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„Knowing *in*, *about* and *through* sonic atmospheres: Soundwalking as a method for understanding relationships between people and the environment“

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1. Introduction

1.1. Research topic and context

Soundwalking means walking, listening, being part of and immersed in sounds. It is a way of connecting to the surroundings, becoming more aware of the environment, understanding one's relationship with a place, its atmosphere and sounds, making sense of one's experience locally and in the world. Soundwalking can be a meditative, leisure or research practice; it can be done alone or with others, in a familiar or unfamiliar environment.

The central question of this research project is how soundwalking can be applied as a method for understanding relationships between people and the environment, in combination with the approach of knowing *in*, *about* and *through* sonic atmospheres (Eisenlohr 2018; Sumartojo & Pink 2019).

Key questions are how environmental sounds – which are an essential part of our everyday experience – are perceived and given meaning to during and after the soundwalk, how the place is constituted through the listening experience and the sounds, and what can thus be learned about the relationship between people and the environment through soundwalking. I pose the question largely in the context of urban parks.

As a result of the research, I will propose a methodological approach to doing research for understanding relationships between people and the environment by soundwalking and knowing *in*, *about* and *through* sonic atmospheres.

The discussion is based on empirical data collected in three stages. The largest part of the data was collected from October until December 2019 in Volksgarten, a historical park in Vienna. The second stage of the fieldwork took place in February and March 2020 in Superkilen Park in Copenhagen, where I had to stop unexpectedly early due to the COVID-19 pandemic. The third part of the empirical data is more fragmentary and was collected distantly from people going on soundwalks on their own around the world during the lockdown in spring 2020. Whereas the plan was to conduct comparative fieldwork in two places, the COVID-19 pandemic interrupted this plan and I only managed to gather fragmentary data in Copenhagen and during the lockdown. Although the empirical research was far from ideal, all case studies enabled me to gain different perspectives on the topic and to test the applicability of methods in multiple settings, so I decided to include them all.

The initial inspiration for this project was on one side my fascination with the sonic world and with the question how anthropology could benefit from paying more attention to sound, and on the other side my experiences of shifting perception of urban and natural environment when I moved to Graz and then Vienna after spending most of my life in Tartu, Estonia. I began wondering how people experience and give meaning to their relationship with nature in the urban environment. It seemed natural to combine these questions with methods from sound studies, as my own perception had been strongly influenced by sonic experiences.

Both points of departure are connected to highly relevant issues in academia and society. Sensory anthropology has grown into a broad area of research, and sonic anthropology has been increasingly popular within it. As a relatively young field, there is still plenty of room for developing methodological and theoretical approaches. Thereby, it is important to take into account the implications of the globalised world onto the sensory situatedness of people who tend to have relations to various places and environments in the world. This brings me to the second point of departure. Environments—natural and urban—are constantly transforming but nowadays with a particularly rapid pace. This calls for new ways of studying the relationships between people and the environment.

1.2. Empirical research sites

1.2.1. Volksgarten

Volksgarten (see figures 1–3) is a public park in the inner city of Vienna, built by an order of Emperor Francis I and opened in 1823. It is part of the Hofburg Palace complex and lies next to the Vienna Ring Road – a boulevard surrounding the inner city. There are several noteworthy monuments in Volksgarten, for example Grillparzer Monument and Empress Elizabeth Monument, as well as the Theseus Temple and the Cortisches coffee house, which has been developed and changed over the decades and is a disco pavilion today. (Österreichische Bundesgärten 2018)

Volksgarten was the first garden in Austria built specifically for the general public. Although Francis I thought about retaining a private garden in the location, it was decided to open the garden for the public – in the official documents, it is explained that all the inhabitants of Vienna would highly appreciate the beautiful scenery (Martz 2012: 283–284). It is still an openly accessible park today, whereby the accessibility is limited by opening times, gates and behavioural restrictions, such as not going onto the grass, not riding a bike and not bringing

animals into the park.

Volksgarten is administered by *Österreichische Bundesgärten*, unlike most parks in Vienna that fall under the responsibility of *MA 42 – Wiener Stadtgärten*. As a former garden of the Habsburg dynasty, they are protected as historical heritage sites as part of the Hofburg Palace together with Burggarten, Heldenplatz and Maria Theresia Platz, and it is the duty of *Österreichische Bundesgärten* to preserve the authenticity of the parks, to take care of the historical plant collections and to protect endangered plant species (HBLFA für Gartenbau Schönbrunn 2018). At the same time, Volksgarten is a much visited park by both inhabitants of Vienna and tourists.

I chose Volksgarten as a fieldwork site because when I visited it, I perceived controversies between the visual and the aural, the urban and the natural. It looked like a place of confinement but at the same time, I heard many sounds of the city while being in Volksgarten. Whereby the architecture of Volksgarten is extremely orderly, the chaos of the city life finds its way to the park through sounds.

Although Volksgarten is a garden by name, it is also listed as a public park. As I regard public parks and gardens as a common category for this research project, I will mostly refer to Volksgarten as a park throughout the thesis.

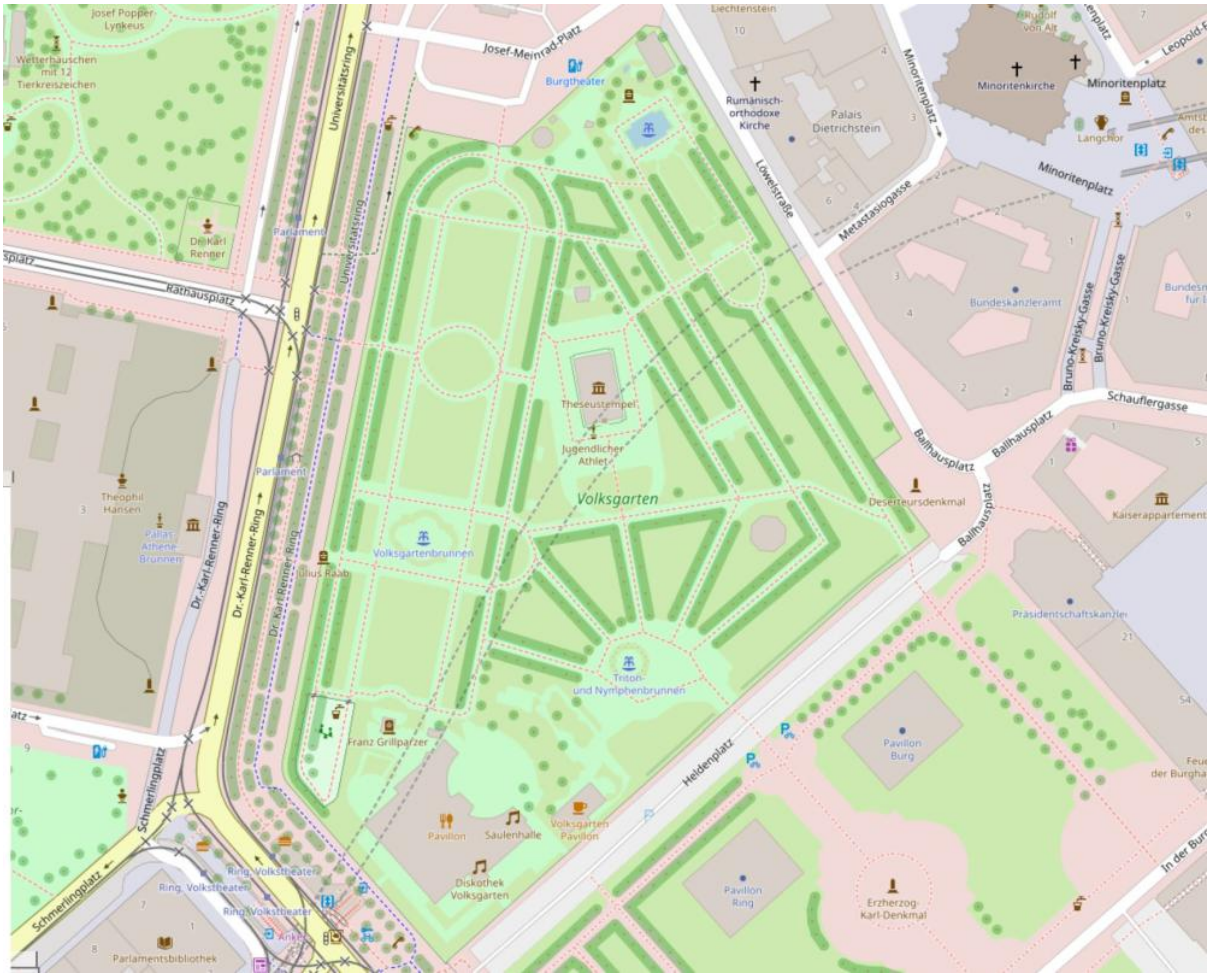

Figure 1. Plan of Volksgarten

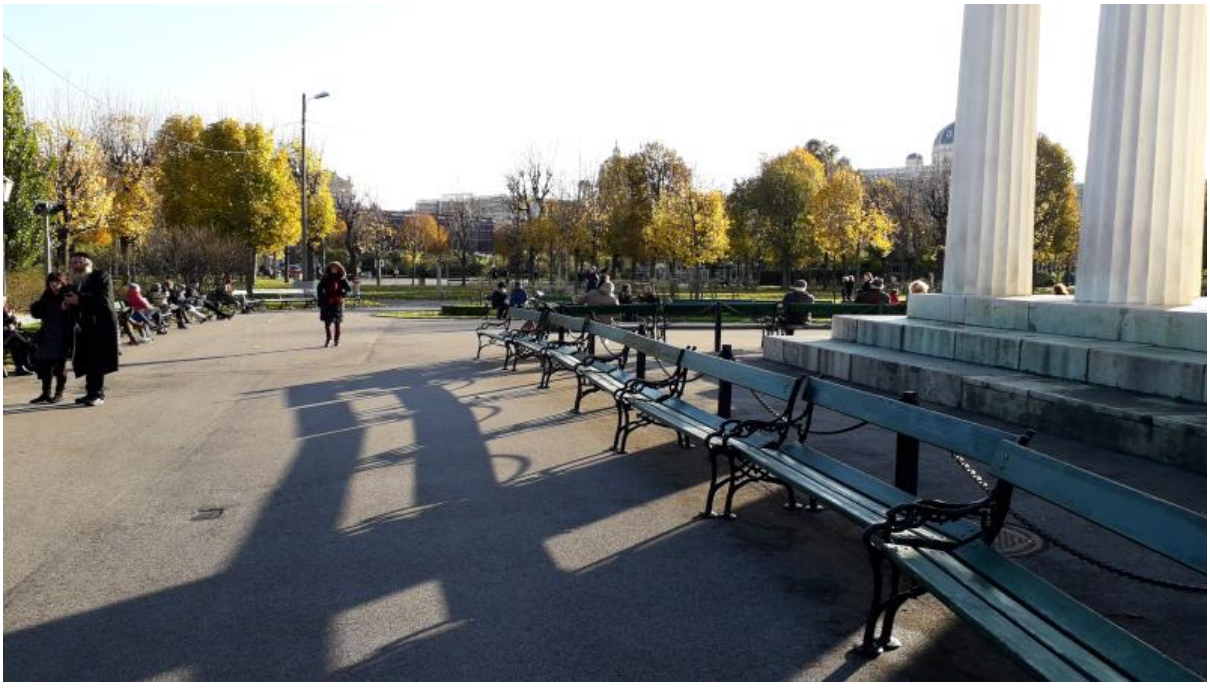

Figure 2. Standing next to the Theseustempel, Volksgarten. November 2019

Figure 3. Rose garden and cranes, Volksgarten. May 2020

1.2.2. Superkilen

Superkilen (see figures 4–7) is a public park in Copenhagen, opened in 2012. It is known for its unique design, including more than 100 objects from various countries around the world, and its purpose to bring together people of the neighbourhood with different cultural backgrounds.The park is divided into three zones: Red Square, Black Square and Green Zone.

Superkilen is situated in the Mimersgade Quarter in the Nørrebro district. The residents have a wide variety of backgrounds, with many having roots in Pakistan, Somalia, Palestine and Turkey (Stanfield & van Riemsdijk 2019: 1363). In the specific location there used to be a rail yard (ibid: 1366). Superkilen was built as part of an urban development project in Nørrebro that concentrated on the ethnical and social variety of the population (Steiner 2013: 9). In the Red Square, there is Nørrebrohallen – a huge building including a sports complex, a café and a public library, and a location of various events.

Superkilen was built by architects from Bjarke Ingels Group and Topotek1 and artists from Superflex, in cooperation with Realdania and the City of Copenhagen. It has been celebrated because of its design, inclusion of public participation and how it dealt with integration and diversity in the neighbourhood (AKDN 2016). Denmark has an image of providing welfare for all inhabitants. Nonetheless, immigration regulations have been made much stricter and are among the most severe ones in Europe, and immigrants are not seen as equal society

members by everyone (Stanfield & van Riemsdijk 2019: 1360).

I chose Superkilen as the second research site in January 2020 when I went to Copenhagen for an internship at the Sound Studies Lab at the University of Copenhagen. I looked up various parks online and visited some of them. Superkilen immediately caught my attention due to its design, purpose and controversies, and thus as a fascinating site for research.

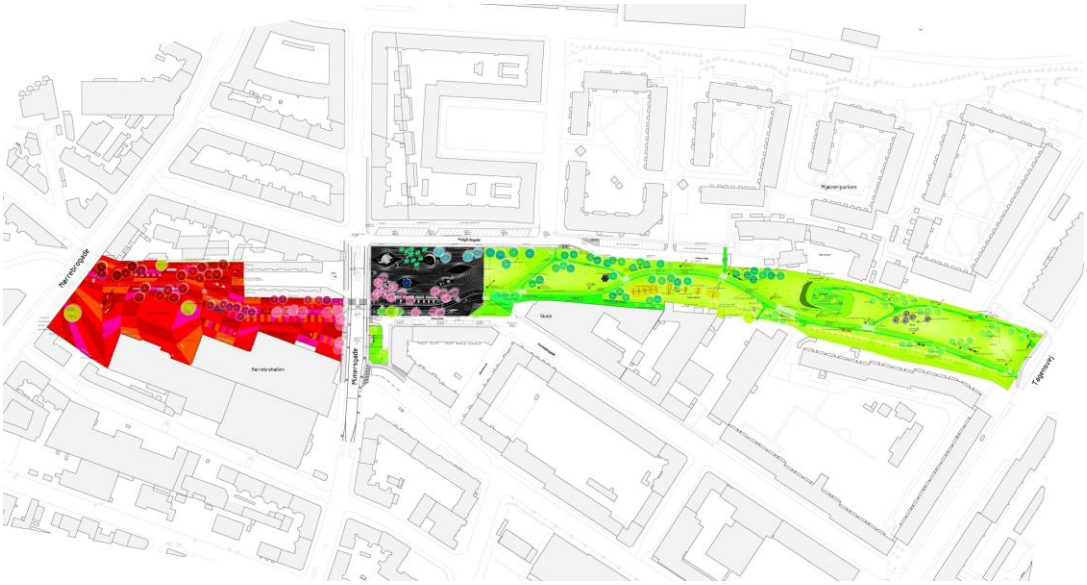

Figure 4. Plan of Superkilen

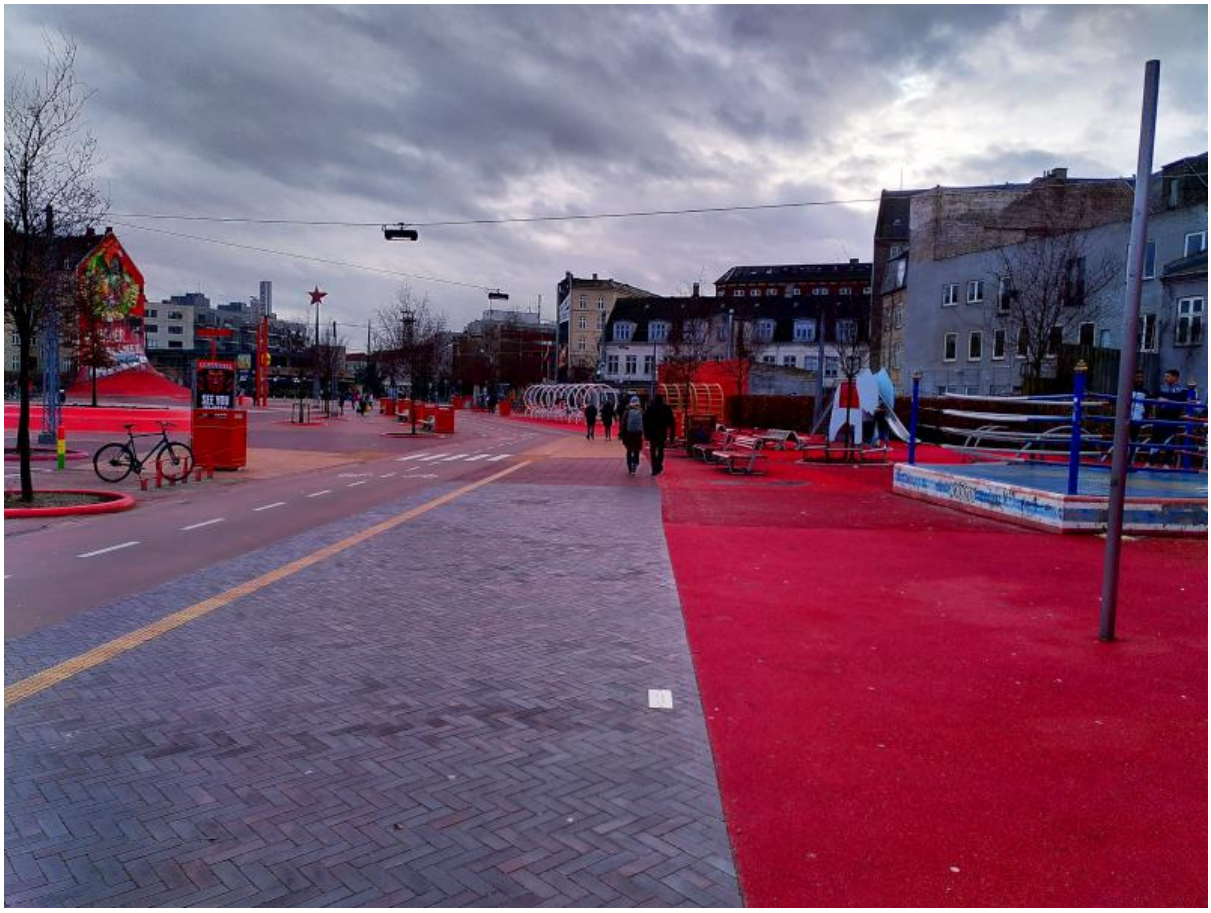

Figure 5. Red Square, Superkilen. March 2020

Figure 6. Black Square, Superkilen. January 2020

Figure 7. Green Zone, Superkilen. January 2020

1.2.3. COVID-19 pandemic

The site for my third case study was essentially different in that it was intended to be limited only temporally, not spatially. I collected data in March, April and May 2020 and hoped to receive contributions from all over the world. In reality, the limitations of my methods for collecting data, meaning mostly my social media networks, had a huge impact on the spatial boundedness of the study. Contributions were sent to me from Estonia, Austria, USA, Lebanon and Norway. Although three continents were represented, Europe strongly dominated over other parts of the world.

COVID-19 hit most of the world in early 2020. This led to widespread changes in the society, as lockdown was declared in many countries and new rules of behaviour were enforced to slow down the spread of the virus. Similar measures against the pandemic led to similar changes in the sonic environment around the world. Noise levels decreased considerably, especially in urban environments (Aletta et al. 2020: 123). The changes in noise pollution were widely monitored and noise maps created (ibid: 124). Less traffic and other loud noise that usually filled the cities led to changes in the behaviour of birds that began to produce "higher performance songs at lower amplitudes" (Derryberry 2020: 575).

The COVID-19 pandemic interrupted my empirical research in Superkilen but at the same time it raised so many questions related to my fieldwork topic that I decided to try to find out how the sonic environment is experienced during this unusual time. It also allowed me to test

another way of soundwalking.

1.3. Theoretical and methodological approach and contribution

The project is somewhat interdisciplinary. I believe that highly valuable knowledge can be gained from other disciplines dealing with similar topics. Therefore, I partly rely on authors with a background in sound studies, musicology, acoustics and urban studies. Within anthropology, I engage with sensory anthropology, urban anthropology and anthropology of place. The analytical framework is largely based on Shanti Sumartojo and Sarah Pink who have developed an approach for knowing *in, about* and *through* atmospheres, which they introduce in their book "Atmospheres and the experiential world: theory and methods" (2019). I will also explore concepts of place, listening and sensory situatedness.

As a result of various factors, including limited access and time resources, the need for new methods has arisen in anthropology (Pink 2009: 9). These factors might be especially relevant in the modern urban context where it is not easily possible for researchers to live among a community for a longer period of time. I believe that soundwalking could be one such innovative method that offers alternative "routes into understanding other people's lives, experiences, values, social worlds and more" (ibid.).

There is no established methodology for soundwalking and my methodological approach is rather experimental. I tested three kinds of soundwalking: researcher as a soundwalker, soundwalking with research participants, and independent soundwalking without the researcher.

Soundwalking has been used in urban studies widely but often, anthropologists have not been part of the projects. Sumartojo and Pink (2019) have studied relationships between people and the environment in urban contexts through the concept of atmospheres, partly involving soundwalking, but sound has not been a dominant focus of theirs. I wish to give a greater weight to the sonic dimensions of atmospheres. Thus, I hope to contribute with an innovative combination of methodological and theoretical approach, and to develop the methods of soundwalking further, hopefully applicable in a wide array of research sites and topics.

The aim of my project is to develop a methodological approach to soundwalking for knowing *in, about* and *through* atmospheres. Thus, I hope to contribute to relevant fields in sound studies, sonic and sensory anthropology, urban and environmental anthropology. The

approach could theoretically be applied in urban planning and in understanding how people experience and give meaning to transforming environments, for example in research and interventions focused on climate change.

1.4. Structure of the thesis

The thesis is divided into following sections. In Chapter 2, I introduce my theoretical approach, and in Chapter 3, elaborate and reflect on methodology. Chapters 4 to 7 present the results of my empirical research. In Chapter 4, I explore various aspects of soundwalking experiences. In Chapters 5, 6 and 7, I introduce the results of individual case studies in chronological order. In Chapter 8, I discuss the potential of researching *in*, *about* and *through* sonic atmospheres by soundwalking, based on the three case studies. In the subchapter 8.4., I propose a revised methodology for soundwalking.

2. Theoretical approach

2.1. Sound studies and sonic anthropology

Sound studies are an interdisciplinary field that studies how sound, sonic practices and discourses about sound influence people and the society and vice versa (Sterne 2012: 2). Sonic anthropology could be seen both as a sub-field of sensory anthropology and of sound studies. I deliberately use the notion 'sonic anthropology' instead of 'anthropology of sound' because I see the first broader, also including anthropology *in* sound and sonic ethnographies. The anthropological perspective on sonic experiences allows us to study which meanings people in different environments assign to sonic experiences (Marazzi 2019: 198).

The analysis of sound in cultural theory has been around the 1970s; the first major theories were influenced by the soundscape movement and the accessibility of sound technology (Schulze 2018b: 8). R. Murray Schafer (1977) is often seen as one of the first actors in this development. Anthropology of sound became a distinguishable field in the 1980s when Steven Feld did sonic research in the Bosavi rainforest (1987).

A number of studies influenced the development of my research design. Applying Feld's acoustemological approach, Tom Rice has studied the acoustic dimensions of hospital life in the Edinburgh Royal Infirmary (2003). The project Acoustic Environments in Change focused on the changes in soundscapes of five European villages from 1975 to 2000 (Järviluoma et al. 2009). Anthropologist Freek Colombijn (2007) has explored the soundscape of Indonesian cities from the perspective of social sciences, studying the main components of the soundscape and the experience of urban sounds by residents, attempting to connect research on urban space and soundscapes. Tripta Chandola did research in Govindpuri settlement in Delhi "to emphasise how different reckonings of sounds as noise within the settlement manifest politics of space, gender and community" (2012: 392). Ozgun Eylul Iscen (2014) studied newcomers' listening experiences in Vancouver, influenced by their sensory repertoire from other places. Agathe Colléony et al. did anthropological research on soundscapes in zoos, involving the analysis of the role of nature in a city and how urban natural environments create a "restorative sense of 'being away'" (2017: 673). All the aforementioned studies have influenced the process of my research.

