal before and a local DJ who, host of thematic Heavy Metal monthly gatherings at a local bar located in the city center of Rotterdam. Once all the interviews were conducted and transcribed accordingly, we worked with the defined themes to identify the most relevant findings for our questions and our research.

Going over personal experiences, shared accounts, touching upon the extent of their involvement with the Heavy Metal community of the city of Rotterdam and through their opinions informed by their own lines of work and main areas of knowledge, the participants contributed with a vast amount of content to be analyzed and reflected upon. Guided by the questions which in turn drew upon the five domains to evaluate the vitality and sustainability of a musical ecosystem presented on our theoretical framework, the interviews with experts proved to be an effective data gathering method allowing us access to valuable information that would have been harder or would have taken more time if working with a different method. During the transcribing phase we were able to already identify specific stances, opinions and perspectives on the different topics that were developed and as a product of this, the establishment of a common set of threads allowed us to

work towards providing answers to our initial research questions. We then proceeded to structure and divide our data in preparation for the reflection and interpretation.

To organize our results, we assigned codes, single words or phrases, to relevant pieces of texts that were significant to our main research objective, keeping in mind how the codes are meant to capture the main essence of what was been said by grouping complete extracts from the responses provided by our participants under simplified key concepts. Afterwards the codes were grouped based on the commonalities found, similar views, thematic similarities, etc., and in turn, the codes where re-arranged into groups which followed a specific topic and the different contributions regarding the theme in questions. These groups came to represent our main categories. As we previously mentioned we had five initial main categories through which we would be dividing our findings; Based on the theoretical contribution by Schippers and Grant (2016) these categories were: Systems of learning music, Musicians and Communities, Contexts and Constructs, Infrastructure and Regulations and finally Media and the Music Industry. This latter category was arranged for it to be a better fit with our design. Therefore, we adjusted it by renaming it to Media and Heavy Metal. Additionally, by reviewing our data we identified another interest topic which we could not assign to any of our main categories, instead we developed an additional category named Improvements, this category has been used on the closing thoughts of this project.

Informing our main categories, the thematic similarities were represented as follows: As a part of Infrastructure and Regulations all our findings pertinent to Governmental Support, Decrease of Support, Venue Alternatives, Diversity of Events, Diversity of Venues, Decrease of Infrastructure, Gathering Spaces were considered. Within Contexts and Constructs, we included data in line with Local Issues, Local Limitations, Stereotypes, Technology, Attitudes, Accessibility, Changes in the music Industry, Interest of Heavy Metal, limitations of Heavy Metal, Identity of Venues, etc. For Musicians and Communities, the answers related to Bands, Band Activities, Collaboration, Initiatives, Lack of Initiatives, Networks, Social Happenings, and Visitors were included in this category. For Systems of learning music, we grouped our findings behind labels such as Music Education, Talent Development, Mentorship, Knowledge Transfer. As with the case of Media and Heavy Metal, themes of Coverage of Heavy Metal, Exposure of Heavy Metal and Heavy Metal Content were all gathered. Finally, within our final category, Improvements, everything that matched Areas of Opportunity from our respondents was assigned here.

Unfortunately, we came across areas that were vaguely covered or in some occasions were barely mentioned at all, this due to lack of knowledge from the participants or as a consequence of omission. Such as the case of Media & Heavy Metal, and Systems for Learning Music. Also, while having fewer themes assigned to it, the category of Improvements was considerably present across

all of our participants. Nevertheless, this lack of discussions could also be seen as an interesting finding in itself allowing for the opportunity to reflect on whether this could signify additional areas of opportunity and whether further involvement from the media and more systems enabling musical learning should be sought. The results and the reflection of the findings presented in this section have been divided by the main categories and subsequent themes contained on each of the categories.

4.1: Infrastructure and Regulations

The first portion of our results section concerns with the issue regarding places, availability, diversity, and additional aspects regarding venues, other alternative spaces and the different types of support that exist. Presented through the themes introduced earlier in this same section. As we have established already through our theory, live music needs a place for it to happen (Frith, 2010), not only that, but having existing alternative places that can also function as gathering places for fans of a particular style of music also has a significant role in the development of the a scene or a musical ecosystem (Woo, et al, 2015). These issues were key elements in the discussion with our participants as several of their answers dealt with relevant notions of this category. Segmented into different themes, e.g. Infrastructure, Decrease in Infrastructure, Alternative Spaces, Local Strengths etc. Current infrastructure, changes, and possible suggestions where debated with our participants. Starting with the topic of current infrastructure, several of the participants recognized the limitations with what is available in the city today while also recognizing some of the efforts being done on a local level.

4.1.1: One venue to rule them all.

One of the participants Pauwke Berkers, (B) 41, Associate Professor for the Erasmus School of History, Culture and Communication) goes over this point as he explained: "I mean, I could imagine that having Baroeg as one place but not much else, that makes it also vulnerable.[…] that if Baroeg is not there then, then, yeah, you're very vulnerable if you rely on one place". Another participant, Stephan Gebédi, (SG) 52, founder and lead vocalist of the Rotterdam band Thanatos, discussed this issue when asked about the current infrastructure for Heavy Metal in Rotterdam: "I think Baroeg is the only thing we have left and it's pretty small as you have seen". Both participants argue for the limitations and fragility of having one dedicated venue to act as a sort of "Last Stand" in regard to Heavy Metal in Rotterdam. And the fragility lies in the notion of having everything related to Heavy Metal taking place at the same place, because this represents a risk as it implies for a lack of diversity of places for audiences to visit and if anything were to happen to that place, then the local audiences would be left with very little.

Complementing this idea, another participant Julian Schaap (JS), 31, Cultural Sociologist at Erasmus School of History, Culture and Communication) had this say: " I think the one single strength in Rotterdam regarding metal and without it, metal wouldn't have a, ah, notable presence in Rotterdam, is the Baroeg. I think without that, I cannot not imagine Rotterdam without Baroeg, and metal". Through these different extracts, we can reflect that concerning this issue there is a lack of alternatives, for live music places for Heavy Metal in Rotterdam and that the existing conditions could be understood as a delicate position. With only one main venue (Baroeg), known and identified as the principal supplier and provider of Heavy Metal in Rotterdam. Furthermore, the characteristics that this venue possesses in regard to tangible issues, for example: size and location, have also been explored and commented throughout the multiple interviews as since it concerns the local infrastructure, it is relevant to point out and discuss.

Talking directly about this as part of the limitations and challenges of the Baroeg venue, Leon Van Rijnsbergen, (LVR) 43, promoter, main booker and venue director for the Baroeg, commented the following: "Challenges, ahm, we are a pretty small venue. Ahm, capacity of three hundred and fifty people. When it's sold out". He then continues: "But, yeah, all bookers know I have a small venue […] right now I only get offers for smaller bands. Regarding this point and the city of Rotterdam, established musician SG adds: "that's a shame about Rotterdam, the facilities to play live for any bands that are bigger than, ahm, beyond Baroeg-size but not as big as if they play, ahm, Ziggo Dome or Ahoy, you know? […] there's nothing inbetween and that's a shame". Independent music journalist based in Rotterdam, Inge Janse (IJ), 38, also shares insight into the issue of the local infrastructure and its limitations. And while the idea behind the statement is valid for the entire live music culture of Rotterdam, the same could be said for Heavy Metal: "That's the entire part of the live scene problem in Rotterdam, you can't grow as a band, so you can never aspire as a metal band or any other band to play a large venue in Rotterdam because there is no large venue in Rotterdam".

