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Sound of Democracy

Towards the democratisation of standards for soundscapes

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Sound of democracy: towards the democratisation of standards for soundscapes

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ABSTRACT

With this paper and the accompanying audio paper, our aim is to explore the juxtaposition of sound and democracy. Recognizing the multifaceted nature of this field, we approach it through the notion of care and an empirical analysis of democratic implications of trying to regulate sound in public spaces. We examine standards as one example of the many attempts to control sound in

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both public and private spaces. Standards are used to categorize, govern, and control. They are also tools to assess and characterise. As policy tools they raise democratic questions relating to who developed them, when and how they are used. Using the example of a shopping mall, we explore the democratic values reflected in the standards through their development and application through an inter-disciplinary perspective. We used the audio paper format to move from discussing the process of developing the soundscape standards to applying them in a realworld setting, ultimately exploring the consequences of such standards from the perspective of democratic values. The present written paper is a longer elaboration on methodology and theory as a compliment to the audio paper which develops the discussion and analysis.

1. INTRODUCTION

What is the sound of democracy, can democracy be sonic, and is it possible—or even desirable—to democratize sound? This paper aims to ignite a conversation about the relation between sound and democracy. We recognize that this is a relation that defies simple categorization and oversimplification—yet assert that it is essential to explore, particularly considering contemporary challenges to democracy, such as the emergence of anti-democratic movements, declining trust, reduced formal participation and increasing social cleavages. Beyond these contemporary challenges, the connection between sound and democracy also raises questions about everyday well-being, health, and liberty across all species. As such reflecting on sound underscores the notion that boundaries between political, public, and personal spheres are inherently intertwined and thus cannot separated or upheld in democratic thinking. Opening up and inviting reflections this paper, rather than providing conclusive answers, seeks to offer a perspective and a possible approach to understanding one of the potential intersections between sound and democracy by raising the over-arching question *what are the democratic implications of trying to regulate sound in public spaces*?

To reflect on this question, we examine standards as one example of the many attempts to regulate sound in both public and private domains. Standards are everywhere—they regulate the physical forms of almost all surrounding infrastructure (roads, buildings) as well as human interaction in almost all functions of work-life, welfare and everyday life—from taking a carton of milk from the refrigerator to scanning a bar code in the supermarket [1]. In addition to the processes involved in developing standards, they also have a performative aspect. Standards influence us in various ways and to varying degrees.

This paper engages with the ISO standard series 12913 on soundscapes [2], [3], [4]. By applying methods described in the standard in a shopping mall as an example of a "pseudopublic space" [5], we investigate the standards' potential to capture and illuminate democratic values. We want to move beyond the public/private split in democratic thinking by centering an ethics of care [6], [7]. This is also motivated by the values in the standard, including the emphasis on health and safety. An ethics of care ties "the activity of thought to the activity of care", [and] foregrounds the ideal of non-violent and non-hierarchical relationships based on responsibility, respect, understanding, cooperation, sensitivity to the needs of the others, compassion and tolerance" [8]. Meanwhile being highly aware that aims related to 'good care' or 'as-well-as-possible-care' can never be neutral [6]. And just like care, sound is never neutral but always and inherently multi-faceted. Sound has a physicality that affects our bodies, ears and health and attempts at standardization have therefore taken the form of decibel guidelines (e.g. [9]). But sound also has to do with listening abilities, experiences, preferences, politics and aesthetics (e.g. [10], [11], [12]). To make the overarching aim more precise we ask the following research questions: What power-dynamics are revealed through applying the soundscape standards, both in the standards themselves and in pseudo-public spaces? What type of assumptions on behavior and agency can be identified through the application of these standards?