For doing sonic anthropology, I find important assumptions that sounds and listening are social, cultural and artful (Porcello et al. 2010: 52–53; Samuels et al. 2010: 339), and that sounds shape the everyday life of people (Augoyard & Torgue 2005: 3). Sounds have a large

potential as an analytical point of departure. Through sounds we can understand our relations to other people and to the surrounding places, and the meaning of our social experience (Bull & Back 2006: 4). David Howes argues against considering sensuous experiences as something purely emotional, claiming that reason, logic and meaning are part of them (2003: 43). Not all sounds have a meaning though, and for determining possible meanings it is essential to study the context of sounds (Truax 2001: 52–53).

Howes sees sensory experiences as partly influenced by a dominant sensory model of a culture and senses as divided into hierarchies but admits that there is variation and that not everyone follows it, especially in larger societies with heterogeneous populations (2003: 55). Howes' work has been criticised on these accounts by Tim Ingold (2000) and Pink (2009). Ingold claims that Howes reduces people to vehicles of the sensory values of the society (2000: 284), and that "an anthropology of the senses that starts from the premise that perception consists in the cultural modelling of received bodily sensations can have nothing to say about how people practically look, listen, touch, taste and sniff as they go about their business" (2011: 315). Pink says that his approach is not paying enough attention to the sensory experience with its immediacy, and that creating hierarchies of the senses is problematic (2009: 12). Both, Ingold and Pink take human perception, not cultural and social categories, as a point of departure and centre of analysis.

This perspective is the one on which I also based my research. Trying to determine dominant sensory models seems to be less and less appropriate in the globalised world with increasingly heterogeneous populations. Also, the senses are always interconnected and their importance is difficult to separate in sensory experiences.

As sensory ethnography, Pink proposes attending "to the question of experience by accounting for the relationships between bodies, minds and the materiality and sensoriality of the environment", whereby it is important for researchers to acknowledge the emplacement of participants and themselves (2009: 25). This is how I understand sensory ethnography and I would claim that this definition is also suitable in the context of a study in which listening is the main focus.

As many studies in the field use the notion of soundscape, I feel the obligation to shortly explain why I do not use it as a central concept. The notion was brought into the academic world by Murray Schafer, meaning any acoustic field of study, for example a musical composition, a radio program or an acoustic environment (1977: 7). Ingold criticises the

notion of soundscape because it places sound into the role of an object, whereas he argues that sound is "a phenomenon of *experience*" and always in movement (2011: 137, 139, original italics). Ingold argues for hearing *in* sound instead (ibid: 138). Although 'soundscape' might be a fruitful concept for some studies, in the context of my research I agree with Ingold and do not use it to focus more on the immersion in and movement of sound. I still use the term 'soundscape' to refer to audio recordings made in a specific sonic environment, and include some concepts of researchers that do speak of soundscapes.

2.2. Anthropology of place, space and the environment

2.2.1. Space or place?

Anthropological theory is full of discussions on space and place, and often a core question is which one of the two should be used. Even though it is unavoidable to take a stance in relation to the notions, I try to explain my perspective only briefly, as this is not my main focus. Moreover, it appears to me that many parallels can be found between concepts of space and place, creating the impression that the difference is more in the specific approaches to space or place, rather than in the choice between the two words. Paul Kendall who studied sounds of social space in Kaili—a small town in China—, has expressed a partly similar opinion saying that he avoided place but the issues he explored could also be analysed through place (2019: 33). I believe the choice should be made, considering which concepts would serve best as an analytical tool in the specific research context.

There is a tendency to view place as space with boundaries and specific material characteristics and space in a more abstract way, and place as located in space (Jaffe and Koning 2016: 24). Based on a phenomenological approach, Edward S. Casey takes an opposing stance, seeing place as primary and claiming that space and time arise and are contained in places, not the other way around (1996: 36, 44). Relying on the latter statement, I will handle Volksgarten and Superkilen as places that contain temporal and spatial measures. As already mentioned, I find that the main question should be how we approach either space or place, and I will now introduce some aspects of space and place that are relevant to this study.

2.2.2. Places as entanglements

How can we define place in a way that involves possibly many of its relevant aspects?

Assemblage theory and actor-network theory might offer a good start, as they have provided the understanding of places as dynamic networks, including the non-human world, such as elements of nature (Jaffe & Koning 2016: 24). For example, Tim Cresswell considers places as assemblages because they combine the material world, representations and practices in a dynamic and complex way (Cresswell 2011: 238, 240). His approach also involves the immaterial aspects of place. Another definition is offered by Ingold who claims that places are a result of movement, and thus sees places as a meshwork of pathways, as something that occurs, not exists (2008: 1808).

Pink (2009) has developed an approach to place, based on a discussion on concepts of space and place by Casey, Massey and Ingold. As a result of the analysis of those three concepts, she introduces places in which "persons, things, trajectories, sensations, discourses, and more" come together and become entangled (ibid: 41).

The latter approaches to place allow us to remain aware of the temporal and spatial measures of places. There are different nuances to how these approaches deal with different elements coming together in or bringing together places, whether they are called assemblages, meshworks or entanglements. They give a role to human and non-human, material and immaterial actors, all of which are relevant to how places come to being.

Following from the different actors, these definitions give space to studying the agency of non-human actors. Robert Rotenberg introduces the concept of material agency to explain how objects move people to act in certain ways, in particular the agency that nature has in the city (2014: 391), relevant when studying urban parks. Non-human actors also include material objects other than natural ones that also have agency.

Taking into account the elements of entanglement, agency, movement, material and immaterial, human and non-human, time, space and interconnectedness of actors, Pink's definition of place seems to be the most comprehensive, involving all the relevant aspects of the aforementioned concepts.

2.2.3. Embodied places, phenomenology and a global sense of place

Phenomenology is the study of phenomena in the lived experiences of people, either individually or as groups (Desjarlais & Throop 2011: 88). A phenomenological approach to places enables us to study an essential characteristic of place – the sense of place and how people give meaning to places (Cresswell 2011: 236). A sense of place can be created through personal or mediated experience (ibid.). Soundwalking has the intention of studying people's

sense of place through walking and listening experiences. The practice of soundwalking implies understanding places as embodied and experiential.

When combining places as entanglements and embodied place, we can speak of the global aspects of the sense of place. According to Setha M. Low, embodiment allows us to explore the global in spatial analysis, to see places at the same time as experienced and perceived, and translocal and transnational (2009: 22). Theories of place-making also involve the global scale – Rivke Jaffe and Anouk de Koning argue that global connections and movements contribute to processes of place-making (2016: 39).

2.2.4. Politics of place

Another important aspect concerning place is the politics of place, which is related to the control over a place, including its sonic environment. Even if no obvious conflicts are perceived at first glance, places still have an impact to what types of social relationships are acceptable (Kytö 2019: 181). To address conflicts connected to a specific place, Low and Denise Lawrence-Zúñiga use the term 'contested spaces' (2003: 18). Politics also influence the meanings that a place can have. Jaffe and Koning bring out a shopping mall as an example of this: it is made and maintained for consumption (2016: 26–27). Such processes can again lead to a contestation of the meanings and functions of a place (ibid: 27). Jaffe and Koning claim that these disputes make urban places important for studying inequality, exclusion, contested meanings and thus more widely urban politics (ibid.).

Sound-related behaviour and norms in parks can also shed light on power relations in the city – both the official norms by the city authorities and the non-official norms of the inhabitants, as well as the following of official norms. In addition, sound can be used to assert control over a place, for example making loud sound is a way of presenting force (Colombijn 2007: 265). Like today, sound and controlling the sonic environment of the city was already part of the power structures in the 17th-19th-century cities, the authorities decided upon the allowed sounds in certain times and places (Garrioch 2003: 16). From an individual perspective, Michael Bull (2004) writes about the uses of sound technologies to control space or place, based on his study on the use of walkmans in a city. He found that through this mediated sound, people create a privatised space (2004: 182). He conceptualises it also as an aesthetic colonisation of a space and claims that Walkmans are used to create privatised spaces; in doing that, "the listener gets more out of the environment, not by interacting with it, but precisely by not interacting with it" (ibid: 183–184, 186). In the context of parks, speakers are

frequently used for such aesthetic colonisation; in this case though, other people are also influenced by the sound.

2.2.5. Urban environment

Urban anthropology can be understood as "the cultural anthropological study of cities, urban peoples, networks, systems, and environments" (Low 2014: 16). The field can be more difficult to define in urban anthropology than in a 'classical' anthropological study, to find a group that is spatially bounded, as people all over the city are connected through social relations (Jaffe & Koning 2016: 15). Cities are environments that consist of many people with various backgrounds, so when studying experiences of the urban environment, it is important to study individual experience (Adams et al. 2006: 2385).

The role of sounds in a city environment and their perceptions have changed remarkably throughout recent centuries, as David Garrioch (2003) suggests: in the 17th until the 19th century, sounds were important sources of information and the urban soundscape acted as a semiotic system for the inhabitants. This changed when other information sources emerged and became more dominant. Whereas the sonic environment changes due to changing social circumstances, changes in the sonic environment themselves can also change how social practices are carried out (Lacey 2016: 24).

2.2.6. Heterotopia

One interpretation of the position parks have in a city has been written by Rotenberg (2012; 2014) who analyses parks as Foucault's heterotopias and presents six ways that the latter are different from 'ordinary spaces' in a city. He says that nature can only exist in the city on human terms, in a contained form and not threatening the order of the city (Rotenberg 2014: 387). Parks are such non-threatening spaces that allow nature to exist next to culture, while at the same time symbolising the ideal of nature (ibid; Rotenberg 2012: 250).

According to him, there are six ways that such spaces are in contrast with ordinary spaces in a city:

1) Parks have a universal quality, in contrast to ordinary spaces that belong to a specific city or a neighbourhood of a city. If parks were transferred to another city, they would keep their meanings and functions. (Rotenberg 2014: 387)

2) The functions of parks are easy to determine, wherever they are situated. When we walk into a certain neighbourhood, we can recognise the specialised functions characteristic to

the area. The functions that define parks are more universal. (Rotenberg 2014: 388)

3) Meanings of parks are repeatable and shared by many different people, independent of their experiences. Rotenberg introduces Foucault's example of the Persian garden that is at the same time a physical garden, a model of paradise, a carpet, a heaven etc. Heterotopia is different from ordinary places by the multivocality. (Rotenberg 2014: 388)

4) Parks "create a break with ordinary time". We cannot distinguish the current meanings of a park from the meanings of the past. A park contains memories of past events, also from before it was a park. Parks change with a different pace than the surroundings; they do not keep up with the rhythm of the neighbourhood. "A park is something that can change and still remain the same. It is spatial déjà vu." (Rotenberg 2014: 388)

5) Parks are characterised by boundedness. Whereas neighbourhoods are relatively open, the accessibility of parks is restricted through fences, gates and opening hours. Into some parts, only the personnel may have access. (Rotenberg 2014: 388) To maintain the illusion of being in perfectly ordered nature, the surrounding city is kept out as much as possible, both visually and aurally. In addition to physical and temporal restrictions, parks exclude social groups that are regarded as unfitting to this illusion. (Rotenberg 2012: 251)

6) There is a special linkage between parks and the surrounding ordinary spaces. In parks, we can experience domesticated nature. Whereas city life is chaotic, perfect order can be found in parks. Rotenberg claims that this might be the best category for analysing how nature exists within a city because it shows life experiences as separated and even mystified in parks which contain nature. "Such linkages offer a radicalizing juxtaposition of the ideal garden with the real city. You are given the illusion of a choice between a life lived in the garden (easy, but improbable) and one lived in the city (difficult, but probable)." (Rotenberg 2014: 388–389)

I will explore questions that arose regarding parks as heterotopias as a result of soundwalking in chapters 5, 6 and 8.

2.3. Sonic atmospheres

2.3.1. The sonic in atmospheres

The notion of sonic atmosphere is based on Patrick Eisenlohr (2018) who applied the concept of sonic atmosphere together with transduction in a study on sonic dimensions of Islam,

based on the analysis of na't recitation practices in Mauritius, concentrating on the sonic dimensions of the voice. He included transduction because it emphasises "the immersive character of sound and [...] the ways in which listeners comingle with sonic phenomena" (ibid: 13). Going beyond verbal descriptions of sonic experiences, he did a formal analysis of sound, representing it on spectrographic and waveform diagrams.

Although I benefitted from his ideas about sonic atmospheres that draw "attention to the fact that the perception of sound always involves modifications of felt space by the body" (Eisenlohr 2018: 92), I could not directly apply Eisenlohr's theoretical and methodological approach to my study though because he was focusing on the analysis of voice which is quite different from the experiences of an urban sonic environment. Such a formal analysis of voice cannot be done the same way with a wide range of sounds. Therefore, I turned to another approach to atmospheres.

2.3.2. Knowing *in*, *about* and *through* atmospheres

Sumartojo and Pink view atmospheres as a way how something feels, which is a result of the "surroundings, sensory perceptions, subjectivities and imaginations" (2019: 5). Atmospheres are important for understanding places and events, they stay with us in memories and influence our imaginations; they do not only show us how places feel but also their meaning; they connect experiences to meanings (ibid: 2). Studying atmospheres allows us to think about people's relationships and engagement with the world, places and times in new ways, and to find new ways for making changes (ibid: 3).

Sumartojo and Pink do not view atmospheres as attached to certain environments but as emerging when we move through them. They argue for conceptualising atmospheres "as dynamic and changing configurations that allow analytical insight to a range of topics when we begin to think in, about and through them" (2019: 3). Thus, atmospheres do not only give information about a place but can help with understanding abstract concepts through themselves, such as urban and natural environment and parks.

Although they are more than the conditions that make their emergence possible, these conditions are essential in understanding them and must be looked at in an empirical study in atmospheres. Attending to these configurations demands methodologies that include the process of emergence of the atmospheres, in addition to how they feel, what their meaning and value is for the people who experience them. (ibid: 3–4)

Sumartojo and Pink argue for the use of atmospheres to learn about our perception and

understanding of the environment by studying experience (2019: 4). They do not treat atmospheres as actors themselves; atmospheres do not have the agency to make people feel a certain way but they are "part of a configuration of things and processes that make up a perceptual environment" (ibid: 5). When doing ethnographic research on atmospheres, the ethical implications involve being empathetic to the affective and sensory experiences of participants but also being aware of how we shape their experiences and impact them (ibid: 49).

In my research, I use the three-part analytical framework proposed by Sumartojo and Pink for thinking atmospherically:

1) Knowing *in* atmospheres

Knowing *in* atmospheres allows us to understand how we—both researchers and participants—live in atmospheres, and the constitution, experiences, meanings and consequences of atmospheres (Sumartojo & Pink 2019: 11, 36).

Researching *in* atmospheres must be reflexive; it requires engaging with our experiences autoethnographically and being aware of how we create meaning and knowledge. Being in atmospheres, "the ways of knowing that we are engaged in during research processes are also emergent from the atmospheres in which research is undertaken" (ibid: 38).

Collectivity is also important – working together with participants and understanding with them how they perceive and give meaning to the atmospheres they are in, not just doing research about them. (Sumartojo & Pink 2019: 11) Thereby, researchers can develop workshop environments that contribute to the emergence of certain atmospheres but these cannot be created without the activities of participants (ibid: 40).

Knowing *in* atmospheres is a prerequisite for the next two points by making it possible to research with participants and by creating a reflexive awareness (ibid: 36). Methodology should attune to emergence, uncertainty, reflexivity and collectivity (ibid: 40–41). In my study, soundwalking, creating sound maps, sound recordings and listening protocols were methods for researching *in* atmospheres. Soundwalking was a previously described workshop environment that created the conditions for atmospheres designed and imagined by me.

2) Knowing *about* atmospheres

This level of research is about representing and describing atmospheres retrospectively, and trying understanding the structure, conditions and possible impacts of atmospheres

(Sumartojo & Pink 2019: 41).

Knowing *about* atmospheres requires methods of documentation and creating research materials that take into account the emergent nature of atmospheres (ibid: 41). In my research, making interviews with research participants, and analysing my listening protocols and the sound maps of participants were methods for knowing *about* atmospheres. The interviews involved sound elicitation which Sumartojo and Pink also practised in their study on noise transformations in a park, although they primarily propose using photo and video elicitation (2019: 43, 66).

Knowing *about* atmospheres can lead us to knowing *through* atmospheres "by attending to what thinking atmospherically draws into being or makes it possible to know" (ibid: 41).

3) Knowing *through* atmospheres

Atmosphere can be connected to other concepts of experience and to how the latter is understood by finding new links that might not be immediately obvious. It also involves moving between the individual level of perception and larger scales, e.g. global collectivity. (Sumartojo & Pink 2019: 12) When the concept of atmosphere is used to understand something else, the politics of atmospheres are important to consider, as atmosphere emerges in an encounter and power relationships are always involved in encounters (ibid: 44).

Methodologies for researching *through* atmospheres "must always attend to relationality and encounters between humans and the things, people, objects, histories, imaginaries and sensory elements that somehow touch or constitute them" (ibid: 44–45).

2.3.3. Case study: Atmospheres and sound

In their book "Atmospheres and the experiential world: theory and methods" (2019, Sumartojo and Pink discuss various case studies on atmospheres. I wish to briefly introduce one project, as it is the most similar to my own. The focus was on how participants experienced a small park next to a motorway in Melbourne in which technologies were integrated to transform and cancel noise.

The fieldwork involved an autoethnographic exercise which meant listening and interviewing each other. Their experience was not just sonic but multisensory and affective. They argue that "the affective and sensory affordances of the transformed sound, the haptic experience of the environment and its visual aesthetics configured with these other elements to generate particular feelings of being that gave the sense of being *in* a particular atmosphere" (ibid: 64,

original italics). The concept of atmosphere helped them to bring the elements of individual experiences together. The autoethnographic exercise was partly meant to prepare them for research with participants (ibid: 64–65). This also enabled them to compare their own experiences with those of the participants.

The second part of the fieldwork involved a soundwalk with participants, during which they filmed the participants and the discussion. They created the route themselves, while acknowledging that it was partly a "constructed atmosphere". The other activity was a focused listening exercise, which they described as sound elicitation. During these exercises, the researchers also remained in atmospheres themselves. (ibid: 65–66)

In this project, they researched *in* and *about* atmospheres how they and participants experienced changes in the sonic environment. Knowing *through* atmospheres let them create understandings of abstract concepts like well-being.

Based on the project, Sumartojo and Pink argue that atmospheres enable us to develop an understanding for the relationship between sound and place further; it helps to "understand how being in an atmosphere that is already marked out as being 'special' or different, and which we have purposefully set up in a more experimental research context, enables a mode of atmospheres research that is reflexive and intense" (2019: 62, original italics).

Although sound has an important part in constituting an atmosphere, it cannot be seen as separate from other elements (ibid: 67). "By focusing on participants' experience of atmosphere, rather than of sound in isolation, we are able to see how a whole configuration of memories, materialities, emotions and sensory experiences of the environment come together to create transient atmospheres in which particular sentiments or feelings are generated" (ibid.).

Sumartojo and Pink acknowledge the compatibility of atmospheres and sonic anthropology, referring to anthropology done 'in sound' and about multisensory experience of a place (2019: 63–64). "When connecting this to the process of researching atmosphere, we can understand being in sound as part of being in atmosphere, engaging sound as a route into atmosphere, where we need to attend not only to the multi-sensoriality of experience, but also to the affective and material circumstances of this experience" (ibid: 64).

3. Methodological approach

3.1. Introduction: Soundwalking

Frauke Behrendt defines soundwalking as a combination of walking as "a specific form of human mobility" and listening as "a specific way of sensory attention", whereby there can be various purposes for soundwalking, as well as different practices (an expert practice, a research method, an artistic endeavour, a non-expert practice, an individual or group practice, one-time or repeated), and elements (silence, reflective discussions, audio recording, predetermined or improvised route, engaging with the soundscape and adding to it or trying to be silent) (2019: 251). Behrendt characterises soundwalking as "spatio-temporal, embodied, situated, multi-sensory and mobile" (ibid.). Furthermore, he understands soundwalks as being in sound and walking, rather than about sound or walking (ibid.).

Another view on soundwalks is offered by Karoline Oehme-Jüngling who describes soundwalking as a form of participant-observation to study relations between humans and sound (2014: 359). Movement is an essential element of soundwalks, becoming a conceptual tool (Behrendt 2019: 250). Movement and position are also important in Helmi Järviluoma and Noora Vikman's understanding of a listening experience – it is strongly influenced by the points of listening – whether it is one position that lets "the world sound as if it were flowing past" or various listening points while moving (2015: 654).

Referring to the aforementioned definitions and explanations of soundwalking, it is clear that there is no single way of conducting a soundwalk. As the focus of this research project is largely on methodology and as this is my first endeavour in anthropology of sound, I experimented with different ways of soundwalking. Although I initially relied on authors who have written about theoretical considerations (e.g. Behrendt 2019; Oehme-Jüngling 2014; Truax 2012; Westerkamp 2007) or about their experience with soundwalks in case studies (e.g. Adams et al. 2006; Colléony et al. 2017; Iscen 2014; Järviluoma & Vikman 2015), developing the methods was a longer process, throughout which I learned a lot from the ongoing practice. Retrospectively, I divided the practices of soundwalking into three types: researcher as a soundwalker, soundwalking with research participants, and independent soundwalking without the researcher.

After giving an overview of the general course of the empirical research, I will explore each in the following sub-chapters. Additionally, I will talk about complementary methods I applied during fieldwork, data analysis, and data representation, as well as offer some

reflexions on soundwalking as a research method.

3.2. Fieldwork methods

3.2.1. Overview of the fieldwork

I began fieldwork in September 2019 with the search for research participants in Vienna. From October until December 2019, I went on soundwalks myself, made sound recordings in Volksgarten and Burggarten, and conducted soundwalks with research participants in Volksgarten, accompanied by interviews afterwards. I also made an expert interview with an official of *Österreichische Bundesgärten*, responsible for the maintenance of the two parks.

In February and early March 2020, I went on soundwalks and made some recordings in Superkilen. I also got acquainted with the neighbourhood Outer Nørrebro, took part in events there and talked to local people. I went on one soundwalk with my colleague and supervisor in Copenhagen, Carla J. Maier. During this time, I also looked for research participants and made appointments for soundwalks with them. However, I had to leave Copenhagen before the planned time for soundwalks with participants due to the COVID-19 lockdown, and I only managed to conduct one such soundwalk.

During the lockdown, I decided to try to gather some data on soundwalking online, and I wrote a call for soundwalking, which I shared on social media and through friends. From March until May, I received nine contributions from different parts of the world, both from urban and rural environment.

In May, I wrote to the research participants from Vienna to ask if they would be willing to go on a second soundwalk in Volksgarten on their own. One of them did this, documenting the soundwalk herself. We conducted a Skype interview afterwards.

3.2.2. Researcher as a soundwalker

One way for researchers to use soundwalking in research is to simply practice soundwalking themselves. It seems to fit well to what Howes has said about how an anthropologist could be more sensible, namely experimenting with one's own bodies and senses (2003: 28), although Howes does not speak about soundwalking or even sound specifically. This practice can also be seen as a way of practising participant-observation (Oehme-Jüngling 2014) – while listening, one can observe the sonic behaviour of people. As soundwalking is an autoethnographic practice, it is important to be critical of listening as a practice and a high

degree of reflexivity is required.

Soundwalking as a researcher was a greater focus during the fieldwork phase in Copenhagen, where I practiced soundwalking myself as a preparation for soundwalking with research participants. In Vienna, I went on an individual documented soundwalk 10 times, with the duration varying from 10 minutes to an hour, often around half an hour. In Copenhagen, I practised soundwalking 8 times, whereby the durations were considerably longer than in Vienna – from 45 minutes to 3 hours. This is not because Superkilen is much larger than Volksgarten but because I tried to purposefully immerse myself into the environment more – I often stopped to listen, interacted with the many objects, sat down, and walked through the park several times. As it was mostly very cold and windy, I sometimes went to warm myself up in Nørrebrohallen. This allowed me to get a sense of the people and activities there. For example, I once visited Nørrebrohallen during an event on the International Mother Language Day, when locals with different backgrounds introduced their languages.

Movement

Movement brings a distinctive value to listening as a method. Listening while walking allows us to have various points of listening and become more aware of our own role in the sonic environment, and while walking it might be easier to be "conscious of the hypothetical borders between seeing and hearing" (Järviluoma & Vikman 2015: 654).