In relation to this point about size, and through our participants contributions we can see and understand that the issue of having a low-size venue can, in part be understood as a local limitation that is pertinent to the whole infrastructure scenario. Small capacity in turn implies a smaller attendance and a profile of bands significantly smaller, as the match between the band and the venue needs to be beneficial for both. On other hand and a considerably more pressing issue that affects other areas of an ecosystem as talent development (to be discussed further below) is the fact that bands who may already have developed successfully on early stages and thus the need for a larger venue for them to play would be necessary in order to keep on fueling their development. If there are no such facilities, the opportunities to grow as band diminish considerably, which affects

talent development: Firstly, by limiting the exposure and growth and by making bands look for other alternatives outside the city.

Next to the limitations highlighted by our respondents, there are positive findings to be shared regarding the notion of having one venue and specially in the characteristics that this venue possesses. Firstly, this has to do with venue specialization and the with the identity of the venue second. Venue director LVR said the following: "This venue specializes in hard and alternative music, among other Heavy Metal". Discussing the uniqueness of a venue dedicated to hard music LVR added: "When you look at the whole country, we do not have a lot of venues that specialize in hard and alternative music". And that importance has already been mentioned in relation to Baroeg. Reflecting on this point it is very valuable for Rotterdam to have a specialized venue that hosts Heavy Metal live performances. Not only because it provides the city and its visitors with a steady and continuous supply of concerts both international and local throughout the year but that it also understands the genre, how it should be addressed and as well how the community interacts which in turn influence results from our additional categories.

The issue of venue specialization is a very important finding which is not directly address on our consulted theory, as it had a more general approach towards having infrastructure that can enable live performances, however, and as part of our contributions to the discussions we could argue that having a specialized venue could represent an additional layer that can improve the conditions of a specific musical culture when attempting to assess specific genres. Next to the specialization, the identity of the venue could be understood as another positive assessment. Submit Fest co-organizer Monica Buurmeester (MB), commented in regard to Baroeg: "Baroeg is kind of small, the shows are quite intimate, and Baroeg is also very welcoming to everybody". Discussing this identity and appeal of Baroeg, cultural sociologist JS commented: "I think a lot of venues are quite anonymous […] Baroeg has identity, has character […] bands want to return to Baroeg, because they felt that they were received well while they were still very junior." Baroeg feels as an integral place and it has been held dearly by the participants.

Continuing with the existing infrastructure, besides having venues that can support live performances and host audiences, the need for additional spaces is also considered to be an influencing factor whenever studying a local music scene or its ecosystem. This particular requirement can be traced to Schippers & Grant (2016) and into what is defined as "Social and ritual settings and contexts" (p.456). In that regard and currently, the assessment of said spaces and alternatives is considered to be limited in the city of Rotterdam. Referring to alternative places like bars that work as gathering spaces, established musician SG said the following: "Maybe this is the only place where they play metal every now and then". The participant is referring to a place

located in the city center called Bar3, that has also been identified and mentioned across most of the participants for this project, with one having a direct involvement to the activities that take place there.

<u>4.1.2: Once upon a time…it was better.</u>

Issues related to the current conditions, changes and decreases on the existing infrastructure of the city in regard to live music and more specifically Heavy Metal, were present and popular themes among the participants, as it was vastly discussed and commented through the interviews. The largest reflection from this, which comes from the theme of Decrease on the existing infrastructure, is how according to all the participants, in previous times, Rotterdam had more of a variety of places that would host Heavy Metal music and in turn this meant that the alternative and supply of activities to do within the city were larger. From venues with a higher capacity that hosted bigger international Heavy Metal bands, to multiple bars and alternative places that would allow for the audiences to gather, interact and share information and experiences. This represents an interest finding because it establishes an existing record where infrastructure was richer, activities were more diverse, and communities thrived. All located in the city of Rotterdam. And it provides a comparison across time periods that benefits the study of the musical culture of Heavy Metal as an ecosystem.

In this aspect, established musician SG commented the following: "Back then, we had, like this place, Blokhut, and every weekend there were one hundred, two hundred fifty people coming there, even if there were no bands". Addressing the themes of venue alternatives and on the diversity of infrastructure SG added: "We had some bars in the center of Rotterdam. There were also two hard rock bars and it was one in, ahm, Blokhut, south. Even Baroeg used to have a metal bar on Friday and Saturday. So, you had like four places where you could go, and that's not…it's not like that anymore". Here the existence of another venue was also brought up: "Besides we had Nighttown and Nighttown was a big thing because that's the place where we saw a lot of bands for the first time, it had a capacity of like one thousand people". Another participant, Thomas Sciarone (TS) founder of the metal/alternative band GOLD, also commented in relation to the change and decrease in infrastructure: "It must have been 93 or maybe 94 that I first went to the Baroeg and you had the Blokhut as well in, ahm, Rotterdam south. But also, Slayer would play Ahoy, Machine Head and Death would play in the old Nighttown, so there were, I think, ahm, Rotterdam used to have quite of a, ahm, yeah good position in the international and national metal scene, I would say. And that's, it's not the same anymore."

Respondent Jessica Santiago Lopez (JSL), co-organizer of Submit Fest contributed in this point with the following: "There used to be a bigger scene here, like Waterfront had a lot of metal

bands, ahm, Nighttown and later Watt, they booked a lot of shows, like shows that were booked now by Melkweg, they could just play here. So, it's kind of a big loss for the city". Although specifically addressing the Heavy Metal musical culture of Rotterdam as a scene in these two previous extracts, the changes in the local infrastructure have been addressed in a clear manner by multiple of the participants through their input and can be seen as a relevant for the assessment from an ecosystem perspective. Their argument for a simplification of spaces is an aspect that can affect the results when assessing the conditions of a local scene or musical ecosystem, due to a lack of options available for bands and for fans, contrasting directly with the need for "Places to perform and create" that represents an important element of music practices (Schippers & Grant, 2016, p. 456).

4.1.3: Diversity…but to each their own.

Nevertheless, despite the consensus of a decrease in infrastructure visible on the size and limitations of a venue like Baroeg, all the participants of this project argued and agreed that on that same smaller scale, there are plenty of venues within the city. Another issue is raised when it comes to how many of these venues could also host live performances of Heavy Metal music. When thinking about places to play in Rotterdam, musician TS had this to say: "We're here in Rotown and Rotown, they do a fantastic job programming, but they would never or hardly ever give some room, for a metal band, even if it was an experimental or open minded metal band." Keeping the same concept of considering the possibility of Rotown hosting Heavy Metal live shows, local DJ MVB commented: "We're pushing that, since mid-2000's. I don't think it's going to happen". This could be interpreted as part of the existing bad reputation known to follow Heavy Metal outside its established audiences, in which the outside perception of the genre and different elements that are part of it. Another approach to these results could rely on the fact that the city of Rotterdam already has a specialized venue for Heavy Metal and from that point of view, the need for more places hosting Heavy Metal performances could not feel justified as each one of the venues provides a specific music genre.

Addressing this point of specialization, an important and very interesting finding has to do with the distribution of live music among the different venues. Rotterdam has an exciting distribution of labor, where different venues specialize on different music genres. As pointed by Tom van der Vat (TVV), Project Manager at POPUNIE: "It has to do with what do you think your role is as a venue. Because we have five, six in the city. You see, Baroeg is the place for the loud music, Worm is for the experimental music, Rotown is for the hip and indie music, and, ahm, LantarenVenster is for the jazz kind of thing and Bird is for the music of black origin. That's the simple version. But, that's a very healthy way to divide, ahm, the city in, ahm, your own plainfield". And as we have argued

before in relation to this division or distribution of musical genres, we can agree that having a specialized venue on a particular musical genre can provide solid groundwork for the development and growth of said genre.