2. ORDER IN A GIVEN CONTEXT

2.1 Democracy and care

Few concepts are more contested than democracy, and processes of defining it-and its limits—is part of the democratic project itself. In very broad terms, democracy is generally considered to be both a way to make decisions (e.g. voting, representation) and the promotion of number of values (e.g. freedom, justice, equality). The difference between the two perspectives can also be conceptualized as the difference between 'input oriented' and 'output oriented' democratic thought [13]. 'Input-oriented' perspectives will focus on political decision-making, deeming decisions legitimate when they reflect the will of the people (in practice often a majority of the people). The will of the people is, of course, highly elusive and can be captured in many ways, many of which are unsatisfactory in practice (representation, participation, voting etc). On the other hand, more output-oriented theorists will instead focus on the consequences of what is actually being done and the effects of this—placing emphasis on the importance of decisions not circumscribing any fundamental rights (justice, equality, freedom) but also their capacity to effectively promote the common interest and support a joint public and political sphere where these values are to be defended and promoted [13]. From the perspective of sound and democracy, input-related or procedural questions concern queries such as Who has the right to make decisions related to sound? How should standards and regulatory framework of sound be decided on? Whose experiences should regulations be based on? From an output-perspective, questions would instead be, which effects of sounds are considered acceptable? Is freedom circumscribed or enabled through sounds and their regulation? Are sound-related regulatory frameworks just or fair? Which sounds constitute a threat against the safety of people?

These questions, while highly relevant to any study of the potential juxtaposition of sound and democracy, reflect the dominating democratic norms as they developed during the seventeenth and eighteenth centuries in tandem with specific forms of Western/European democratic states [14]. Recognizing the pertinence and importance of these questions, we argue that theorizing sound and democracy needs to move beyond Eurocentric and anthropocentric understandings of democracy and take broader insights and debates into consideration. One of the central points of contestation in democratic debates in this regard has been the critique towards the tendency to lean on abstract liberal individualism in democratic thinking in general—and in theorizing on justice in particular. Here, feminist, post-colonial, and queer scholars have elevated how the atomistic liberal subject as a model for democratic rights fails to recognize differences between groups and tends to conflate the normative assertion that 'all men are created equal' with empirical assumptions of how "men" are "created". A plethora of empirical studies has taught us how the "normal" or average "man" has been the template for everything ranging from medicine to regulations on work hours and the formation of political parties (and as we will see below—of standards). In this paper, we are indebted to these debates and attempt to build on more decentered and problematizing notions of democracy by merging it with debates on care and the ethics of care.

Each one of us is in some kind of relationship with care—giving it, receiving it, longing for it or remembering it. These various states and relations to care all have material consequences and environments: care is performed somewhere and with something (including our own bodies) and is, in this work, connected to soundscapes. While we may empirically research care (e.g., assess the impact of sounds on people in a given space), its significance and properties are uncertain [6]. Theory on care identifies its various facets and includes the need for a more sustainable and caring approach to our relationships with the world as care is, as noted above, never neutral [6]. Aware of more recent critique, we here follow Tronto and Fischer's [7] seminal interpretation of care as something "that we do to maintain, continue and repair 'our world' as place to start to discuss the relation between care and democracy.

Echoing Tronto in Caring Democracy [15] a fundamental challenge to formulating a "political" conceptualisation of care is the split between public/private spheres in democratic thinking. In this context, critique has been raised against the division between a private sphere, concerned with care (often femalely coded) and a public sphere of "mutually disinterested equals" Held [14], which in turn has built the foundation (or myth) of care belonging to the private sphere. If we instead, as Tronto does in her later work, understand "care as a public value and as a set of public practices" and "recognizing that care is highly personal" we can open up towards a more public conception of care as a value which is necessary for maintaining any democratic society [15]. This moves us to an *ethics of care:* As noted by Held "An ethic of justice focuses on questions of fairness, equality, individual rights, abstract principles, and the consistent application of them. An ethic of care focuses on attentiveness, trust, responsiveness to need, narrative nuance, and cultivating caring relations" [14]. It is here this study takes its point of departure. In this paper we use these insights as a backdrop to study the democratic effects of ongoing attempts to govern sounds. Sound is currently governed in a plethora of ways, ranging from regulations to norms and social conventions. Here, we focus on a particular policy instrument—the standard.