As with any kind of soundwalking, movement is an essential part of it. I did not follow a specific route, unless I was recording. Still, it was similar to the route that we would take on soundwalks with participants. On my soundwalks, I often stopped and sat down to listen for a longer time in a specific place, and also for writing protocols. My movements were more similar throughout the process in Volksgarten. In Superkilen, my movements varied more and often depended on the current situation and what drew my attention.

Listening protocols

In Vienna, I mostly just listened and wrote down what I heard. There was no specific set of questions for listening and making a protocol. The listening protocols contain notes on what I heard, my thoughts and associations while listening, and additional information based on other senses (mainly sight). In Copenhagen, I began exploring questions about the listening process as such more, I tried to be more aware of my own biases while listening and tried to reflect on the process. Listening protocols were both in the form of writing and audio recordings that I later transcribed.

Soundscape recordings

Antonio Marazzi finds audio recording to be an enrichening possibility for ethnographic research, making it possible to capture the listening experience, thus helping us to memorise certain events, which could then be analysed later (2019: 202-203). Although I do not agree with the possibility of "storing the sensory experience directly" (ibid: 202), as a recording device cannot capture the sonic environment exactly as one hears it, I do find technology worth using for field recordings.

Relying on my own experience, I agree with Barry Truax who supposes that recordings should be done after soundwalking several times, so that the site is already familiar, and should not be done during soundwalking, as it would be a distraction (2012: 196). So Truax does not denounce sound recordings as such, it is just an activity that cannot be combined well with soundwalking. When I was walking around with a recording device, I did not concentrate on listening as much as I did otherwise.

I made recordings with three different devices but for soundscape recordings, I primarily used a set of two condenser microphones (AKG, see figure 8) and the recorder Roland Edirol R-09HR, both lent to me by Phonogrammarchiv in Vienna. The recordings are in the form of a soundwalk – I recorded while walking through the park, trying to capture as much of the area as possible. When recording a soundwalk rather than staying immobile in one place and trying not to move at all while recording, it was for me a way of acknowledging my presence, role and subjectivity as a researcher – I was part of the sounds, not an outside observer, and my sounds in the recordings remind me of that.

Figure 8. Preparing for recording, Volksgarten. December 2019

3.2.3. Soundwalking with research participants

Soundwalking with research participants has been done in various studies in anthropology and beyond. Iscen (2014), in the study of newcomers' acoustic experiences in Vancouver, let research participants choose a route in the city and went on a soundwalk with them, after which they had a discussion session. She also let the participants keep sound diaries, giving them a sound recorder for a week for them to record sounds significant or meaningful for them. She then made interviews again about the recording and sound diary experience. During the project Acoustic Environments in Change, Järviluoma conducted sensory memory walks in Lesconsil, a fishing village in Brittany, France (Järviluoma & Vikman 2015). They called their method sensory, not soundwalks because they had already conducted soundwalks in the past and realised that listening is a multisensory practice.

Soundwalking with research participants made up the core of my research project, which is why I will grant this method the most space. In contrast to the practice of soundwalking as a researcher, the central focus is on the fieldwork conducted in Vienna. I went on soundwalks in Volksgarten with inhabitants of Vienna, with one, two or three people at a time. Initially, I also planned to organise one or more soundwalks with a larger group but did not manage to do this. I recorded the whole soundwalks. There were two stages of walking along a pre-defined route and concentrating on listening, and after both stages the participants reflected upon their experience, both freely and following my questions. In the third stage of the

soundwalk, the people walked around by themselves and made a sound map of the park.

In Copenhagen, I aimed to go on soundwalks with residents of the Outer Nørrebro area. The planned structure of the soundwalks was derived from my experience in organising soundwalks in Vienna. Unlike Vienna, we would have three stops for reflexions, due to the peculiarities of Superkilen, which is divided into three parts. As the park is in the shape of a long stripe, the soundwalk would be from one end to the other, and while making the sound map, the participants would walk back to where we had begun.

Research participants

The original plan was to find ca. 10–15 people from both cities who would have lived in the city for several years and who would have visited the park in question or parks of the city in general. I made two Facebook events for soundwalks in Vienna, which I shared in various Vienna-related groups, as well as on my timeline, which led to some friends sharing it. In the event description, I explained the purpose of the soundwalk, the preliminary course and some questions I would ask the participants. I also tried to use the snowball method – people that I knew or had reacted told about it to their friends. In total, there were 11 participants in Vienna. They had been living in the city between one and 19 years, and come from different parts of the world. Despite the variety in backgrounds, there are certain common denominators among them – most fall into the age group of 25-36 years, with one person 40 and one 46 years old, and they all either have higher education or are currently acquiring it, with 6 of them being students (mostly Master's level). I also need to mention that as a result of the method for finding participants, the relative failure to find people through social media, and the fact that I have acquired a large part of my acquaintances in Vienna through anthropology studies, several participants have a background in anthropology.

All participants gave their permission to use their contributions in this thesis. I use pseudonyms to keep their identities anonymous.

Movement

With the purpose of creating as similar conditions for different participants as possible, we walked along a predetermined route, which was the same on all soundwalks. I created the route after going on several soundwalks alone. I tried to take the participants through various parts of the park with various soundscapes. On walks with one person, we generally walked next to each other. With two or three, there was more change in positioning, with someone usually being more in the front or in the back. I tried not to stay in the back, to be able to lead

the participants along the predetermined route.

Silence and speaking

On the soundwalks in Volksgarten, we mostly walked in silence and spoke during stops. On two soundwalks though (both with one person), the participants took initiative to also speak about their direct experience while walking. I gladly gave them the freedom to do so and found it interesting what changed in the dynamics of the walk and in the content, now being about immediate impressions.

Individual and collective soundwalks

Most soundwalks were individual but some had two or three participants, which had implications on the course of the soundwalk. Referring to my experience, one advantage of going on a soundwalk with one person is that the person has a greater freedom of movement and expression, being able to choose the pace, to stop and to speak while walking. On one soundwalk, this seemed to have a particularly large effect – he talked a lot while walking and listening, and stopped every now and again to turn attention to something specific. I partly even got the feeling that I was being led, not the other way around, and it made me think that this might actually be a better way to conduct soundwalks.

Conducting soundwalks with two or more people brings an additional nuance to the walk – it becomes a shared experience between more people (see Järviluoma & Vikman 2015: 652). Järviluoma and Vikman (ibid.) had a forum immediately after a collective soundwalk: “This forum transforms the immediate individual experiences from a collection of subjective soundscapes into a new collective sphere of shared observation and meanings that are not yet rationalized or fixed by rigid interpretations.” Here, it should be kept in mind that when on a soundwalk with several people, on one side the participants can influence each other, but on the other side one participant does not necessarily have to agree with what another one has said – in my experience, sometimes an answer triggered a contradictory thought that might have been left unsaid otherwise. Triggered like that, people may express thoughts that they may not have had alone or that they may have forgotten. People reacted to each other, for example by saying that they did not notice a sound that someone else had heard, or how they think similarly or differently of a certain sound. Through this interaction, additional knowledge can be gained of people's perceptions and opinions.

Sound maps

As already said, I worked with sound maps (see Oehme-Jüngling 2014: 362) – I gave the

participants a plan of the park and let them make notes on it. During the interview, I let them explain the sound map, which, in addition to the recordings, would help to take the person mentally back to the soundwalk.

Iscen (2014) tackles the question of how a researcher can trigger sonic awareness. She herself let people express their sonic experiences creatively by recording sounds and creating sound installations. She also referred to Heikki Uimonen's 'recorded listening walk method' (2011) – he let people themselves record and edit sounds, making it a collaborative documentation of the soundscape. I see sound maps as an analogous expressive method – I did consider letting people record themselves but found that mapping would be easier to carry out.

When I let people create sound maps, I told them that they can freely write, draw, make symbols etc., depending on their listening experience – it could be what they heard, which thoughts and feelings they had when hearing something. I tried to give as little guidelines as possible but sometimes this left the participants confused, and in those cases I explained in greater detail. Whereas I told everyone that they could freely explore the park and they generally did walk around, one person did not go around at all but stayed in one place.

When making sound maps, the research participants walked around the park freely, not along a predefined route, and could creatively express how they related to the place at the current time. Leaving a greater freedom in the way the maps could be created had interesting effects. For example, one person drew a circle around the area in which she could hear a certain sound, and another drew her trajectory during the independent walk.

Interviews

Either immediately or some days after the soundwalk, I conducted a semi-structured interview with each participant. I preferred to let a couple of days pass, so that they would have time to reflect on their experience in the meanwhile, but not too many, so that they would not forget. In the end, I mostly acted according to their preferences. The interviews took place in my apartment, at a café or in one case in Volksgarten immediately after the walk. I wrote down topics for the interviews but the order and range of how certain topics were covered, depended on the flow of the interview.

When possible, I played chosen fragments of the soundwalk at the beginning of the interview. I chose five fragments of ca. 30-60 seconds, trying to present the variety of the sounds. Sound elicitation has been used in several studies, for example Feld (1987) played recorded everyday sounds to people to invoke discussion, and Adams et al. (2006) and Colléony et al.

(2017) used recordings of soundwalks during interviews.

Influencing factors

There were a number of factors that influenced the data. I already wrote about the method for finding participants. I also took people to a specific location chosen by myself and not to a setting in which people lived daily or which they found somehow remarkable or relevant themselves. Of course, I influenced the answers by my questions and the recording fragments I played. The predefined route definitely also influenced the listening experience. My purpose was to lead the participants through as many different parts of the park with different soundscapes as possible, but sometimes it felt artificial, for example when I directed people to the path right next to Ring, as if saying: now it gets really loud and you better notice it.

Another factor that had a significant influence on the experience was the time of the soundwalk, thus also the weather. Different times of the day, week and year have different sounds. Although I was planning to conduct the soundwalks as early in autumn as possible, it took much longer in reality. The weather got colder and colder, not only making walking more uncomfortable, but also having a sound-related influence. For example, in the beginning there were a lot of leaves falling onto the ground, which was a significant sound for many participants. In November, the fountains stopped working, eliminating most of the water sounds which could otherwise be quite dominant. In Mid-December, the leaves were already gone and the pond was partly frozen. One soundwalk in November took place on a rainy day, making it quite certainly faster and shorter, and having implications on the soundwalking experiences. Still, as big of an influence as time had, it became clear during the fieldwork that people have the amazing ability to also hear what is not present – participants who were in Volksgarten on a rainy day mentioned sounds that they would expect to hear, were it a nicer weather. Even on a clear afternoon, there were sounds that were perceived as missing, exposing expectations towards the place and parks in general.

As the last factor, I wish to mention language. The soundwalks and interviews took place in three languages: mostly either in German or in English, and once in Estonian. I let the participants choose the one most comfortable one for them. One soundwalk even took place in both, German and English – one participant was not very comfortable speaking German but understood it, and the solution that the others spoke German and she English worked quite well. On one individual soundwalk, language seemed to be a problematic issue for communication, which has led me to be very cautious using the data and only choosing the

parts in which I am sure there were no misunderstandings.

3.2.4. Independent soundwalking without the researcher

After I had to stop fieldwork in Copenhagen due to the COVID-19-related lockdown, I decided to try an alternative method for gathering data, partly to try to save the fieldwork phase of my research, partly to document the situation out of interest, without a certainty of the extent to which I could use the gained information.

Soundwalking without the researcher does not seem to be a popular choice of method but can still be found. In a study about soundscapes of zoos (Colléony et al. 2017), participants went on a soundwalk at a zoo, whereby they could choose the route. The soundscape was recorded with binaural microphones and tracked by a GPS-system. Then, five 2-minute parts from the recordings were chosen and used in self-reflective interviews the day after the participant's visit. The participants were asked about what they heard during the visit, and about what they could hear in the excerpts and what the sounds evoked during their visit (ibid: 677).

Call for soundwalking

To find participants, I wrote a call for soundwalking that I shared in various Facebook groups and on my timeline. Several others shared it as well. In addition, some people told about it to someone they knew, who in turn sent me their contribution. The call included questions for reflection, instructions for listening and documentation.

Data collection

It was clear from the beginning that this was a situation that I could control much less than with the other methods, as the whole documentation relied on the soundwalkers. This definitely has implications to which questions can be answered and how effective the method is. Theoretically it is a way to gather more data with less effort, but in some ways the data is less reliable and less thorough.

In any case, this method gave me the opportunity to study how people around the world perceived their sonic surroundings during the COVID-19 pandemic. I guessed there would be some rather universal changes in the soundscapes that might arise when looking through the data. I was wondering if the way people reacted to the changes would also be similar, as this is something very personal, as well as social. One relevant question was whom the call reaches – of course it was very limited, favouring people who use Facebook, and the social network of me and my acquaintances.

I also asked the participants for additional information, as much as they were willing to share, such as their age, gender, where they lived and where their soundwalk took place. Some of them wrote more about themselves, their occupation, hobbies, where they had lived before, how the current situation had affected their lives, and what else they found relevant when thinking about their experience.

3.2.5. Additional methods

Even though soundwalks were the core of my fieldwork, there were a number of additional methods that should be mentioned. To learn more about the history of the parks, I used secondary sources, mostly internet-based. I found especially many and interesting sources about Superkilen, considering its relatively young age. They were mostly about how the park is presented and represented in media (webpage of the park, promotion videos, articles about the park, interviews with the designers), and how visitors have perceived it (Google online reviews from recent months).

As I was interested in the perspective of the park planning and maintaining institutions, I also intended to conduct expert interviews. In Vienna, I wrote to MA 42 and to *Österreichische Bundesgärten*. MA 42 just referred to their official principles for park planning, but *Österreichische Bundesgärten* gave their consent for an interview. Thus, I interviewed Gerd Koch. In Copenhagen, I contacted Superflex and the administrative unit of the district. I did not receive an answer from the latter. Superflex did react and expressed interest in the project but unfortunately the artists did not have time for participating.

When I began fieldwork in Vienna, I had already lived there for two years, but I only spent two months in Copenhagen and did not know the city or the district. This led me to endeavour getting to know the Outer Nørrebro neighbourhood better. In addition to exploring the area myself, I attended a tour through Outer Nørrebro – these are Ghetto Tours, led by young people who have grown up in the neighbourhood with the reputation of a ghetto, telling about their experience in the area. I believe the tour did deepen my understanding of the district and its history, and after the tour I had the chance to walk through Superkilen and surroundings with the tour guide Mona who shared her memories and thoughts.

In Copenhagen, I began to go to visitors, trying to choose them as randomly as possible (e.g. thinking that I will go to the next person that I see), and asked about their experience and perception of the park. This could be a useful addition to soundwalking as a researcher – in addition to listening and observing, one could ask on the spot how others perceive the place

at the same time, and possibly even find new research participants.

3.3. Data analysis

I used the software MAXQDA to transcribe and code the soundwalk reflections and interviews. When creating categories for coding, I mostly took the data itself as a basis, at the same time keeping in mind my research interests and questions.

Truax (2001: 72) suggests studying the qualitative aspects of an environment through the analysis of sound recordings, categorising sounds into types and possibly into the place of the source – inside and outside. Schafer (1977: 139-144, 150) has proposed several division possibilities: categories such as human sounds, mechanical sounds etc., or sound contexts: acoustics, psychoacoustics, semantics, and aesthetics. In the process of the data analysis, I was often puzzled by the question whether such categorisations of sound are meaningful and useful for an anthropological study. I came to the conclusion that these analytical categories were not in themselves useful for my research interests, but sound contexts were in a way present in the analysis of listening modes and their implications.

When Pink (2009) analysed the empirical research of the Cittàslow movement, she found that her sensory experiences had helped her to mentally bring back the research situation. Therefore, she considered this engagement as essential in her research process (ibid: 125). This was also a way in which the recordings I had made helped me during the analysis.

3.4. Data representation

As advantages of using editing techniques for sonic ethnographies, Rice brings out the possibility of presenting the data so that provokes thoughts, informs and expresses what the author finds important (2019: 246). I am not sure if this is the best or only option though. Howes argues for using text as a medium, since the presented data is anyway a production of the anthropologist, and text does not create a false impression that the data is objective, as might occur with video or sound (2003: 57). Perhaps with sound collages or compositions, this would be easier than when using unedited audio data, especially when emphasising that it is a subjective work, not an objective account of the reality.

If the data is presented in an audio format, the question of production is an important one and several viewpoints exist. Truax (2012: 196) says that the decision of post-production of

recordings can be made after going on several soundwalks, then it can be decided what the best way of representing the soundscape would be. Marazzi (2019: 202) finds that the sounds should be presented the way they occurred, not editing them a lot or using any sound effects.

The representation of empirical data in sound was one of my goals. I considered making sound collages or soundscape compositions (see Levack Drever 2002; Truax 2012). In the end, I did not do it due to time restrictions and stayed with verbal representation of the results. I see this as one of the major shortcomings of this project and think that there is great potential in sonic forms of expression.

3.5. Reflections

Soundwalking as a researcher is an autoethnographic endeavour and this needs to be reflected on. As already mentioned, I became more conscious, reflexive and critical of the subjectivity of listening as a practice throughout the fieldwork. It was a way to develop a sense of place, as a preliminary work for soundscape recordings and soundwalks with research participants. Experiencing soundwalking is useful for analysing and understanding the experiences of others.

During my soundwalks, as well as the ones with research participants, it became clear that listening and soundwalking is a multisensory practice. I felt that when I let my senses awake, they were all awaken. Several participants also said that it was difficult to only concentrate on listening and they noticed other sensations as well.

It was my first attempt in sonic ethnography, which made it quite experimental. Everything seemed to fall in place in the course of fieldwork – how many people, how many breaks and where, what is the predefined route, which questions to ask, how to describe sound maps, when and where to do the interview, if and how to play recordings during the interview, whether to play the recordings through headphones or speakers.

It is clearly more difficult to understand the experience of the participant when the researcher is not present on the soundwalk and has no experiences in the location. At the same time, it might make it easier to be less suggestive. A researcher could take a less passive role than I did, as I did not conduct interviews with the participants but only rely on what they wrote to me. This was due to personal difficulties at the time of collecting the contributions. I also hoped to acquire more contributions by making it possibly easy to participate but would

choose quality over quantity in possible future research.

As any ethnographic endeavour, soundwalking definitely has an impact on those who soundwalk. Several participants told me afterwards that it had been a very interesting and remarkable experience for them, and that we should actually be more aware of our sonic environment. Soundwalks gave people a motive to concentrate on their senses, on the moment and on their relationship with the environment.

4. Experiencing soundwalking

4.1. Listening modes and sensory situatedness

4.1.1. Theoretical framework

How do we listen and why? Even though the question may appear simple enough, it is quite complex when we begin to explore it more thoroughly and to go further than the human anatomy. Michel Chion (2012) distinguishes between different levels of hearing that are the result of three modes of listening. The first and the most common is *causal listening*, which means listening for the cause or the source of a sound (ibid: 48–49). For example, if we are walking down a street and hear a siren, we might recognise it as an emergency vehicle, and going into more detail, try to identify the specific emergency vehicle. The second one is *semantic listening*, meaning listening for capturing a semantic message (ibid: 50). This is about the content, and can be based on language or a code. In the case of the siren, this would give us the message that an emergency or accident has happened, but also to stay away from the street while the vehicle is driving by. The third mode is *reduced listening* which concentrates on the physical and aesthetic properties of the sound (ibid.). When hearing the siren, we may think of it as loud, shrill and high-pitched. Chion also acknowledges that more than one mode can be activated simultaneously, for example when we hear a person speaking and we identify both the content and the speaker (ibid: 50, 52).

Whereas the aforementioned modes of listening might be considered universal, we are all biased in how we listen. One factor that contributes to the bias of listening is the personal knowledge in specific sonic environments, which Truax (2001) calls *soundscape competence*. This lets us attribute meaning to environmental sounds (ibid: 58). Iscen (2014) applied the concept in her study on newcomers' experiences in Vancouver. The research participants came from various places in the world and their previous life experience had shaped their soundscape competence, which only started to develop in Vancouver. Wherever we live and travel, we gain some knowledge on the local sounds and their meanings.

Politics of listening also has an impact on personal listening experiences. As Chandola did research in the lower-class Govindpuri settlement in Delhi, India, she became increasingly aware of the impact of her middle-class background on her perception and initially she had doubts whether she would ever be able to listen differently and if she should continue (2012: 397). She did learn to cope with the issue and to tune into and follow the sonic encounters, while not being able to silence her class background but instead being attentive to it (ibid.).

Chandola's study shows that not only should a researcher be aware of the politics of listening in other people's listening experiences but there is also a strong bias in the way a researcher listens and it is important to be mindful of this.

Pink (2009) calls for exploring our own sensory situatedness and sensory categories, for which she introduces two concepts. *Sensory subjectivity* describes the ways people "use sensory knowledge and practice", and is connected to several factors, such as socio-cultural background, experiences and ideologies, connections to social institutions and individuals. Sensory subjectivity does not stay the same within a person though but shifts, depending on contexts. The second, connected concept is *sensory intersubjectivity* that relates to "our intersubjective relations with others and our material/sensory environments", which is relevant, considering both the changing relationships between the researcher and participants, and between the participants. (Pink 2009: 53)

For trying to understand different factors that influence our listening and their causes, it may be helpful to look into the formants of anthropology of sound by Holger Schulze (2018a, 2018b). For studying us—strongly differing humanoid aliens with our multiple idiosyncrasies—he proposes paying attention to sensory corpus, auditory dispositive and sonic persona. *Sensory corpus* refers to the variety of bodies and thus bodily and sensory experiences (Schulze 2018a: 120–122). *Auditory dispositive* brings attention to the external, normative circumstances in which a listening situation happens and which shape or intend to shape the listening experience (ibid*:* 123). *Sonic persona* is the sensible self, the perceptual identity that Schulze describes as "made out of a sensory corpus struggling with changing auditory dispositives" (ibid: 126, 129). Schulze points out that the researcher is also an example of this struggle (ibid: 129), just like the researcher is as much sensorially situated as any research participant.

Truax, Chandola, Pink and Schulze deal with the specifics of sensory situatedness in various ways but several parallels can be found in the concepts they introduce, which all enable forming a picture of the different factors that influence how we listen and why. It is the interplay of our bodies, personalities, socio-cultural background, experiences, knowledge, material surroundings, social environment, power relations, networks and relationships. As the authors emphasise, the researcher cannot escape their own situatedness but can and should be attentive to this.

4.1.2. Listening modes

Modes of listening are probably not something we are usually aware of, if ever. During the soundwalks and interviews, participants rarely reflected on their experience in relation to modes of listening. I could get an idea of the character of listening generally from how they described sounds and expressed them on sound maps, as well as from their associations with heard sounds. There were exceptions though, for example Louise expressed the causal nature of her listening:

> *I already have in my mind like water – fountain, cars – Ring road, chirping [...], I don't know where those birds are, I don't see them, I still have this language in my mind – ok, those are probably wild birds there.* (Soundwalk 2, Louise)

Listening modes were helpful as an analytical tool in combination with other concepts and I will refer to them further in this chapter.

4.1.3. Soundscape competence

The influence of soundscape competence on the differences in listening experiences became apparent in Vienna from the ways that the participants characterised the sonic environment of Vienna and their relationship with it. There were those who had previously lived in smaller cities or towns and found Vienna quite loud and disturbingly noisy, and those who had experienced huge and chaotic cities, compared to which Vienna seemed quiet and orderly.

Some participants described changes that had happened in their perception of Vienna throughout the time they had lived there. Miriam explained that in the last two years, she had become more aware of how much constant noise there is was in Vienna. Diana also believed that in time, she had begun to notice the traffic more, as she had already become used to the sound level of Vienna:

> *The first thing that I noticed when I moved in here was the silence. [...] And in the beginning, this was very strange for me that it was so silent. And I think today, after a year, I started to hear more the traffic. [...] Now sometimes I'm more like [groans], it's too loud here.* (Interview 7, Diana)

Pia noticed how she had already started to recognise specific means of transport – on the soundwalk, she had a moment of thinking that she could hear the older type of tram, and when she looked it really was the older type which sounds differently than the newer trams. Florian noticed sirens but forgot about them for some time. When he remembered again, he

pointed it out and said that he might have become a bit desensitised to the sounds of sirens, compared to the beginning when he was not used to them because grew up in the countryside.

Even though the participants had already spent some time in Vienna, they partly still remembered the feeling of being a newcomer, and how they had gone through the process of becoming more of a local. This was a process also familiar to me, as I had been living in Vienna for 2 years when I started the fieldwork. On my soundwalks, I noticed how I already recognised the sound that signalled an upcoming announcement by Wiener Linien. In Copenhagen, though, I began my field research after having barely spent a couple of weeks in this city. This allowed me to listen from a newcomer's perspective. My perception of a loud city environment was already contrasted by the perception of the only research participant to whom Copenhagen seemed extremely quiet and peaceful.