4.1.4: Rehearsing spaces for everybody! A lesson of quality over quantity.

Moving along to additional areas of infrastructure, besides providing spaces that can host live performances, an ecosystem requires additional setups that can support the music industries on a local level. Before bands can take the stage, perform in front of an audience, get their names across and begin building audiences and fans, bands need to work on their sound. This is possible in rehearsing spaces. Concerning this type of infrastructure our findings have been mixed. Initially there seems to be enough supply and availability of rehearsing spaces to satisfy the musical numbers of the city of Rotterdam, several characteristics of these spaces are mentioned by our respondents. Initially, when asked about this issue, project manager TVV responded: "enough […] because if it's not enough people will be protesting in the streets, gives us a rehearsing space, it's not happening. And there are still new bands forming and, so, if, ahm, sometimes there are sentiments, maybe it's not easy to find one. But that it's not the same as that they don't…that they aren't there."

This latter section on the response from our participant brings light to another issue, also found across the opinions of different respondents; visibility, however this will be mentioned in more detail at the later time within this same section of results. The argument concerning rehearsing spaces started with the notion of having enough supply to fulfill the existing demand. It is important to realize that number of rehearsing spaces could be considered one of many characteristics to look for when considering assessments of music from an ecosystem perspective. Continuing with the reflection, established musician SG said the following about rehearsing spaces: "there's more stuff like, in, ahm, more places where people can rehearse but not that much you know? […] You always have to pay for, pretty big prices […] there are some places but not that much. There's always a waiting list, so, ahm, it's pretty hard to start rehearsing somewhere." Based on this account there seem to be additional issues when trying to procure a rehearsing space.

In this same view, interview participant Pushpa Toekoen (PT), member of the new Rotterdam Metal band Katsu-dum and co-organizer of Submit Fest talked about her experience while looking for rehearsing spaces in Rotterdam: "Most of them are really small or don't have good gear to practice with." And Tamas Niks (TN), also member of the Katsu-dum commented the following when asked about improvements and/or changes in Rotterdam: "Yeah, mine is easy, affordable practice spaces in Rotterdam, you know. Would be nice, with good gear." Finally, established musician PB talked about two characteristics that the existing rehearsing spaces need to have for a prosper development: "You have to have good rehearsal spots and payable rehearsal spots, especially for

young kids […] you gotta give them opportunities and that's something from as a far as I'm concerned, should be done". There are two interesting finds, that we consider relevant to reflect upon. First, while the number of rehearsing spaces might be the appropriate one for a city, additional characteristics as price, availability, the quality of facilities and quality of gear available also play an influential role when assessing for conditions.

Added to what has been previously mentioned and discussing, a complementary finding from this project shed light into the multiple uses that these rehearsing spaces can have. Established musician PB, while discussing the existing infrastructure in Rotterdam for places to play noted: " He, he has been doing some shows in, in a rehearsal spot in the south of Rotterdam which, I haven't heard before […] I didn't know that spot existed, you know." From this we can understand that a deeper evaluation is needed, in order to assess infrastructure for places to play, besides traditional venues for live music, the need to consider emerging places or even improvised places as potential venues could have a significant impact on the assessments, especially when it comes to evaluating diversity of venues . Once this approach is taken, the perspective on infrastructure could improve as the emergent and alternative space seem to be provided the local music communities with additional alternatives than initially considered for live music to happen.

4.1.5: Let there be festivals!

Still within the notions of infrastructure and its conditions, next to diversity, size and identity of venues, and more in line with alternative spaces, an emergent trend has been seen to be on the rise across countries (Communian, 2017). Festivals have become a highly valuable phenomenon, and music festivals are no exception as their growth is consequence of a monitored development that can be seen in "cultural consumption and experience goods" (Communian, 2017, p. 8). Represented among our themes as Diversity of Events, participants referred greatly to the development of a local Heavy Metal festival, which can be interpreted as a potential sign that could indicate that there is still a significant music culture of Heavy Metal in Rotterdam. Organized by Baroeg, the Baroeg Open Fair provides additional diversity of events for the community. Talking about the festival and its impact, music journalist IJ had this say: "Baroeg Open Air is one of the few times that you can see rather big, metal bands, in a place with a low threshold, like a festival that you could go to even though you're not really into metal […] that really helps to also feel more proud about your own city". Here not only the significance of a festival is addressed but also the positive effects such effects have on cities where they are held.

Established musician SG also addressed the issue of festivals: "The festival thing is very big now. Baroeg Open Air is a good thing to try to build on that and see how far you can go. It crossed the ten thousand border, I think last year […] we played there, and so we see it grow every year".

Next to providing alternative for events, arguing for the musical culture of Heavy Metal in Rotterdam, another notion that was discussed was that concerned, besides its growth is concerned with the role that the festivals fulfil according to the respondents. Festival co-organizer JSL commented: "I'm really glad that Baroeg Open Air is still here because I think that's our best representation. Because, each and every year it shows there's a lot of people wanting to go there and it's growing". Baroeg Open Air has managed to address a gap that needed attention in Rotterdam, according to our participants, the need for larger shows outside the specialized venue. Baroeg Open Air was a free entry festival, which helped increase its appeal and popularity. However, and simultaneously with the developments of this project, beginning with the current year will change its model, becoming a paid festival. We believe this was worth mentioning as we move onwards with our results into the second section of this category mainly focused on reflecting on the existing regulations and supports available.

4.1.6: We got your back…or do we?

When it comes to discussing the regulations within the city of Rotterdam, the themes that were developed for this key category dealt mainly in issues concerning support, in the shape of funds or general orientations and advice aimed towards the improvement of the musical culture. The evaluation of support was mainly considered from local authorities and from an organization focused on local talent development. This latter actor is one of the most significant findings across this project and it makes a case for a more unique approach to the development of music culture on the local level. The role of Support as an indicator has been clearly identified and discussed by all the respondents. Beginning with support provided directly through the local authorities (Government Support) venue director LVR commented: "really good, they support about eighty cultural organizations in Rotterdam. And we're one of them, with this money we can pay for our staff and the venue rental." It is commonly understood that the local government enable resources with the objective of supporting arts and culture and by a natural consequence of this: music (Cloonan, 2010).

From the previous we can reflect on the importance of having direct support from the local authorities and how counting with this type of support represents a very positive characteristic, that can contribute to keeping musical cultures alive. Cultural sociologist JS, added on relation to the government support: "that's a good thing, it's good to see that the municipality is taking this kind of culture also seriously […] to actually embrace it as a part of Rotterdam and Dutch culture". Yet despite this confirmed support, and in connection to the closing statement of the previous section, we could understand that managing to secure additional support despite what is already being granted could present a challenge. Taking the case of the Baroeg Open Air festival and their switch from a free festival to a paid one, music composer and local DJ Michiel van den Bos (MVD) gave the

following remark: "There is no way, the hoops they have to run through every time to get the funding they need, to get it done, I don't, there's no way, it's unbelievable". When asked to elaborate on this MVD, noted: "Well, it's always been a niche thing, I mean come to the local government and say yeah we want to put a metal fest on [Proceeds to make shocking face]. This passage denotes additional issues that may be affecting the grants available. And while fully acknowledging the resources from the government may be limited, there is still a deeper issue embedded in the opinion of the participant which dealt with perceptions of Heavy Metal, theme that is addressed in a latter section.