2.2. Democracy and "pseudo-public" space

In this paper, we discuss the standard in relation to the shopping mall Emporia, situated in the south of Sweden. During past decades, there has been a debate relating to the changing conditions for urban public life and the character and availability of urban public spaces. In here seminal book *Naked city: The death and life of authentic urban places* (2009) Sharen Zukin [16] suggests that socially heterogeneous urban spaces have been "replaced by the suburbs' clean, sprawling, socially and visually homogeneous shopping centres" as part of a process of "standardisation in spaces of consumption", describing malls as "the premier privately owned public space of our time" [16]. This assertion is echoed in what Margaret Kohn [17] calls "the privatization of public space", and Don Mitchell refers to as "the end of public space" [5].

Mitchell describes malls and corporate plazas as *pseudo-public spaces*. These are places where desires for security are prioritized over interactions between people, and where entertainment and distraction is prioritized over social and political community building, with dire consequences for democracy [5]. Yet another distinctive aspect of malls as pseudo-public spaces is the way they are "highly regulated" with private security guards and taken-for-granted restrictions and rules [5]. This regulation even occurs through sound, including the use of "mosquito" systems that use specific frequencies to deter a "disorderly public" [18]. Even if planners sometimes seek to appeal to "fantasies about public space," this aestheticization hides the fact that privately owned and developed malls are "highly orchestrated and controlled environments that eviscerate the diversity that animates public space" [17].

Shopping malls have also been widely discussed in relation to their numbing effect on public democracy and urban dissent. In a memorable phrase, Benjamin Barber has asserted "that the malling of America has sometimes entailed the mauling of American civil society and its public, multiuse spaces" [19]. In many ways, the shopping mall is highly ambiguous in terms of its "public" qualities [20]. Kohn [17] suggests it is part of "a vast grey zone made up of 'social spaces' that are privately owned but do facilitate contact with strangers" and, moreover, that "the proliferation of places like shopping malls makes it apparent that it is anachronistic to divide the world into public and private, because there are many spaces that fall into neither category." These private spaces of commerce that nevertheless "simulate public life" [17] are thus exemplary public-private or private-public spaces. Here we follow Mitchell's conceptualisation and describe them as "pseudo-public spaces" [5].

2.3. What is a standard?

The ISO defines standards as "[...] the distilled wisdom of people with expertise in their subject matter and who know the needs of the organizations they represent" [21]. Moving beyond how the concept is defined by an organization that itself promotes them, the concept has a broader conceptualization in organization studies. Brunsson et al. [22] describe standards using three criteria, describing them as a "specific type of rule" [...] that is "voluntary" [...] and "are meant for common use" and defining them as a "as a rule for common and voluntary use, decided by one or several people or organizations.

Regardless of their formal role, standards are used by governments, often in regard to health and safety issues [23]. As standards are generally made up and backed up by external bodies such as professional/expert organizations (often based on scientific and technical expertise) or manufacturers' associations, their legitimacy is thus often based on their purported rationality and the guise of neutral expertise. This is also strengthened by the fact that the developers of standards are often anonymous. Yet despite this guise of neutrality, standards are sometimes contested by third parties, including lobby-organizations and other actors raising concerns relating to bias [23] or risk.

Beyond more descriptive definitions of standards focusing on their potential organizational and governing function, Timmermann and Epstein [23] describe standards as a "process of constructing uniformities across time and space." This also means that standard, in essence, renders "the modern world *equivalent* across cultures, time and geography" [23]. This means that they are not easily imposed in a world characterized by complexities, inequalities, and variations of freedom. This challenge has also been elevated in broader debates, including health advocates raising concerns with how conceptualization of a standard human (in practice often a white middle-aged male), has left other groups underrepresented. The effect of this is not only lack of medical knowledge, but also possible detrimental health effects for specific groups [23]. This also opens questions regarding whose needs are being recognized in/by the standard.

