Headphone Bubbles
Negotiating Space through Audio

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ABSTRACT

Headphones are a common feature of public space. They allow users to determine what noise they hear and are visible to others. This paper aims to explore how headphones affect spatial perception through personal choice and social context. Using participatory observations and interviews, headphones were analyzed as part of the personal spatial experience instead of a separate entity through a phenomenological perspective. The main findings include how particular audio is associated with space, rendering it one of leisure or one of productivity by changing the occupied space’s character. The personal sonic choice transforms the space without moving locations. Headphones constitute an extension of personal space as the noise they create is only meant for their user. Wearing them creates a safe space for the listener where they are left alone by others but accompanied by their own audio. As they are deemed an entertainment device, headphones become an acceptable way of disassociating from others. A norm of wearing them is found in various spaces, conversely producing social vulnerability when they are not used here. Headphones are employed as a means to mitigate effects of a social context that users do not wish to participate in at certain times.

Keywords: Privacy, headphones, public space, audio, music.

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1. INTRODUCTION

Hearing is a sense unlike sight or smell. If we see something frightening, we may close our eyes and if we smell something unpleasant, we may hold our breath. Hearing does not have an off switch. It is an ever-present information source and complete silence is uncommon. Being able to hear is, of course, beneficial as we would struggle to communicate, localize ourselves, and be aware of our surroundings without it. Sounds are shared between us, and we create languages to get closer to one another. Music utilizes our hearing capabilities to generate emotional responses, contribute to culture, and communicate messages. As the world is increasingly urbanized by humans, we encounter more complex sound than ever before. Since we cannot shut noise out, headphones become a way of selecting what we hear as opposed to being subjected to ambient noise. The introduction of the Walkman in 1980 made it possible to filter much of what we hear in public spaces (Hosokawa, 1984, p. 165). As time progressed, they became a recognizable gadget of modernity. The very idea behind headphones is to allow the single person to listen privately while on the move. This phenomenon, then, might be considered a privatization of sound, making the otherwise open and shared experience of space fragmented between personalized and shared audio (Bull, 2005, p. 345).

Today people wear headphones everywhere. They might be considered a norm of social space that often is not considered and we seldom tend to reflect upon their impact. Headphones are a tool for media listening but understanding them from a geographical perspective requires insight into personal experience of usage regarding how social relations are shaped, motivations behind music consumption, and their impact on spatial perception. From a phenomenological perspective, the body is an interpreter of the environment, creating a personal truth regarding it (Buttimer, 1976). This subjective truth is constituted by personal experience, and hence, our perception of the world cannot be separated by headphone listening and the physical environment (Downs, 2021, p. 21). Our ability to curate audio changes our realities. The personalized spatial experience produced, in the specific case of personal listening devices, I shall henceforth call the ‘headphone bubble’ as no one term is established. What this means is that people create a space for themselves using audio within this bubble (see e.g. Downs, 2021, p. 9). The idea is summarized well by Bull; The attempted exclusion of all forms of unwanted intrusion constitutes a successful strategy for urban and personal management; a re-inscribing of personal space through the consumption of personalized music (Bull, 2005, p. 354). The agency of making such an adjustment has motivations that tell us about society and the spaces in which headphones are used. What impact do these changes have? How is space understood differently through such choices? This thesis explores the effect of headphones on perception of public space.

1.1 Aim and Research Questions
The aim of this Bachelor’s thesis is to add to the existing knowledge base concerning people’s experiences of social and physical space in relation to headphone listening. I ask the following:

What effects do headphone usage have on the production of spatial perception?
The main research question is operationalized through the following:

- How are university students’ experiences on campus affected by headphone use?
- Why are headphones used and how do they relate to public space?
- What do students listen to and does this affect spatial experience?

1.2 Delimitation

While musical geography is a subfield that has become more common since around 2000 it is often concerned not with listening but with the creation of understandings. Previous research on the subject has often studied lyrics and particular songs or artist (see e.g. Moss, 2011). The intention of this thesis is different and will instead focus on people’s experiences socially and personally when using the technology. The phenomenon of headphone listening has been researched within multiple fields including ethnography, sociology, musicology and geography. However, the scholarly literature is hardly extensive within human geography, although the nature of the subject is inherently geographical which increases the amount of relevant research. A dominant understanding of headphone listening is that it induces a sense of security as people choose music (and other sounds) to personalize space (see Downs, 2021; Chow, 1990). While the specific auditory input is certainly important it is not the purpose of this paper to analyze this aspect.

Campus was used as a starting point for this paper but was not the sole space considered in interviews. Comparisons between different spaces are used to contextualize behavior. Uppsala University’s campuses are spread throughout the city and are mostly accessible to the public. Although their main occupants are likely university students and staff, they are for this thesis considered public space, in part because of public access and as it is shared space that is critical in this project. The interview sample was not limited to students belonging to a specific campus as the buildings tend to share a common character and all interviewees utilized multiple campuses. It should be noted that the use of ‘headphones’ in this thesis refers to all sorts of portable personal listening devices, such as headphones commonly referred to as over-ears, in-ears, and on-ears.

2. THEORETICAL FRAMEWORK

2.1 Too Close for Comfort?

Urban areas are places that by definition [...] exceeds the thresholds of population size and/or density frequently used in census definitions (Johnston et al., 2000, p. 870). Since the majority of people nowadays live in urban areas, new phenomena appear. Coexisting in the same spaces as others, many times strangers, often means a loss of personal space and an increased need for creating privacy. The desire for seemingly anti-social behavior in otherwise social spaces is thus associated with urbanity (Bull, 2005, p. 353). Spatial perception consists of a combination of senses including vision and hearing, meaning that personal space is not just the physical distance from other people, but includes audio (Walsh, 2013). The negotiation of private and public space for the individual becomes a core issue in such an area. Increasing personal space within the public is assuredly not a novel occurrence and has previously manifested in different
ways, such as reading a newspaper for distraction, and this same quality is today provided by headphones (Weber, 2010, pp. 357-358). Thus, the devices can be analyzed as a portable focus-shifting technique by making listeners focus on the audio input and drowning out noises of social space.

By visibly showing that your focus is elsewhere, signals are sent to surrounding people that you are not available for a chat (Weber, 2010). The sociological concepts of desired privacy and achieved privacy can be applied in this context. Desired privacy refers to the amount of social interaction that is wanted by a person while achieved privacy is the current interaction taking place (Altman, 1975, p. 10). Headphones can help situate these two concepts closer to one another, creating a comfortable milieu as they permit a certain privacy control. Since they are wearable, they can—through Altman’s (1975, p. 34) perspective—be seen as an extension of body language, a form of nonverbal privacy mechanism sending social signals to not be disturbed. Cultural factors are also influential as to what is considered personal space. Altman (1975, pp. 76-79) explains that studies have found differences between what is deemed sufficient personal space across different cultures. Swedish people on average, according to him, require larger personal space than other groups of people. What is deemed comfortable is therefore context specific.

Based on these ideas certain assumptions are made. Headphones are considered visible and therefore affect social interactions for all people involved in such an encounter. Asking a headphone user a question means they would have to press pause or remove the device. A quick chat would consequently be seen as an even larger disturbance to the listener than without them, as the signaled desired privacy and the achieved privacy of such an interaction result in a wider gap between the two. This creates an added extra step when intervening in a headphone users’ activity, from simply interrupting to requiring a physical removal of the social barrier that headphones represent.