4.1.4. Musical and rhythmic listening

So the previous life experience of the participants and me, as well as the time already spent in the specific city, influenced our experiences. However, there is much more to personal experience than residences. One type of listening bias revealed itself in two participants' experiences, both of whom practise music and composing. Florian expressed a strong sense and awareness of rhythm; he often described sounds or sound combinations through the terms of rhythm and music. Leo also claimed to perceive rhythm and musicality a lot while listening:

> *When I look at and listen to these leaves dancing around the ground, it inspires me every now and again with ideas of how I can have a feeling for these nature sounds more and more in my music.* (Soundwalk 7, Leo)

4.1.5. Sensory corpus

So far, I have talked about peculiarities of our sonic personae and auditory dispositives. The empirical research also revealed the influence of the differences in our sensory corpora. A participant related the unpleasant perception of construction noise with his tinnitus. This is a reminder that it is not only our socio-cultural background and sonic personae that influence our listening experiences – the sensory corpus (Schulze 2018a, 2018b) also plays a significant role. Another participant mentioned his different perception of sounds due to his hearing aid, and I have found my ears to be extraordinarily sensitive compared to friends.

4.1.6. Being aware of our sensory situatedness

In Superkilen, largely thanks to discussions with Carla, I realised I had certain expectations of sounds related to the objects. For one, this was expressed in how I perceived languages in Superkilen. I recorded being surprised of only hearing Danish and English several times. Once when walking through Superkilen, I noticed my bias of listening, as I noted that two people were speaking a language that I had expected to hear there – I did not recognise it but it was not English or Danish, and I found it possible that it was from any of the countries that the objects represented. Although the presence of the objects contributed to my expectations, they could largely still be connected to politics of listening (Chandola 2012).

During the lockdown in spring 2020, I began to practise meditation. Some exercises reminded me a lot of my listening experiences, and I started to see a lot of parallels between meditating and soundwalking. It seemed that thinking through meditation can be a useful tool for observing how I listen and which associations, thoughts and feelings I have while listening, as if being outside of them.

One similarity of soundwalking and meditating was brought to my mind by two participants who made almost identical statements (on different soundwalks): they explained how the conscious act of listening changed their perception of sound – unlike an ordinary situation, they found themselves not evaluating the sounds but being more neutral towards them.

I would also like to touch upon how my biases of listening revealed themselves on soundwalks with research participants. Sometimes, I wrote in my fieldwork diary that I was surprised how the participants did not point out some sounds, for example how one participant had not mentioned bells, even though I had already heard them three times, or how a participant barely mentioned hearing traffic noise. As the time passed, I had clearer ideas and expectations for the listening experiences of others and more surprises when someone did not notice the sounds I noticed.

The participants did reflect on their listening biases as well by acknowledging the role of their background and previous experiences, personal preferences and moods. I believe that such self-perception of research participants is a really valuable source of information in understanding their experiences – how they themselves give meaning to their experiences. I must admit that I was not so conscious of this while doing fieldwork and I am grateful for the self-initiated reflexivity the participants expressed. It would be important to involve this focus in a research on listening experiences.

4.2. Multisensoriality

4.2.1. Theoretical framework

Throughout the research process, it became an increasingly dominant question if we should concentrate on one specific sense when doing sensory anthropology. Pink does not think that the senses should be addressed one by one because senses are interconnected (2009: 2). Howes also claims that it is important to study the relations between the senses (2019: 26).

Even if we do focus primarily on listening, it is not possible to simply shut off the other senses (except for vision if closing or covering the eyes). They come together in bodily experience in various ways. Howes does see sound studies as a field that can deal with the relations of the senses: "Sound studies must be seen as a branch of sensory studies, which treats the sensorium *as a whole* as its object of study" (2019: 26; original italics). He understands senses as both being able to work together synaesthetically, as well as conflict with each other (Howes 2003: 48).

Ingold does not agree with the idea that senses can contradict each other because each sense is only an aspect of an experience "[a]nd their synergy lies in the fact of their being powers of the same organism, engaged in the same action, and attending to the same world" (2011: 315). It is our expectations that might make us perceive senses as conflicting (ibid.)

4.2.2. Exploring the interconnected senses

One departure point for my whole project was the feeling of conflicting senses in Volksgarten – vision and hearing just did not seem to harmonise for me there. I had the same feeling in Superkilen. Thus, what Howes said about the senses being able to work together but also get into a conflict, seemed to describe my experience quite accurately. However, the more I thought about it and studied listening experiences, I began to see the experience more holistically. I asked myself why I felt that the sounds do not match the visual side. Reading Ingold (2011), I found the answer in expectations – even though I claimed to take listening as a basis of my research, I had paradoxically still made assumptions about what I should hear, based on what I saw. I realised that we have a whole sensory experience and all the senses contribute to it. Still, the feeling of controversy was there and the expectations that create such feelings can be a good source of information. Therefore, I believe the senses are worth exploring, including looking into how individual senses contribute to our perception.

At times, I wrote about multisensory experiences into my fieldwork diary. In the beginning, I did not think about it but the further I was with field research and the more I noticed participants talking about multisensory experiences during soundwalking, I began to pay attention to my own multisensory experiences more consciously.

Sometimes, the multisensory experiences included more than two senses. Once, I wrote that hearing birds singing created a slightly spring-like feeling together with the sun. It was not only the visual component of seeing sunlight but also feeling the warmth of the sun on my face, which was a special feeling in Copenhagen in February. Florian also described a feeling that involved several senses:

> *I noticed that it is difficult for me to only concentrate on the hearing. Especially on such a beautiful day when you just perceive with all senses, [...] the air is cold but the sun is warm on the skin, and you see so much.* (Soundwalk 6, Florian)

4.2.3. Hearing and vision

Most of the times when participants spoke of other senses than hearing, it was vision. Several persons said that it is difficult to concentrate on hearing without vision. Miriam and Louise discussed how it was difficult for them to split hearing from vision and how seeing something brought to their mind the sounds these people or objects would probably make. Not seeing the sound source of an unfamiliar sound could create a feeling of unease:

> *I heard the wheels and the cars and I thought – transport, and the people – playfulness. [...] But when I heard the flag I didn't know what to think. And the fact that I couldn't see it visually also didn't really help.* (Soundwalk 9, Lucas)

Conflicts of vision and hearing were also mentioned by some participants. Andrea found that the unpleasant street noise takes something away from the optical beauty of the park. Francisco noted that when he was walking between the trees, he would rather have expected to hear bird song, not a tram. Miriam explained that on the soundwalk, she realised why she does not go to Volksgarten often – it might be nice to the eye but not to the ear.

There were also cases of closing one's eyes and deliberately shutting of vision for a short time. Diana began to close her eyes due to the difficulties she felt when she tried to disconnect from seeing and concentrate on the hearing. She closed her eyes, listened to the people and tried to imagine what kind of people would be passing through, and in the end she looked who it was. Her description showed how listening can trigger much more imagination

when one is not looking at the same time. The same phenomenon was expressed by Judith who said twice that when she closed her eyes and listened, she imagined a different scene than what was actually in front of her.

4.2.4. Touch and smell

Other senses did not come up much, with a couple of exceptions. I already mentioned two instances in which a sense of touch had a role to play, among other senses. On one soundwalk, Leo also said how the clarity he felt in the dry and cold air seemed to make him able to hear further. Laura was drinking coffee during the soundwalk and at one point was unsure whether she heard or felt the sips:

> *It's as if you hear the sip. But I don't know if I rather hear or feel the sip. But because I [...] try to listen consciously, I feel that I hear it too.* (Soundwalk 3, Laura)

From smells, Laura wrote "smell of roses" onto the sound map. In Superkilen, I once wrote how I could smell something that probably comes from a fast food restaurant nearby and later that the earlier pleasant smell had become an unpleasant smell of meat and fat. That was also a moment in which I experienced the difficulties of shutting off other senses and concentrating on listening, as had several participants.

4.2.5. Walking

Sumartojo and Pink argue that "human movement offers us a useful conceptual tool through which to follow through the trajectories of how atmospheres are made and why they feel the ways they do at particular moments in people's journeys, routes, routines and lives" (2019: 28). Anna Harris also writes about the potential of walking together with participants as a method and how it enables getting to know their bodily relations to the places they live in, for example their sonic memories (2015: 26).

I have given a lot of attention to listening experiences. Although walking is also an essential aspect of soundwalking, I did not explore the element of walking by far as much as I could have during fieldwork. Therefore, there are not many accounts on walking from the participants. Some still reflected on their perception of walking, for example by pointing out that they became aware of the sounds their bodies made while walking. Andrea, the only participant who went on a second, this time independent soundwalk in Volksgarten, said that it was different to soundwalk alone than in a group. Due to the lack of focus on it during

fieldwork, I cannot involve the element of movement in the analysis of the experiences more.

4.3. Sonic associations

4.3.1. Theoretical framework

A rather dominant part of the listening experiences on soundwalks was made up by various kinds of associations – there is never just sound, whoever is listening has a unique set of factors that influence the feelings, thoughts, imaginations and memories that they have when hearing a sound.

As a qualitative tool for analysing sonic environments, Jean-François Augoyard and Henry Torgue propose *sonic effect*, meaning the "interaction between the physical sound environment, the sound milieu of a socio-cultural community, and the "internal soundscape" of every individual" (2005: 9). Thereby, they acknowledge the importance of the spatial context (ibid*:* 8). In the attempt to make sense of sonic associations further in this chapter, I will introduce a couple of the sonic effects.

Another way of characterising certain associations is offered by Truax who speaks of *sound symbolisms* – a sound and its context create a symbolic image in one's consciousness, for example the sound of flowing water symbolising life (2001: 80).

Exploring the imaginative aspects of sonic associations can gain from Don Ihde's notion *auditory imagination*, which refers to perceived sounds that trigger imagined sounds, whereby the two might be in synthesis (2007). I would like to broaden this concept to *sensory imagination*, which takes into account the multisensory nature of listening and the possible intersensory imaginative connections.

At this point, I wish to return to the modes of listening and to the multisensoriality of listening. Taking Chion's listening modes as a basis, I will attempt to find links between the types of sonic associations and the listening mode that was involved in the emergence of the association. I will also explore the interconnectedness of the senses based on the associations that involved other senses than hearing, whether as a trigger or in the association itself.

4.3.2. Sonic memories and anamnesis

Associations linked to past experiences can partly be explained with the effect *anamnesis* – "an effect of reminiscence in which a past situation or atmosphere is brought back to the

listener's consciousness, provoked by a particular signal or sonic context" (Augoyard & Torgue 2005: 21). Past experiences have a large role in how we feel places or events (Sumartojo & Pink 2019: 9). All associations are somehow based on memories but occasionally, participants referred to memories of specific situations that they remembered during the soundwalk. In the study by Sumartojo and Pink, introduced in chapter 2.3.3., the participants understood "their experiences of the sound transformations referred to environmental and emotional states as well as recalling memories and connecting to other similar or resonating experiences" (2019: 66).

Some, especially childhood memories were mixed memories of repeated similar situations, such as Francisco remembering being at a playground with his parents when he heard a child go past him, or Florian remembering the many times he spent by the sea as a child when he heard bell sounds that related to a ship's bell at a port to him. When Judith heard a lot of different birds simultaneously, she remembered being in her childhood home where behind her window, there was a bird's nest and in spring it was full of loud and hectic bird sounds. Also, when Laura heard a child trolley rolling past, the sound of the wheels rattling on the asphalt brought back a childhood memory from the time her brother was small and the wheels of his trolley made a similar rattling sound on the asphalt.

Also more recent experiences were triggered by sounds in Volksgarten. Hearing music she identified as Italian music brought Judith back a memory of walking along the streets of Venice. Pia had an association between a high-pitched construction sound and a recent incident in which her niece could not breathe for a short time – an association involving reduced listening, in contrast to the other associations so far, which were about sound sources. The latter connection caused the feeling of unease for Pia, which was now also related to the construction work sound.

Some associations did not relate to certain situations but to places – still being related to memories but in a less direct way, perhaps more to atmospheres. As I entered Volksgarten before beginning my first soundwalk with a participant, there was an accordionist sitting inside next to the gate, playing "Sous le ciel de Paris", which immediately made me feel as if I were in Paris. There was a visual element in play too – the romantic image of Paris was strengthened due to the fact that I was looking at the rose garden. I did not remember certain situations from Paris, it was just the feeling of Paris – I had been there once and during the period of planning and after coming back from the trip, I often listened to this song. Another atmosphere was felt by Judith who said that when she heard a group of musicians, it

reminded her of a lively cocktail bar mood. She had two other interesting associations: the sounds of trolley suitcases and different languages reminded her of an airport, and a woman cheering reminded her of a marketplace – she compared it to shouting at a marketplace and went on to describe a scene and atmosphere at a marketplace in more detail.

Once, a sound also triggered an association with rural landscape, when Florian thought of the countryside when he heard hammering sounds, which sounded like someone in a valley in the countryside hitting nails into a wooden roof. Another interesting relation came out from Evelyn's listening protocol in which she wrote about the feeling of threat when hearing flying objects. She comes from Switzerland where she did not perceive any sound as a threat, but after she moved to Beirut, Lebanon, she started having associations between flying objects that were often Israeli drones and the feeling of threat.

Other associations were related to people. Hearing people laugh out loud, Francisco thought of his friends and their mutual memories of having fun. Sounds of children reminded Florian of his daughter and also his studies in education. Judith had to think of her aunt when she noticed two older ladies having a conversation about blueberries, which was a rare case of an association based on semantic listening. One association from the lockdown of spring 2020 showed how studying listening experiences in habitual and meaningful places, there is a different depth to the associations, which are then based on an array of experiences in the same familiar location:

> *This car sound relatively close to home triggered the thought whether [my husband] was already back from work – I have developed such an association, you always listen if the car is turning to drive down the hill.* (Contribution 4, Mai)

4.3.3. Associations with time

Another category of memory-related associations were connected to time, mostly they were sensations associated with seasons. During an early autumn soundwalk, I noticed someone blowing their nose, and sounds of getting sick brought into my mind that the autumn had really arrived. More than once, I wrote into my listening protocols that I heard sounds of autumn. On one soundwalk, there was a collective association of sounds with wintertime. The sounds of footsteps on gravel made Judith feel like walking through snow, and she found the association very pleasant and positive. Diana agreed that it sounded like walking in snow but for her it had different meaning:

> *For me it is not so pleasant. I think I relate that to having my feet wet because I'm*

> *not accustomed with winter and I always think: oh my god, now I'm gonna get wet and I'm gonna be cold and [...] dirty.* (Soundwalk 4, Diana)

There were a couple of times that felt like spring. Birdsong was an important trigger but not only, as it was always also sunny and the feeling of the sun on the face can create a strong association with the arrival of spring.

Especially strong associations with time were present during the COVID-19 pandemic. I will elaborate more on these in chapter 7.

4.3.4. Sound symbolisms and semantic listening

Sound symbolisms (Truax 2001) arose when a sound or a sonic context was associated with an abstract concept. Lucas explained his trains of thought, which revealed how he thought of transport when hearing cars and bikes and of playfulness when he heard people. In that way, he found parallels between the sounds of cars, bikes and pedestrians, as they were all passing sounds of transport.

Volksgarten was described as a touristic place by several participants. The links with tourism were made through sound symbolisms. For Louise, two musicians with horse head masks represented tourism, since they usually play in touristic sports. This had a somewhat negative connotation for her, as it made her think that this was going to be a rather touristic space, even though she liked the sound. She also had an association with tourism in other locations within Volksgarten when she heard tourists with rolling suitcases talking about going to the first district. There was a visual element in both examples, as she mentioned the tourists walking with tourist maps, and she probably would not have recognised the musicians if she had not seen them. Miriam also mentioned tourism that came to her mind when hearing the honking of an old car with a touristic function.

Mai talked about her experience with hearing no wind:

> *I think this absence of wind (when there is no wind, you can actually hear the absence of wind, especially together with the sunset) created the impression, as if the world was standing still.* (Contribution 4, Mai)

The latter metaphor might be related to the sonic effect *anticipation* – if one expects to hear a sound, they can hear it, even if it is not physically there (Augoyard & Torgue 2005: 25). In this case silence was heard because it was expected in the lull, even though there is almost no chance of complete lack of sounds when being in a natural environment.

Furthermore, Judith said that for her, street noise that she heard is related to hecticness, stress and city life. Another sound symbolism was expressed by Miriam who had a negative connotation between the sounds heard from an event at the Town Hall Square (some music, cheering and someone interacting with the audience), and entertainment and consumerism.

Miriam also expressed negative emotions when hearing horse carriages:

> *The sound of the hooves, it is [...] still weird for me to hear horses in the city and it makes me really angry and [...] frustrated that it's still allowed, because for me this is really not the place for horses [...]. I really don't understand why it's still legal in 2019 for them to be here. Yeah, that's one point I really don't like about Vienna. Because it also uses the animals to promote the city in a way.* (Soundwalk 2, Miriam)

The sounds of horse carriages symbolised the captivity of animals that are being forced to live and daily walk in a city environment in the middle of the traffic.

Based on these examples, I would relate sound symbolisms mainly to semantic listening, as in most cases the connection was made, based on the message, the content and meaning of the sound.

4.3.5. Sensory imagination and reduced listening

Reduced listening, in turn, appeared to facilitate more imaginative associations. For example, to Florian, communication among children and among birds sounded similar. Diana made a connection between the clacking sound of someone in high heels and the sounds of the horse hooves. Judith had an imaginative experience while listening to the rustling of leaves:

> *I listened to it longer and at some point it reminded me of sea noise. If one doesn't know that it is a tree with leaves, it definitely has similarities with the sea. With a bit of fantasy.* (Interview 5, Judith)

She talked about another association with a similar character, comparing the rustling of leaves to the sound of coffee beans being poured into a grinder.

One more example of a connection based on reduced listening was explained by Mai:

> *In the forest, I could hear three woodpeckers drumming, the word "shooting" – I don't know if it was the influence of the radio show [involving the topic of war] or because sometimes there is a slightly apocalyptic mood now – came into my mind, because it was really as if they were shooting a machine gun. And the*

> *[Nordic] walking sticks sometimes make pretty loud thumps, from further away I also quietly heard single calls of a raven, so for a moment I had this kind of a war feeling a bit.* (Contribution 4, Mai)

The last experience took place during the COVID-19 lockdown, which explains the apocalyptic mood, but if we set that aside, the association between the drumming of woodpeckers and machine guns was based on the physical characteristics of the sound. In that way, the previous cases were analogous. In addition to auditory imagination, another sonic effect might have been in play, namely *phonomnesis* – "a sound that is imagined but not actually heard" (Augoyard & Torgue 2005: 85).

Earlier I claimed that the imaginative nature of sonic associations also involves other senses than listening, and the more accurate term for these associations would be sensory imagination. From the soundwalks in Vienna, there were at least two examples that could be placed under this category.

> *Every now and again, I heard an airplane sound. This somehow reminded me a bit of lying in the sun, looking into the sky, there was also a visual component of this stripe in the sky, which I did not see now but rather saw in my mind.* (Soundwalk 6, Florian)

> *[The music] reminds me a little bit of [...] sounds from old movies when people are actually walking in parks. I think this kind of music is very common in movies where, I don't know, two characters go walking in a park, [...] amusement park I think.* (Interview 7, Diana)

For Florian, a sound triggered multisensory imagination, also involving a visual and bodily element. With Diana, sound as a part of a whole sensory experience in a park facilitated the appearance of an image of a film scene.

4.3.6. Ambivalent associations and multiple listening modes

Chion (2012) acknowledged the overlapping of listening modes. When I worked through the accounts of soundwalking experiences, the simultaneous occurrence of listening modes appeared most clearly in the cases of ambivalent associations.

When Henrik heard a bell, he found the sound beautiful and quiet but it still triggered a negative association, as he is often woken up by loud and disturbing church bells at his apartment. Even though reduced listening created a positive experience, the causal element of

listening was connected to negative experiences.

A sound that created the most different feelings and also mixed emotions in several participants was that of the horse carriages. Francisco first associated sounds of horse hooves with the feeling of going back in time, which was positive for him. On the other hand, it made him feel sad because he finds that horses should be free in nature and have the chance to run around. Henrik also said that he found the sound of horse carriages pleasant but it had negative associations for him:

> *Of course it is a tradition and nice to see something like this sometimes but I don't know, I always immediately think of the animals that don't feel well on the asphalt and in the city.* (Interview 8, Henrik)

When the bells were related to specific negative personal experiences, the horse carriages had the potential of provoking an inner conflict between associations, as they are related to values, which might be very different from aesthetic preferences.

I experienced an ambivalent association myself in Copenhagen on one of the first soundwalks in Superkilen in early February. When I heard birds that usually arrive in spring, I felt happy to hear bird song and feel the spring atmosphere but at the same time I had a negative association, as birds arriving so early in the year reminded me of climate change.

4.3.7. Spatial situatedness of listening experiences

Turning our attention to sonic associations, we also learn about atmospheres. It was a perhaps great mistake in my research design that I did not go with the people to places that were meaningful for them, but rather I tried to standardise the empirical research by taking all the different individuals into the same place, with which none of them had particularly strong associations. In a research project that would indeed follow the people and delve more into their personal experiences, it would be possible to trace the sonic associations more in depth.

For example, Sumartojo and Pink could learn a lot about the atmosphere of the Queen Victoria Market, Melbourne, by paying attention to the role of memory and imagination – "people expressed the value of the site in terms of how they had used it before, the relationships that unfolded in, through and as a result of their work" (2019: 2).

That way the associations could tell more about the place and the relationship between people and their environment. This is supported by the stronger place-related associations of the individual soundwalkers. Still, the individual experiences in Volksgarten in these specific

times did reveal how the atmosphere felt like for these people, and they show the subjectivity and variety of atmospheres within a certain space-time. Sounds are specific and nonspecific at the same time, and it is the nonspecificity that makes it possible to bring back memories of other places than the visited one (Harris 2015: 16, 27). From the connections experienced in Volksgarten, sound symbolisms appeared to give the most knowledge on the place.

4.4. Expressing listening experiences: Sound maps

4.4.1. Styles of map making

When giving instructions for creating sound maps, I tried to be vague on purpose, not to limit the participants too much and to give them the opportunity to be more creative. The individuality can be seen well on the sound maps, as everyone had a different style. Still, there were some similarities. With one exception, all participants used text to represent sound sources, sounds, thoughts or feelings. Six participants of eleven drew some sound sources. Most participants used some symbols – most frequently musical notes, sometimes also lines and arrows. With lines and arrows, the range of a sound or a combination of sounds was represented in three cases. Two soundwalkers used emoticons to express feelings.

There were some aspects of sound maps that particularly stood out. Two participants marked down points of listening with an ‘x’ and wrote what they heard there. Sometimes, the space around the park plan was also used (the plan did not take up the whole A4 sheet) to represent sounds coming from outside of the park, to write down general impressions or to explain some symbols. Once, the back side of the map was included – Diana wrote numbers onto the map that represented her trajectory and therefore different points of listening. On the other side of the paper, she described her listening experience in those locations.

Two participants found ways to express rhythm. Pia drew points and lines in different shapes. The points represented the steps of a jogger and the lines—drawn onto the street—showed the rhythm of the traffic, the constant noise of the cars, the regular appearance of the trams and the phases of traffic lights. Florian also expressed the perception of rhythm, and in his case his musical background clearly influenced him a lot. In one spot, he drew a base key and next to it the rhythm of the street and construction sounds with different lines. Similarly to Pia, he drew points representing footsteps. How people perceive rhythm is one aspect of listening experiences for which sound maps might be a particularly fruitful method, as it gives a more direct idea of the perception compared to a mere verbal description.

One question that I did not address before analysing the maps was whether people marked down sounds from the mutual part of the soundwalk, from the time of creating the maps, or both. In most cases, I do not know it or can only assume, based on the sounds that were also discussed during the soundwalk. For more clarity, it would be useful to address this question.

From the sounds that are mentioned and the ways they are represented, we can observe that different participants have different perceptions of sounds, concerning which sounds were more relevant and dominant. For example Judith used to have a scooter and she likes them, which might be why she was the only one who drew and described the sound of scooters on her map. Sound maps are an outcome of our sonic personae (Schulze 2018a, 2018b) and show additional aspects of our idiosyncrasies to verbal descriptions of listening experiences, as they involve creativity and another method of expression.