Next to the issues concerning Government Support, there was a highly relevant finding in Rotterdam for that regard. Rotterdam has an organization called the POPUNIE, that supports the local music scenes, regardless of the genre. As project manager TVV stated: "POPUNIE is a foundation, a non-profit foundation and we, ah, our main objective, is ahm, talent development in all genres. We are a second line organization. So, we are an expertise center, ahm, you can come to us for help and we try to help you, ah, ahm, as good as possible." Pushpa Toekoen, also talked about POPUNIE: "POPUNIE organizes workshops and invites important people in the music scene […] we went to a few meetings and they gave a lot of advices about how, what you can do to start a band or what kind of help they can provide." The existence of a such an organization entirely dedicated to supporting and developing local talents, can be considered as an attractive and extremely useful asset from an ecosystem approach for the development of music cultures in the city of Rotterdam.

Musician TS also talked about this organization: "Good thing about Rotterdam is that we have an institution like the POPUNIE, ah, who, ahm, yeah really support local music and local very well, who provide tour support for upcoming bands which we used a couple of times". TS continued: "That's an infrastructure that not all cities or all countries have. So that's a luxury that we, that we benefit from […] that's a part of Rotterdam that's nice, that's good." Having a support institution like the POPUNIE, solely dedicated to the support of local musical talent across all genres is a very interesting advantage. It can provide the guidance necessary for bands and performers in relation to understanding and procuring what is necessary for them in order to make their first steps in their musical career. Among the support programs offered by the POPUNIE, there is one focused on networking and connections. Project manager TVV explained: " Then we have another thing, it's called Meet the Pros, that's a program with about five sessions a year and we invite pros about a certain, uhm, subject […]and there's a group of musicians or organizers, it's about forty, fifty people and it's a very low-key setting that stimulates to communicate with each other." The activities done by POPUNIE in relation of music scene support are very varied. As stated by our participants they can provide direction, and advice for musical acts on their earlier stagers as to how to properly develop.

They also connect starter musicians or music event organizers with individuals possessing higher levels of expertise. These interactions lead to knowledge exchange and improvement overall as the more experience people can share their knowledge with the more inexperienced individuals who in turn can directly benefit from this as they carve the path within the music industries. We did, nevertheless, come across other responses in relation to POPUNIE that offered a different view in relation to their support. Established musician SG mentioned: "When we were starting, it was already there, but it was more focused on other types of music, we experienced back then. It was a little bit difficult to get them interested in metal because they did not take it that seriously". Adding to this independent music journalist IJ, commented: "the POPUNIE is of course for the entire musical scene. They do not give much focus to metal bands". It is important to stress the differences in opinion that exist among our participants, getting to know the different experiences provided us with a more complete picture to reflect upon during this assessment.

The findings presented on this category showed interesting developments. There is proven and confirmed support from the local authorities which is mainly seen in the form of funding. The Baroeg venue can keep on functioning because of this support. Though, there is an issue to be seen when requesting additional support, and this represents a series of challenges for the venue as they remain confined to their core activities without much room for additional endeavors. Additionally, contributions concerning previous times spoke of a larger infrastructure where a bigger diversity of venues and alternative places for the Heavy Metal ecosystem of Rotterdam where available. Still, having a venue that specializes on the genre of Heavy Metal has additional value to the quality of the local conditions when seen from an ecosystem perspective. Moving onwards we reflect on the second category which could have influenced and can help better explain some the developments within Infrastructure & Regulations.

4.2: Contexts and Constructs

Besides the support represented through regulations and the infrastructure seen through the venues and facilities that enable the practice and performance of music available to assess a musical culture from an ecosystem point of view, concepts of a more intangible nature need to considered as they also influence and determine the quality and sustainability of a musical ecosystem. Reflecting on these categories was particularly challenging as there is a significant amount of depth in relation to the layers in which some the constructs are located and due to their mostly subjective nature. Contexts on the other hand, proved to be easier to identify, as the "context of some music genres are relatively stable but most change over time" (Schippers & Grant, 2016, p. 453). Heavy Metal is genre that has endured different transformations and developments,

but the main concepts have persevered throughout the lifespan of the genre allowing the constructs to remain fairly unaltered.

4.2.1: Mid-size, (And nothing else needed?)

Connecting with our previous findings, more in particularly addressing the decrease in infrastructure presented earlier, the contexts surrounding Heavy Metal provide a relevant insight into why the decrease of facilities may not truly affect and musical culture of Heavy Metal in Rotterdam. Even though the perception that it was indeed damaging was seen and shared by the majority of the respondents, there were also alternative perspectives that presented a different approach as size was not seen or perceived to be an issue at all, in regard to the local Heavy Metal scene of Rotterdam. DJ, MVB, argued for a different approach. When asked about the local infrastructure and its performance he stated: "Ahm, once again, you don't need much. I mean, we have the Baroeg and they do, do a lot of good things […] but if you have the Baroeg what the f*** else do you need?". He later added when asked about larger sizes venues in Rotterdam he replied: "Not necessary for metal, at all. Not anymore, unless you're a festival that has like three days or something. Yeah, I don't think it'll make things better if we have another large venue for metal. Because it's, ahm, a mid-size thing now." The latter portion of his answer is related to the overall aspect and perception of Heavy Metal, its place on the musical spectrum among other themes about outside perception.

4.2.2: An anti-establishment establishment

In that regard the contributions by the participants help shed more light into the genre of Heavy Metal, discussing the appealing notions while at the same time acknowledging the limitations that have been present through the history of the genre. MVB, when discussing Heavy Metal from a context approach, said the following: "It has always operated like in a little bit of cult thing, and it is actually kind of nice […] and that is what it has always been or at least, what it has grown into. You know it is in the background somewhere, it is pretty big, but nobody sees it". Established musician SG also talked about Heavy Metal and the main idea behind it "The rebellious idea of us against the world", to which associate professor PB also added: "it is sort of this anti-establishment". We can identify the main theme found across the excerpts from the three participants. Relevant to the Interest of Heavy Metal, we can conclude that the context in which Heavy Metal mainly conducts itself is with a defined rejection of the mainstream ideas, and in this opposition of what dictates the norms lies part of the appeal of the genre.

Despite these clear features being identified with Heavy Metal, there is another side to the genre and to the sub-culture that exists with it. Cultural Sociologist JS briefly stated: "It has also something about not conforming to all kinds of standards. Although it has its own standards". There,

we found a contradicting issue that simultaneously represents the Interest of Heavy Metal on one side of the spectrum while also acknowledging this confrontation as part of the limitations of the genre. Additionally, we came across several constructs that were worth reflecting on. The Attitudes represent the intangible qualities that are part of any musical genre and Heavy Metal is no exception. One of these attitudes is considerable valuable and might even contribute to its sustainability; the appreciation of knowledge. JS elaborated on this: "In Metal there is actually a culture that celebrates knowledge […] on the one hand it is snobbish you could say and pretentions but pretentions is sometimes very good, because you learn about the culture and you are really invested and it means something to you". Here we have found a direct link that confirms an element from our theory, Schippers & Grant argue that "community recognition of the value of the music genre seems to be a significant factor in sustainability" (p.453). Having the recognition of the genre through the active celebration of knowledge as a vital element of the community of said genre provides a strong case for sustainability of a music culture from an ecosystem approach.