2.2 Spatial Creation
Bull (2005) writes about the creation of personal soundworlds during the emergent age of the MP3 player. This soundworld is understood to manifest personal space through audio as the listener moves throughout space. The listening technology permits people to construct a sense of control in the urban world that they previously felt unable to impact through accompanied solitude, as the headphone user can choose to exclude themselves from a social narrative while customizing their audio intake (Bull, 2005). As such, the headphone bubble can create personal space where it otherwise is not.

Hosokawa’s (1984) influential concept of the ‘secret theater’ made possible by the Walkman in the 1980s implies that there is secrecy around headphone use in public. The device is seen as a disclosure to others that the headphone wearer has a secret and is existing in a soundworld of their own, but says little regarding what that soundworld is. Chow (1990) has a similar understanding of it and argues that the separation of the public and oneself becomes apparent in this privatization, as one is constructing the own experience while fully aware that it is just that—one’s own personal experience. The effect of headphone usage on encounters goes beyond the personal effect, acting as a social cue because all actors involved are aware of their current experiential difference.
The transformative qualities of audio should not be understated when providing this escape. A phenomenological perspective aims to understand the constituents of experience and facts (Pickles, 1988, p. 239). For Buttimer (1976) one’s lifeworld is constructed by intertwined subjective and physical properties. From such an understanding, perception of space cannot be separated by headphone listening in public areas and the public areas themselves. As soundworlds are not separate from the creation of the personal, it is instead the combination of the two that together create spatial experience (Downs, 2021, p. 21). Thereby it can be assumed that when utilizing headphone technology, space itself is constructed through the (presumably) chosen listening experience. Bull (2005, p. 345) uses Raymond Williams’ conception of mobile privatization to explain how, through headphones, public space can be customized to become more enjoyable for the listener. Music’s ability to divide space yet simultaneously generate identity when people choose it and identify with it highlights its personal qualities (Connell & Gibson, 2003, p. 193).

Vitry (2021, pp. 938-940) interprets Sara Ahmed’s queer phenomenology, where space is not simply neutral but a reflection of skewed power dynamics that favor different actors and institutions. Thereby, spatial interpretation is not projected onto a blank canvas, but bodies are oriented either with or against norms. From such a notion, headphones can be viewed as resistance to participate in the normativity of social space or as an attempt to fit into this same space if headphones, and thereby the creation of personal space, are the norm. By not diverting from this norm headphones may constitute a form of security. The change of perception made possible through headphone use becomes the core of the headphone bubble and by researching situated knowledge, in this case through young university students, the personal truth is addressed instead of attempting to create an objective view of listening.

In sum, this theoretical framework consists of social, ontological, and musical insights. Headphone noises are not separate from the lived experience but an integral part of it. Their ability to create a personal space affects the user’s spatial experience both by isolating and transforming the said space while either adhering to or resisting normativity. The media listened to also has implications for emotions and headphones can be seen as an avoidance technique for uncomfortable social situations. Approaching headphone listening from a geographical perspective means applying these concepts into lived space and researching the impact chosen audio has in different environments as the body itself becomes a geographical arena. Therefore, crucial features of headphone use include both how sound is chosen differently based on space and how space is changed through that sonic choice. The rest of the thesis builds upon these ideas, both regarding privacy creation and social implications of headphones in and around a campus setting.

3. PREVIOUS RESEARCH

Walsh (2013, p. 191) writes that sound is particularly important for the ways in which social interaction is experienced, because it renders some situations ‘public’ and others ‘private’. His study on music listening in office environments suggests that headphones offer a choice between participating and not participating, and that it is the choice that allows for comfort-
creation. Choosing means that taking part is selectable but also that the noise one hears is controllable, which relates to desired and achieved privacy. Walsh’s findings indicate that what is chosen is familiarity as sounds become related to a certain activity. Music becomes context. The intersection of these two characteristics of music listening creates a personal space that frames situations and simultaneously drowns out unpreferred noise, essentially excluding others (Walsh, 2013, p. 196-197).

Walsh’s 2010 dissertation Musical Listening and Social Boundaries: Framing ‘Public’ and ‘Private’ Social Life Through Sound builds on Goffman’s theories of interaction and studies five different scenarios where music is listened to and how it affects and is affected by these situations. As hearing is a sense that is impossible to turn off, headphones provide a personal choice that does not require the body to physically change locations. Walsh means that music is used as a framing device for the situation by both decreasing the required physical personal space, allowing more people to occupy the same area and is used as an enlargement of one’s own space by muting out other people’s presence. Further, he concludes that music is only used for these purposes if it is ensured that the sound is private and will not leak into other’s soundworlds and disturb them. The way music is used varies and depends on location. It contributes to defining space itself, particularly through a phenomenological perspective (Walsh, 2010, pp. 215-224).

Bull (2005) argues that music has spatial qualities through memory. It can be associated to a certain place, such as a certain song making a person think of home (Bull, 2005, p. 349). This audio-memory-emotion connectedness is transportable through headphones. He means that space somewhat loses its significance as any place can become quasi-private (Bull, 2005, pp. 352-353). Since space is constituted not only by its physical qualities, but a combination of social, physical, and imagined aspects and implications, a geographic lens on headphone spaces becomes relevant to understand how places are perceived by the people occupying them. Schäfer and Eerola (2020) have a similar understanding to Bull and use the term social surrogacy for the replacement of human connection that music constitutes while alone. Music is also able to promote feelings of nostalgia. When someone wishes to experience a feeling or think about something or someone, certain music is put on which evokes emotions (Schäfer & Eerola, 2020). These more aesthetic qualities seem to change people’s perception of the environment through different genres and moods, making one see space in a different light. As Anderson and Jones (2023) uncovers, headphone usage does not have a single goal and can aid in providing a variety of feelings. In their study on hikers’ headphone use a few main categories of incentives were established. These include to shape the experience and to regulate social interaction (Anderson & Jones, 2023, p. 5).

Regarding music listening, Schäfer et al. (2015) found that people’s stress levels are connected to sound. When exposed to both instrumental and lyrical music participants’ stress levels decreased when presented with a dangerous stimulus. The same was not true for noises of nature or no sounds at all, implying that the music itself had comforting implications. Importantly, different tempos were preferred by different people, and the ability to choose a suiting soundtrack is consequently vital. Music’s mood-regulating qualities are also found to have an important role in keeping people company and can therefore be assessed as summoning a sense of companionship (Schäfer et al., 2015).
As this study particularly concerns headphone listening there is a need to address the differences in media interpretation through different devices. Looking into people’s reactions to headphone versus speaker audio, Kallinen & Ravaja (2007) found that emotional responses differed. The same audio could be perceived differently, which is thought to be a product of the distance from the mechanism producing sound, creating an experience of audio as apart from or a part of the subject. Isolating the listener from their surroundings when headphones are worn is also seen as a possible cause. While no full satisfactory explanation could be provided, there is an evident difference between the two listening technologies (Kallinen & Ravaja, 2007, pp. 315-316).