4.4.2. Expressing sounds

One question that I first thought about while analysing the sound maps was whether one captures sounds themselves or sound sources. It only then became clear to me that so far, I had considered sound sources as sounds when looking at the maps – when I noted to myself that a sound had been named, usually it was actually the sound source. I then started to make a difference in the expressions of sounds.

Once more, Chion's modes of listening proved to be a useful analytical tool. Most people wrote down or drew the sound sources, representing causal listening. Reduced listening was also often expressed but more with combinations of lines and patterns, whereby sometimes sounds were verbally described, for example 'loud', 'artificial', 'monotonous'. Semantic listening was rarely expressed on the maps. When representing people speaking, mostly the language was written down.

Some participants recorded absent sounds on the map. Here, the sonic effect anticipation and sensory imagination became visible, as expected sounds were captured. Usually, the imaginative aspect of an expressed sound is not explicitly stated but in one case, Henrik did write that he had an imagination how it would sound in Volksgarten in summer.

Not only were sounds and sound sources represented but also thoughts, feelings, memories and other associations related to the sounds, which I had often also encouraged the participants to do, or at least mentioned it as something that could be represented on a sound map. Feelings were expressed in words or in symbols, associations and thoughts in words. The creative nature of the activity seemed to encourage more informal ways of expression,

such as using emoticons or slang words.

4.4.3. Expressing atmosphere, temporality and multisensoriality

Sometimes, participants described the atmosphere of the park. Judith expressed the feeling of being at an airport when hearing many languages and trolley suitcases rolling. There is an area of the park—the Northern corner with a pond—which was sometimes described as something extraordinary and positive. Various water sounds (fountain, bubbles gurgling) could be heard there and water dominated over other sounds, so the outside sounds were not so present. For example, it was what Louise called ‘an oasis of peace’. Atmosphere was not only related to a specific location but sometimes to a specific time during soundwalking. Judith wrote ‘very calm’ to a spot close to the Ring – usually a rather loud location.

A map always represents a certain state of things – a specific area in a specific time. The state of things, however, is in constant change, especially if one is trying to capture something as temporal as sounds. The changes in the rather short process of creating sound maps (usually around 15 minutes) can be perceived when looking at the maps on which temporality has been expressed. Miriam wrote that the musicians were away, meaning they had been there earlier but had gone, while she was in another part of the park. Words like ‘now’, ‘again’ and ‘constant’ were used to express temporality. It can also be sensed when an activity is being mentioned, for example ‘I noticed’. Temporality was sometimes expressed through comparison, and is in essence always a comparison with other moments in time. Temporality is also related to capturing rhythm, which I already mentioned.

As listening is a multisensory practice, so are sound maps. They are a visual representation of sonic experiences, but in turn they are a strong trigger of sonic imagination – looking at them made me hear specific sounds, rhythms and combinations of sounds in my head. In my case, the previous listening experiences in Volksgarten also played a role and influenced the nature of my sonic imagination. Pia’s map drew my attention to the materiality of the sound maps – they were made on a physical sheet of paper with a pen in different weather conditions. Her map had been wrinkled by the rain, showed some struggles with using a pen in the rain, and also signs of being in a hurry in the uncomfortable weather conditions.

Sometimes the visual component of the experience itself was visible, for example Louise describing activities such as taking pictures with a leaf, a child running into pigeons, accordionists with animal masks. In all cases, she could hear the activity but the description was still largely based on the visual sense. Also, Pia drew a scene on the map that she said

she could not hear but it was so prominent in the whole soundwalking experience that she still recorded it – we happened to witness a marriage proposal about 10 metres away, which we could not hear due to the high background noise level but it was still very impressive. Once, a smell was represented on a sound map too.

4.4.4. Localisation of sounds and sound sources

While analysing the sound maps, I began to notice that it is not always the sound source that is being localised on the map. A common pattern emerged, based on whether the sounds came from inside or outside the park. Most participants had a tendency to mark down inside sounds precisely and outside sounds simply somewhere outside of the park territory in the general direction of the sound source.

But sometimes participants wrote down sounds in the locations in which they heard them, not where the sounds originated from. This was partly also the case with inside sounds. Usually it was a mixture of localising sound sources and points of listening, although there were exceptions with only points of listening. Of course it is not always possible to know for certain if the locations are for points of listening or sound sources and partly it was only possible because I was there myself.

4.4.5. Understanding and interpreting sound maps

As there are various styles of creating sound maps, there are also various ways of interpreting and understanding the maps. On some maps, most information is presented as written explanations, which leads to fewer possibilities for interpretation. With more symbols and drawings, however, explanations are necessary.

What sometimes came out in the interviews was whether participants represented our mutual walk, their individual walk or both on the sound map – there were no instructions regarding this. Because I failed to ask this in the interviews, I often do not know it.

Where emoticons had been used, the emotion could be interpreted but to really understand it and the reasons more clearly, explanations given during the interviews helped a lot. When people marked points of listening with an ‘x’, I found out in the interviews that these were indeed points of listening. With all kinds of drawn lines and patterns, it was necessary to let the authors explain what specific lines and patterns meant. But even when participants used words to describe sounds, feelings or associations, the additional explanation they gave in the interviews made it easier to understand.

4.5. Participants' reflections on soundwalking

The participants seemed to be very aware of the differences in perception during soundwalking, compared to an ordinary situation in the city or in a park. Soundwalking was described as something unusual, several participants found differences in how they would normally go around the city or a park and the soundwalk. It raised the attentiveness of participants, which is one of the reasons why soundwalking and similar practices allow finding out more about the relationships between people and their environment.

Sometimes, participants discussed whether they had only noticed a sound because they were especially paying attention to listening, such as water running down a sewage drain or the turning of a newspaper page. There were also contrasting experiences – the experience of soundwalking did not have an identical influence on everybody:

> *Through the concentration on the sounds I had the focus on the moment somehow and I also didn't find any sound to be disturbing or unpleasant or good or bad, I just observed.* (Interview 6, Andrea)

> *For me the most negative was definitely the street noise [...], especially when you concentrate on listening and then think what you can all hear. I find that it is even more disturbing as otherwise.* (Soundwalk 5, Henrik)

Some participants also expressed the impact of soundwalking outside of the immediate experience – it made them think how it is important to be more conscious of the surroundings and in the case of soundwalking during the pandemic, it could relieve some anxiety related to the uncertain situation.

Soundwalking does not only have potential as a research method but also as a way of giving people an opportunity to become more aware of their environment. At the same time, there are ethical questions related to soundwalking concerning how researchers influence the participants that need to be considered before and during the process.

5. Volksgarten: Between cultural heritage, tourism and a green living room

One of my first memories of Volksgarten is walking there with a friend on a warm and sunny early autumn afternoon. We sat down on the grass somewhere behind the rose garden and talked about life. Little did I know that we were actually breaking the rules, as going onto the grass is prohibited within the whole park. It was natural to sit on the grass in a park.

When talking about Volksgarten with people and visiting it, I got the impression that it is a beloved park. I myself found it a bit hard to enjoy being in a park so close to the Ring with its constant traffic noise. I felt a contradiction between the beauty of the rose garden and the disturbing noise level, caused by multiple lanes for cars and trams. I am also no fan of such orderliness in parks and prefer more wildness.

The participants had a different amount and quality of personal experiences in Volksgarten. A couple of them did not remember being there or only had one or two memories of it; some said they would only go there with visitors wishing to see touristic places; some occasionally went or had gone to spend time there because it was close to the university; others liked to go to Volksgarten for a walk.

Iscen (2014) has studied the sonic experiences of newcomers in Vancouver, Canada, and through this their relationship to the city. In her interpretation of the data, she referred to Laura U. Marks who suggests that “the meeting of cultures in the metropoli is generating new forms of sense experience and new ways of embodying our relation to the world” (Marks 2000: 23). When I began with empirical research, I had been living in Vienna for two years. The participants also had various backgrounds in relation to Vienna. They had all moved to Vienna from another place and had lived there for some time, from one to nearly 20 years. They had all experienced Vienna as a newcomer though and often remembered how it felt and how their relationship with the city and the sonic environment had developed since then, as did I.

5.1. Knowing *in* and *about* sonic atmospheres

5.1.1. Sounds of Volksgarten

Knowing *in* and *about* sonic atmospheres can happen on several levels. As we did on soundwalks, I begin with specific sounds as perceived by me and the research participants.

This detailed level creates the preconditions for moving to broader levels of analysis, such as the perception of the atmosphere of the park, the conditions in which these experiences could arise, and knowing about more abstract concepts *through* atmospheres.

I divided the sounds into three categories: sounds from inside, sounds from outside, and absent sounds. The division into inside and outside was intuitive for me, based on my soundwalking experiences in Volksgarten, but several research participants also perceived the sounds as coming from inside and outside. Absent sounds arose as a separate category which seemed remarkable to me because the sounds that people notice not hearing proved to have a lot to do with their expectations for the place. The attitudes toward sounds tended to vary the most when the meaning of them was related to values, such as with horse carriages.

Sounds from inside Volksgarten

Sounds from inside the park included various sounds made by people, often relating to their voices but also to movement, such as footsteps or swallowing; music; birds, both by species and activities; leaves, trees and wind; water; and other inside sounds, for example cameras and rolling suitcases. Mostly, these were sounds related to people or nature.

The sounds of people obtained different responses. The absence of sounds from people was often noticed and usually not in a positive sense, although the absence of loud people could also be positive. Quite often the sounds from people were mentioned rather neutrally and were neither among the positive nor negative sounds. Still, the sounds of people were frequently seen as something that one would expect to hear in a park.

> *I also like the noises from people, [...] this is a good part that you know that you're in a park in a city because you can feel that there are different groups of people and you can listen a little bit of what they are doing and. I like this, the noises. [...] They remind me that it's leisure time for most people here and I think this is nice.* (Soundwalk 4, Diana)

Although the sounds of having fun were missing for a participant on one soundwalk, indications of people having fun or being in a good mood were heard on other occasions. The content of conversations people had was not usually spoken about; it was more about people talking in general, how their voices sounded and which languages they were speaking. The sounds of children were often mentioned as typical park sounds and were mostly seen as either positive or neutral. Hearing many languages could create various associations, such as travelling around the world, the international character of the place or tourism.

Sounds of people moving were generally found pleasant. Slow and calm steps on a sandy terrain were perceived as calming, fast steps were associated with tourists rushing to a next monument. Footsteps on gravel were associated with the feeling of being closer to nature and found suitable in a park. The crunching of leaves under feet—something characteristic only for the current time of the year—was often mentioned among the most pleasant sounds. Walking on grass and leaves reminded people of nature.

> *I think the only noise that we made was mainly the sound, the crunching of leaves but even that [...] didn't last very long. [...] If you look at the way that the park is designed as well, you have a lot of concrete [...], it's so perfectly clean that you're not really going to get a lot of this texture of crunching your feet on leaves.* (Soundwalk 2, Louise)

Here, the very slight presence of the sound was linked to the clean and orderly atmosphere of the park and in this case was seen as negative.

Several soundwalks took place on Sundays, which is the time when street musicians frequently play in Volksgarten. On the days of soundwalks, we heard several accordion players and a harpist. Music was perceived as influencing the atmosphere a lot and dominating, for example making the atmosphere more pleasant and happy. Unwanted music was not seen as positive though and even pleasant music could become too much.

From sounds related to nature, birds were mentioned a lot throughout the soundwalks and always as positive. Bird sounds were found peaceful, pleasant, calming, springlike and comfortable. Birds were associated with the feeling of being in nature.

The sounds of leaves, trees and wind were often mentioned and always as positive. I placed them under a common category because wind was heard in interaction with leaves and trees. The sounds changed throughout the fieldwork – in autumn, leaves were falling, creating a variety of sounds. Then, there were no leaves left on the trees, so the sound of wind blowing through them disappeared. A participant also mentioned that she mostly appreciated the sound of wind and leaves exactly because it is only present for a limited time.

There are several fountains and a pond in Volksgarten, so sources of water sounds are present in various areas. In November, the fountains stopped working so there were no water sounds, unless it was raining. When water sounds were perceived, they were described as pleasant, peaceful, relaxing, making a big difference and helping to isolate the loud sounds from outside. One participant partly perceived the sounds of a fountain as unpleasant – she found it

very loud, monotonous and artificial, as opposed to a natural water source. Usually also water sounds coming from a fountain were considered among nature sounds. One soundwalk was particular because it was raining. Raindrops were considered as the most pleasant sound by both participants, to one they had a simultaneously calming and threatening effect.

Sounds from outside

Sounds from outside the park included traffic, construction work, signals, horse carriages, bells and other sounds, for example a creaking door and people talking. These were largely sounds related to technology. There were some construction sites near Volksgarten during the fieldwork period. When construction sounds were mentioned then usually in a negative sense. Street noise was described as stressful, loud, unpleasant and disturbing. It reminded the participants that they were not in nature but in a city. There was some ambiguity towards the traffic sounds. Although they were never considered pleasant, people seemed to be cautious in labelling them as negative too. Some participants negotiated the presence of the constant traffic noise for them, claiming that if something is negative, it is the street noise, and at the same time saying that it is inevitable when living in a city and does not disturb very much. The negative meaning of traffic noise also shows how self-explanatory the presence of cars is in Vienna. As a contrast, Colombijn (2007) found that in some Indonesian cities, traffic noise was considered positive because it was a sign of modernity and success.

The perception of signals can often be closely related to soundscape competence (Truax 2001), as signals tend to vary locally, compared to sounds of vehicles or birds. None of the research participants were new to Vienna but they all came from somewhere else, so they tended to associate some signals with Vienna or Austria in particular, such as tram signals, ambulance and police sirens.

Volksgarten is in the first district of Vienna where horse carriages can often be seen, heard and particularly smelled, taking tourists on rides around the old town. As it happened, horse carriages always drove along the street behind Volksgarten exactly when we were walking next to the street, with one exception. Attitudes towards horse carriages were probably the most diverse among participants. Some found the sounds pleasant, bringing atmosphere into the city and related to nature, whereas some directly connected the practice to cruelty towards animals. I already wrote about ambivalent attitudes that some participants had, based on different modes of listening. I could relate to the participants that did not approve of the practice, as I always have negative feelings when sensing horse carriages in the city.

In Volksgarten, bells can be heard from several sources, according to my observations at least four times per hour. I felt particularly attentive to bell sounds after reading about the changing meanings of bells in European cities (Garrioch 2003). I like to hear bells because they remind me of earlier times, contributing to a historical atmosphere that I appreciate a lot. As I noticed during soundwalks with participants, I expected them to also be attentive to bells and was always surprised when they did not notice bells or when they did not like the sound.

Absent sounds

Absent sounds were those often named as typical or desirable park sounds – children, dogs, bicycles, music and having fun. Sometimes a visual element was involved in the experience of absent sounds, for example if something was seen but could not be heard as anticipated, for example a camera click. Or, as Louise explained:

> *I was wondering why this park was so quiet and why it felt so artificial to me. This I didn't hear but I saw—but I think this silence is also important—I saw for the first time walking here somebody who is homeless on one of the park benches. And then I thought to myself, ok, now I remember why I don't like this artificialness. [...] This is a public space, was it designed to [...] prevent certain people from coming into this space.* (Soundwalk 2, Louise)

Seeing something unusual for Volksgarten made her realise that it is usually missing, the silence made her understand the meanings she gave to the park. The perception of absent sounds can be related to sensory imagination and the sonic effect anticipation, revealing which imagined sounds the experience triggers and which sounds are expected.

5.1.2. Atmospheres of Volksgarten

So far, I have taken the perception of sonic atmospheres into parts, talking about sounds as separated. They are never really separated though and the perception of an atmosphere always happens in the co-presence of the whole range of heard (and imagined) sounds. I will now explore the atmospheres of Volksgarten as perceived by the participants, based on their soundwalking experiences.

Volksgarten was described as a heterogeneous park with many versatile corners. Even making a few steps could lead to a completely different sonic atmosphere. This could be seen both positive and negative as not relaxing due to the many small straight paths and many objects. It was also perceived as clean and orderly, which could again be seen as positive or

negative. This could be related to the perceived function of the park as decorative. Whereas the visual beauty of the park, the rose garden and the statues, was appreciated by several participants, the decorativeness was also viewed critically as excluding, restrictive and not relaxing, not encouraging children to play and people to have fun.

One participant found Volksgarten nice and green but that it didn't sound nice, rather monotonous and artificial. A similar view was expressed by some others and it was similar to my own perception of the park. Although it was somehow nice, there were aspects that did not feel nice, there was a controversy between different contributors to the park atmosphere.

The decorative and representational characteristic of the park but also the actual sounds related to tourists made the park feel touristic. Several participants mentioned that they would go to Volksgarten with tourists. Some also associated sounds of trolley suitcases, many languages and specific street musicians on the soundwalk with tourism.

The material and normative characteristics of Volksgarten seemed to support specific regimes of movement. It is not allowed to sit on the grass but some participants also said that they did not feel like sitting down on the grass. It gave the impression of rather being a place for walking through, or maybe sitting down on one of the many benches that are placed in long regular rows around the rose garden.

Some accounts of the perception of Volksgarten as a whole were a result of a comparison with the nearby Burggarten that is also part of *Bundesgärten* but has a somewhat different character. In contrast to Volksgarten, Burggarten was seen more as a place for sitting down and hanging out, more for students and young people than for tourists, less orderly, more open with a wide grass area.

As I visited Volksgarten many times through several months, I did experience quite different atmospheres. It should be kept in mind that the participants usually formed their impressions based on the one experience, which means that the temporality of atmospheres had a very large role. I sometimes perceived the atmosphere as calm and sometimes as lively, whereby even very small changes could have a large impact. Participants also had various experiences; some described the park or parts of it at the time as quiet and peaceful, some did notice sounds they would expect from a park.

5.2. Knowing *through* sonic atmospheres

5.2.1. Volksgarten as a heterotopia

Heterotopia provides an analytical tool that might help to understand the conditions in which sonic atmospheres emerge, and lead to ideas and concepts about a place that might otherwise not arise.

Universal portability

Parks have a universal quality, their meaning and functions do not depend on the location. Rotenberg makes a difference between ordinary places that belong to a specific city or neighbourhood and parks that "could be moved from city to city without a significant loss of function or meaning" (2014: 387).

When people said that they either visit or do not visit Volksgarten, it was usually related to the location and convenience – people went to Volksgarten because it was close to the university or on their routes from A to B, or they did not go there because it was not near their habitual routes or they rarely visited the first district.

The sonic atmosphere is inseparable from a specific location in the case of Volksgarten. One can hear horse carriages, tourists and bells. The neighbourhood does play a role – Volksgarten is probably one of the few parks in Vienna where horse carriages can be heard.

When speaking about meaning, there is not necessarily a single answer. Whereas Volksgarten is closely linked to Austria's imperial past, this meaning of the park did not arise at all during and after the soundwalks with participants – what people valued or did not value were not usually related to a wider context. Still, the constellation of Volksgarten has come to being in certain conditions. It would probably carry different meanings in a different city or country.

Universal easily definable functions

Which functions does Volksgarten have, compared to an average park? Some participants went there to be in a green space close to the university during breaks. Some said they would go there with tourists or for a walk. When talking about parks in general, participants said they went to parks to meet friends, have a picnic, do sports, study, let their child play on the playground, have a walk, relax, observe people or nature and rest.

To a certain extent, Volksgarten does have functions that any park has. Its difference is partly a result of its historical meaning. Historical parks have combined functions of a regular park

and a touristic site. People go to Volksgarten as tourists and with tourists. Spending leisure time in a green environment partly clashes with the official function of heritage protection and preservation that can lead to misunderstandings and conflicts.

Multivocality and repeatable meanings

Rotenberg claims that parks offer "repeatable meanings across a broad range of people regardless of their lived experience" and have various meanings simultaneously (2014: 388). Volksgarten definitely has several simultaneous meanings and probably for a wide range of people – a park for a walk, a touristic place for sightseeing, a cultural heritage site.

However, the lived experience can have a huge impact on the meanings. It is difficult to assess this based on my empirical research because the participants—even though with different backgrounds—still represent a similar social group that is among the more privileged and wealthy people in the society, either having or acquiring higher education and in no particular difficulties for everyday survival.

There is already a difference in the meaning for several participants and the institution responsible for the park. In addition, meanings for those who are somehow excluded from the park should be taken into account. As these meanings can be silent, it is not an easy task, but listening to what is not there can reveal some limitations of this statement about parks.

Spaces that create a break with ordinary time

Rotenberg writes that parks can change but still remain the same, that they have a different rhythm than the surroundings, that they contains meanings from different times and fuse them together into the present meaning (2014: 388).

In some ways, Volksgarten does have a different rhythm than the surrounding city that constantly changes. But is it not only in the visual appearance that Volksgarten 'stays still'? Although the physical characteristics of the park are preserved with great care, we cannot see Volksgarten as isolated from the surroundings. When sound is taken into account, the ways in which the urban rhythm influences the rhythm of the park become apparent.

Boundedness

As boundedness, Rotenberg names the accessibility of parks through fences, gates and opening hours but also mentions preventing access for people who are not seen as suitable (2012: 251; 2014: 388). This is one aspect of a heterotopia of which Volksgarten appears to be an excellent example. There is a fence around the park, gates and opening times. In the

late evening and night it is not possible to enter. Dogs and other animals are not allowed.

On soundwalks and in interviews, the topic of boundedness did generally not arise. Only Leo raised the topic of boundedness but based on his experience with Augarten, another park in Vienna administered by *Bundesgärten*. He was quite disturbed by the closing times because he enjoyed going to green spaces late in the evening when Augarten was already closed. He also experienced the restriction of activities when a park warden asked him to take down the slackline he was currently practising with, even though he had previously seen people using slacklines there. Being forbidden to be in the park as he liked made him feel resentment.

> *It doesn't mean that the gardens are not valuable but the problem is that these gardens are so interwoven into the city life of the inhabitants [...], I believe that more possibilities are missed for them to meaningfully live with these gardens when they are bounded, instead of opening the possibilities a bit.* (Interview 12, Leo)

Gerd Koch had a very different opinion on the matter and elaborated on the official perspective, saying that *Bundesgärten* are in a difficult situation because on one side, the park has similar characteristics to a museum but on the other side, they cannot protect it like a museum by opening and closing doors and requiring an entry fee. They would restrict other parks as much as Volksgarten to preserve the plants but the public pressure is too high.

Louise noticed a homeless person in Volksgarten, which led her to realise that one aspect about Volksgarten she does not like is that it was designed in a way that prevents some people for entering. Missing sounds can tell a lot about non-physical boundedness and exclusion. Indeed, representative parks can be quite restrictive in the sense that not everyone and not all activities are allowed. Low et al. speak of a new threat to public space in the 21st century – "patterns of design and management that exclude some people and reduce social and cultural diversity" (2005: 1). Among the causes are conscious efforts to reduce the presence of undesirable people and historic preservation; the places are oriented towards the wellbeing of tourists and middle-class visitors (ibid.). This has led to more closed and restricted public places. Even though they base their understanding on the context of USA, this can be said of Europe too. For example, Christopher Tilley has studied Holland Park in London and says that this and other parks in London can be seen "as cages for 'suitable' social activities and 'suitable' people" (2019: 399). Volksgarten seems to be similar in this matter.

Rotenberg also says that parks shut out sounds and sights of the city around them (2012:

251). When it is somewhat true of sights, sounds are more difficult to shut out. Depending on the position in the park, the outside sounds were more or less dominant and definitely influenced the atmosphere of Volksgarten. In that way, parks are not so bounded, unless strict noise reduction measures are taken.

Linkage between heterotopia and ordinary spaces

Rotenberg says that parks create an illusion of an extraordinary and ideal environment, compared to the chaotic everyday life in a city and sees this as a very fruitful category for analysing the role of nature in a city "because it directs our attention to how the experiences of everyday life are closed off, shut off, mystified or camouflaged within these extraordinary spaces where nature is allowed to exist" but only on human terms, so it is an example of having control over something as uncontrollable as nature (2014: 388–389).

Based on the experiences of soundwalkers, Volksgarten does not create an illusion of an ideal environment and cannot be separated from the chaos of everyday city life. The city sounds were a remarkable part of the listening experiences and everyday life experiences could not be shut off so easily. The only exception was the corner of the park with a pond and loud water sounds that was described as an oasis. If we would only take the visual appearance into account, Volksgarten could be seen as such an extraordinary environment where nature exists under a very strict human control, but as the visual measure is only part of the experience, it cannot be used to make such generalising statements about the place.

