Spaces of Reproduction: How Teenagers Co-construct Post Industrial Soundscapes in Smithfield, Dublin

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Summary of contents

Sounds are specific to space, yet much of the critique of urban space within social theory fails to address the social and cultural significance of sound in the shaping of spatial practices. This thesis provides an in-depth argument for the inclusion of sound as formative in the social construction and shaping of urban spaces, and mobile mediation practices within the urban. This thesis: (1) advances theories of sound within sociology; (2) contributes new data on sound in urban development and spatial use; (3) interrogates the role of mobile mediation in navigating spaces of regeneration, and (4) explores these concepts with young teenagers. This research examines sound and the urban using Lefebvre's theory of space, particularly his theorization of symbolic spaces. It also offers a critique of the politicizing and policing of noise within the EU, as well as Ireland's adoption of quantitative models to measure sound. The study examines the Smithfield area in Dublin, Ireland by using a triadic methodological approach (combining sound mapping, soundwalking and focus groups) to explore the urban soundscape of young teenagers. The outcome of this sociological investigation is that: teenagers employ mobile technologies to enhance their experiences within silent spaces, urban spaces are defined as participatory and engaging only if they contain the sounds of consumption, and that silence, within a city, is defined as problematic and dangerous - a symptom of poverty and the current recession.

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CD track list

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- 6. A selection of recordings from older cohorts

Abbreviations

SCOT [Social Construction of Technology]

SST [Social Shaping of Technology]

ANT [Actor-Network Theory]

STS [Science and Technology Studies]

DCC [Dublin City Council]

AQMNCU [Air Quality Monitoring and Noise Control Unit]



Introduction

A large number of publications across various disciplines have explored the role of the auditory in art, film and media theory, as well as ethno musicology; these studies have highlighted how we must "re-think the meaning, nature and significance of our social experience" (McPherson, McPherson, and Welch 2012:386). What is needed is for sociologists to overcome the long-held engagement with "the hegemony of textual analogies" (Erlmann 2004). Truax (2001) argues that even research, which has clearly started from a sonic perspective, such as the oral history project at Columbia University in the USA, has tended to follow "the bias of historians to have written documents" (Truax 2000). This research asks how individuals and groups within society, particularly teenagers, interpret and engage with an urban soundscape. As such, this study examines the ways in which teenagers related to the soundscape of the Smithfield area in Dublin city, and more specifically, how sounds shape spatial and social experiences.

This research began with a simple premise, to define what part sound plays in the experience of everyday life in Dublin city. The original emphasis was on the urban soundscape in general, however, the research evolved substantially throughout its examination of the urban, to include interior and exterior spaces as well as mediated soundscapes. Moreover, in light of a lack of empirical qualitative data on subjective soundscape experiences, it became necessary to design a new method in which to engage with this question. Both Thompson (2004) and Bijsterveld (2001) have argued that sound studies and the monitoring of sound levels in cities, are historically tied to class distinctions, and they suggest that this is located within fundamental political and social constructs of the working class. Thus, the study chose an alternative route; by choosing a space traditionally defined as working class, but which has, over the past 15 years, undergone extensive rejuvenation. This allowed for an interrogation of sound as a class-based, social, gendered and community experience.

¹ The term soundscape and other terminologies developed to define different types of sounds are defined and discussed in chapter 1.

² Image from Paula Russel's paper cited in the bibliography

This study worked with two groups typically identified as being excluded from the design of public space and urban planning. These groups, comprising teenagers and older people, are often characterized as vulnerable and marginalised. The older group contained a small selection of cohorts: 5 participants, chosen for their extensive memories and connections to the Smithfield area since childhood. However, the young participants, of which there were 84 participants, were the core focus of this research. Recent studies have shown that while young people are frequent users of public spaces, "teenagers as a group are excluded from or, not welcome in, much of the public realm" (Travlou, Thompson, and Maxwell 2008:309). Within urban communities there have been some efforts to provide teenagers with 'token spaces'. However, this still highlights a general exclusion from public spaces available for adults, or adults with young children (Matthews, Limb, and Percy-Smith 1998; Matthews, Limb, and Taylor 1999; Matthews 1995). Although there have been some studies which included the voices of teenagers in examinations of the soundscape (Yang and Kang 2005), their focus was not on the subjective experience of teenagers alone. This research study also included an examination of the role afforded audio technologies in mediating public/private spaces by teenagers. It was necessary to interrogate the ways in which teenagers use media technologies to alter their experience of public space, as there has been a growing trend since the 1980s of mobile mediation (Bull 2000; du Gay et al. 1997). Bull (2000) has defined this use as a process for removing oneself from the abstract sounds of the urban environment. However, public spaces such as parks, footpaths, streets and squares, once used for public gatherings, and the private spaces of the home and bedroom, are increasingly sonically mediated, as a process of disengaging from the surrounding soundscape.