Roquets (2021) studies on binaural listening making 3D-sounds possible in headphone use strengthens the previous statement. The anatomy of having two ears at either side of the head means that sound will reach them at different times allowing us to measure distance. When headphones are worn, sound can be placed within a virtual one-person space by utilizing our association between position and sound (Roquet, 2021). A perceived spatial layer is added onto the physical realm one is occupying, giving music directionality (Gallagher, 2016, p. 46). Although not all music is produced binaurally, human anatomy allows these qualities by nature, such as when the guitar is more prominent in the left ear and the vocalist in the right. This may enlarge the perception of physical personal space. Downs (2021, p. 94) understands the creation of 3D-sounds as an amplification of the headphone bubble. He concludes that there is no one experience created by listening, but there is seemingly always embedded spatiality with headphone listening. Hence, seeing headphones as only a means for listening to media and emotions as solely dependent on said media appears to be a shallow analysis, which furthers the incentive to investigate headphones in this study.

Indications that headphone usage is multifaceted insinuates that attempting to construct causal relationships between usage and feeling is not only difficult but unproductive. Because of this, the intention is not to essentialize headphone behavior into any single emotional category but to instead give some insight into how assumptions of their social role are related to practice. Furthermore, what appears largely unexplored is societal pressure to wear headphones. Anderson & Jones (2023, pp. 6-7) argue that not wearing them promotes interaction and experiential immersion while safety and technological struggles are concerns. This is seen as a choice in the same manner as listening in public, suggesting that headphone usage is not an outlying phenomenon but has become more of a norm in certain environments. For me personally, the headphone bubble is a site of solitude that one is expected to reside in in certain social spaces. While studying, walking, or any other such activity, I feel a pressure to wear headphones as otherwise my presence would be too obvious, and I’d be too connected to public life. If previous findings hold true and the norm is becoming—if not already the case—wearing headphones in certain spaces, a loss of control could be one reason for being uncomfortable without them. I realized that I often wear headphones without listening to any media which might illustrate the other side of the same coin. This ‘faking’ of the headphone bubble could be viewed as an attempt to affect social space but not interfere with personal space. Therefore, looking into the societal expectations of headphone usage is useful to highlight what qualities they provide for students. This appears largely unexplored in previous research.
4. METHODS

4.1 Study Design
I utilized qualitative interviews and participatory observations in this study. Empirical material was used to explore the headphone bubble within a campus setting. As previous literature on the topic finds that headphones increase a sense of privacy and affects social interaction, trying to unpack it using another method might be difficult since the subject requires insight into the thoughts and experiences of others (Dunn, 2016, p. 150). This calls for a study design that allows for a comfortable setting to gain insight into interviewees thoughts. As a researcher, I took needed time with interviews, asking additional questions and seeking elaboration when possible. I believe this increased reliability as interviewees were allowed to thoroughly explain their individual experiences. That said, the project had a limited timeframe, and three in-depth interviews were conducted to give larger insight into the participants’ thought process and obtain insightful, precise information.

The interview method is motivated by previous experiences from other researchers. Most academic literature I draw on in this study is also based on interviews (see Bull, 2005; Downs, 2021; Walsh, 2010). Nyre’s (2015, pp. 283-284) method of giving participants certain Spotify playlists to listen to, instead of choosing their own soundscapes (i.e. the sounds of a space) when going about their daily tasks, detached the sense of privacy and homeliness from the stimuli which made the experience less private. While this shows the intimacy of music, it is not the intent of this study to analyze the same. The difficulty of creating a productive interview guide is also reflected upon by Nyre (2015), as most people do not seem to think about their headphone usage and have difficulty when being asked about it. This poses a methodological issue that was considered thoroughly in the questions asked.

To understand the in-situ use of headphones, two participant observations were also conducted. Interviews serve as important tools to understand motivations, but the differences between doing and thinking are not easily found using just one of these methods (Watson, 2021, p. 138). Thereby, observing became a tool for seeing headphone usage and its implications in action. During the first observation, focus was on observing more so than participating to see how students were interacting with each other or not, if they were using headphones in groups or alone, how they were positioned relative to others and their overall body language. In the latter observation I focused on my own participation, acknowledging my actions and feelings while wearing headphones.

4.2 Data Collection
My observations were used both to situate the study by giving context and to construct questions for the interviews, together with the theoretical framework and previous research. Here, inspiration was taken from grounded theory, formulating ideas based on what was observed. As Baxter (2021, p. 116-117) argues, grounded theory is not only theory creation as the researcher has previous knowledge about the subject, but it does produce in depth knowledge creation for case studies. In a phenomenological manner, the body was used as a research tool. This is especially evident in the observations, as my role as a researcher is not only to look at
others’ behavior but at my own experience within the context. The first observation showed differences between thoughts and actions, as well as inspired new questions for interviews that had not previously been considered.

To expand knowledge of people’s personal experiences with headphones, the interviews aimed to understand both motivations and affects. A semi-structured interview guide (see Appendix A & B) with key questions was constructed while allowing room for spontaneous comments or questions (Dunn, 2016 p. 152). The method was chosen because of the freedom it provides. As opposed to a structured interview, there were not set questions that were followed precisely. Rather, the structure follows a few chosen questions to be used, if need be, from which the discussion could be expanded. In a grounded manner, the questions posed considered the supposed most important themes (Cope, 2021, p. 363). By leaving them open ended, answers were not limited to these themes but questions were seen as starting points. Questions were ordered from easier to harder so that the interviewees could become comfortable before delving into more intimate matters, making the interview setting more agreeable for the both of us (Longhurst, 2003 p. 121).

The interviews took place in different settings and during different times of day. The first interview was conducted in the participants’ home while vegetables were being roasted in the oven, emitting a homely scent for the interview in the kitchen. This created an intimacy that aided in talking about personal experience. The following interviews were conducted on campus in smaller rooms where personal relationships were, to a larger extent, left behind as opposed to the first as we entered a space of more professional character. The room was small and created a feeling of intimacy, although the glass door and window made us visible to others. Still, the room was quiet with a hint of chatter from outside making the setting formal but relaxed. The spatial differences likely influenced both of our behaviors as one environment provided insight into the personal while the other was accessible to the both of us, thus lacking the exclusivity of a dwelling. After the first interview, the guide was expanded to provide more follow up questions as the initial questions were often answered quickly yet thoroughly. This did not make a large difference as the main questions were, in the later interviews, discussed at length without having to consult the guide as I grew more comfortable with it and had previous interviews to base further questions on spontaneously. This made the interviews range from 30 to 60 minutes. It is likely that the interview setting influenced how quickly personal themes were brought up because of the spatial context they were conducted in.

4.3 Analysis Method
The data analysis consisted of coding material into themes that were found during the observations and interviews. Cope (2016, p. 378-379) identifies that through finding certain themes and coding interview transcripts into them, a deeper understanding may be conceived through looking at context. Thus, analytical coding creates a context for underlying themes that is not outright found in interview transcripts (Cope, 2016). Although headphone listening is highly personal, the context in which it happens is vital to understand its social effects. Codes were created using concepts developed by previous researchers in mind.

The coding of the observations started immediately after they had been conducted. A memo was written, and certain themes were found almost instantaneously while others were only
identified during the writing process. The findings were categorized and served as both an analysis of my own experience and of others’ behavior. After all empirical material had been gathered a process of triangulating observations, interview transcripts and previous research took place which assisted the research rigor (Watson, 2021, p. 127). Using observations in conjunction with interviews created further insight and illuminated new perspectives. Shifting back and forth between transcripts relating informants’ statements and reasoning with one another was especially useful.