Regardless of their origin, governments on all levels may or may not choose to adopt standards as governing tools to promote change and compliance. Yet, even though they may substitute for other forms of authoritative rules, compliance with standards is more voluntary than many other forms of regulation. Despite this, standards often constitute a highly legitimatized social regulation with a strong inertia to them; not only as they are often difficult (time-consuming and costly) to change, but also because of the chains of path dependencies that are created across industries over time. As noted by Timmermann and Epstein [23], standards have a way of "sinking below the level of social visibility, eventually becoming part of the taken-for-granted technical and moral infrastructure of modern life."

2.4. Stories to tell—existing soundscape standards

As noted by Timmermann and Epstein [23], every standard "has a story to tell", including a variety of expertise, problematizations, ambitions and rationalizations. *ISO standard series 12913 on soundscapes*, published in 2014 had the aim of bringing together best knowledge to provide requirements, specifications and guidelines that can be used consistently to ensure soundscape processes are fit for their purpose [2]. Two additional parts of the standard were published in 2018. These are concerned with methods of data collection and of reporting on soundscapes emphasizing the combination of interviews, soundwalks and physical measurements [3]. Methods for data analysis are also presented [4]. So far, the development of the ISO standard of soundscapes has resulted in three publications that describe respectively the framework, data collection and analysis methods for conducting soundscape research. The motivation for the development of this ISO standard is, in addition to the standardization itself, the desire to shift the approach to sound environments from a negative focus on noise control to a quality-of-life focus. This approach is in line with what R. Murray Schafer suggested several

decades ago [24]. The Soundscape Approach has grown significantly over the past 20 years in the fields of community noise, soundscape and environmental acoustics and has now also come to attention of policymakers, architects and city planners [25]. This development represents a paradigm shift from noise control policies towards a new multidisciplinary approach, as it involves not only physical measurements and quantitative data, but also data from humans and social sciences with a focus on how people experience an acoustic environment in context.

The standard is still under development and is yet not widely applied or established. The Canadian sound researcher Milena Droumeva has shown that the citizenship(community) perspective is absent in this ISO standard [26], but the implications of the potential widespread application of these new types of standards is still to be explored. We continue the conversation through applying selected parts of the standard to an everyday setting, with an emphasis on democracy and care.

3. METHODOLOGY

In this paper, we apply and explore the ISO standard in a pseudo-public space, using the case of Emporia in the far south of Sweden. When Emporia opened, with its award-winning sonic branding and sound design [27], it was the largest shopping centre in Sweden, and it remains one of the largest in Europe. Its conception and construction formed part of the wider Hyllie (a district of Malmö) urban-development project, which itself is the largest such project in the Nordic countries.

Both the standard and other central documents on the soundscape approach [25] require a multidisciplinary and multimethod approach to the analysis of complex everyday soundscapes. Our interdisciplinary team comprises nine researchers spanning fields such as occupational and environmental medicine, architecture, retail research, cultural geography, political science, musicology, fire safety engineering, and sound studies. We adopted a mix of quantitative methods of acoustic measurements and qualitative methods such as interviews, soundwalks and field recordings. This is based on the application of the standard ISO 12913 [2], [3], [4]. This approach is in line with the methodology put forward by Schafer [24]. A multidisciplinary and trans-disciplinary team worked together to collect and analyse the different domains of data that have been collected in Emporia (a shopping mall located in Malmö, Sweden) along with the standards documents available for the soundscape analysis. The goal was to make use of the different perspectives related to soundscapes considering as a central theme the ethics of care theory and the associated democratic values. A case study has been explored here to demonstrate the application of the existing soundscape standards.

Those three sources of data (interviews, questionnaires, and recordings) mirrored the approach recommended in ISO 12913 and—along with the critical analysis of the standards—formed the basis for the rationale of this paper regarding the relationship between soundscape standards and democracy.

3.1. Data collection and soundscape analysis of the Emporia shopping mall

In the preliminary soundscape assessment phase, our research group conducted two field trips, integrating soundwalks, decibel and ultrasound measurements, field recordings, ISO 12913-2 adapted questionnaires, and visual documentation. The first visit occurred during quiet opening hours on Jan 25, 2024; the second visit was during busy hours on Feb 29, 2024.