This research project involved an examination of the Smithfield soundscape in Dublin city, an historic market area. The research project involved the participation of 84 teenagers over a two-year period, whereby they played a pivotal role in examining the soundscape of Smithfield and it environs. These participants either lived within the research area or went to a school close to Smithfield, thus having some familiarity with the space and its soundscape. The emergent sounds within a space can be read as the engendering of a set of connections or disconnections to the public sphere. Thus, Smithfield was examined for its ability to shape meaningful relationships based solely on the sounds produced within its space. This involved exploring and

interpreting their experience of sound within the urban, particularly sounds that are connected to the everyday. It also meant exploring the difference between local and non-local sounds. For young people living around the Smithfield area, local sounds might include the sounds of the Luas tram, the markets and school bells. But it might also include less specific sounds, sounds that are heard on a daily basis and come to be regarded as local and site specific; sounds which suggest productivity, socialising, play etc. Lefebvre (1992) argues that sounds define the rhythms of a place, they create patterns of meaning and regulate daily activities. Local sounds can also mean sounds that are symbolic or have meaning to specific social groups because of their relationship to a space. For example, the older cohort has developed relationships to types of sounds within Smithfield throughout the course of their lives, and mourns the loss of sound types from their childhood.

Smithfield: historic space and cultural quarter

The Irish name for Smithfield is 'Margadh na Feirme', when translated literally means "the Farm Market". This name suggests the productive practices, as well as the links to rural production that have shaped this space for centuries. Historically, the space has existed since the Vikings came to Ireland over 1000 years ago, however as a market it has been in existence since the 16th century. Although there were attempts in the 17th century to gentrify the space, it remained an area housing working class families and institutional buildings such as the Collins army barracks, and over time became increasingly congested, in part because of the construction of public housing/tenements (McCarthy 1990). In the 1990s, under the rubric of urban regeneration, the Historic Area Rejuvenation Project was established (HARP). Russel argues that what was different about such projects, was the role afforded to communities "at least in the rhetoric of regeneration" (2001:2). The partnerships between communities and urban developers were initially encouraged through the financial support of European funding initiatives during the 1980s.

The development of such areas like Smithfield followed American models of "modernisation construed as commitment to the growth model of prosperity with its economic and social adaptation" (Soper 2013:249). During the economic boom of the late 1990s to the 2000s, and because of "property-based tax incentives" in Ireland, numerous sites were built or regenerated; as a result the "character of urban spaces

became increasingly generic" (McCarthy 2005:235). One can attribute this generic profile to the lack of engagement with older people or teenagers in the community, or little, if any examination of the non-physical properties of urban spaces.

The various steering groups involved in the development of the Smithfield area did not include the voices of youth or children in this urban development, (see Figure 1).

Membership Drawn From	Members	
Local Authority	Local Authority Officials	
	- Project Manager	
	Assistant City Manager	
	Elected Representatives	
	5 councillors from the local constituency	
Social Partners	Unions – ICTU	
	Employers - IBEC	
State Agencies	FAS	
	Enterprise Ireland	
	Dublin Tourism¹	
Local Development Agencies	Dublin Inner City Partnership Company	
	Dublin Inner City Enterprise Board	
Local Businesses	Henry St. Mary St. Partnership	
	Capel St. Traders Association	
Local Community	4 Community Representatives 1 drawn from	
	each of the four area cells	
Conservation	An Taisce	