The interviews were all conducted in Swedish. This means that all quotes in this thesis have been translated by me, creating several issues. For one, my interpretation of what was said becomes even more prominent as I must choose words that I deem appropriate for the intent of the informant. Because of this, I kept noting what I interpreted the interviewees to have meant and asked if this was correct, which it sometimes was not. Asking them to rephrase their intent gave further context to these translations. Secondly, Swedish and English have different words that can be interpreted differently depending on situations, meaning that direct translations are not always useful. Smith (2003, pp. 183-186) explains that concepts are not the same in all languages and translating requires an understanding of context. Further, she argues that analyzing an already translated transcript means losing out on information. Thus, the transcripts were never translated in full. Only the chosen quotes written out in this text were translated after the analysis process was completed. As Swedish is my first language, my proficiency in it and understanding of it is important to make correct interpretations into English. Because of this, a choice was made to not directly paraphrase but to translate so that the meaning was conveyed as valuable information would otherwise be lost.

The risk of drawing unmotivated conclusions consequently must be managed within the analysis. As the intent is to highlight similarities and differences between a small number of participants, thematic codes were used. Themes brought up by both interviewer and interviewee were categorized based on topic which was later compared to the other interviews. Since the interviews were semi-structured the discussions differed from one another which affected the comparability of gathered material, because open ended questions cannot guarantee that all topics are touched on in all interviews (Kitchin & Tate, 2000, p. 214). As a result, opinions and thoughts of the individual were important in presenting results instead of always searching for common conceptions. As the goal was to understand the individuals’ personal perspective and not quantify their thoughts, comparing interviewees to one another was not done to find an objective truth but understand subjective headphone usage.

4.4 Sample & Limitations
Interviews were conducted with three students. The criteria were quite simple; each participant had to be actively studying at Uppsala University and wears headphones on campus. The selection sample is important as interviewees need to have experience with the subject at hand (Longhurst, 2003, p. 123). This proved to be more difficult than assumed as virtually everyone uses headphones so selecting people based on only these criteria did not produce a very distinct group to study. Given the large base of people who could be chosen and the limited timeframe, a convenience selection was made with people from within my own network. All interviewees were women between 20 and 21 years old. This specific group was not chosen with intent but
does produce a fairly homogenous sample. Since there is no other group being studied, conclusions are hard to draw regarding age or gender as it is unclear whether the informants’ experiences are tinted by these characteristics. Considering the sample size, generalizability cannot be deemed great. However, the overall aim with this thesis is not to clearly state how headphones are used but how certain people experience their environment while using them. Given this, convergences with previous research can support prior understandings while new themes found cannot be generalized but indicated.

4.5 Ethics, Positionality, and Reflexivity

Participants were asked to sign a consent form that followed the guide provided by Uppsala University. The consent form explained the scope of the project, the time frame during which material would be handled, and what sensitive information would be used, namely age and gender. Participants all verbally agreed to being recorded during interviews. The form was thereby used in combination with further verbal information to gain each interviewees informed consent. All names used in this thesis are aliases and while personal information was anonymized, I am still connected to each interviewee beyond this research. This produces an ethical dilemma regarding my role in their choice to participate. From the interviewees’ perspectives, my asking them to participate may have created a dilemma wherein they felt pressure to accept or risk jeopardizing our relationship. This issue cannot be fully avoided, yet by outright saying that they should decline if they are unsure, both during scheduling interviews and before consent forms were signed was an attempt to mitigate our relationship’s effects on their decision-making. Given the quite intimate subject matter, an attempt was made to position myself somewhere in the middle between a creative and professional interviewer. There is no consensus on which type of relationship is preferred as context varies, but assuming a humbler position can be beneficial when researching personal subjects and as a way of showing respect for informants (Dunn, 2016, p. 164). Despite this, there is always a discrepancy in power between the two roles and our relationship likely influenced the results presented in this study.

When conducting interviews, the consideration of power dynamics and relations between interviewer and interviewee is important to understand aspects that may be both advantageous and unfavorable. Walsh (2010 p. 65) discusses how music listening reflects people’s self and how if that self is not culturally acceptable it may be stigmatized, resulting in unease during interviews. By interviewing people that are already familiar or known, the hope was to circumvent such an issue as there already is a certain amount of trust between us. The double insider role produced by such a relationship is described by Adriansen and Madsen (2009) as being an insider in both the subject matter and the group itself, making the otherwise quite clear roles within a research project less visible. Because of this position, the ethos of the interviewer as a leader of research may be questioned, while being an insider of the interviewees social circle constitute multiple benefits (Adriansen & Madsen, 2009 pp. 148-151). Previous relationships further require the researcher to avoid letting information go unspoken that may be taken for granted.

As a student observing behavior of other students, I was part of the group studied. As someone from Sweden who comes to campus nearly every day, I am part of its in-group and could study it in the role of a participant-as-observer (Kearns, 2016 p. 319). Watson (2021, p.
134; 138) means that this can provide important context clues and insight into phenomena while issues arise if there is not an internal critique, such as key behavior going unnoticed as it is understood as normal. In the context of this project, there were likely practices that I as an insider did not notice regarding social behavior as I deem it typical in Swedish culture. Simultaneously this means that I was able to interpret behavior without drawing unfounded conclusions by misunderstanding the cultural context. Still, conducting observations comes with a risk of imposing on and changing behavior of others (Watson, 2021, p. 139; Kearns, 2016, p. 321). By sitting down with a laptop and taking notes in an area typically used for such things, the observer role was not particularly pronounced to others. During observations, no notes were made regarding characteristics. As the people studied had not given their consent to be subject of an observation, anonymization took place while it was conducted. As the place of study, Ekonomikum, hosts many students there should not be an issue with traceability. The benefits of the observations were therefore deemed greater than the ethical risks.

My interpretations of others’ behavior and statements has consequences for the results presented. Since all gathered material is subjective my analysis can never be truly accurate to the intent of the interviewee. Objectivity is therefore not possible and despite effort the material was likely affected by personal bias, experience, and assumptions (Rodaway, 2006). Although concerns regarding interpretation of behavior is of importance, Laurier (2003) argues that the goal of participant observations is not to say that something factually is a certain way, but to understand the space. He means that positioning oneself as an objective outsider is not helpful as there already is an understanding simply by being human, and understanding what is going on in said space. An example Laurier gives is a friendly look, which can be hard to prove, but we still are able to understand (2003, pp. 142-143). Because of this, there was not an attempt to act as an objective outsider of this project but rather to see myself as a participant of it. This stance also allows for self-reflection and further participation by describing my own experience as accurately as possible.

5. OBSERVATIONS

5.1 First Observation
The first observation took place in the afternoon at Ekonomikum, Uppsala. It was written down by hand and expanded upon just after. The space, a large hallway with seating for students with views of a park outside and many open areas made the spot a good place to see headphone usage in students sitting down to study, but also people walking through the hallway. Since this observation was conducted on a Friday afternoon in a non-exam period, the campus was calmer than it often can be. The weather outside was gloomy but bright as snow reflected light that travelled inside through the windows. Sounds from the other side of the building were heard as background noise but did not disturb much in the otherwise near-quiet area. All tables were made for multiple people. As such, by occupying one of them by myself, unaccompanied by neither friends nor headphones, I felt awkward.