5.2.2. Politics of atmospheres

Power relationships do not often become obvious simply by experiencing sonic atmospheres. However, they are inseparable from other conditions for the emergence of atmospheres. Here it is important to see Volksgarten in a wider context: as a part of *Österreichische Bundesgärten*, Vienna and Austrian imperial history.

There is a controversy about Volksgarten that became clear to me during the interview with Gerd Koch. On one side, it is supposed to be a museum-like garden, meant to be preserved in a possibly authentic way. The task of *Bundesgärten* is to preserve the historical garden in its original state. On the other side, it is a city park and used as such by the inhabitants of Vienna. Before fieldwork, I cannot remember considering Volksgarten as a historical site – I saw it as a park and did not really think of the aspect of heritage protection.

In Austria, the historical gardens are mostly free of charge to visit, also the

> *Bundesgärten. Because it was made open for the public space as a free garden already in the imperial time. Of course it is increasingly more difficult for us because there is constantly more tourism, more people come to Vienna, and the inhabitants use the green space as a green living room.* (Interview 10, Gerd Koch)

He found it problematic that Volksgarten is open to everyone and that there are more and more tourists, as this makes their task more difficult.

This is related to the boundedness already explored. There is a difference between what the inhabitants expect from Volksgarten and what the official function is. Even though Burggarten has a similar history and official purpose, the atmosphere was described as very different. Why Burggarten has such a different atmosphere than Volksgarten is partly a result of it being a contested space (Low & Lawrence-Zúñiga 2003: 18) in the 1970s–1980s. There were student protests in Burggarten that demanded more rights to people to use the park for leisure activities, also on the grass (interview with Gerd Koch). The protests led to changes – sitting on the grass became allowed. Changes have also occurred later:

> *Some years ago, the city of Vienna said: the city belongs to you; they opened all grass areas for public use. And the people don't make a difference what is Bundesgärten and what is the city of Vienna. Therefore, many believe: the city belongs to me and it is all free. But in the Bundesgärten, I always say that we are a living museum; it has a cultural historical value that should be preserved. And if you do everything... In Augarten, they lie between the flowers, children ride through the flowers with bikes; this is of course not the meaning and purpose.* (Interview 10, Gerd Koch)

From this statement, one peculiarity of the city of Vienna becomes to the fore, namely that although there is a strong distinction between the parks governed by the city and by *Bundesgärten*, many inhabitants may not be aware of this and may therefore treat all parks in a similar way. Based on several answers of participants, being able to walk and sit on the grass is valued in a park. Even if people are aware, a certain freedom of action associated with parks may still be expected.

Control over sonic atmospheres

Being a site of heritage protection means that *Bundesgärten* do not deal with noise issues, as I learned from Gerd Koch – their primary duty is to keep the parks historically authentic and it

would not be possible to change the park, for example to plant a hedge. One way they do influence the sonic atmosphere is with different cultural events and projects. To also understand the visitors' perspective on this matter, I inquired which opinions participants expressed on changing sonic atmospheres in parks, in relation to their soundwalking experience in Volksgarten.

Views on if and how measures should be taken against noise and unwanted sounds differed and participants tended to be hesitant. Uncertainty with expressing their opinion probably had to do with the fact that they were talking about an imaginary situation, not something they had experienced. Several people were not in favour of artificial sounds from loudspeakers. Some were open to the idea of blocking out outer sounds but had no certain ideas of how it could be done. Some strategies were proposed for improving the sonic atmospheres: creating private spheres, separating areas, planting more trees on the edge of the park, having a park large enough to be able to be away from the city noise, making the park attractive for birds and building a fountain or a pond, or just accepting everything and practising to isolate unwanted sounds in the mind. The idea of artificially influencing the sonic atmosphere could also be thought of as clashing with the visual appearance of the park:

> *I would really like if it would be possible to isolate city noise from a park but only if it wouldn't interrupt the visual side. If the precondition is that I am hiding behind some ugly wall that isolates sounds, I think I'd still not want that.* (Interview 4, Laura)

The potential of sonic interventions could be a useful question to explore through sonic atmospheres but in this case, actual experiences of the alterations should be studied, like Sumartojo and Pink (2019) did in their study on noise masking installations in a park.

Music

Control over sonic atmospheres does not only come from the official actors. Everyone in a park has some agency regarding the sonic atmospheres. People can try to influence the atmosphere of a place, to create it so that they feel differently in them (Sumartojo & Pink 2019: 113). Music is an easily observable illustration of this. Music can be used to create a privatised space (Bull 2004: 182). This can be done by listening to music through headphones but also by playing music live or through speakers, in a way that others can also hear it. In the context of Walkman usage, Bull has conceptualised such an act as aesthetic colonisation – the everyday experience is aesthetically recreated (2004: 183). In a park, there are often several

groups playing music and the privatised spaces can begin to overlap.

From the perspective of *Österreichische Bundesgärten*, street music is not actually wished for in the park, it is just difficult to prevent. The acceptance of street music also depends on the quality of music. The latter was also important in how the presence of music was perceived by research participants. Most participants said that acoustic music, for example someone playing a guitar is nice to hear in a park but loud and 'bad' music from speakers is unpleasant, especially when several groups play different music simultaneously.

5.2.3. Concepts of parks

Park sounds

In the interviews, we spoke about sounds that are associated with an average park, which sounds are perceived as pleasant and positive and which unpleasant and negative.

Sounds of people and nature are often associated with parks. Sounds of people include talking, laughter, children playing, having fun and doing sports. Partly they can also be categorised as sounds of movement and were mentioned in relation to materials, such as footsteps on a different terrain than asphalt. From nature sounds that are expected to hear in a park, trees, leaves, wind and water were named. Music was also mentioned by three participants. Most people only named sounds that came from inside the park but two also said that city noise is characteristic of a park.

Sounds that were regarded as positive and pleasant included various nature sounds, also sounds of people and music, possibly live music. As one category, peaceful and calming sounds were named. Two people said that they value the absence of traffic noise in a park. One participant did not separate sounds characteristic of parks from pleasant sounds:

> *I believe that I only imagined pleasant sounds because with the word 'park' I probably have a largely positive association. [...] One goes there voluntarily, therefore the basic attitude is already good.* (Interview 8, Henrik)

Among the negative and unpleasant sounds, there were (bad) music from speakers, traffic noise, noise of children, quietness (that created a contained feeling). Some individual differences came out from the categorisation into positive and negative sounds: whereas some participants enjoyed the sounds of quietness, music and children, there were also those who did not. Music could also be pleasant and unpleasant for the same people, depending on the style, medium, personal mood and situation.

Tilley's study on the Holland Park in London revealed that park visitors he questioned liked specific things about the park, among which were 'tranquillity/relaxing environment/quietness', 'natural feel/like the countryside' and 'wildlife/trees/gardens/flowers/greenery', and among the least liked aspects were 'too noisy/too many people', 'too many loud and noisy tourists' (2019: 379). These answers create the impression that nature sounds are appreciated in parks and urban sounds not so much. More complexity was in the answers of the participants in Volksgarten.

Urban and natural environment in parks

When looking at the mentioned park sounds, the felt nature-urban divide in the context of parks became evident. On the soundwalks in Volksgarten, sounds related to nature were usually perceived as most pleasant and positive. But also urban sounds related to human activities were usually positive. Originally I planned to concentrate on the concepts of nature in parks. During the research process I realised that it is not just about nature though. Urban and natural environment come together in a park and the urbanity of the experience was also often expressed.

Parks as nature

Judith Haines (2016) did research in Adelaide Park Lands, in Rymill Park where a group held Reiki sessions, studying the sonic dimensions of the Reiki practice in relation to a 'natural' and 'unnatural' space. One participant shared her view on nature in the context of parks that trees are still trees with their life and energy (ibid: 142). Based on her study, Haines claims that there is an ambivalence in parks that animates "uncertainties in modern societies about both what is 'natural' and 'unnatural' and the social valuing of these spheres" (2016: 144).

The idea that nature is still nature, also in a park that has been influenced by humans, also resonated in some answers of the participants in Volksgarten. Diana mentioned connecting to nature as one reason for going to a park. She found traffic noise to disturb in the sense that it did not let her forget that she was in a city. At the same time she enjoys the urban feeling that the sounds of people enjoying leisure activities create.

Andrea first mentioned nature sounds when talking about park sounds:

> *I believe that the requirement of a park is rather that nature sounds should be hearable. [...] It should be separated from the traffic, no traffic noise or be large enough that there is maybe a peaceful place, not taking into account the people who might be there.* (Interview 6, Andrea)

These answers express the function of natural urban environments to "give urban people a sense of escape without being geographically distant" (Colléony et al. 2017: 673). In a study in Parisian zoos, participants said that natural sounds made them feel immersed, helped to ignore other sounds and created a feeling of 'being away' (ibid: 680).

Some participants said that they would go to a larger park if they were looking for peace and nature, for example Pötzleinsdorfer Schlosspark or Steinhofgründe. This may partly have to do with mobility, as going out of the city can be time-consuming and is not necessarily the first thought if one is not used to driving out of town with a car, riding a bike for a long time or taking trains often.

Parks as ordered nature

The question of nature's presence in the city also suggests the question of controlling nature. Rotenberg claims that nature can exist in the city on human terms, which means that cities are faced with the challenge of "containing the uncontainable" (2014: 387). Parks and other green spaces are a solution to this challenge, there nature can exist and not threaten the order (ibid.). "An urban park [...] mystifies the relationship between the rural and the urban, the condition of nature in the city and nature in nature" (Rotenberg 2012: 251).

The orderliness of parks came up in some conversations in and about Volksgarten and parks. Laura said that in parks, she looks for something visually beautiful and for this reason she prefers parks that are well taken care of. Still, she said that having a non-asphalt terrain does create some closeness to nature that she found suitable in a park. She also found important for a park that one can walk on the grass. An ideal park would give her the feeling of being in nature, although in ordered nature.

> *I don't know how much a park should be the opposite of the urban architecture of the city, a piece of nature. It presumably still is, the point of a park is to preserve the green space. Yes. And at the same time, when speaking of the orderliness of a park, when it is already called a park I still rather like to feel the hand of orderliness, not to have a wild park.* (Interview 4, Laura)

Not everyone liked the orderliness of parks though, for example Pia and Leo said they enjoy some wildness in a park.

> *I like to simply have a large grass field where you are also invited to walk on it and to go your own way. That's probably it, I don't like to be in parks that determine how I should walk. This is very important to me.* (Interview 12, Leo)

The previous opinions show a distinction between the orderliness of a city and the wildness or the seeming chaos of nature that is present in the public discourse too.

Parks as non-nature

Some participants made a clear difference between parks and nature. Laura said that if she wishes to go to nature she drives out of the city. Francisco said that he goes out of town for 'pure nature'. Miriam also said that when she wants to be somewhere green, she goes to Donauinsel or out of the city. For her a park is a place for people to come together. Henrik had a similar view:

> *Parks, I don't really associate them with nature, rather local recreation possibilities and so. For a small walk it is quite nice but I wouldn't want to define it as nature.* (Interview 8, Henrik)

Pia talked about a sound installation with classical music at the edge of Vienna, already classified as nature by her, and she found the installation unfitting to the place because it was nature, whereas she might have enjoyed it in a park. This also shows a clear distinction between parks and nature.

Overcoming the dichotomy

Hilary Cunningham and Stephen Bede Scharper challenge the dichotomy of city and nature, claiming that the city should be understood as nature and vice versa (2014: 495). They show that the future of cities is an ecological issue and "also suggest that owing to the urbanization of the planet, our collective ecological future *is in the city*" (ibid, original italics). Furthermore, nowadays it is almost impossible to actually find a place in the whole world that has not been influenced by humans; either it is sounds of technology heard in a deep forest or environmental impact of human activities on a global scale.

Parks can have the function of giving a sense of escape without a longer physical journey but at the same time, an experience of a park can be very urban. The urban atmosphere is cherished in a park similarly to the natural atmosphere, and the presence of people having fun and spending their leisure time creates a special atmosphere. This shows that urban and natural environment can peacefully coexist in parks, generating a unique park atmosphere.

6. Superkilen: Transcultural, instagrammable and controversial park in Nørrebro

My relationship with Superkilen began very differently than with Volksgarten. I first read about the park while searching for potential fieldwork sites online in January 2020. I was instantly thrilled – a park that's purpose is to bring together the local neighbourhood, to create a transcultural space in which people with various backgrounds can meet and peacefully coexist. The idea to bring together objects from so many countries, meaningful to the people living in the area, and in cooperation with locals, seemed fascinating. My initial enthusiasm was quickly reduced though when I began to search for materials already published on Superkilen. Apparently, everything was not as perfect as it seemed – there was some quite harsh critique about the park and its planning process, for example concerning the alleged minimal level of including inhabitants of the neighbourhood, as opposed to what was presented to the public, and the shadow of colonialism in collecting the objects (Stanfield & van Riemsdijk 2019). Nevertheless, the controversies made the park even more interesting and I was intrigued – what happens when 108 objects are gathered from around the world and placed together into a relatively small space?

6.1. Knowing *in* and *about* sonic atmospheres

6.1.1. Design and intended atmospheres

The experienced atmosphere in specific places is influenced by the designers and their imagination (Sumartojo & Pink 2019: 22). At the same time, atmospheres cannot be designed, only conditions can be created for their experiential emergence (ibid: 89). Still, designers (or the political or other actors behind the process) can have the intention to encourage certain feelings and behavioural norms (ibid: 97).

Superkilen was designed in a unique way with specific purposes concerning atmosphere. Concepts of Topotek1 and Superflex included a romantic English garden, a gigantic Tivoli with a mesh-up of objects, imported atmospheres and bad translations (Steiner 2013: 30). They saw the (re)designing and (re)constructing of objects as a translation process and saw it analogous to migration – in both cases there is a transformation that creates something new in the end (ibid: 59). They wished to create a copy-paste park for which anybody could select objects (Estenne & Le Brun-Cordier 2020: 40). Division into three zones was intended to

create certain atmospheres: sportive and cultural red square, classical black square and green zone inviting for a picnic (Estenne & Le Brun-Cordier 2020: 40–41). The concept for Superkilen also involved conflicts; it was supposed to make already existing conflicts visible (Steiner 2013: 71), so it was intentionally provocative.

6.1.2. Experienced atmospheres

Autoethnographic explorations of Superkilen

When I headed to Superkilen for the first time, I entered the park from the side of the Red Square. Facing a huge red square and staring at a red five-pointed star, I felt immediate agitation. I could almost hear a dreary Soviet march in my head. At this point I should probably explain my background that led to such a reaction – I grew up in a country formerly occupied by the Soviet Union, and although I did not experience the dreadful time myself, the collective painful memories still have a strong impact on me and I feel unease whenever I am faced with communist symbols in public space. I acknowledged my bias, calmed myself and broadened my attention. Going further, I felt overwhelmed – there were so many objects, colours, it was like a zoo of things. I tried to notice as many details as I could, while also perceiving the whole atmosphere. I felt a bit like walking in a museum-like space.

The second time, I enjoyed being there much more. It already had a familiar feeling and I could concentrate on details more. When I observed the objects, I began wondering about their stories. They seemed somehow bizarre just standing there in the middle of Copenhagen, torn out of their original context and brought into another one. I wondered how the objects would sound in the previous location. The objects might look like the ones they are supposed to replicate or represent but they sound different in a different context. While soundwalking in Superkilen, a lot of metaphors about listening came to my mind – what kind of sonic echoes can be heard from the places from which the objects have been brought together? What kind of a voice do the objects have, which stories do they tell?

I tried to pay attention to the interaction of people and objects but was not very successful in this endeavour. The time could probably not have been much worse for this purpose, as it was a cold season. What also made the observation of interactions more difficult was my lack of Danish language skills – I did not understand what people were speaking in the presence of the objects. People interacted with some objects, for example the Japanese octopus was frequently full of children and the Thai boxing ring was used both by parents and children play-fighting and a training group. Once I saw two young people going under the Turkish

dancing pavilion and beginning to deliberately step loudly, maybe because the sign said ‘dancing pavilion’, maybe because there is an echo under the pavilion. In any case, I could recognise the material agency of this object by observing the interaction.

As a part of my walks and hangouts in Superkilen, I also visited Nørrebrohallen many times. It was often a place to go to warm myself up because it was usually quite cold and windy. When Superkilen is a rather touristic place then Nørrebrohallen does not seem to be one at all. All signs and posters are in Danish, for example also the event on the International Mother Language Day that I happened to visit. Also visitors were largely Danish-speaking.

I could often hear human sounds that one would expect from a park – people talking and laughing, children playing. There were some sounds related to movement, for example the many bikes constantly riding through the park and the skateboards rolling and rattling on the ground surface. There were also traffic sounds, as the park is next to several roads. I noticed surprisingly few nature sounds – the Green Zone was actually dominated by traffic sounds because it is very open and there is a large road next to it. I did notice seagulls but they were further away. Reading one Google review that mentioned soothing water sounds and green trees, I realised that my experience was very relative in this matter and in other seasons there might be more nature sounds.

One evening at 5:30 pm I noted that the place felt like a place of transition – most people were riding through the park with a bike or walking through. It was interesting to observe the movement, as there were no certain paths in the middle zone and people were moving in and out in all directions, creating a dynamic asymmetrical pattern.

The atmospheres I perceived in Superkilen were relatively versatile. I visited it in various times of the day and week. The weather was often gray, cold and windy, which influenced my perceptions a lot. This made me notice the lighter moods even more.

Fragmented impressions of Superkilen

Before leaving Copenhagen, I managed to go on a soundwalk with Lucas. He talked about various sounds of transportation, movement and people, many of them as quickly passing sounds. In the Black Square and Green Zone, he found it surprisingly quiet; it felt empty, as he knew the park better from times with more people. He said that he generally saw the Red Square as a place to get somewhere but in the Black Square and Green Zone he would also hang out. He had often biked through the park but had also spent leisure time there.

Once I had a conversation with some young families whose children were playing in the

Black Square while the parents were talking. They lived in a building next to the park and had moved there after the park had been built. As they were ethnic Danes, this led me to think about gentrification that the park might have supported. One man commented that the park is always full of Chinese people, taking photos on the striped hill. A woman agreed and said that it is quite an 'instagrammable' place. When I asked about the objects, the woman said that partly it makes sense for her, for example the playground, and she finds it nice, but some objects in the Green Zone she just does not understand. She wished she knew their story.

In an endeavour to get to know the neighbourhood better, I went on a Ghetto Tour – a tour around Outer Nørrebro, guided by local young people with an immigrant background who had grown up in the area and shared their experience. Our tour guide Mona introduced the struggles of the young people growing up on one side with the expectations of their parents to be successful and make it out of the 'ghetto' and on the other side being constantly told by the authorities and part of the population that even though they might feel that they come from Copenhagen, they do not belong in Denmark. After the Ghetto Tour, I walked through Superkilen with Mona. She told me that she could not exactly remember how it looked before. She thought that now more families came there and saw the park as a positive development. Mona is an example of how Superkilen can have the effect of facilitating various local groups to notice each other more. She said that she was never that interested in Japan but when she saw the octopus she realised that there were also these people there.

To learn more about how tourists perceived Superkilen, I looked through 152 Google reviews. Most reviews were positive, a lot of reviewers used general positive words like nice or great. The park was also characterised as beautiful, fun, interesting, unique or unusual and touristic. Superkilen was seen 'instagrammable' and the most commonly mentioned activity was taking photos. It was also appreciated for the possibilities to play on the playground, do sports, bring children there, hang out and relax, walk or cycle – activities suitable for a park. Those who were more critical toward the park said that it was boring, nothing special, dirty or just not so nice as on photos. Some described Superkilen as a place of transition. One person also said that there was no trace of nature. Only 14 comments mentioned the multiculturalism of the park, objects from many places in the world and the show of the diversity of Copenhagen. Some reviewers saw it as an art park. One person also said that although there were objects from around the world, there was no consistency in the display.

Atmospheres of Superkilen in comparison with Volksgarten

Superkilen and Volksgarten are both touristic places. They are very different in character and could be described through several dichotomies: classical and historical vs. modern and new, elite vs. problematic area, centre vs. periphery, bounded vs. open. Both have a strong visual appearance, which is mentioned as a reason for going to both places. In some ways both parks represent the stereotypes of the respective cities rather well – Volksgarten and the classical Vienna, Superkilen and the innovative Copenhagen.

Interestingly, I perceived Superkilen as a museum-like space, like Volksgarten is officially supposed to be. Regarding this matter, one difference between Volksgarten and Superkilen is that the latter invites for interaction – every object can be touched, every surface stepped on.

6.2. Knowing *through* sonic atmospheres

6.2.1. Superkilen as a heterotopia

Universal portability

Just like Volksgarten, Superkilen seemed to me as a good example of how the visual and the aural dimensions can be perceived very differently. Many of the sounds in Superkilen could belong to any park. Compared to an average park, nature sounds were missing for me, which might be partly due to the season, but the urban atmosphere is probably always more dominant there. The objects and the sound these produce or trigger are on one side closely connected to the neighbourhood but on the other side so international and global that maybe they could be in a different location as well.

Universal easily definable functions

Superkilen is used by locals as a place to hang out, to let their children play and to do sports, just as any park could be. For some, it is a place of transition, which is a result of both the location and the design – the bike road going through the whole length of the park is clearly distinguished and wide, as is common in Copenhagen. It also has a touristic function that not many parks have, except for some historical or otherwise particular parks.

There is the non-heterotopic intended function of bringing the diverse inhabitants of the neighbourhood together but there has been critique of the gap between intention and practice. During my field research though, I learned from Mona that some girls from a youth centre were glad about the swings on the Red Square because they did not like simply hanging out

in the streets as boys did, and this gave them an opportunity to hang out with a nice activity. Thus, this function cannot be dismissed but would need further investigation.

Multivocality and repeatable meanings

When I first went to Superkilen, I saw graffiti on a red wall that said 'FUCK SUPERFLEX'. It was huge and felt like it was screaming at me. But who had wished to express their negative attitude towards the designers of the park? It could be someone whom the park had excluded or whom it claimed to represent but did it in a false way in their opinion. Until my next visit, a different graffiti had been painted over it, so that only 'SUP' remained visible. The visual expression of opinion had been erased, someone's voice silenced. From the latter incident, the complexity of the question of repeatable meanings becomes apparent. As with Volksgarten, there are the 'official' and branded meanings but this does not mean that these meanings are shared by most people.

Spaces that create a break with ordinary time

Based on my field research in Superkilen, I would say that it does not accord to this aspect of a heterotopia very much. I believe that the design has a strong influence on the temporal separation of a park from the surroundings. In that way, it is also linked to boundedness. Superkilen has been designed without walls and opening times, and also as a place of transition it is constantly part of the rhythm of the neighbourhood.

Boundedness

Superkilen creates the feeling of a very open space. There are no walls and gates; everyone can go in and through the park anytime. As the park was meant to unite the neighbourhood and to break metaphorical walls, it is significant that the park is also physically open. Also the sounds coming from the streets are part of the park atmosphere.

We could still speak of some aspects of boundedness though. There are some restrictions, such as the anti-graffiti paint which prevents some activities. I already wrote about the significance of missing sounds that can tell more than the physically perceived sounds in some ways. For example who is excluded from a place; who does not have access. In the case of Superkilen, everyone can enter the park physically but there can still be characteristics of the place that push certain people away, as the aforementioned graffiti showed.

Linkage between heterotopia and ordinary spaces

This category is difficult to analyse in the context of Superkilen. As nature is not a dominant

aspect of Superkilen, it is not a suitable park for analysing the role of nature in the city. It is also not meant to be an ideal environment compared to the chaotic city. It rather aspires to be the opposite – a representation of the surrounding neighbourhood.

We could still have a look at this category by concentrating on the linkage between Superkilen and the surrounding neighbourhood. Superkilen was intended to show the multiethnicity of the neighbourhood and to have a significant influence on the surroundings. According to Astrid Bruus Thomsen, they aspired not to support gentrification but rather to improve the living conditions for the existing residents (Steiner 2013: 69). The creators thought that the provocative and somewhat ugly appearance of Superkilen helped to avoid a lot of gentrification (ibid: 73). Mona said that she had not noticed signs of gentrification but added that it might just not be so visible because in Denmark, people do not show off their richness, according to the Law of Jante. Superkilen definitely brought more visitors into the neighbourhood, it is a hip place to hang out or visit as a tourist. If this necessarily follows the needs of the inhabitants is another question and would require more thorough research.

6.2.2. Inclusion and exclusion

While researching *in* and *about* sonic atmospheres in Superkilen, the question of inclusion and exclusion was one that came up both in relation to the planning process and the end product that Superkilen is.