Figure 1 Composition of Harp steering group²

In examining urban regeneration projects, one must also look at ways "in which regeneration policies impact on the lives of socially excluded groups" (Degen and Rose 2012:3273). These groups, such as teenagers and the elderly, arguably use local spaces the most, being often limited in their ability to access other spaces for reasons of finance and age. When examining spaces for regeneration or rejuvenation, one must include the voices of these groups. The rationale for this, as it connects to the study of sound and the soundscape, lies in the familiarity both groups will have with the local soundscape as a result of their frequent use of public spaces. For the older generation, it is the connections they have made to sounds and their production over time, as well as their ability to trace changes within the soundscape and link them to the devolving of social and productive practices. For the young people, it is

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² Image from Paula Russel's paper cited in the bibliography

critical to examine their increased use of audio mobile technologies to navigate urban spaces, as it is informative in its implication that public space is increasingly disconnected from urban social practices of use and participation. In other words, we must examine that which exists in the urban, which plays a role in spatial and social configurations, yet cannot be objectified or quantified; that is, the urban soundscape.

Smithfield is both a familiar and unfamiliar space. The connection began in childhood with Saturday shopping excursions with my mother to the Smithfield market in order to purchase fresh produce. This was a unique experience as at the age of 10, shopping expeditions predominantly consisted of visits to large supermarket chains in a Dublin suburb, where access to fresh fruit and vegetables was limited. Over the years, considerable transformations have taken place within the Smithfield area; this has included the construction of new buildings and the demolition of old ones. A dislocation of spatial arrangements appeared within the space with the removal of several large structures, one of which was the old fish market building. What followed was the construction of large-scale apartment complexes with business premises on the ground floor, tourist facilities and an art house cinema, the purpose of which was to remake Smithfield as a cultural quarter. These new structures were situated alongside the smaller, older social housing, flat complexes and wholesale markets within the area. This reshaping of architecture impacts on the diffusion of sound in space. It changes the acoustic territories that demarcate space where sound is no longer attributable to specific spaces or communities (LaBelle 2010). Additionally, since the early 1990s, sounds within Smithfield began to change with the removal or downsizing of certain productive practices, such as the fish and fruit markets. This reduced the kind of traffic, both pedestrian and commercial, which would have moved through the area. There was also a noticeable reduction in the sounds of birds; they left when their food supply, waste food, disappeared.

Theories of space and sound

The fields we are concerned with are, first, the physical - nature, the Cosmos; secondly, the mental, including logical and formal abstractions; and, thirdly, the social. In other words, we are concerned with logico-epistemological space, the space of social practice, the space occupied by sensory phenomena including products of the imagination such as projects and projections, symbols and utopias (Lefebvre 1974:11–12).

Auditory information is a frequent reminder of the individual's connectedness to the community. If less information becomes available to the listener, through lack of variety or loss of definition, the traditional sense of community involvement is weakened and probably replaced by other ties (Truax 2000:96).

The above quote's signal the significant challenges we face when defining and redefining space and its connection to community; the authors argue that space is constantly changing and that sound plays a part in how people connect or disconnect from space. Lefebvre contends that spatial use - the production, reproduction, and representation of space - needs to be explored from an historic and contemporary context. This is a key point in this research, as it leans towards the problem of transformed or rejuvenated spaces and their ability to sustain community meaning and social inclusion, whilst encouraging economic practices sustainable to the community. Truax (2000) argues that spatial significations or symbols are not limited to just physical attributes. The loss of key sounds within a space plays as much a part in the fragmentation of community and social meaning which connects one to place, as the loss of traditional social practices. Space has meaning attached to it because of historical/relational connections, attributable partly to traditional social and economic processes reproduced in space. If these productive processes fail, whether because of changes in economic or political will, as in the research area, then rejuvenation seems the current solution to reignite such spaces. However, rejuvenation projects can fail if considerations of the sensory and community are ignored in the design process.