As the observation commenced, the division of headphone users and non-users were about 40% and 60% respectively. People by themselves, with or without headphones, had a
body language that stated that they did not wish to interact with the groups around them by leaning into their work. Most headphones used by them were large and clearly visible to outsiders. However, nearly all people without headphones on were not sitting by themselves but with a group. These people were the most talkative and laughed together, suggesting that they were not necessarily focusing on their studies. For non-headphone users walking, most were in groups where the same thing was largely true. However, the lone ones appeared very aware of their surroundings, looking around at the people they were about to pass and did so quite fast. It appeared that they had a goal in mind and had to get there quickly. For the single headphone user on the other hand, their pace was slower, and they did not look around in the same manner as their counterparts. They did not seem to be very engaged with the rest of the space. From my perspective as an observer, exchanging eye-contact with these two groups was experienced differently. As I was observing, I felt as if people without headphones were paying closer attention to my actions than the ones with them. This created a difference for my own comfort and sense of privacy, and I felt as though they knew I was observing. Perhaps this might be an example of the secret theater, where experiential difference is known by both parties due to the visibly of headphones, as I felt calmer and less intruded on because I knew the person I met was hearing and experiencing something different from myself, creating a further division between us than the physical distance. This was more extensively true for large headphones that were visible with a quick glance than smaller, less noticeable in-ears.

Behind me a group of five people all sat with large, over-ear headphones on except one who had them around his neck. They all seemed focused on their computers. When someone they knew passed and said hello, the person without them quickly threw them a smile. The other four took their headphones off to greet their friend and have a quick chat. When the interaction was finished, the four people put on their headphones again and kept studying. It seems that limiting noise from the others sitting down made them focus more and showed that they did not want be disturbed by them, while it was fine to be interrupted by the person passing through. It became clear that the purpose of the headphones in such a situation was to restrict disturbance from their peers but not from the outsider. They were all in the same physical space but were separated by their individual soundworlds. Later, another group of five people sat down in the same area and started to chat. In doing so, the noisiness increased and the previously mentioned fifth member of the group (who previously had his headphones around his neck) put his headphones on. From this, it seems that the noise pollution was not large enough to need assistance to get focused, but as new sounds entered his soundscape there was a need for regulatory measures.

Multiple people waited for their friends by the door on their way home, or on their arrival for class. Nearly everyone who waited by themselves did so with headphones of some type on and immediately took them off when their peers arrived. The opposite was also true, the people who appeared took their headphones off as they approached one another. Outside of the building, many groups went their separate ways. A number of these people walked away from one another and only when they no longer were in each other’s field of vision did they put them on. This behavior could indicate that by suppressing and choosing sound, privacy is created. This is not only applicable for headphones but for everyday chatter. The sound of
someone’s voice creates one sonic space and when the option of companionship is not available, headphones provide accompanied solitude by constituting another option to essentially produce a similar experience.

5.2 Second Observation
It is difficult to know how headphones affected the people observed, as no conversation took place between us. To overcome this hurdle another observation was conducted in the same place, at the same table, and at a similar time of day as the first. The environment was much the same, except that it was darker out as winter solstice approached. During this observation I wore large, over-ear noise cancelling headphones with calm acoustic music playing, as I normally would while studying. The focus was put on my own behavior instead of other people’s mannerisms. This time, the observation felt more informal and insincere. I was easily distracted from the task at hand as I felt a disconnection between other people’s presence and my own. Looking at passersby was no longer such an intrusion on personal space as my firsthand focus was seemingly no longer on them but on my audio. As compared to the first observation I found a sense of comfort which meant I could look out into space at nothing in particular without feeling very strange about it.

Although exchanging glances with strangers felt easier, greeting acquaintances was more difficult than before. During the first observation I could say hello and smile, but now something else was blocking our interaction and it felt more as an intrusion than a friendly encounter. The interruption was more substantial and I was more surprised when seeing someone I knew. People did not treat me any differently than previously, except during these encounters as there were no words exchanged between the two of us as we met. We quickly waved at one another but did not feel the need to verbally greet each other as we would have otherwise. This was a mutual understanding that did not need to be expressed which showcases a norm of headphone etiquette where both parties understand how to act.

In a sense this part of the study was continuous. While writing this thesis I almost exclusively sat on campus with headphones on, either alone or in a group setting. Seldom did I not wear them while sitting alone no matter if anything was played, with or without noise cancellation turned on. The contrasting experience of not wearing them resulted in discomfort in an environment where companionship is expected. It diverted focus from my task as spatial awareness increased, compared to with headphones, making me more comfortable taking up space when by myself. With peers, I could exclude myself from the soundworld of social life and instead escape into my own headphone bubble without feeling anomalous. My own understanding of this behavior is constituted both by normativity and accompanied solitude. Writing at campus is influenced by a norm of sitting down to study while other spaces, like the home, offer various distractions. Not wanting to be alone in a social space together with being in a space associated with productivity made headphones a tool to be somewhat private while still having to adhere to the space’s social rule of doing work. There is also a norm of wearing headphones. Fitting in is a way of accepting that everyone wants to be productive and to not be disturbed, consequently reproducing the behavior. When headphones are worn, others are not intruded on with neither sound nor physical presence. The secret theater implies that there is not a disclosure of what a
headphone user is listening to, concealing the soundworld they are experiencing from others although both are aware that it is something else than the noises of campus. This makes us aware, or at least suppose, that attention is placed elsewhere than on each other.

6. INTERVIEWS

6.1 Managing the Social

Yesterday I reacted when I sat at the office with my headphones on and someone said something to me. I sat there alone because it was lunch or something and he came into that small space and said something. I thought he wasn’t talking to me because I was wearing headphones, but he did. He said something like ‘are you having lunch now?’, but I noticed no one answered him so I took my headphones off. Like in some way I expect that others see that I’m in a productive, or focus-mode, when I’m wearing my headphones.

– Sara

The above quote comes from Sara, who spends time both on campus and in an office setting. This anecdote highlights one of the main themes common to all participants in this study, that of the expectation to be left alone and for others to know that they are not available when wearing headphones. The surprise of being the one who was talked to, despite trying to signal that she’s not available, indicates the acknowledged differences of perception within Hosokawa’s secret theater. The body language of being in this focus-mode is manifested through headphone usage. Sara’s intention is (partly) showing others that she is working and should not be disturbed in doing so. From the headphone user’s perspective, there is an obvious barrier and difference between their current circumstances and when this is not recognized it is experienced as a rule break.

All participants regarded headphones as a social cue for wanting to be left undisturbed. This was particularly apparent in situations when they were alone, especially on campus. Each interviewee explained that headphones mean that strangers are less likely to talk to you, even if none of them thought that headphone usage would decrease the chances of such a thing happening. In their experience, interruptions while working seldom occurred without headphones either. When asked about approaching someone else every informant said that it does make a difference whether they are wearing headphones or not. Each one would choose to ask a question to someone without them as it is seen as posing a lesser disturbance to the headphone user. It is of importance that it is just strangers that were brought up initially. Alice, another interviewee, virtually only wears headphones when alone and seldom does so when studying with friends. Her motivation is that her studies require much individual work and that getting to study in a group is not a very common occasion. Therefore, she wants to make the most of it and even if others at the table wears headphones she often does not, explaining that it is a sign that you are open to socialize. She explains it as an invitation for talking rather than a requirement to be headphone-less in a group of people on campus and that she would not disturb others who are wearing them. Alice says that No, I do not use headphones if I’m sitting
with other people. Possibly if we have individual tasks, then I’ll put them on. But then it’s more to signal ‘don’t talk to me’.