The idea of the architects and designers was to make the project participatory from the beginning until the end. They held public meetings, put up announcements in media, internet and public space. In search of people who did not come to the meetings they came to the idea of extreme participation that involved the inclusion of youth and the elderly who could choose objects. In the end, the final decision was still made by the designers and architects and only five objects of more than a hundred were chosen by individuals living in the area (Steiner 2013: 49–57). The actual inclusion of participants has been questioned and criticised. E. Stanfield and Micheline van Riemsdijk did interviews with locals who felt that the residents had been almost completely thrown aside from the planning (2019: 1367).

How the park as a result of the design process includes or excludes people is connected to the concept of boundedness that I already introduced. Whereas nobody is physically excluded with the open boundaries and no opening times, this does not mean that other ways of exclusion do not exist. Also the material conditions of the park do set certain boundaries to practices. For example anti-graffiti paint is a physical way of excluding certain practices.

The material conditions also create possibilities for practices. Superkilen has a lot of opportunities for doing sports – outdoor gym equipment, basketball field and hockey goals, a boxing ring, skateboarding rinks. It also has interesting playground areas for children, so it attracts both families with children and physically active people who enjoy outdoor sports. The variety of the zones can make the park attractive to various kinds of people. There are possibilities to sit on the swings and chat, to use the public grills, to have a picnic on the grass or at the tables, to relax in a hammock and more.

Considering the latter possibilities that Superkilen has created, it might seem a very inclusive place. However, if it would include everyone, there probably would not be the controversial opinions on the park. We are once more faced with the problem that the voices of excluded people are not heard, except for a couple of visual interventions in Superkilen, such as the already mentioned graffiti. Those who are excluded might partly be those whom the park claims to represent but as they perceive it, does not really represent them.

6.2.3. Representation

There are 14 objects from Africa, 22 from Asia, 51 from Europe, 11 from North America, 1 from Oceania and 9 from South America (Steiner 2013). The signs only mention a city and a country. However, the story of the objects might be more complicated. All stories can be read on the homepage of Superkilen but when simply being in the park, there is no information about this. For example, there are small hockey goals from Syria. On the homepage I learned that they were actually made in Germany and then taken from Germany to a mall in Syria where they had an ice hockey rink. But people did not use them because they did not play ice hockey; they just went there because it was cooler than outside. And now the hockey goals found their way into Copenhagen, supposedly representing Syria.

The designers talked about the idea of displacement and were aware of objects acquiring new meanings in a new context (Estenne & Le Brun-Cordier 2020: 41). When speaking of translating the objects, one of the architects talked about an object designed after a dentist sign in Qatar: “It did not look good, and it had a different scale. But, produced in Denmark, it suddenly turns into one of the most beautifully, perfectly made first-world objects” (Steiner 2013: 63). This statement is problematic in several respects, representing a way of thinking in which European production and aesthetic is valued more than an object from Middle East (or any other country in other parts of the world). Whom does this object really represent? The sign next to the object does not tell this story but says ‘Qatar’ so it might be thought that it is

an object directly brought into Copenhagen from Qatar, whereas the original object was actually seen as too imperfect, not 'beautiful' enough to fit into Copenhagen.

Stanfield and van Riemsdijk have seen the collection of objects critically: the prototype of the English garden is strongly related to the imperialist times during which collecting objects from different lands "was intertwined with racialized, exotified views of non-Europeans as the "Other"" (2019: 1368). Mona again found it positive that objects of Muslims had been brought into Superkilen. She could not say that she associated with the Moroccan fountain but still found it nice. Another source of critique is that the objects have not been selected proportionally to the numbers of inhabitants from specific countries (Stanfield & van Riemsdijk 2019: 1368). Many objects are from Europe, so on one hand it has a colonial vibe and on the other hand it does not represent the residents proportionally.

Daly criticises Superkilen for focusing too strongly on the spatial representation of intercultural differences and claims that more social cohesion could be built through enabling more spatial practices and intercultural encounters (2020: 66, 80). The park has been criticised for being a somewhat failed attempt to represent inhabitants of the area with immigrant backgrounds, as it represents the designers' idea of diversity, not the views of the residents (Stanfield & van Riemsdijk 2019: 1357, 1368).

One local activist with an immigrant background whom Stanfield and van Riemsdijk interviewed saw the wide celebration of Superkilen and its diversity as a paradox because she herself did not feel like accepted in the society; "the park highlighted the political message of immigrants being told they were not fully Danish" (2019: 1369). Mona had a different view – she found it positive that a space had been created for different cultures and that it created a safer image of the area. Mona is also one of the people whom the park is supposed to represent, so different opinions and experiences exist among the locals.

Superkilen and its objects can be considered to represent certain countries, ethnic groups or nationalities, the transcultural Nørrebro or just the designers' vision. When inhabitants were invited to select objects, they were not expected to choose something from a country they associated their identity with – they could choose anything, for example an object they remembered from a trip (Estenne & Le Brun-Cordier 2020: 40). The park can also be seen as a representation of globalisation. People have associations with the objects and places in so many different parts of the world, and people do not necessarily have to associate themselves with the places or their origin.

7. Temporality of sonic atmospheres: Listening in times of COVID-19

7.1. Knowing *in* and *about* sonic atmospheres

I did not research *in* sonic atmospheres the way I did in the other case studies. I spent the lockdown in the countryside and the only times I experienced a small town atmosphere was when I went shopping for groceries once a week. The emphasis was thus on researching *about* sonic atmospheres, which had implications to how I became to understand the experiences of others. I did experience mediated atmospheres, either through listening protocols, sound or video recordings made by the participants.

7.1.1. Absent sounds, quietness and silence

Participants noticed the absence of specific sounds but perhaps even more the general quietness or silence compared to pre-lockdown. Missing sounds included the sounds of traffic, people, bars and cafés, a usual greeting from a nearby shopkeeper. When listening through the recordings made in cities, especially in Vienna, which I know, I also noticed the bizarre absence of people. The absence of sounds otherwise considered unpleasant could be perceived as a positive change, mostly regarding traffic sounds, but absent sounds could also create a sad feeling. In addition to the complete absence of sounds, some sounds felt quieter, for example people seemed to behave in a different way and speak more quietly.

Often participants said that it was generally quieter than usual, not referring to specific sounds. It was described either as quietness or silence. Participants were not always sure if the sound level was actually lower or if it just felt like it because of the atmosphere:

> *The first couple of days since the measures were implemented the city seemed eerily quiet. But I'm not entirely sure if I simply imagined it to be or not. Perhaps I just expected less noise now that everything was going into lockdown.* (Contribution 1, Katrin)

This perception could cause different emotions. For one participant, quieter streets made her way to work more pleasant and peaceful. Several participants described the atmosphere caused by quietness as gloomy, depressing, serious, sad or eerie. It felt 'as if life stopped' or like being in the countryside. A participant said that otherwise the quietness would feel peaceful but because she knows that the cause is the pandemic, it was more negative. Similar ambivalent associations could also be sensed in some other contributions. This could be

related to the simultaneous appearance of several modes of listening (Chion 2012), whereby reduced listening could lead to a pleasant experience but semantic listening—what the absence of sounds means—was associated with a negative phenomenon.

Similar negative meanings of quietness in a city have been recorded by Iscen (2014) in the study of newcomers' experiences in Vancouver. According to all the participants, quietness led to them feeling isolated (ibid: 130). The pandemic was also a case of suddenly changing circumstances that led to the changing perceptions of certain sounds that might otherwise be experienced as positive.

7.1.2. Extraordinary sounds

The sound that was most frequently mentioned as extraordinary was the sound of birds. This was always perceived as positive, whereby one participant mentioned that before the pandemic he might just not have appreciated bird sounds as much as he did now. Hearing many birds could be the result of more birds actually coming to the cities but also because the sounds were masked by noise before.

During the lockdown, there seemed to be a tendency to go to nature more often. Robert became very aware of his footsteps in the forest when walking on branches, leaves, mud and grass. He realised how surprisingly noisy someone who is not used to moving in nature is. Another remark he made was that he probably only noticed the sounds of animals, the river and fish due to paying attention to listening particularly, as these would otherwise be too 'natural' in nature.

Many sounds were perceived not as new but just as sounds that now had the chance to come to the foreground, as the general noise level was lower. This could be perceived as a general feeling or associated with specific sounds. These included the "heavy roaming of generators", turning on a saw, wind, people speaking, sounds of the train with no people masking the engine noise with their conversations, and a call for prayer:

> *The call for prayer is getting louder too. I never knew you could hear it that well from this location. You probably couldn't.* (Contribution 7, Evelyn)

Sounds that were a direct result of and associated with the pandemic were also heard. In some cities, people were required to wear a mask also in the streets. Walking around with a mask made a participant perceive her own breathing very loudly compared to a usual situation.

Rachel described the somewhat spooky feeling of being in the train and metro stations in

these times:

> *The announcements don't make it less spooky. When you hear a certain announcement: when you want to ride there and there, it might happen that you are thrown out at the state border because you don't have a permission to enter [...]. This makes everything a bit surreal.* (Contribution 6, Rachel)

On her recording that involved a train ride, I also noticed that the only talk that I heard was from the frequent announcements with health tips, new behavioural norms and rules.

In the first months of the lockdown in spring 2020, a custom spread throughout the world to organise actions for either making music by the window or opening the windows to applaud to the healthcare workers at a specific time. One participant recorded such an action in her listening protocol:

> *[A] handful of people from the neighbouring buildings started clapping. And we eagerly joined in. The other people were relatively close, in hearing distance [...]. But.. it felt like there was nothing to be said. [...] The fact that we were only a handful of people, and the way my claps echoed back at m[e] from the otherwise silent walls of the buildings reminded me to my core of a feeling of isolation. The exact opposite of what the action was meant to achieve. There is just something about echos that implies a certain loneliness. I did not speak to any of the neighbours. As soon as the minute was over they closed their windows.* (Contribution 1, Katrin)

7.1.3. Reassuring sounds of normality

Hearing mundane sounds that otherwise were not particularly appreciated suddenly became welcomed during the lockdown. Walking in an unusually quiet city and suddenly hearing traffic sounds could create a nice feeling of familiarity, for example when the intensity of the traffic increased or drivers were signalling each other. As the situation was so extraordinary in a severely negative way, anything that might remind people of the ordinary life could become highly appreciated.

7.1.4. Different experience of walking

The experience of listening changed a lot with the pandemic but also the way people moved around their surroundings became different. On one side, it was easier and more comfortable to move around a city due to less traffic. On the other side, people started to navigate in a

way that they would not pass other people too close, as this could lead to getting infected or infecting others. The participants who went soundwalking during the pandemic sometimes described avoiding people, for example by crossing the street.

7.2. Knowing *through* sonic atmospheres

7.2.1. Temporality of sonic atmospheres

Sumartojo and Pink write that when we think "about atmosphere as a *changing* configuration means that we must also think about temporality" (2019: 22, original italics). The changes in the sonic environment can be very subtle and not easily perceivable, as they happen and continuously develop during a longer period of time. In the case of COVID-19, the change often happened overnight – there was a very sudden change of behaviour in the society, and it was easy to notice the sudden drastic transformations in the sonic environment.

Experiencing extraordinary sonic atmospheres do not only tell something about how people perceive and give meaning to the current situation but also about the times that are the basis for the comparison, as people inevitably compare the extraordinary situation to an ordinary situation. Whereas the temporal comparisons in Volksgarten and Superkilen regarded the time of the year, week and day, they were now mainly about the time of pandemic and pre-pandemic.

The temporality of atmospheres involves the ways how past and future are involved in the experience of the present; it involves anticipation towards the future (Sumartojo & Pink 2019: 24). This was evident in the account of soundwalking in times of COVID-19. It was a situation in which nobody knew how long it would go on, how it would develop and what might happen next.

7.2.2. Changing perceptions and meanings of sounds

The listening protocols of participants showed a shift in how some sounds were perceived. Meanings of some sounds also changed during the pandemic. For example, there were sounds that became related to danger, such as any sounds related to health issues. They were not pleasant before but could easily be ignored in the pre-pandemic situation. Now they seemed highly dangerous and inappropriate. While listening to a recording, I heard someone coughing and immediately had the feeling of danger and inappropriateness, even though I was not physically present. Behaviours changed too, as people started to avoid coughing and

sneezing in public and felt very improper when it still happened. Danger could also be related to hearing foreign languages that were interpreted as signs of possible travel. Even the sounds of people simply coming closer could evoke the feeling of danger.

So sounds of health problems seemed to suddenly break social norms. The same was the case with sounds of having fun and larger groups of people.

> *I noticed people being out, in groups(!), laughing and discussing while their kids were playing together [...] I took it as a sign of carelessness in this very serious time. Of course, I know that the sounds itself did not necessarily mean they weren't keeping a safe distance and following hygiene-recommendations etc. etc. Yet, their holly-jolly sounds of enjoyment, as if it were any regular Saturday afternoon in the park – annoyed [m]e greatly.* (Contribution 1, Katrin)

Again, I had a similar feeling when I heard someone laughing while listening to a sound recording a participant had sent me.

7.2.3. Local perspectives and global issues

The heard sounds but also the perception and meanings of sounds changed drastically during the pandemic. As I looked through the gathered contributions from around the world, the relative universality of the pandemic experience, the similarities in the sonic environments and perceptions were very clear and striking.

Researching *through* sonic atmospheres offers tools to connect local perspectives and global issues by learning about abstract concepts through personal sensory and affective experiences. Whereas this becomes especially visible in multilocal studies, there is a potential of understanding global issues also when soundwalking is only conducted in one location or region. For example, the balance between urban and natural environment is not only an issue in Vienna but in cities all around the world.

8. Final considerations on sonic atmospheres and soundwalking

8.1. Researching *in* and *about* sonic atmospheres by soundwalking

Researching *in* sonic atmospheres helped me to create the basis for researching about and through atmospheres. In Volksgarten, I went on several walks before the soundwalks with participants and also in between. I could also experience soundwalking together with participants, as a shared experience. It opened new ways of perception and meaning-making to me, which were different from my own perspective.

Soundwalking by myself before engaging with participants enabled me to develop a sense of place, get to know Volksgarten better and gain points of reference for upcoming work. By observing my own perception, sonic effects and associations that I experienced, my thoughts and feelings, I laid the groundwork for understanding other people's soundwalking experiences. The questions and issues that arose for me while being immersed in the sonic atmospheres in Volksgarten offered me a basis for comparison with the experiences and perspectives of the participants.

Soundwalking on my own also played a role in developing the methodology for soundwalking with participants, regarding the length, route and rhythm of the walk, questions for reflection and interviews, and the concept for creating sound maps. The presuppositions I thus had for my research were of course highly subjective; for another person conducting research, the questions would have probably been different. Where I perceived a conflict between natural and urban environment or between visual and aural perception in Volksgarten, and questions of inclusion, representation and material agency in Superkilen, someone else could have perceived different fluctuations. This is unavoidable and illustrates the subjectivity of atmospheres. All I could do was trying to be aware of my subjectivity and to minimise its impact on the participants.

Soundwalking alone between soundwalks with participants was also a significant part of the research process. By doing this, I could reflect on the soundwalks with participants, acknowledge and analyse the new aspects and issues that had come up, and modify the methodology as seemed suitable in the light of the new information.

By researching *about* sonic atmospheres, I learned which sounds were more and less dominant, unpleasant and pleasant, positive and negative for the participants. I learned how

the participants categorised sounds, which associations they had with specific sounds, which meanings they gave to the sounds and how various sounds contributed to the sonic atmosphere for them. Based on the encounters with these sounds, I learned how the participants perceived the sonic atmosphere of Volksgarten, how they understood the park.

I also developed a more thorough understanding of listening experiences by comparing the accounts of various participants and myself. By analysing the modes and biases of listening, the multisensoriality of listening and different kinds of sonic associations, I gained a lot of insight into soundwalking as a practice and possibilities for developing the methodology further. This analysis also helped to make sense of the relationships between the participants and Volksgarten, and to understand which factors played a role in their perception of the sonic atmospheres of Volksgarten.

In Superkilen, soundwalking on my own unexpectedly had a much greater weight than in Volksgarten. When I began soundwalking in Superkilen, I already had an idea of the design process and the atmospheres that the architects and designers had intended to create. Atmospheres cannot be made in a certain way intentionally though, only the conditions can be created for their emergence (Sumartojo & Pink 2019: 89). By soundwalking in Superkilen, I could observe how my perception of the sonic atmospheres related to the purpose of the architects and designers. This process was different from my previous fieldwork in Volksgarten because then, I first made more thorough background research after already having experienced the atmospheres. On one side, being more of a clean slate might have facilitated more openness in my perception. On the other side, already having more contextual knowledge let me consciously analyse the differences between intended and experienced atmospheres from the beginning.

In Superkilen, I went through the experience of immersing myself in an unfamiliar sonic atmosphere in an unfamiliar city. I could experience it as a newcomer with very little personal connection to the city. In comparison with Volksgarten, everything was new to me and thus, there was a smaller chance of unintentionally dismissing some aspects about the atmospheres due to familiarity leading to ignorance. The aspects that seemed important to me were still a result of my personal biases. For example, I was perhaps more than average attentive of the role of material objects in representation due to my interest in material culture.

I planned to use this part of empirical research as a preparation for soundwalking with participants as I did in Vienna but the potential remained largely unused so I cannot analyse

what the influence of it was or could have been. Through the few encounters that I had, I did gather some impressions of Superkilen from people with different backgrounds and connections to Superkilen and Nørrebro. Added to my own impressions, they widened the scope of perspectives on the park and opened some additional questions in relation to Superkilen. Here, soundwalking did not play a very significant role – mostly this data was gathered through additional methods.

During the pandemic in spring 2020, researching *about* sonic atmospheres showed how similar listening experiences were, independent on the exact location. I gained insight into how participants perceived the relative quietness or silence and absent sounds, which sounds were extraordinary for them, how sounds of normality could be both reassuring and eerie, and how the experience of walking itself changed with the pandemic.

8.2. Researching *through* sonic atmospheres by soundwalking

In Volksgarten, researching *through* sonic atmospheres enabled me to get a glimpse of the power relations and politics that are part of the conditions for the emergence of particular sonic atmospheres. It also let me explore the issue of control over sonic atmospheres and the actors that are relevant to the issue.

Based on researching *in* and *about* sonic atmospheres, I could also discuss concepts of parks; the soundwalking experience offered a basis for participants to tell which sounds they associated with parks, and how they understand the relations of urban and natural environment in parks. Through the soundwalk, participants got comparison material – listening in one park gave them input for thinking about parks in general, either by hearing or not hearing expected sounds.

Researching *through* sonic atmospheres in Superkilen led me to abstract concepts that arose resulting from the combination of my soundwalks, engagement with participants, park visitors and locals, and media coverage on the park. By exploring sonic atmospheres, I was able to gain additional insight into the issue of inclusion and exclusion during the planning process and in the park as it had developed since the opening in 2012. The sonic dimensions also proved to be a unique gateway to questions of representation. Another topic that was dominant for me throughout the period of empirical research was the role of material objects while consciously listening in the presence of the many objects in Superkilen.

As can be seen, the questions and issues arisen in Superkilen were quite different from those that dominated more in Volksgarten. This illustrates that the conditions that contributed to enabling the emergence of sonic atmospheres, the various actors considerably differed in the two parks. It also shows the potential of soundwalking and researching *through* sonic atmospheres, as the approach pays close attention to the individual sensory experience and takes as a point of reference the ways in which people perceive the fluctuations that contribute to and are part of sonic atmospheres.

Through collecting contributions about soundwalking experiences in spring 2020, I could explore the temporality of listening and sonic atmospheres, and how perception and meanings of sounds can transform drastically after large-scale changes in the society. By not concentrating on one location but choosing a multilocal field, this case study also showed how studying local perspectives in regard to sonic atmospheres can act as a route to understanding global issues.

Researching *through* sonic atmospheres let me explore conditions in which sonic atmospheres arose in the respective contexts. It also gave me the opportunity to pay attention to and delve into abstract concepts and issues that came up during the process of soundwalking and being immersed in sonic atmospheres. Some of the fluctuations that led to those issues and questions were perceived by me and deliberately studied further with participants, and some fluctuations attracted my attention because one or more participants pointed them out. Therefore, researching with participants is an immense resource in the study of atmospheres and the more different individuals are included, the more versatile concepts and issues can be explored *through* sonic atmospheres. Thereby, attempts to study the perspective of specific socio-cultural groups could be made. In this case, there would be more interplay between the shared and individual values and backgrounds that influence the perception and meaning-making.

In Volksgarten and Superkilen, researching *through* sonic atmospheres by soundwalking facilitated the analysis of those parks as heterotopias. While the previous aspects of researching *through* sonic atmospheres concentrated more on the differences between Volksgarten and Superkilen, heterotopia is about the suggested mutual qualities of parks and thus enables to look at possible similarities. I have not found a study on parks as heterotopias in which the focus is on sound. Sonic atmospheres offered a different perspective on the discussion of parks as heterotopias. On the other hand, the concept of heterotopia contributed to understanding some other concepts related to sonic atmospheres in Volksgarten and

Superkilen.

Regarding universal portability, meaning and functions, the meanings seem to be more connected to the location and context than functions and the question of universal portability becomes somewhat problematic. Considering the functions, some universality was there both with Volksgarten and Superkilen. Here, the intended functions and functions in practice were not identical though.

Multivocality and repeatable meanings became questionable in the context of parks in Vienna and Copenhagen. Even if parks might have meanings that are repeated among a large group of people, there are also other people, the ones that we may not hear or see in a park because they are excluded in some way. We might end up reinforcing what Low et al. (2005) criticised – only recognising the meanings of middle-class visitors and tourists. Thus, this aspect might not be the most profitable one if we are to overcome such a limited gaze.

Creating a break with ordinary time was not a very productive perspective on Volksgarten and Superkilen in my research. Still, it could reveal more if rhythm analysis would be more in focus – sonic atmospheres do have a potential for this aspect of parks as heterotopias.

Analysing boundedness *through* sonic atmospheres in Volksgarten and Superkilen proved to be quite useful, as it led to a wider understanding of the power relationships and the conditions in which atmospheres could emerge. Sonic dimensions can reveal new aspects of the boundedness of a place than only concentrating on the material aspects does.

As for parks as containments of ideal natural environment, rather the weaknesses of the concept of heterotopia came into the foreground in Volksgarten and Superkilen. By concentrating on the nature aspect of parks, heterotopia does not give enough attention to the urban side of parks and does not take into account that there are different kinds of parks, those with a more dominant natural side and those with a dominant urban side. Superkilen is definitely the latter type. Whereas Volksgarten did have a strong natural characteristic to it, compared to Superkilen, the urban environment was still always present.

Overall, analysing the atmospheres of Volksgarten and Superkilen through the lens of heterotopia did help to understand some conditions that contributed to the atmospheres. At the same time, sonic atmospheres challenge the conceptualisation of parks as heterotopias. Heterotopia limits the analysis of parks as places of entanglement by isolating them too much from the outside actors. Taking sonic dimensions into account might bring into attention problematic aspects of regarding parks as heterotopias. Knowing *through* sonic atmospheres

made it possible to emphasise more idiosyncratic characteristics of parks that are not considered enough when speaking of parks as heterotopias.

8.3. Proposal of a revised methodology for soundwalking

8.3.1. Relevant considerations

If I would begin my research again, I would do several things differently, based on my experience and learned lessons. When soundwalking is used as a method, the researcher could benefit from being attentive to the following factors.

Sensory situatedness

It is important to trace how personal, cultural and social background and individual idiosyncrasies influence sensory perception and meaning-making. Listening is subjective and we all have some biases of listening. This involves the sensory situatedness of the researchers, as well as research participants. Reflexivity is the key and also participants could be asked to discuss the reasons behind their perception, feelings and associations. In my study, individual soundwalkers were on average more reflexive of their experience as a whole, as they sent me information about themselves that they regarded relevant, in relation to the experience.

Helpful concepts can be soundscape competence (Truax 2001), politics of listening (Chandola 2012) and formants of anthropology of sound: sensory corpus, auditory dispositive and sonic persona (Schulze 2018a, 2018b).

Multisensoriality of soundwalking

Soundwalking is a multisensory experience, both regarding walking and listening. Senses are always in action and interconnected. This does not mean that listening cannot be taken as a point of departure but listening is never the only contributor to sensory experiences. Thus, the influence of other senses should also receive attention, as well as the experience of walking, which was very much in the background in my empirical research.