Degen and Rose argue that people's everyday experiences within the built environment "cannot in fact be understood entirely as a consequence of the design features of those environments" (2012:3271). It is only through our, 'bodily mobilities', everyday walking (Augoyard 1979; de Certeau 1988), that we encounter or mediate the sounds of place. Although there has been what Howes (2006) calls a 'sensory revolution' within the social sciences, the focus on all of the senses excludes discreet examinations of how one sense, the auditory, shapes specific urban experiences. Additionally, audio-technological mediation has prompted numerous researchers to examine how important sound may be in our connections to place and time - in some ways more than any other sense experience (Bull 2000, 2011; Sterne 2003; Winner 1989). This research argues for a sociology of the auditory senses. Sight has played a dominant role within numerous research fields (Sterne 1997, 2003; Synnott 1992), the result of which has led to a focus on the built or physical environment in certain urban, cultural and design initiatives (Adams et al. 2008; Cain et al. 2008; EHA 2010). The dominance of the visual has led to the objectification of the urban and the placing of physical design over sensory and subjective engagements with space. Again, citing Degen and Rose, there has been no examination within Ireland of how the sounds of "built environments engage their users, nor to the diverse felt experiences that such environments might elicit" (2012:3273). One must examine how the soundscape, as part of the built environment, affords a form of 'sensory experience', which makes different spaces unique.

This thesis is spread over 6 chapters. The first chapter looks at sound as an integral part of theories of space, it gives a general introduction to discourses of urban space, the production of space and the various theories of place, non-place and third space. It also explores the study of the soundscape as fundamental to urban planning and design. Chapter 2 deals with technological mediation and audio technologies, looking at theories of social constructivism, technological determinism, social shaping theory and actor network theory whilst also exploring the history and development of sound and technology studies. Chapter 3 charts the development of the methods adopted for the research as well as the use of two research cohorts: a small older research group and a large group of teenage participants. Chapters 4, 5 and 6 examine how young people negotiate sound territories, both real and virtual and offer an analysis of noise as a social construct shaped by macro and meso society, highlighting the wide

distinctions between noise and sound. Chapters 4 and 5 examine types of sound as variously socially constructed. Finally, chapter 6 explores audio mediation and its impact on navigating space and the shaping of social narratives. These final three chapters, though examining very different sonic experiences are intricately connected through the common theme of urban design and its impact on listening.

Chapter 1 explores concepts around productive spaces and spaces of capital as defined by Harvey, and interrogates the mapping of space and the defining of trajectories by urban planners, which de Certeau argues ignores the sensory routes which are traced by users of space. This chapter explores the various theories used to examine space and place with an emphasis on the making of space. It focuses on the works of Lefebvre (1974, 1992), de Certeau (1988) and Harvey (2001, 2008) and their examinations of social, urban, capitalist and imagined spaces. This chapter examines in detail, Lefebvre's tri-partite of space (1974), explored in his seminal work 'The Production of Space'. Lefebvre defines space and spatial practices, as situated within three different modes of production: 'spatial practice', 'representations of space' and 'representational space'. This is interrogated in detail in chapter 1 and is studied for its potential to examine sound in the production of symbolic representational space.

The chapter contends that the gap in research on space and the production of space centres on a lack of consideration of the role of sound in creating, defining and designating spaces with meaning. Although Lefebvre refers to sound as significant in his final chapter of The Production of Space, he does not interrogate or inform the reader as to its significance, in any detail. Since the 1960s, Murray Schafer (1977), an acoustic ecologist, has argued for the inclusion of sound in theories of space. His research has helped develop an aggregate of sound types, which work to segregate particular sounds within space, and to give distinctive meanings to these sound types. Since Schafer, much research has appeared which seeks to contextualise sound within society; conversely, the focus, until recently, was on sound as a scientific or technological phenomenon (Clarke 2007; Thompson 2004; Truax 2000), apart from some theorists who examined the role that 'noise' plays in civil society (Bijsterveld 2008; Radovac 2011; Schwartz 2011).

Chapter 2 explores the development of audio technologies alongside the mediation of audio technologies. It also focuses on the history of audio-technological developments and how social shaping and constructivist processes advanced audio-technological designs and their eventual use. The chapter expands and discusses the various theories of technology: social constructivism, social shaping, technological determinism and actor network theory. It emphasises the importance of social shaping in the mediatization and use of mobile audio technologies in navigating public space. This is situated within the chapter's exploration of the technological soundscape, which for some theorists coincided with, and supported technological audio mediatization. It also addresses the literature on noise within the modern and post modern landscape, frequently linked with advances in technology and the increased presence of industrial centres within modern cities. Finally, it explores the technological soundscape and technologically mediated soundscapes, distinguishing between the two as socially constructed in different ways.