Urbanity is indirectly reflected on in a similar manner by Sara. She explains that she is overstimulated by being around lots of people and cannot stop contemplating what others are thinking about her while in public. She must travel to and from both work and campus, which for Sara means taking public transportation and managing the presence of a large amount of people both while travelling and at either end-location. Sara explained that the high number of encounters that take place demands interpreting others’ behavior and changing her own demeanor. In crowded places when people are physically intruding on her personal space, headphones are used to block them out:

I think it [personal space] becomes larger when I block out [sound]. Because sound for me becomes pressing, I’m being very abstract, but I think that things around me decrease my own space and the social [interactions] around it decreases it. And just that, my own space, when I enter my own world… in my own bubble I can take up more space. – Sara

In accordance with Weber’s (2010) understanding of headphone use as a mechanism of social management, headphones are used to shift focus and increase Sara’s personal space. When asked why in situations of wanting to be alone in a social space, interviewees do not simply plug their ears the responses were largely the same; it would be strange. Something about not only blocking others out, from the outsider’s perspective, but also listening to something makes it acceptable to shut them out of a personal soundworld. Headphones seem to signal that disassociating is not the main intent behind their use but a side effect of it, although this is not always true. For oneself, it is not silence that it sought after, it is the creation of the personal. Sara’s feelings are consistent with Walsh’s (2010) findings, where the expansion of personal space is explained by inscribing it through audio. She allows herself to occupy more physical space as her own personal space increases.

Maja rides the bus to and from campus. As soon as she leaves the building and goodbyes are said after a lecture, she puts on headphones for the ride home. When asked why it is so important to immediately put them on and what would happen if she did not have them on hand she answers;

It’s about being prepared. – Maja

Prepared for what? – Erik

Reality. No, but like… It’s tedious if I’m not prepared, to take them out of my bag. […] It’s nice to enter your own little shelter. […] Without them you’re vulnerable. You become a lot more vulnerable. I feel a lot more vulnerable without headphones. I don’t know. You get pulled into reality, what’s going on. I guess you want to be in your own bubble. At least, now I’m specifically thinking about the bus, if I’ve got music on I usually look at my phone, should I just look at my phone without any music? If that’s the case I become much more visible, or I feel more visible. They [strangers] probably don’t look at me differently, but I feel much more vulnerable to reality. – Maja
She implies that there is something waiting outside campus that must be regulated, something that is uncomfortable and has to be adjusted with the help of headphones. When saying goodbye to friends, Maja describes it as if her friends constitute one protective wall and when that wall is gone, another one is needed. By preparing for the farewell with headphones already in hand, the time that this wall is down is shortened. The anxiety related to being without headphones appear to be a reproduction of cultural norms, where here, headphones have become the norm when one is alone. When asked who it is that does not wear headphones on the bus, Maja answers weird people and goes on to say that it is very strange but that maybe they’re just super social, reinforcing the idea that headphonelessness is equated with inviting social encounters. Sara says that she wears her in-ears even though she knows that they will start to hurt, which in this context supports the idea of normativity. Although Sara continues by explaining that she will eventually remove them if the pain gets too intense, it appears that the comfort of being inside the headphone bubble trumps the physical discomfort of wearing them.

Interestingly, the protective walls of the headphone bubble are not necessarily constituted by music itself. Maja explains that headphones can provide a similar effect although no music is being played. The same behavior is indeed recognized in every interview and the word vulnerability is used by all participants concerning being without the listening device. Utilizing headphones without audio is thought about differently amongst them. Alice means that while her earbuds might muzzle out some noise they are only used to block out others, not sound itself. She describes the feeling of having them on as comforting and that they provide a further social obstacle to being interrupted or exposed to others. Sara says that the sensation of having her earbuds in creates a sense of security, and the slight suppression of sound is irrelevant. For Maja, large over-ears are often worn without any sound if they have run out of battery, while smaller in-ears are not. The difference is visibility, as she explains that they do not provide much for her sense of self. She shares Alice’s experience of wanting to protect herself from others. Maja laughs and feels silly about trying to protect herself from something she is unable to clearly identify.

Headphones are used to deal with social life by making their user seem unavailable and the body language involved with headphones serves as a tool for avoiding social interaction in an acceptable way. From the perspective of others, there is no knowledge of what is being listened to. By extension, the secret theater implies that the result of an intrusion is unsure as you cannot know what you are interrupting from. Bull’s (2005) argument that the physical is becoming insignificant can partly be supported. Headphones mitigate the loss of personal space and help shelter the user through mobile privatization, but when and where headphones are worn is dependent on physical space. They provide a source of management for the social, which in this context is not disconnected from the material environment. Maja’s explanation of the headphone bubble acting as a protective wall when other company is unavailable relates to my observational findings. Accompanied solitude becomes a substitute for face-to-face companionship and provides a sense of security.

Kallinen & Ravaja’s (2007) explanation of music creating security through speaker distance or isolation may here also, in part, be explained by the association between headphones and security. The topic of safety was never outright touched on. Compared to Anderson and
Jones (2023) where safety was a main motivation for being headphoneless, the different environments of the city and nature are likely reflected in such a comparison. Campus and the city do not seem to be particularly threatening spaces as none of the interviewees were articulately being concerned about crime in relation to headphone usage. Instead, it is seemingly taken as safer when wearing them as the social cue of headphone wearing is thought of as a barrier rather than making one accessible, no matter if the conception is true.

6.2 Sonic Representation and Selection

Negotiating space is seen as a cost-benefit analysis by Sara. When choosing whether to study at campus or not for the day, that choice often consists of a value comparison between social life and productivity. For Sara, the home is a space where the individual is in control of the environment making it possible to customize it to personal needs. She says that When I choose to go to campus it is often to meet people. Campus is seen as inherently social and as a result of that, less productive compared to the sense of control that is felt at home. Further, the music chosen by Sara for working while on campus is distinct from music outside of the productive sphere. Here, lo-fi music, which seldom uses lyrics and often consists of beats using a stripped-down production, is used as a monotone background noise which puts her into a mindset of getting stuff done. This lo-fi music is only put on when studying or working and she expresses that the sound is almost conditioned to be associated with such a situation. Hence, when Sara puts this music on without working she is transported into a space of being productive instead of one of relaxation when, as she exemplifies, cooking dinner:

Outside of the social space I listen [to music] because it’s good or it makes me feel feelings or it’s a vibe and I do it for the sake of music. But when I do it in a space of studying I do it to increase concentration or to just detach. […] I used to listen to lo-fi in other situations too. I could do it when I stretched and stuff like that but sometimes lo-fi for me takes me to the study-situation […] so when I put it on my brain thinks it’s time to study. – Sara

The relationships between the brain and music are expressed further as it is said that music helps create focus as thoughts get too loud, thereby disturbing work. Headphones are thus not only used to drown out other people’s noises, but as a focus inducing tool by blocking inner dialogue. Sara takes advantage of situated music to transform her home into a workplace. When working from home noise acts as a transformative power by separating the two. In quiet places where there are no disturbances, headphones are used for accompanied solitude as otherwise the thoughts get too loud. In a group setting, they are used as a social signal and personal tool to construct focus while in a quiet space they are used for focus-creation and company. Utility is partly dependent on the context in which the listener physically resides and can be a distinction from other people and the self simultaneously. Music becomes a tool to dislocate private and professional roles from one another.