During the second visit a set of 11 interviews (out of which 8 were eventually used in this work, namely 3 in English and 5 in Swedish) with people working at the case study location (e.g. store managers, security guards, etc.) were also conducted. Interview questions were made of a sub-set of the most relevant items included in the ISO 12913 standard. An exploratory analysis of the collected data was then conducted focussing on the implications of standardisation for democratic values. A core set of data was made of qualitative findings from interviews. They were first transcribed (and translated when necessary) and then analysed

with reflective thematic analysis [28], following the theoretical framework of care [7]. Reflexivity served as our guiding principle, allowing us to critically engage with the data while acknowledging our own subjectivities and biases.

The analysis was conducted in three iterative steps applied in an iterative fashion.

1. **Familiarization**: All transcriptions were read multiple times by the authors. For the author team to get familiar with the data material, the interview transcriptions were read as a basis for an initial analytical discussion sharing individual understandings of the raw data.

2. **Generation of codes and constructing themes**: After conducting the initial coding of the data this phase involved a more detailed and systematic engagement with them. Themes and patterns were identified, revised, and tested through an interpretive process, informed by the soundscape field work. The research team condensed and drafted findings of each theme with illustrative quotes, which were tested by the research team through shared discussions.

3. **Interpretation of the thematic findings**: This step involved the extraction of main findings from the data, condensed and wrote up in the thematic analysis qualified by the research team through joint critical discussions.

This analysis was complemented with a detailed analysis of the set of ISO standards addressing the assessment of soundscapes and piloting the use of the questionnaire tool suggested in such standards. The soundscape recordings were also analysed with the aim of characterising the soundscape and obtaining sounds which could be useful to exemplify the findings from the questionnaires and interviews.

4. ANALYSIS

4.1. Analysis of the soundscape standards through the ethics of care

The motivation for the development of the ISO standard is, in addition to the standardization itself, the desire to qualify and nuance the approach to sound environments from a negative focus on noise control to a quality-of-life focus, that is, in line with what R. Murray Schafer suggested in the early 1970s [29]. This is in line with the concepts expressed in the ethics of care [6], [7], as it diverges from merely assessing sound sources as a health threat measured with quantitative methods, to also considering the human perception of sound and its implications. Nevertheless, the standard does not provide detailed information related to the soundscape assessors and the people assessing the material collected-this can have a significant impact on the subjective results and interpretation. Mention of minimum sample size (e.g., 20 people) is provided, but this comes without discussing in detail the relationship between the space usage size (i.e., number of people in the soundscape) and the homogeneity/heterogeneity of users of the space (considering all perspectives, physical hearing abilities, aural diversity, cultural aspects etc.). This will likely impact the assessment process while it requires deeper scrutiny to provide care for the whole set of soundscape users. Saturation could have been used as an alternative concept, as it is able to capture when new data (i.e., more soundscape assessors in this case) do not lead to new findings [30]. This would help to define the appropriate sample size in relation to the soundscape under consideration. These issues lead to a discussion regarding toward whom care is provided with the standard and how to ensure it addresses all soundscape users.

Seeing the standard series through the lens of care ethics draws attention to the fact that it is almost exclusively human-centred. In the book "Soundscapes: Humans and Their Acoustic Environment" [31] accompanying the standards, animals are the only non-humans mentioned throughout the book, however unfolding how to work with caring for non-humans through employing the standard methods and analysis is missing. One can justly question, therefore, the lack of provision of care exhibited toward non-human creatures in the soundscape standards. E.g. standards on ultrasound use in terms of animal hearing could have been a part of the standard development, as could animal hearing within the human audible range. For example, in the latter case, there is convincing evidence that birds are cognitively affected by traffic noise [32] and, in some cases, must adapt their song to cope with the masking effects of such traffic noise [33]. Increasing evidence demonstrates that anthropogenic generation of ultrasound is not only perceived by many creatures but has a negative effect on such creatures including in areas of the world not normally inhabited by humans [34].