4.2.3: Local or Translocal? A Dutch thing

Moving from the constructs back into the contexts, we have previously addressed the issues in regard to venues and the physical characteristics that these have. Yet next to that, these issues also allow for the existing contexts to be understood on a more precise manner. The fact that Baroeg is a specialized venue with frequent programming of Heavy Metal music, represents a local strength when thinking from a local context. Furthermore, the size of the Baroeg also helps shed some light in another local context, the local limitations. And since the physical environment is really significant for music genres (Merriam, 1964, Schippers & Grant, 2016), understanding the surroundings, possibilities and resources available becomes another relevant step when assessing a musical ecosystem. While trying to understand the local conditions, strengths and limitations and new (and very unexpected) finding was revealed to us through our participants, such finding presented a new range of possibilities to evaluate and reflect upon.

While addressing the context of Heavy Metal and Rotterdam, cultural sociologist JS had this to say on the matter: "Metal is from all over the Netherlands". He then further elaborated with "I think the Dutch metal scene is very much Dutch and not so much locally bound […] because the Netherlands is such a small country". And in relation to the limitations present within Rotterdam, where size of the local does not allow for bigger bands, he commented: "If you want to see something you can just take the train, to Tilburg or to Eindhoven if it is not booked in Baroeg". Besides, the same was found to be true when considering Baroeg and the quality of shows offered. Venue director LVR addressed this: "We attract people from all over the country, not only from Rotterdam but also from other provinces". This concept of proximity, connection allowed us to

develop an interesting reflection. Where the local limitations found such as venue size or lack of diversity of venues may not be significant considering the context where the communities can relocate easily thanks to the size and connectivity network of a country like the Netherlands. In this notion, further reflection into the Heavy musical ecosystem could change its scope and try to study the sustainability of the entire country as a musical ecosystem for Heavy Metal.

4.2.4: If you cannot see it, does it mean it is there?

We could argue that clarity and a proper visualization could help any assessment to be conducted in a better way. Therefore, we believed that being able to identify everything related to musical ecosystem should be considered among the indicators to be sought for. Through our empirical data we came across a significant situation. Across different answers provided by the participants, one of the most interesting points was the lack of a proper visibility to understand what is really going within the city in relation to Heavy Metal. We conclude that in order for it to be considered as a good and proper ecosystem, the mapping needs to be clear, and all the different actors, networks and existing relationship and bonds among them have to be defined and identifiable in a clear way. On the topic of the local Heavy Metal music culture, independent music journalist IJ remarked: "I think that it is very, ahm, disorganized, and hence it feels non-existing or very fragmentary". Additionally, Pim Blankenstein (PB), founder of the Rotterdam Doom Metal band Officium Triste and ambassador for Baroeg mentioned something similar: " he (a friend of his) has been doing some shows in a rehearsal spot in the south of Rotterdam, which I had not heard before, I did not know that spot existed". The fragmentation mentioned by IJ, affects an ecosystem approach as the connections and networks available cannot be identified.

4.2.5: No support? No problem! Metal always finds a way

Among the multiple set of attitudes embedded within Heavy Metal, the desire to create and to do where there would normally be no support available, stands among the most admirable constructs of Heavy Metal. Similar to the famous proverb "where there is a will there is a way" Heavy Metal has managed to overcome adversities and negativity. We found, through our participants that this construct contributes significantly to the musical culture of Heavy Metal and could be consider as a relevant indicator when evaluating a musical ecosystem. This construct is the Do It Yourself approach or DIY. Drijver and Hitters (2017) talk about this construct when "musicians aim at forms of alternative expression, by indiosyncratic and autonomous production and distribution of their artistic products" (p.18). Meaning that the artist or (seen through findings) the communities developed initiatives without institutional or official support managing to bring them to life through their own means.

Established musician SG, talked about the DYI construct: "We started booking our own concerts […] when we started, we had to do it ourselves because the mainstream magazines did not feature you". Cultural Sociologist JS, when discussing support and subsidies complemented by stating: "I think metal has actually such a self-organize, such a strength in self organizing that often subsidies are well, I think they are very useful but they are not always necessary and I think that is actually a strength of metal music". Of course, this not a construct that is only applicable or useful by the musicians but any community members as well. Co-festival organizer JSL, added: "The heavy scene is always like this niche that needs to do it more themselves". Having this construct and developing this attitude presents a significant development when thinking from a musical ecosystem perspective. Support may be needed within some genre as an element for the assessment while in the case of Heavy Metal, the lack of support may not alter the assessment whatsoever.

Whether is through the attitudes rooted in the genre or the impact or influence that the physical environment in a musical ecosystem. Knowing the contexts and constructs in which a music culture is developed allows for the identification of key elements to be used for assessment. We believe that this category is essential when determining the measurement indicators to assess a musical ecosystem. Theory can guide and provide the background, but it is through the understanding of these categories from the empirical observations that the model for assessment could be truly develop.

4.3: Musicians and Communities

Next to the infrastructure and contexts, groups of actors are another key element for a musical ecosystem. They are the ones who occupy the venues, the ones the gather and interact socially, and they are the ones responsible for carrying on and envisioning the constructs that define musical genres. It is through that the ecosystem take form, through their participation and initiatives. We have already established DYI as an important asset for the Heavy Metal musical ecosystem. We think that initiatives inject variety and could keep a musical ecosystem from stagnating.

4.3.1 Initiatives

Representing the starting point of potential and powerful developments, we found out that initiatives are very valuable among the Heavy Metal musicians and communities. We also came across frequent responses that dealt with support from the community, audiences, or local actors that took matters into their own hands and contributed to the development of the musical culture. These contributions took the form of initiatives. And these initiatives are varied in nature and goals. Whether it meant the development of a monthly radio show centered around metal *Dood & Verderf,* organized by project respondent music journalist IJ. Providing an alternative space for metal

audiences to gather and interact outside concert attendance at a local bar at recover the community approach, all the way to the development of a new Heavy Metal festival that focuses only on the more evolved or newer sub-genres that have emerged with an emphasis on promoting local talent.

The support from the community in the shape of initiatives adds a diversity of alternatives that from a musical ecosystem point of view improves its conditions and advocates for its endurance. Local DJ MVB, talked about the development of an initiative in relation to Heavy Metal in Bar3: "It's really hard to find venues that, especially in the city center that accept that kind of thing […] and we wanted to go full on trash, death, with a little bit of heavy in between, that's it. And, ahm, there was no place that would do that, but I frequented this bar quite a bit, and I was like: I might try this." In this sense we can reflect that this can be understood as an alternative space, a place for the development of the social happenings complementing the notion of infrastructure by offering an additional location for social occasions outside live performances.

 What was developed from this initiative became a monthly gathering named "Metal Monday", which has been identified by fellow participants and recognized for the value that it holds. Pim Blankenstein (PB), founder of the Rotterdam Doom Metal band Officium Triste and ambassador for Baroeg commented on the matter: "I've been there a couple of times and it totally, ahm, meets what is needed for a scene, just social interaction, that's what makes a scene […] it's talking to each other, you know". Music journalist IJ also talked about the Metal Monday and the impact that it has: "The metal community very much likes to go places and meet each other. Like, the social aspect is really important." As stated by few of the respondents, the community aspect of Heavy Metal holds a high degree of significance in relation to the possible developments that could sprout from said interaction.

Based on this, we can reflect and identify the social gatherings as pivotal elements corroborating the theoretical contributions by Woo, et al (2015) of the importance of interactions and relations built around music cultures and could also be considered, as one the opening steps when studying music communities, scenes and musical ecosystems, the first connection, the first exchange of ideas and development of initiatives that could eventually lead to the creation and growth of a musical community. The whole notion of community, relationships and networks is what brings to life the musical culture is the additional spark required for musical ecosystem to thrive.