The association of music, productivity, and space have similar effects on Alice. She explains that listening to different music for recreational and productive purposes serves as an important tool for separating the two while framing the situations. Her preferred study music is African jazz as it does not include many lyrics nor shock factors that are deemed disturbing for
such a situation, as she explains in a comparison between American and African jazz traditions. It becomes background noise instead of something one actively listens to. I just want it to be a... the opposite of a disturbing noise, a white noise. But it provides more than just background noise and situates her lived experience. Jazz gives Alice a warmth that is transferred from the music into the lived world. When asked if she likes campus she answers no, but explains that music can color the environment in a positive light, producing a tolerance for it. Bull’s (2005) understanding of headphone listening through associating place to memory with sound appears relevant here, as balance is created between likable music and dislikeable space. Both Alice and Sara change their music when leaving the campus setting. Alice says that it can be a freeing feeling finally getting to listen to that one song she’s thought about all day, expressing self-restraint through music selection. Sara explains that leaving her workplace or campus with the same music still playing in her headphones is strange. Forgetting to change her music out means that she has not really left campus as it is part of it, conversely rendering the outdoors a space of productivity.

Sara also feels vulnerable and exposed without headphones. At the same time, she means that it can be a pleasant experience to not be distracted. She argues that headphones induce focus for herself by not letting her thoughts wander, making her more productive while working. Her private thoughts can be postponed to a moment where this focus is not needed. Sara means that this usually happens outside of campus, where she is free from both the pressure of the built environment and its affiliated soundscape.

Maja differed from the others in this regard. Whether the chosen audio had lyrics was not a matter of concern in relation to productivity and there was no particular study music. Recreational and productive music converged and what was chosen was instead mood dependent. For Maja, there was no shift in focus depending on the actual songs themselves, but rather beats and genres were important to get into a range of headspaces. When really having to focus and write a lot, hard rock was used to get energy and a feeling of capability. When doing light work podcasts were used as entertainment for an otherwise mundane task. Headphone listening was used to reach a certain feeling, which was true for the other participants as well. For all participants, the songs chosen in everyday situations were, to a greater extent, put on as a means for achieving a certain mood rather than to increase an already existing emotion. Sara says that I can put something on and then it’s like ‘no, now I can’t concentrate’ and I have the option of changing it. She continues to explain that some tasks are so boring that you need to listen to something entertaining. Sara and Maja both used music as a confidence booster, listening to certain genres and songs when wanting to look like they know what they’re doing, such as walking into a lecture hall. Instead of feeling vulnerable in a situation when visible to others, music helped Sara feel like a boss. Maja does not think it actually changes how peers view her, but it helps her feel on top of the world. Music is used to achieve something, whether that be concentration or entertainment. In Nyre’s (2015, p. 290) study, a participant explains that death metal could get her into a rage while the researchers’ curated compilation of music was calming yet not soporific, which showcases the suitability of different genres and styles for distinct situations. The same result is found here, where music induces a certain mood along with possessing a spatial and situational quality.
Nyre (2015, p. 296) concludes that the individual’s ability to choose is vital in headphone listening as the environment can be adapted to their desires. Getting to be the decision maker of the soundworld is one of the most important spatial contributions of headphones. The concept of private and public sound that Alice and Sara experience is consistent with the framing aspect of music that Walsh (2010, p. 191) describes, where situated sound represents something further. The sonic environment changes the lived space for the individual and is not separate from the spatial experience. When campus is framed successfully, music can evolve from mood creation to being part of the place itself. For Maja where selection is not based on such extensive association between music and space, listening serves as framing the self rather than the space.

The headphone bubble is a private space meant to be occupied only by the user. Maja realized, in one instance with her sister, that her headphones were leaking sound and she became self-conscious when using them in public. A pop song from the recent Barbie movie’s soundtrack was brought up as an example. She says that it is not something she listens to normally but adds that it was among her most listened to songs of the year. When asked about it she says that she does not identify with the song and does not want others to think that she does either. Maja notes that when the song played in her headphones while in public she thought *damn, is somebody hearing that I’m listening to this? That’s really fucking embarrassing.* The embarrassment and feeling of exposure show the intimacy of music and the emotions connected to the media, together with the idea that headphone listening is meant to be private. When others hear it, the private self becomes available for the public. In other words, the secret theater is no longer secret which breaks the contract of headphone usage. Sara agrees and feels like her personality is exposed if sound leaks out, both through music itself and what it represents. She does not want others to hear her confidence-boosting music as it exhibits needing help achieving such a feeling. The power of choosing to frame life instead becomes a powerlessness of not being able to frame it in the way one would like, as people would think that she has bad music taste. Sara references herself saying that *this is not the kind of music I usually listen to, even though I do.*

Similarly, using headphones is seen as an act of respect to others in the same space. As the technology makes different soundworlds possible in the first place, and as its purpose is to be private, it would be inconsiderate to not use them. All participants would only use sound for distraction, as a focus mechanism, or entertainment if it did not impose on others’ personal spaces. Sara thinks this has to do with Swedish culture and notes that in other places she’s been to, people often scroll through social media and listen to music openly in public. She explains that here in Sweden, people do not even like eye contact with others and thinks that the respect for each other’s personal space extends into the sonic realm. When Maja is faced with a similar question, she answers that if she really wanted to listen to a particular song she would go into the restroom and hold her phone up to her ear if headphones were not an option. She explains that she has done just that on campus before. Physically removing herself from others and entering the privacy of the restroom indicates that it would be deemed unacceptable to not use headphones in this setting. It is therefore feasible that with the normalization of listening devices in public, there is an expectation and norm of only listening if it does not impose on other people’s soundworlds. The privacy of musical listening and the want to not intrude relates to Goffman’s understanding of intrusions (Walsh, 2010, pp. 3-5). He explains that social codes
of conduct include sound where there is a certain expectation that others will not overstep a normal level of physical or sonic intrusion when it can be avoided. Walsh extends this notion and argues that headphones protect the self as they limit the amount of sound that may be expected.

Although headphone behavior frames situations, affect socialization, and changes focus, a reemerging question concerns whether this was an actively made choice or simply a consequence of mundane behavior. Sara believed headphones do have utility for several occasions but was unsure if the choices she made regarding their social affect was continuously purposeful or not. She further explains that wearing headphones is more about being inside one’s own bubble than shutting others out of it, which is contradictory as one is not fully possible without the other. The private and the public are always negotiated together. The very ambivalence that she faces showcase the probability that headphone usage does not have one specific use. Rather, purposes remain differentiated based on physical and social space. Sara did earlier express a changed expectation of others’ behavior while wearing headphones, finding utility in suppressing the noises of others, and allowed increased concentration on work instead of socializing. Being unsure about the purpose of headphones highlights the lack of conscious thought that goes into using them as a product of normativity.

7. CONCLUSION

Headphones are not just used for audio but to create personal space, affect social interactions, and shape spatial experience while both reflecting and creating social norms. However, there is no universal understanding of headphone usage. Relations between desired and achieved privacy are partly influential, but so is the relationship between entertainment and situated audio. Depending on the occupied space, utility changes. When wanting to disconnect from social life, headphones are used as such. When wanting to be entertained, they are used for this reason. Despite this, their effects are not as simple. No matter the end goal, both shifted focus and social isolation is achieved. There is the case of an outlier, namely wearing headphones without media. In this case participants did not curate a personal soundworld but used headphones only as a means of shutting others out while adhering to norms. It is indicated, but not clear, that such behavior lacks a similar dissociative result as music listening.