How to incorporate the multisensoriality of soundwalking into the methodology? I suggest beginning with the exploration of all senses. First, attention could be brought to walking – how does it feel to walk, to move the body in this way; how does the ground surface feel in contact with the foot soles; how does the air feel on the skin, how do clothes feel on the

body? Then, sight and smell could receive attention. When attention is directed toward listening, it could again begin with the body – which sounds do our moving bodies make? Now, after the senses have been awakened, the 'gaze' could be broadened into the whole perceived sonic environment. This way, we already have a more holistic soundwalking experience.

Sonic associations

Sonic associations can be a key to understanding how the sense of place or time emerges and develops. Thereby, there are different kinds of associations with memories, time, people and places. Sonic associations can be traced together with participants in conversations about their experiences.

Analysing sonic associations from the perspective of listening modes (Chion 2012) enables us to understand factors behind the associations, for example how perceptions of sounds are related to values and memories. Other helpful concepts include sonic effect (Augoyard & Torgue 2005), sonic symbolisms (Truax 2001) and sensory imagination (auditory imagination, Ihde 2007).

Absent sounds

Methodology for soundwalking in sonic atmospheres should be attentive to absent sounds because they are a rich source of information for how atmospheres of a place are perceived and adds the future measure (that Sumartojo and Pink emphasise in atmospheric research) to the subject. For example, the absence of sounds of fun in Volksgarten told a lot about the concepts of and expectations toward parks. The concept of sonic imagination and sonic effects such as anticipation could be helpful.

Ways of expressing soundwalking experiences

Participants can express their experiences in various ways. When developing a methodological approach, there is the question whether only verbal expression should be included or could the experiences be understood more thoroughly through audio or visual expressions. I would argue for including other methods of expression, such as sound maps or sound recording and editing.

Ethical considerations and influence on the participants

Soundwalking can be an experience that influences the participants in a positive way by making them more aware of their sonic environment or by simply introducing a new practice

to them, but it could also have negative effects. Either way, there are ethical considerations that should be made when leading people to sensory, affective and emotional experiences.

Ethical questions also arise when sound recordings are made in public places – there might be sensitive conversations or other sounds captured on the recordings, and even if the content of the talk is not sensitive, people may not be in accordance with them being part of (published) sound recordings.

8.3.2. Choosing the right method

I have explored three different types of soundwalking in this project. In a study not specifically focused on methodology, it might be sensible not to apply all three but to choose between them.

Soundwalking as a researcher and soundwalking with research participants have the best results when combined. Using both methods would be the ideal way of doing research *in*, *about* and *through* sonic atmospheres by soundwalking, based on my experience and considerations. Thereby, soundwalking as a researcher is beneficial as a preparation for working with participants but also in between and after the latter.

Letting participants go on individual soundwalks has some drawbacks, compared to other two methods, but can also be preferred in some situations. The main weakness is that it severely limits the possibility of researching *in* sonic atmospheres, as the researcher can only develop a sense of place based on a mediated experience. Therefore, the potential knowledge and understanding is limited. The advantages of the method are the possibilities to conduct multilocal research and studying sonic atmospheres in locations that are not possible to visit. Hence, this method could be preferred in situations in which the physical presence of the researcher is not possible, or the goal is to gather knowledge from several locations simultaneously.

8.3.3. Soundwalking as a researcher

Soundwalking as a researcher is an important part of researching *in* sonic atmospheres. The researcher can already acquire ideas regarding topics for further exploration and for preparations for planning soundwalks with participants. Also, by analysing one’s own sensory experiences, it might be easier to understand the experiences of others.

Based on the first soundwalking experiences, guidelines can be created with questions to keep in mind while soundwalking. Personal guidelines can be continuously developed further

and taken as a basis for asking participants to reflect on their soundwalking experience.

On soundwalks, further methodology for soundwalking with participants can be developed. This includes planning the route, length and rhythm of the soundwalk, deciding on where to stop for reflections and how many stops should be made.

Soundwalking as a researcher is an autoethnographic practice and respectively requires analysis and reflexivity. This enables to become more aware of one's sensory situatedness, biases of listening and the factors behind them, and thus facilitates finding routes to understanding the sensory situatedness of others. It also lets the researcher experience and analyse the multisensoriality of soundwalking and sonic associations.

There are various ways of documenting the soundwalks and sonic atmospheres. Experiences can be described by writing down or audio-recording notes. Making sound recordings can be a good way to document the fieldwork, as recordings can be listened to afterwards, which facilitates going mentally back into the fieldwork situation.

Making recordings should not be part of soundwalking but done on separate walks with the primary intent of recording, as it would otherwise disturb being immersed in the sonic environment.

As a part of or in addition to soundwalking, being at the research site can also involve talking to people in the location to ask about their perspective in regard to the place, depending on the research topic, and observation of the sonic behaviour of other people.

8.3.4. Soundwalking with research participants

Soundwalking with research participants involves researching *in* atmospheres, as the researcher is part of the experience, but a large focus is on knowing *about* atmospheres. There are several decisions regarding methods to be made before fieldwork.

How many people

A soundwalk can be conducted with one or more participants. The advantages of involving one person at a time include being able to give all the attention to this person, the participants having a larger freedom of movement and speaking, and avoiding the influence of others. Involving groups might be preferred because it is more time-efficient, it allows studying collective soundwalking experiences, and conversations between participants about their perspectives can create additional interesting and relevant data. Groups could be rather small, as with more than 5-6 people it might be difficult for everyone to express their opinion.

Length, rhythm and route

An orientating length and rhythm could be planned beforehand. It depends on the place or whether the walk is limited to a more bounded place or for example involves walking along the streets of a town. Altogether, 30-60 minutes could be an average length of a soundwalk. The rhythm is dependent on the length but at least two stops could be made for reflections.

The route can also be planned, based on the researcher's experience of soundwalking. Another option is letting participants choose the route themselves, if possible. That way, they can lead the researcher through a place or areas they know and have a personal relationship with, so that the researcher can know more about this relationship. Choosing a predetermined route may facilitate an easier comparison between soundwalks but actually it might be more fruitful to let the participants guide the researcher through the area, as this sheds more light on their experience, senses and spatial knowledge.

Questions and instructions for reflections

On the soundwalk, the questions could be more about the immediate experience, not about more abstract topics. I preferred to instruct and ask as little as possible but to give directions when it felt appropriate and necessary.

A possible range of topics involves categorisation of sounds; positive and pleasant sounds, negative and unpleasant sounds; expectations for sounds; thoughts, associations, memories and feelings when hearing specific sounds and being immersed in the sonic atmosphere in general; which role other senses played in the experience; what kind of atmosphere was perceived.

Documentation

I audio-recorded soundwalks with the permission from the participants. Video recordings could also be made but I personally feel that audio-recording is less pervasive and distracting for the participants, and also demands less attention from the researcher, especially if a second researcher is not present.

Questions for interviews

Questions for interviews should be based on the soundwalks as a researcher, topics that arose during soundwalks with participants, and theoretical interests of the study. When preparing questions for interviews, both, knowing *about* and *through* sonic atmospheres should be kept in mind. The questions could also trigger deeper reflexivity about the sensory situatedness of

the participants. If sound recordings were made during the soundwalk, sound elicitation could be used – some fragments could be played to bring the participant mentally back into the situation.

Creative expressions of listening experiences

Non-verbal creative expressions of listening experiences can reveal new aspects of relationships between people and the environment that might stay hidden when talking. These can be visual translations of the aural, such as sound maps, but also stay on the sonic level. Participants could record environmental sounds and create sound collages (or installations, Iscen 2014), which could then be discussed.

8.3.5. Independent soundwalking without the researcher

The elements to consider are largely similar to soundwalking with participants. Still, the participant has a more active role in this case. The length and the route will be free to choose. Instructions regarding what to pay attention to and to reflect on can be given prior to the walk. The participant is solely responsible for documenting the soundwalk. Whereas I earlier argued for recording walks in audio instead of video, the situation is different when the researcher is not present on the walk. If possible, video recordings could be made to improve the extent of the mediated experience for the researcher. Interviews are even more important now, and the questions *about* sonic atmospheres could have a relatively higher emphasis.

8.3.6. Representation of data

Sonic ethnographies are ethnographies that are not just *about* but also *in* sound, editing sounds makes it possible to combine expressive and informative sonic forms that provoke thoughts (Rice 2019: 246). The researcher can create sonic ethnographies but another possibility is letting participants create their own sound works, or creating them together (e.g. Feld 1987). Thereby, it is not only the participants who should have the possibility for creative expression – the researcher could also create a more artistic work as a representation of data, such as in the form of a soundscape composition (Levack Drever 2002).

9. Conclusion

The purpose of the thesis was to explore how soundwalking can be applied to understand relationships between people and the environment, and to propose a methodology for soundwalking in anthropological research. I combined soundwalking with the approach of knowing *in*, *about* and *through* sonic atmospheres.

The analysis was based on three case studies. Two were concentrated on the spatiality of sonic atmospheres and took place in urban parks: Volksgarten in Vienna, Austria, and Superkilen in Copenhagen, Denmark. The third part of the empirical research was conducted distantly and focused more on the temporality of atmospheres – I gathered contributions of soundwalking during the COVID-19 pandemic from participants around the world.

Theoretical and methodological approach

The theoretical framework was influenced by various texts from sound studies, sensory anthropology, and anthropology of space and place. First, I explained the choice of practising sonic anthropology and taking sounds as a point of departure in research. Sounds are meaningful and by studying the meaning of sounds, we can learn a lot about the relationships between people and the environment they inhabit. Although senses are culturally and socially influenced, the perception is also highly individual. Therefore, individual experiences should be the starting point of sonic anthropological research.

Next, I clarified my perspective on place and environment. I consider places to be entanglements of different elements, actors, connections and movements. They are embodied and experiential, making it possible to talk of a sense of place. Places are also realms of politics, power relations and conflicts. Sounds can be a source of knowledge for all the aforementioned aspects. Broader than the more clearly bounded place, environment refers to what kind of surroundings we live in. In this study, the focus was on urban environment but also how natural environment can exist within it. Heterotopia provided a tool for analysing the latter question.

The third part of the theoretical framework was the core of my chosen approach – sonic atmospheres. These emerge when we listen in places and environments, and allow us to connect experiences to meanings, relationships and knowledge. The approach includes knowing *in*, *about* and *through* sonic atmospheres – all three elements are essential and interconnected, they enable the exploration of one's own and others' experiences and abstract

concepts that emerge through the latter.

The methodological approach involved testing three types of soundwalking. By soundwalking as a researcher, I went on soundwalks alone, studied my experiences and prepared for working with participants. By soundwalking with participants and interviewing them, I learned about their experiences, perceptions, meanings and relationships with the environment. The same purpose was filled by independent soundwalks of participants who sent me their contributions, albeit with some constraints due to my physical absence. In addition to soundwalking, I made sound recordings in the two parks, investigated some secondary sources, conducted an expert interview and made efforts to get to know the neighbourhood of Outer Nørrebro better.

Experiencing soundwalking

I analysed soundwalking experiences from a number of perspectives. Modes of listening did not tell much about listening experiences on their own but were a fruitful analytical tool in combination with other concepts. The sensory situatedness of me and participants revealed itself in previous life experiences, soundscape competence and personal idiosyncrasies, such as musical thinking or physical sensitivity toward sounds. Participants often reflected upon their own subjectivity but this could be intentionally elicited more by the researcher.

Soundwalking and listening proved to be multisensory practices. Other senses than hearing influenced sensory experiences, even if the focus was on listening. Sometimes senses were perceived as contradictory, sometimes as supporting the same impression – in any case, they could not be fully isolated from each other. Whereas I primarily concentrated on listening, walking experiences would also be worth exploring in more depth, as they are also vital parts of soundwalking.

Sonic associations are a valuable source of knowledge in regard to listening experiences but also relationships with a place, time or environment. Sounds could be connected to more distant or recent memories, certain places or areas, times of the year, abstract concepts and values, or other similar sounds. A sound could also evoke several simultaneous associations and thus ambivalent feelings.

When we study atmospheres by analysing sonic associations, we should turn our attention to the spatial situatedness of listening experiences. The perception of atmospheres is influenced by the relationship between a person and the location of soundwalking. Thus, places that are meaningful for the participants could rather be chosen.

Participants expressed their soundwalking experiences on sound maps. The maps were a useful addition to verbal expressions. Sounds, sound sources, rhythm, atmosphere, thoughts and feelings were represented by text, symbols, shapes and drawings. There were differences in how sounds were illustrated and localised. Sometimes, the temporal dimension and the multisensoriality of soundwalking experiences and map creation were evident. Understanding and interpreting sound maps was greatly supported by talking about them during interviews.

Soundwalking had an impact on the participants – it made them more aware of their living environment and how they perceive environmental sounds. Several people described how the experience had also influenced their thoughts and actions after the walk, and the experience and the impact were considered positive.

Knowing in and about sonic atmospheres

In Volksgarten, I analysed how the participants perceived specific sounds and the atmosphere as a whole. Sounds from inside, sounds from outside and absent sounds arose as distinctive categories. Inside sounds were mostly related to people and nature, and outside sounds to technology. Sounds of nature were nearly always perceived as positive and attitudes toward sounds of people and technology had more variety, whereby previous living environments and associations with sounds played an important role. The atmosphere of Volksgarten was widely perceived as touristic, orderly and decorative, as a place for walking through. The atmosphere could change in various parts of the park.

Research in Superkilen persuaded me that atmospheres cannot really be designed but merely conditions can be created for them to emerge. The purpose of the designers and architects of Superkilen was to create a transcultural environment that would unite people with different cultural backgrounds but the mesh-up of imported objects did not fulfil this purpose for all locals and visitors. Documented experiences included confusion and unease; the park was perceived as touristic, instagrammable and artistic, as a place of transition or just a park for spending leisure time.

In spring 2020, I could not research *in* sonic atmospheres together with participants. Still, I learned a lot about their experiences of soundwalking during the COVID-19 pandemic from the contributions they sent. Absent sounds were quite dominant during this time, and quietness and silence acquired new meanings. People noticed several extraordinary sounds that were either results of the pandemic or could only now be heard in the absence of the regular noise level. Sounds associated with ‘normality’ could either be perceived as

reassuring or inappropriate and threatening.

To conclude, researching *in* and *about* sonic atmospheres led me to a more thorough understanding of how participants perceived and gave meaning to their environment, allowed me to analyse factors that influenced the experiences, and made it possible to research *through* atmospheres.

Knowing through sonic atmospheres

In Volksgarten, two larger categories arose by researching *through* sonic atmospheres. Regarding politics of atmospheres, issues related to different understandings of the functions of the park and control over atmospheres came to the fore. From the official side, Volksgarten is a site of heritage protection and the purpose is to preserve it authentically. The visitors wish to use the functions similar to any park though, and this can lead to conflicts. Concerning controlling sonic atmospheres, the officials are bounded by rules of law and preservation, whereby visitors also have agency to influence the atmosphere, for example with music. The other larger topic was concepts of parks. Here, the opinions and assigned meanings depended on whether parks were regarded to be more of a natural or an urban environment. Usually parks were seen a mixture or both, as natural and urban atmosphere were both appreciated.

Topics that I investigated *through* sonic atmospheres in Superkilen were inclusion and exclusion, and representation. Inclusion was a problematic issue both during the planning process and afterwards, and similarly to politics of atmospheres in Volksgarten, there were controversies between the official side and the inhabitants. The same goes for representation – although the park was intended to represent certain countries and locals associated with those countries, several inhabitants did not feel or wish to be represented in such a way.

The third case study focused on the temporality, rather than the spatiality of sonic atmospheres. Sudden drastic changes took place across the world and were recorded similarly in various countries. Such extraordinarily rapid changes allowed studying changing perceptions and meanings of environmental sounds. The study also illustrated how global issues can be researched by connecting local perspectives through the analysis of sensory experiences.

Soundwalks offered an original perspective on analysing parks as heterotopias, and the concept of heterotopia contributed to understanding some concepts related to sonic atmospheres in Volksgarten and Superkilen. Whereas with functions, some universality could be found in both parks, universal portability, multivocality and repeatable meanings became

questionable in the context of the two parks. Creating a break with ordinary time was more ambivalent but could be studied more thoroughly to draw conclusions. Boundedness was a useful category for understanding the politics and conditions in which atmospheres emerged. Although somewhat beneficial, heterotopia does not include the urban environment of parks enough, and limits conceptualising parks as places of entanglement. Sonic atmospheres somewhat challenge viewing parks as heterotopias.

To conclude, researching *through* sonic atmospheres enabled me to investigate the conditions in which atmospheres emerged, including the politics of atmospheres. Furthermore, it was a route to abstract concepts and large-scale issues that became evident during the empirical research. The variety of the concepts and issues in the three cases shows the universality of the potential of researching *through* sonic atmospheres and sensory experiences.

Final considerations for soundwalking

Based on my experiences and analysis, there are several important factors to be considered when developing a methodology for soundwalking: sensory experiences of each individual are influenced by their sensory situatedness; soundwalking and listening are multisensory practices; sonic associations are a valuable route to understanding a person's perspective and meaning-making in relation to atmospheres; paying attention to absent sounds facilitates understanding what is expected of atmospheres in a certain setting; other expressions of soundwalking experiences than verbal descriptions could be included; ethical considerations should be made in regard to how the research process influences the participants.

The choice of method depends on the peculiarities of the research. In most cases, a combination of soundwalking as a researcher and with participants seems the most thorough. Individual soundwalking of participants could be considered when it is not possible to be physically present at the research site or the intent is gaining knowledge about several sites.

A researcher can gain a lot from soundwalking alone – developing questions for further investigation and planning soundwalks with participants, analysing own sensory experiences for later comparison with others. Creating guidelines with questions for reflections can be beneficial. As an autoethnographic endeavour, this method should involve a high level of reflexivity. Ways of documentation include written or recorded listening protocols and sound recordings.

For going on soundwalks with research participants, it should be decided how many people participate in one walk, what the length and rhythm of the walk are and whether the route is

chosen by the researcher or participants, which instructions and questions the participants will receive, how the walks are documented, what the questions for interviews are, and how the participants can creatively express their soundwalking experiences.

When the participants go on soundwalks by themselves, similar considerations should be made, whereby the main differences are in the importance of documentation by the participant and that the researcher can only have a mediated experience of the site.

In addition to a written representation of the data, other options could be considered, such as creating sound collages or compositions alone or with participants, or letting the participants also create sound works. Mediating the multisensoriality of the research and its various aspects to the audience could have a larger potential if other than verbal expressions are used.

Future perspectives

As the focus of this project was mainly methodology, each case study was analysed undeservingly little in depth from other perspectives. In any possible future research, I hope to correct this mistake and concentrate on a single site. I also wish to encourage choosing sites for soundwalking that are meaningful for the participants so that the participants can be the guides, letting the participants reflect more on their sensory situatedness, and involving more creative expressions of soundwalking experiences, such as using sonic forms to represent data and letting the participants record sounds and create sound collages.

With my thesis, I hope to have showed that soundwalking is a method worth considering when doing research *in*, *about* and *through* sonic atmospheres. By including the measure of change and possible futures, sonic atmospheres are well fitted for studying a wide array of topics, such as urban planning and climate change. Going further from the sonic in atmospheres, the perspective could also be broadened into a study with a larger focus on other senses, in which case sensory walks might be a better choice of method.

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Soundwalks

Soundwalk 1. Francisco. 13.10.19. Volksgarten.[1]

Soundwalk 2. Miriam, Louise. 20.10.19. Volksgarten.

Soundwalk 3. Laura. 07.11.19. Volksgarten.

Soundwalk 4. Andrea, Judith, Diana. 10.11.19. Volksgarten.

Soundwalk 5. Pia, Henrik. 20.11.19. Volksgarten.

Soundwalk 6. Florian. 11.12.19. Volksgarten.

Soundwalk 7. Leo. 11.12.19. Volksgarten.

Soundwalk 8. Carla J. Maier. 04.03.20. Superkilen.

Soundwalk 9. Lucas. 12.03.20. Superkilen.

Interviews

Interview 1. Francisco. 13.10.19. Vienna.

Interview 2. Miriam. 23.10.19. Vienna.

Interview 3. Louise. 24.10.19. Vienna.

Interview 4. Laura. 07.11.19. Vienna.

Interview 5. Judith. 11.11.19. Vienna.

Interview 6. Andrea. 12.11.19. Vienna.

Interview 7. Diana. 17.11.19. Vienna.

Interview 8. Henrik. 21.11.19. Vienna.

Interview 9. Pia. 25.11.19. Vienna.

Interview 10. Gerd Koch. 03.12.19. *Österreichische Bundesgärten*, Vienna.

Interview 11. Florian. 12.12.19. Vienna.

Interview 12. Leo. 13.12.19. Vienna.

Interview 13. Mona. 08.03.20. Copenhagen.

Interview 14. Andrea. 19.06.20. Video call.

[1] The names of the participants are pseudonyms, except for Carla J. Maier and Gerd Koch.

Contributions of individual soundwalking

Contribution 1. Katrin. 21.-22.03.20.[2]

Contribution 2. Helen. 22.03.20.

Contribution 3. Christopher. 22.03.20.

Contribution 4. Mai. 23.03.20.

Contribution 5. Anna. 22.-29.03.20.

Contribution 6. Rachel. 01.04.20.

Contribution 7. Evelyn. 08.-09.04.20.

Contribution 8. Robert. 04.-05.20.

Contribution 9. Sophie. 01.05.20.

Contribution 10. Andrea. 02.06.20.

Figures

[2] Due to the wish of some participants to stay anonymous, I do not reveal the locations of the contributions.

Attachments

Abstract (English)

The purpose of this study is to explore how soundwalking can be used as a method to understand relationships between people and the environment, and to propose a methodology for soundwalking. My approach follows the work of Sumartojo and Pink in their understanding of knowing *in*, *about* and *through* atmospheres (*Atmospheres and the experiential world: theory and methods*, 2019). The analysis is based on three case studies. Two of them focused on the spatiality of sonic atmospheres and were conducted in two parks: Volksgarten in Vienna and Superkilen Park in Copenhagen. The third case study was carried out distantly during the COVID-19 pandemic without a regional focus, studying the temporality of atmospheres. I explored three types of soundwalking: soundwalking as a researcher, soundwalking with research participants and independent soundwalking without the researcher. By examining the soundwalking experiences in depth, I draw conclusions in regard to adjustments in methodology. By analysing the individual cases, I show how researching *in* and *about* sonic atmospheres sheds light onto how people perceive and give meaning to their environment, and is a gateway to knowing *through* atmospheres. Furthermore, the findings show how knowing *through* sonic atmospheres enables the investigation of the conditions in which atmospheres emerge, and abstract concepts and large-scale issues that become evident through atmospheres. As a result of the study, I present relevant considerations for soundwalking and propose a methodology for soundwalking.

Abstract (German)

Das Ziel der vorliegenden ist die nähere Betrachtung von Klangspaziergängen (Soundwalks) als Methode zur Datengewinnung einerseits und die Erforschung von Mensch-Umwelt-Beziehungen unter Anwendung eben dieser Methodik andererseits. Dabei wird vor allem auf den Zugang welchen Sumartojo und Pink in ihrem Werk (*Atmospheres and the experiential world: theory and methods*, 2019) erarbeitet haben, Bezug genommen in welchem Forschung in, über und durch Atmosphäre stattfindet. Dieser Zugang wird in dieser Arbeit mit dem Konzept der Klangatmosphäre (nach Eisenlohr 2018) verknüpft. Dazu stelle ich in dieser Arbeit zwei Studien vor, welche ich im Laufe 2019/2020 im Volksgarten in Wien beziehungsweise im Superkilen Park in Kopenhagen durchgeführt habe. Zusätzlich ergab

sich im Zuge der COVID-19-Pandemie die Gelegenheit für eine dritte, nicht lokal-zentrierte Studie. Methodisch werden die „*Soundwalks*“ dabei auch in drei Gruppen unterteilt, je nach Partizipation von Forscher und Teilnehmer*innen an den *Soundwalks*. Die Erfahrungen mit und Ergebnisse dieser Methode wurden dann zum einen Ausgewertet, um über die Methode an sich zu reflektieren und für weitere Studien zu adaptieren. Zum anderen wird aufgrund der Daten gezeigt, wie Wissen *in* und *über* Atmosphären Aufschluss darüber gibt, wie Menschen ihre Umgebung wahrnehmen und ihr Bedeutungen zuschreiben, was schlussendlich auch eine Voraussetzung für Wissen *durch* Atmosphären ist. Schließlich soll die Forschung *durch* Klangatmosphären aufzeigen wie diese Entstehen und in welche größeren sozio-kulturellen Kontexte sie eingebettet sind.