In the reference list of the first ISO document that defines soundscape [2], the main references include the key books for the soundscape tradition by Schafer [29] and Truax [35]. Both key sources stress how the ideal soundscape is characterized by enabling clear communication through minimising noise, assuming quietness as a basis for better quality of life as the main caring gesture. The whole metaphor in Schafer's tuning of the world as a symphony builds on an ideal where all actors can live in harmony through a hi-fi soundscape composed through what we could term quietness care. The standards reflect this idea of care through promoting a silencing dispositive of controlling sound and noise through the different methods for both analysing and intervening afterwards to "manage" [2], "enhance" [31] or "improve" [31] the problematic soundscapes.

How does this thought tie to the activities of care in the methods and analysis laid out towards actual quietness care activities? Schulte-Fortkamp et al. [31] aim to show ways of turning the standard into practice through repairing and harmonizing a damaged and noisy world. This process aims for "quietness" as a permeating caring goal throughout the book [31]. Quietness care means offering people opportunity to find calm and quiet and capacity for psychological restoration (based on comfort) through both decreasing the negative impact of noise as well as restoring balance and harmony (hi-fi) in the soundscape [31]. Quietness does not necessarily mean silence, or a designing for a lack of sound, but consists of four components: Pleasantness, Calm, Fun and Naturalness [31]. This can be achieved by creating positive and familiar stimuli for better quality of life by preserving positive sounds and adding harmonising sounds. These could include natural sounds such as bird song, water features, greenery, vegetation, reduction in human activity (except from positive sounds such as festivals with music and acoustically diverse and vibrant places) and audio islands for masking [31]. Taken together, the needs of humans are clearly focused on care as restoration, harmony, and quietness.

4.2. Analysis of empirical evidence from the case study Emporia shopping mall

Our preliminary data analysis revealed that human-made sounds and mechanical noise predominated, including ventilation drones, escalator noise, and store music. Questionnaire responses indicated a moderate loudness level consistent with our measurements, alongside an overall assessment of soundscape annoyance. Ultrasound measurements detected periodic ultrasonic bursts around 23kHz occurring every 30 seconds (e.g. likely being produced by a fire alarm). Questionnaire responses also indicated a lack of "resting places", with "not a single quiet second", although a soundwalk identified that the bathrooms' bird and water sounds evoked the self-care context of the spa experience ("I'm supposed to feel safe and nice in here").

However, the existing methods did not allow ways to capture relational and democratic negotiations in the soundscape that we found central to the overall assessment of Emporia. For example, the importance of understanding how store music delineating invisible sonic territories and on what basis a guard expelled an individual carrying a mobile sound equipment playing music while walking fast through the corridor.

Table 1 illustrates the first and second stage of our thematic analysis of the interview material. The data analysis resulted in 3 themes and 15 sub-themes. Drawing on theory of care, three main themes identified were 1) *Care for/by*, 2) *Relations/negotiations of care*, 3) *Caring authority*. The theme *Care for/by* relates to the set of activities, perceptions and interpretation of the soundscape that are associated with an action of care. This theme is focused on the perspective of the individual subject towards care. The second theme *Relations/negotiations of*

care represents the continuous, unstable negotiations in between people through sound. This is reflected through the notion of care, as it enables describing the interactions between people. The third theme *Caring authority* refers to a set of implicit and explicit norms, regulations and policies which affect the way people and institutions handle the soundscape. A more elaborate discuss on the interpretation of the findings is included in the accompanying audio paper.

5. CONCLUSIONS

The primary aim of this paper was to spark a dialogue regarding the connection between sound and democracy. Rather than offering a mapping or all-encompassing account of potential connections between the two concepts, this paper aims to stimulate contemplation and encourage diverse perspectives, presenting only one possible approach and opted to focus on a particular case. The over-arching question in this paper was *what are the democratic implications of trying to regulate sound in public spaces* and we suggested a care-oriented perspective to democracy, this was specified in two research-questions that are discussed below.