Students’ experiences on campus are changed in several ways through headphone listening. Firstly, the visual impact of seeing a headphone user creates a social understanding that builds on normativity. As headphones serve as a social cue regarding how available their user is for interaction, it is understood as a want to disconnect from others. When someone is using headphones, it is an acceptable way of performing such a detachment as their primary purpose is not seen as removing the self from social context but as entertainment. Although this is not always the case, isolation is regarded as a consequence of wanting to be stimulated rather than the opposite. Furthermore, they signal that the user is not as present as they would be without them. Hosokawa (1984), Weber (2010), Walsh (2010) and Bull (2005) all share a similar understanding of headphones constituting a spatial division through control over the personal soundworld. From such a notion, the awareness that people share about this characteristic
becomes the operational force behind privacy creation. The headphone bubble is partly a social construct made possible by how widespread the phenomenon is, as the value of being undisturbed by others builds on a quiet agreement of what headphones represent.

The vulnerability of not wearing headphones while alone in public relates to being accompanied. Public spaces are seen as normatively social, and in a social space people do not want to be alone. The walls of the headphone bubble envelop a space in which the user is not alone, acting like social surrogacy (Schäfer & Eerola, 2020) when company is unavailable, increasing both the sense of self and security. Choosing to wear headphones is adhering to norms of social life. They are not worn in chosen social space, meaning that while together with selected people there is no need for such a protective shell. The headphone bubble instead constitutes protection from unwanted or unchosen interaction by retreating from the public. As such, no matter if music is played through the devices or not their social impact prevails. Interviewees were unsure of the effectiveness of isolating the self from the public but signaled that they would not interrupt another headphone user. My own experience concerning intrusions on the headphone bubble supports that it is not only an imagined aspect of usage, but a real change in perception. This conceptualization is supported by the insight that participants gave, describing a feeling of increased physical space enabled by audio that may relate to both a feeling of seclusion and a physiological reaction made possible by headphone listening specifically. Thus, virtually everyone having worn headphones in public equates to an understanding of other people’s intents and experiences. There remains uncertainty regarding if isolation is a product of headphone use or purposeful by itself. That said, no matter if headphones are seen as an objection to decreasing personal space or if this is a consequence of using them, the culture of headphone usage is reproduced, demonstrated by unspoken headphone etiquette.

The option of deciding what to hear creates situated noises that are associated to certain spaces and moods. Alice and Sara had designated study-music that was not separate from but a part of the study situation. Music was used as a tool for focus, serving as background noise and heightening the intent to be productive. Using it as a framing tool can result in a strong association between space and audio by assigning different music to physical spaces. For Maja, music was instead used to form emotion correlating to the desired mood for differently focus-demanding tasks. All participants more often used music to create feelings, whether that was distraction, for focus, empowerment, or any other emotion instead of heightening something that already existed. By using selected situated sounds, the own private and professional roles could be separated in a similar manner to what Walsh (2013) describes in an office setting. When music belonging to a space was heard outside of it the occupied space changed character, such as the home becoming a workplace. It was used as an instrument for self-regulation. As the sample was small, challenging generalization, future studies on headphone usage and music listening are needed. Because there is a sense of protection without music, there is difficulty drawing conclusions on whether this emotional response is due to the physical sensations, if it is the sequestering of external noises, the social barrier they represent, normativity, or the association between wearing them and being in a comfortable musical environment that is the cause. Future research is needed to provide further insight into this phenomenon.
Finally, headphone listening is not just a product of requiring entertainment. It is used to distract, induce focus, empower, create personal space, change spatial character, shut out others, and enclose the self. But what this really tells us concerns the environments in which headphones are used. Their representative role encapsulates a desire for privacy within a world where we encounter more people than ever before. It also highlights the vulnerability such a space produces, where headphones are utilized to mitigate negative effects of being alone in public spaces through accompanied solitude. As Weber (2010) argues, trying to escape others’ presence is not a new occurrence, but a manifestation of a much older desire. Perhaps the intent behind the Walkman was never beyond portable entertainment, but the headphone bubble has since become much more.

8. BIBLIOGRAPHY


**Interviews**

“Alice” 20 years old, student at Uppsala University

“Maja” 21 years old, student Uppsala University

“Sara” 21 years old, student Uppsala University

**APPENDIX A**

**Interview guide (Swedish)**

Vart brukar du sitta på campus?
- Kan du beskriva platsen; ljud; ljus; vilka är där; fysisk utformning
- Vad känner du kring denna plats?

Eftersom platsen denna studie berör är en publik miljö, hur känner du över att vara i en sådan miljö när du studerar?
- Kan du beskriva hur du brukar sitta och vilka du möter?
- Ser du några för- och nackdelar med att vara här?

Hur använder du dina hörflurar på denna plats till vardags?
- Förändras det beroende det på hur miljön upplevs? Påverkar mängden personer och ljudnivån?
- Använder du dem olika när du är ensam eller i grupp?

Vad lyssnar du på?
- Skulle du säga att situationen förändras beroende på vad du lyssnar på?
- Associerar du musiken du lyssnar på till något?
- Är det valet annorlunda från plats till plats?
- Vad tror du att det beror på?
- Lyssnar du aktivt eller inaktivt och skiljer sig det från plats till plats?
Vad tror du att ditt hörlursanvändade bidrar till för dig?
- Finns det skillnader med eller utan dem? (känslor, upplevelse, samtal, fokus?)
- Upplever du att hörlurarna stänger ute ljud från omvärlden?
Vad är din motivering för att använda dem när du är ensam kontra i grupp?
- Påverkar dem din bekvämlighet? Hur?
- Påverkar dem din självkänsla på något vis?
- Hur tycker du att hörlurar påverkar dina sociala interaktioner?
- Hur tror du att du uppfattas utifrån när du har hörlurar?
Finns det tvärtom platser du väljer att inte ha hörlurar? (Varför? Förklara)
Händer det att du bär dem även om ingenting spelas? (Varför?)
- Tror du att det påverkar din egen upplevelse?
- Tror du att det påverkar andras upplevelser av dig?
Tänker du på något annat?

APPENDIX B

Interview guide (Translated)
Where do you usually sit on campus?
- Can you describe the space; sound; light; who is there; physical design.
- What do you feel about this place?
Because the place that this study concerns is a public space, how do you feel about being in such an environment when studying?
- Could you describe where you usually sit and who you meet there?
- Do you see any pros and cons of being here?
How do you use your headphones in this space?
- Does that change depending on your experience? Does the amount of people and the sound level have any effect?
- Do you use them any differently when alone or in a group setting?
What do you listen to?
- Would you say that the situation is changes based on what you are listening to?
- Do you associate the music you listen to with anything?
- Does this choice differ from place to place?
- What do you think that depends on?
- Do you listen actively or inactively and does this differ from place to place?
What do you think your headphone usage contribute to for you?
- Are there differences with and without them? (feelings, experience, conversation, focus?)
- Do you experience that your headphones shut noises out?
What is your motivation for using them when alone as compared to when in a group setting?
- Do they affect your level of comfort? How?
- Do they affect your sense of self in any way?
- How do headphones impact your social interactions?
- How do you think you are perceived when wearing headphones?

Are there conversely places where you choose to not wear headphones? (Why? Explain)

Do you ever wear them even though nothing is played? Why?
- Do you think that effects your experience?
- Do you think that effects how others perceive you?

Are you thinking of anything further?