4.3.2 Networks and Their Power

If there are limitations present within the existing infrastructure, an alternative, taken from the contributions of the participants and reflected on as a finding, is to rely on networks that surround the musical ecosystems in order to find alternatives and solutions to the limitations that

may be affecting a particular aspect of a scene or ecosystem. We have reviewed how the size of Baroeg is seen as limiting factor by the participants of this project. However, alternatives were discussed by our participants that relay the notion and specific importance of networks for local musical scenes. With this as a possible course of action to take, a new picture can be painted when assessing a musical ecosystem in which the already established and defined limitations may present a smaller obstacle than what was originally considered or even in some cases eliminating what was initially considered as limitations from the discussions and assessments.

We have already established that the specialized venue for Heavy Metal in Rotterdam (Baroeg) has a small size, which affects the possibility of bigger shows and bigger bands for the city and the audiences. However, and interest solution has been found that also relies on the existing infrastructure of Rotterdam. Infrastructure that while not necessarily focused or specialized in Heavy Metal, is part of the larger set of networks surrounding the local music industries and in particularly the live sector. Baroeg's venue director LVR stated on this: "Yeah, of course, you can book some bigger acts, sometimes. And, ahm, when we can, when we are offered a bigger act, we go to another venue called Maassilo, they have capacity of eight hundred people […] and I think that's, for us that's a better idea than, ahm, to get really big". Project manager TVV further commented on this idea and amplified it to the whole live music sector of Rotterdam. He said: "And the Baroeg sometimes they book a big band, but they don't, it's too big for the Baroeg, so they put in on in a big, bigger venue, Maassilo, for instance. But they are doing it, but Rotown is doing it also, Bird is doing it also".

The availability of such possibilities enables alternatives that would be otherwise commonly overlooked and presents itself to be one of the most interesting findings concerning this project. Furthermore, in relation to the possibilities outside its own stage, Baroeg can not only transpose when there is need for a bigger venue but can also work together in collaboration to support smaller venues as well. Regarding this Baroeg's venue director LVR commented: "also some shows on a boat by the way, ahm, V11. And, ahm, we started a cooperation with them as well. With the shows that are, ahm, not big enough for this venue and big enough for that boat with a capacity of one hundred people". These developments highlight the importance of local networks that can benefit the live music industries of a city and therefore possess a high degree of relevance for them to be studied from an ecosystem and ecological perspective. However, and still taking a critical approach, while there may seem that some of the existing limitations may no longer be an impediment, a new set of conditions has developed and with it challenges and risks. Baroeg's venue director LVR stated: "It's also a bigger risk for us. Because, ahm, when we do it in another venue, we don't have the bar income. Ahm, it's a bit of a risk to, ahm, to pay a lot to big bands and, ahm, yeah, have to earn this

back by entrance money only." Regardless, is still valuable to have options available that can directly increase the diversity of live performances.

4.4: Systems of learning music

Not a widely discussed category among our participants. Nevertheless, the small findings retrieved were made useful in determining the existence of a Heavy Metal musical ecosystem in Rotterdam. Schippers and Grant (2016) mention that: "In all sustained music practices, some aspects are transmitted from one individual or group to another". (p. 451). The transfer of musical knowledge, both in theory and execution is considered to be an important element. Of course, the authors acknowledge that there is no one-way of knowledge transfer but many and this may vary depending on the genre. Among the briefly excerpts discussing this matter, established musician PB had this to say: "You have Rock Central in, in Rotterdam, there is also some coaching, to get, to know how to get a band together and this is good. But I think it should be pushed more." Through this response we can implied that there is an alternative that promotes learning music and coaching for new talent development but that this opportunity may not be getting enough attention. Something that we could relate with the visibility issues presented earlier.

Having discovered Rock Central as a source for music education in Rotterdam later on our project, we attempted to gather any possible information. A supplementary set of questions was sent via email to LVR, venue director of Baroeg (Answers will be provided separately as part of the appendix). This is what LVR had to say on the subject: "Rock Central is a music coaching project for your / starting / talented musicians in the hard and alternative scenes a collaboration between SKVR and Baroeg. SKVR felt the need to do a project for musicians within the hard and alternative styles. Young talents develop their skills in SKVR and Baroeg offers them the first experience on an actual stage". Unfortunately, the showcase was meant to be held later and outside of the time restraints for this project. Regardless, this data proves that the existence of a tool aiming at developing talent within hard styles, among them Heavy Metal, however the extents of the success or efficiency of the project could not be assessed.

4.5: Media & Heavy Metal

Although, also not as widely addressed by the participants of our project. The approach and relationship with media are considered to be important by the possibilities the media enables through exposure (Schippers & Grant, 2016). Yet as the authors argue: "Recently, online environment have created massive exposure for certain music genres, with an impressive scope for forging niche markets and communities" (p.455). The developments that came with the internet benefited smaller or non-mainstream genres that often lack coverage or content, and we can argue that Heavy Metal benefited from this as seen from the perspectives of our musician respondents

who all manage their social media sites. Still, and more in line with traditional media, the perspectives provided by our respondents presented a negative picture (no pun intended) in relation to the depiction of Heavy Metal. Musician TS, talking about the Dutch national television broadcasting Pinkpop festival he said: "They had a lot of metal bands programmed on one day and you would see that the, Dutch national television broadcasters was doing live coverage of the event, the festival, and they kind of ridicule it, like, it is metal, it is something weird". This situation could be understood from the theme of outside perception of Heavy Metal, where the existent contexts indicates that there is a lack of proper understanding of the musical genre, turned into inaccurate portrayals.

This issue was also solved through community work reflected in initiatives as our respondents reported, by seeing the current coverage of the genre, the development of specialized media was required. Outlets like *Zware Metalen* and *Aardschock* Magazine presented a more accurate portrayal of Heavy Metal, as again, it was a product of the proper initiatives happening from within the community.

4.6: Improvements

Finally, to conclude our results section, we decided to developed and additional category, not based on literature but significantly important for the project as it could provide a more detailed method of the areas of opportunity and improvements to be considered, as part of a reflective approach that could provide additional insight that could be of use for overall closing section of this research project.

4.6.1: Areas of Opportunity

On the issue of infrastructure, currently the general idea that Rotterdam is a city that is lacking in relation to venues, exists more specifically when talking about venues of a larger size (Approximately 800 to 1500 people). Festival co-organizer JSL stated: "I would bring back Nighttown [...] we need a venue, I think, from that size as well [...] I don't think it's even just for the metal scene but just for the live scene in general. We miss a spot from thousand to two thousand people". Established musician PB, when asked about areas of opportunity and what is currently lacking said the following: "That's what we really need, like a mid-size venue for like bigger tours. Because I know a lot of bands, they're a little too big for Baroeg, but there's no other venue so they go to different cities and we really, yeah, we would need that over here, yeah." Through this, we can also reflect on how having the precedent of multiple venues that varied in size and experiencing and reflecting on the current limitations, caused a significant impact on the local actors, as they understand the potential and the importance of a variety of venues that could host bands of different sizes and the impact in the local audiences.

Staying with the notion of a larger venue musician TS stated: "This is kind of a cliché living in Rotterdam but having a bigger venue, that would be amazing. Because that is also an easier way to reach new people". Up and coming musician TN, also added: "Affordable practices spaces in Rotterdam, with good gear". Established SG, also advocated for social and community aspects: "Places where people can meet up every weekend […] people who come bring his girl bring his boy or whatever, you know and they see each other next week again and it starts growing most of the time". All the improvements selected that were suggested by our respondents represent the different themes, yet their impacts could possibly be seen across the different categories, as most of these issues seemed to be intertwined.