Our first research question was: *What power-dynamics are revealed through applying the soundscape standards, both in the standards themselves and in pseudo-public spaces?*

Considering the soundscape standards themselves, a critical aspect is their application in relation to the characteristics of the assessors. This leads to an interesting question about distribution of power at all levels i.e. who should use, apply or enforce the standards. Our empirical material revealed inconsistencies across different spaces within the pseudo-public space under investigation. Leaving individuals employee, employees or others to regulate this themselves. The power dynamics are associated with the standards and tends to prioritize listeners rather than sound makers.

Theme	Sub-theme	Code example
Care for/by	Care for individuals/customers	When you talk to a customer your voice has to be clear.
		If I had a speaker and attract my customers, I can't do it because I have to show consideration for people who are sensitive to sound
	(Im)possibility of selfcare	I can't really control my sound environment at all.
	Emporia/workplace cares	I don't expect anything because, I knew that it will be like this because it's like a public place—a huge shopping centre.
	The room cares	People don't hear what we say, for example when I shout five times or more than ten times.
Relations/negotiations of care	Ambiguous sound: What to care about?	People drop things, you get scared [as it may be a dangerous scenario].
	Ambiguous care situations	Well, it's hard to do anything, I can't just no, but come on, maybe we should be quiet now [] no, it's hard. I think it is difficult in this kind of environment.
	Adapt levels/directions of care	If I'm [] talking to a customer, I focus on what the customer says and then I don't think about everything else.
	Stretched/strained relations of care	After being here, I don't want to talk to anybody at home.[] In the evening, you feel totally exhausted.
	Lack of care	Yeah. I don't have a specific feeling about it like or just likeit does not irritate me.
	Adapt to others and to situations when/if making sound	My own sounds? Sometimes music, just music - because I cannot do anything else. I cannot sing here.

Table 1: Themes and sub themes resulting from the thematic analysis performed on the interview material collected at the Emporia shopping mall.

	Careless sound	I think it's okay, but if you cause unnecessary noises, like you said, somebody coming with a big speaker for no reason.
	Acceptance of unavoidable sound	I understand that everybody has to do something, and I'm in a public place, so I cannot say anything about it
	Acceptance of convivial sound	[I like] the sound that people talk, you know, like a slow, not very loud. That's a call. Yeah. It's like positive.
Caring authority	Paradoxes of care	I feel that something is not as it should be when something is not right, that's when you react. As an example: Some languages are spoken very loudly. When you are on the phone really loud - I tell people to quiet down too. Then I say, that you have to think about your surroundings.
	Normative care	There are no rules. I decide that myself. That is how I and most people work, sound must not stand out too much. If you talk loudly, you have to go out.

Considering the second research question: *What type of assumptions on behavior and agency can be identified through the application of these standards?*

Our analysis revealed that the point of departure of the standards is the listener, who is assumed to be a passive receiver subjected to sound. This listener is positioned as someone who is affected by the soundscape. Their agency is limited to passive, consultative listeners, detached from the soundscape that they assess, and not as agents who may make sound and co-produce the soundscape they are part of. Some of our respondents seemed to resist this positioning.

Through the process of applying the standards they are asked to reflect on their experiences of being subjected to sounds, rather than having the agency to co-construct the soundscape. Rather than being positioned as agents that can co-produce the soundscape. The information provided here reflects our approach which heavily relies on the audio paper to further investigate the soundscapes, the standards of soundscapes and their relationship with democracy under the lens of care.

We highlighted the importance of addressing a perspective of ethics of care in the analysis of soundscape standards and their application. In addition, while our empirical material demonstrated that existing standards can be a useful tool for the assessment of soundscapes from a democratic perspective, it appeared evident that the ethics of care notion reveals that not all facets of democracy can be captured with the current standards. This is particularly relevant in the context of pseudo-public spaces, in which the power dynamics of using or enforcing a standard are not clearly regulated. While the ISO standards for soundscapes attempt a holistic approach, which includes both quantitative measurements and qualitative human-centred perspectives, it is important to realize that existing standards still lack a further step that must be considered to capture a *care* perspective. We recommend here care as a tool to capture the democratic values that can be interrogated through the analysis of the soundscapes.

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