Chapter 5: Closing thoughts and Possible future research endeavors.

Having decided to embark on this project and choosing to conduct exploratory research with the objective of answering our research questions, proved to be a significant challenge. Taking into consideration the lack of literature or similar academic endeavors, this excursion into what could be considered unknown terrain proved to be a difficult but still rewarding trial. Proper limitations on behalf of the researcher in relation to deeper knowledge of Heavy Metal and The Netherlands, may have contributed as a disadvantage. Despite this, to answer our main inquiry, Rotterdam possesses unique characteristics that confirm the case of a musical ecosystem for Heavy Metal. Counting with a venue specialized in Heavy Metal (Baroeg) offering a considerable amount of shows a year that also is in charge of a festival and that can also collaborate with other venues in the city to provide diversity, having a one-of-a-kind support organizations like the POPUNIE, a musical education and talent development programmed aimed at hard music, and a monthly Heavy Metal themed social gathering hosted at a local bar really help present a very positive picture. Plus, different initiatives from the community, from newer festivals, to gigs on alternatives places advocate for the existence of an ecosystem, with its set of actors, networks, contexts, constructs and infrastructure.

Our second inquiry regarding sustainability proved to be more difficult to answer. There is prove that there is a community, and there is significant infrastructure to nurture the genre and the initiatives developed around talent development exist within the confines of the city. There is support from the local authorities. But among the concepts that are absent are the amount of newer and up and coming Heavy Metal bands that are currently in development in the city. The role of the musicians is significant one, represented by one of the measurement indicators provided by Schippers & Grant,(2016) in "Musicians & Communities" and as older and already established artists tour and play live less frequently the need for the next generation that would carry on the Heavy Metal culture of Rotterdam has, unfortunately not been identified while conducting this research.

However, issues of visibility cloud what could be a mainly positive conclusion for this research. The elements, informed by the categories of our theory as to what constitutes a musical ecosystem and its sustainability are present, however the networks and interactions seem to be disconnected among them with only a few connections in between. Segmentation among initiatives and activities fails to provide the general landscape where everything is accessible and there is awareness in relation to the different activities and places in relation to Heavy Metal. Besides, and as already mentioned, having a specializes venue provides a positive evaluation of the local strengths available. On the other hand, having that same venue as the only visible provider of Heavy Metal music in Rotterdam represents a vulnerability as focusing on a single entity increases the risks of losing the entire presence if something were to occur.

Thanks to the literature reviewed for this project we have been able to contribute and expand the academic debate in relation to Heavy Metal Music. The genre is considered to be popular in the academic fields, but the research endeavors are more in line with cultural studies and sub-culture or from a scene perspective taking a priority in the behaviors and interactions that occur next to the music (Hesmondhalgh, 2005; Spracklen, Brown & Kahn-Harris, 2011; Bennet, 2004; Woo, et al, 2015). Next to this, and addressing music from a more general perspective, academic works on the notion of live music discusses the value it holds for cities and the evolution the sector of music has had in recent years (Frith, 2007; Williamson & Cloonan, 2007; Brennan, 2010). All these contributions helped guide our project, recognizing the importance for more similar research. However, the literature in relation of Heavy Metal live music, its condition from an infrastructure standpoint proved to be limited which served to influence this project with the purpose of contributing to the academic debate as an added motivation.

Additionally, we came to this project thinking that the information available and which was needed to successfully answer our main research questions seemed to be not directly reachable and hidden deep within some other layers of information. Because of this we selected in-depth interviews with experts as our data gathering method, and this gave us the opportunity to address deeper knowledge compared to other types of data collection techniques, as qualitative content analysis as we felt this method would present limitations that would not allow us to further elaborate on particular findings by creating more inquires. By interviewing established and new musicians, venue directors, young festival organizers etc. we were not only able to obtain a variety of accounts based on proper experiences related to the main focus of our research but while carrying out the interviews we had the opportunity to further elaborate on new findings informed by our participants and not initially considered in the original research approach, increasing in this way our thoughts and perspectives on Heavy Metal in Rotterdam from an ecosystem perspective. Interestingly, one of said findings present to be one of the most relevant pieces of information that provided a new perspective and has the potential to fuel further projects in this direction.

Besides, we think that by applying thematic analysis to our gathered data we were able to identify specific ways in which different topics were viewed among our participants. Seeing the similarities or even in some cases discrepancies that our respondents held on many of the different topics discussed in our multiple interviews even before the proper analysis was conducted, allowed us to already have an almost defined direction thanks to the thread that was already developed as to where our results and final reflection would be leading us to, once we concluded the project. In this sense we can argue that the methods chosen to conduct this project were the most suitable as they enable us to visualize the end result and conclusions of our research long before we started with our

data analysis, which in turned transformed into a confirmation stage we need to further elaborate on the main themes to present more viable and in-depth results.

As a first improvement also projected as further research, we propose that a proper mapping of the city of Rotterdam should be pursued, which could later be adjusted into the development of a platform that could provide the needed visibility to all the members from within and outside the community. This would allow for an easier identification of key actors and places and could foster additional collaborations that would in turn enrich the conditions of the local Heavy Metal music ecosystem. Next to that, an increase in the collaboration among the existing venues in the city has the potential to improve the supply of related music events with stronger relations among music venues developing as a direct effect.

The most relevant finding which will fuel the suggestions for additional research, had to do with the Netherlands as a country, its connectivity and the issues of Translocality. Seen from this perspective, the fact that Rotterdam may have some limitations within the ecosystem really hold a lesser meaningful value when thinking of the Netherlands as a whole. Multiple larger venues located within easy-to-reach cities simply provide more alternatives for the communities and fans of Heavy Metal music. Future endeavors should look to assess different cities, establishing comparisons based on similar indicators and providing advice on how to improve the conditions. Moreover, further research should aim to increase the scope and move from studying musical ecosystems of cities to the Netherlands as a Heavy Metal musical ecosystem. The availability of venues and additional music services could reveal significant findings to further feed the academic debate. There is already an important connection of the Netherlands and Metal, which is an important part of the music in the Netherlands, accurately covered by Berkers and Schaap (2018).

We have prominently mentioned throughout this project the contributions done by Schippers & Grant (2016) in relation to the indicators in which we developed our topic lists and interview questions. Their five domains for measuring vitality are a significant contribution to the field and helped inform our project. Yet we believe that based on our findings that some of those domains could not directly apply for a Heavy Metal ecosystem. As corroborated by multiple of our participants, Heavy Metal has such a self-sufficient quality embedded to it that a lack of any of the domains would not weaken the genre as a consequence of them missing. Alternatives and initiatives highly motivated by the Do It Yourself attitude call fill the gap left by any of the established domains that may be absent. A further development, based on our findings, could focus on the creation of measurement indicators specific to the Heavy Metal musical cultures that could be implemented to further measure and understand local Heavy Metal conditions from a musical ecosystem perspective.

Discussing some of the limitations of this projects, besides evident time constraints as a direct consequence of the fixed initial times established to fulfill the research project that would have allowed for the incorporation of additional elements to the project, we dealt mainly with aspects of production for Heavy Metal music, and although most of our group of participants are first and foremost Heavy Metal fans, this project did not fully consider the perspective of the fans and in not doing so an area of opportunity was missed. We could have considered the opinions of fans in relation to a variety of aspects: First, related to Rotterdam and the Heavy Metal culture present, and even discussing the newly found issue of Translocality, where the opinions of the fans in relation to traveling to attend live performances on other cities could have also provided valuable findings improving the case for a Heavy Metal musical ecosystem seen from a translocal level rather that the initial local approach.

Finally, Heavy Metal is a very powerful genre, it transcends borders becoming one of the very few authentic global phenomenon (Harris, 2000). It is was the "misfits" can rely on when life is not good, or when feeling a rejection of the mainstream and the establishment norms, it celebrates knowledge and dearly appreciates social interaction, which represent the strong ties of the community and reinforces the "us against the world" view attached to Heavy Metal. The genre is never going to end, it will not away and even though regular support may be taken away from it, the community with its Do It Yourself attitude deeply embedded will manage to find a way to create a Heavy Metal musical culture. In that sense we could conclude that Heavy Metal is deeply sustainable genre, because of the appreciation showed by those who followed the genre and form part of the Heavy Metal communities.

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Appendix A.

The Role of the Researcher.

The perspective of researcher has profound weight when conducting academic projects and with Qualitative research this is no different. Talking briefly from the researcher perspective, among my activities and responsibilities, I had to ensure the data that would be collected would represent the ideal information necessary to provide a satisfactory and relevant answer to the main research questions provided, with time constraints and limitations considered. Besides the notions of defining the main topic of research, and developing a suitable research design, the data collection was done by me. Based on academic literature, the interview questions were developed and then conducted, transcribed, coded and presented by myself. This combined with my background as a fan of Heavy Metal music since an early age, and the personal interest in the live music sector could represent the possibility of a partiality during the data analyses process and while structing and presenting the results.

However, because of an already existing familiarity and deeper knowledge of some of the main topics in this project (mainly Heavy Metal), I also believe that I was capable of presenting a more accurate picture of the contexts and attitudes that surround the genre, as the outside perception of Heavy Metal and reliance on stereotypes could affect the main approaches and influence the main results as a consequence of a lack of understanding. Knowing the position of Heavy Metal within the musical spectrum, the active opposition of the established mainstream and the Do It Yourself attitude highly embedded in the genre are notions I am closely familiar with. It also another one of the influencing factors under the selection of in-depth interviews with experts as our main data gathering technique, as they entailed accurate depictions of the conditions of the Heavy Metal musical culture that could help inform outside studies or researchers in a better way and could lead to further research endeavors.

Appendix B:
Information about interview participants.

Stephan Gebédi (SG), 52, founder, guitarist and lead singer of the Rotterdam metal band Thanatos, founder of the Dutch super group Hail of Bullets and ambassador to Baroeg.

Julian Schaap (JS), 31, cultural sociologist and postdoctoral researcher at the Department of Arts and Cultural Studies of the Erasmus School of History, Culture and Communication.

Pauwke Berkers (B), 41, associate Professor for the Erasmus School of History, Culture and Communication.

Inge Janse (IJ), 38, independent music journalist based in Rotterdam. Host of the monthly metal radio show Dood & Verderf on Operator Radio.

Leon van Rijnsbergen, (LVR), 43, Director, promoter and main booker of Baroeg. Baroeg is the venue in Rotterdam where most hard and alternative music performances take place, among them Heavy Metal.

Michiel van den Bos, (MVB), 44, videogame music composer, local DJ and active member of the Heavy Metal community. Founder of the monthly gathering called Metal Monday, held on Bar3 in the city center of Rotterdam.

Pim Blankenstein (PB), founder and lead singer of the Rotterdam Doom Metal band Officium Triste and ambassador to Baroeg.

Pushpa Toekoen (PT), drummer of Katsu-dum, up and coming metal band from Rotterdam and co-organizer of Submit Fest, indoor metal festival, held on Baroeg that focuses on the more modern genres within Heavy Metal.

Tamas Niks (TA), guitarist of Katsu-dum, up and coming metal band from Rotterdam.

Jessica Santiago Lopez, (JSL), co-organizer of Submit Fest, indoor metal festival, held on Baroeg that focuses on the more modern genres within Heavy Metal.

Monica Buurmeester, (MB), co-organizer of Submit Fest, indoor metal festival, held on Baroeg that focuses on the more modern genres within Heavy Metal.

Tom van der Vat, (TVV), project manager from the POPUNIE Rotterdam, second line organization funding by the government specialized on local talent development, from all musical genres.
Thomas Sciarone, (TS), founding member of the Rotterdam band GOLD. Former member of The Devil's Blood and progressive hardcore band Malkovich.

Code Report – Grouped by: Code Groups

(77) codes
Local filters:

> Show codes in any of the groups Contexts & Constructs, Systems of learning music, Musicians & Communities, Media & Heavy Metal, Infrastructure & Regulations or Improvements

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Contexts & Constructs

Active: 35 Codes:

● **Accesibility**

1 Groups:

Contexts & Constructs

12 Quotations:

12:13 but it's also quite telling it's in Lombardijen and not in the city ce…… (13012:13190) - D 12: Berkers Transcript

but it's also quite telling it's in Lombardijen and not in the city center and probably [15:30] it attracts also quite a lot of people from the surrounding neighbor, ahm, burrows,

4 Codes:

● Accesibility / ○ Infrastructure / ● Local limitations / ○ Scene

13:50 Baroeg is the only one and that's too far away. And they don't have e…… (20198:20327) - D 13: IJ Interview transcript

Baroeg is the only one and that's too far away. And they don't have evenings where you can go to where there isn't a performance.

4 Codes:

● Accesibility / ● Local limitations / ○ Location / ● Venue Specialization

14:59 So, ahm, but then, the, the nice thing about something like Nighttown…… (30300:30499) - D 14: JS Interview Transcript

So, ahm, but then, the, the nice thing about something like Nighttown is that it's like in the city center [31:45]. The Baroeg is all the way in Lomberdeijn, like that's the biggest issue with Baroeg

3 Codes:

- ● Accesibility / ○ Infrastructure / ○ Location

16:130 Mmm [54:15] kind of thinking of combining these, ahm, ok no. What woul…… (50220:50451) - D 16: MVDV Transcript

Mmm [54:15] kind of thinking of combining these, ahm, ok no. What would you change from the heavy metal scene in Rotterdam?

MVB: Mmmm. I would put the Baroeg in the center [54:30] of the city, so it's easier to reach for everyone.

4 Codes:

- ● Accesibility / ● Areas of opportunity / ○ local changes / ● Local limitations

16:134 think there would have been [56:30]. I mean, even the goth scene exist…… (52054:52210) - D 16: MVDV Transcript

think there would have been [56:30]. I mean, even the goth scene exists, it's weird, I mean I went to WaveFest last weekend, it's, it's there, it IS there!

3 Codes:

- ● Accesibility / ○ Other scenes / ○ Visibility issues

16:138 Yes, but it's, it's hidden and, and, ahm, not able to function in the…… (52738:52860) - D 16: MVDV Transcript

Yes, but it's, it's hidden and, and, ahm, not able to function in the same way that scenes did and that's not their fault.

3 Codes:

- ● Accesibility / ● Local limitations / ○ Visibility issues

17:58 he, he has been doing some shows in [32:15] in, a rehearsal spot in t…… (26354:26577) - D 17: PB Interview Transcript

he, he has been doing some shows in [32:15] in, a rehearsal spot in the south of Rotterdam which, I haven't heard before… before he mentioned: " Oh I'm doing like a gig over there" I didn't know that spot existed, you know

4 Codes:

- ● Accesibility / ● Alternative Spaces / ● Initiatives / ○ Visibility issues