Chapter 3 examines the transdisciplinary approach undertaken for the collection of data. This approach means crossing over the disciplinary boundaries, blurring the differences between fields of knowledge. It required integrating ideas from the fields of sound art, acoustic ecology, psychoacoustics as well as traditional social science methods, focus groups and interviews. The methods involved extending the reach of the discipline by using an interdisciplinary approach. It involved using a creative process to examine and interrogate sound as a social process. The young participants took part in the data collection, documenting the soundscape in various ways and later, during focus groups, they analysed the ways in which sound - both real and mediated - shapes one's experience of space. It was important that the young participants feel a sense of ownership and autonomy in the data collection. The strength of this approach lies in the placing of research collection and data analysis in the hands of one's participants (Harding and Norberg 2005). The participants' interrogated the researched space, its purpose, and the meaning of certain sounds in the everyday - how sound defined place, placelessness or non-place.

The research also involved the creation of a unique method - sound and pyramid mapping - which involved removing the markers of physical space, such as lines and trajectories and replacing them with empty space designated as potential layers of

sound within space. It was not the intention of the research to have a cartographic narrative of space, as this would involve flattening out the landscape, a process, which de Certeau (1988) argues, ignores the subjective experience of walking through space.

Using a transdisciplinary methodology allows for the crossing of boundaries between scientific, technological and non-scientific knowledge. This is in response to a growing recognition of 'concrete societal problems', which demand that researchers "go beyond purely disciplinary research processes and approaches" (Bergmann et al. 2005:6).

Chapter 4 examines sound as socially constructed, defined by such structures of inequality as class, race, gender and age. The chapter offers an analysis of the processes employed by young people in forming their own cultural autonomies. Whether this is in the privacy of their bedrooms and the use of technologies and information they access within (Bovill et al. 2001; Livingstone and Bovill 2001; Stald 2008), or in their use of the public space of shopping malls, squares or street corners (Kato 2006; Watt and Stenson 1998); space is integral in the creation of young people's social worlds. In this study, sound was defined as a significant tactic in managing social and private spaces. Some of the key research questions asked of the young participants were; what impact did sound have on the appropriation of public space by teenagers? Did certain sounds create threatening, hostile or welcome spaces? Did they use mobile audio technologies to walk the landscape, if so, why and where? Comparisons were then made between the soundscape of Dublin's city centre, defined as the locus of the city, and Smithfield and its environs, defined as urban spaces outside of the city centre. The key findings of this chapter lie in the designation of quiet spaces as non-places, whereby the young participants identified Smithfield as not a part of Dublin city, even though it is less than a kilometre from the city centre. This they argued was due in part, to its lack of meaningful urban sounds. Secondly, silence is identified as a threatening sound within urban spaces as it signifies abandonment, poverty, addiction and unemployment. The young participants recognised that silence was increasing within urban spaces as a result of the global recession.

Chapter 5 examines noise as a social construct; it is one area of sound studies that has developed a sociological role, though the data are primarily quantitative. Noise, as a subject within policy and technological debates, continues to play a leading role in discussion about sound and the social. Noise continues to be labelled within quantitative surveys and policy forms. This chapter examines the ways in which noise as a social construct stems from historical narratives involving the seclusion, silencing and segregating of classes and gender (women). It also puts forth the argument that noise control policies continue to enforce systems of suppression dating back to antiquity (Schwartz 2011; Thompson 2004). This chapter argues that noise is a highly subjective construct, and therefore difficult to conceptualise, let alone police. Additionally, spaces identified as noisy are often located in the poorer districts of cities. In two ways this is linked to class; first, poorer areas are often badly designed, with roadways placed close to urban housing and cheap materials used to build public housing, therefore providing no sound proofing. Second, these areas are often overcrowded with thousands of families living in close proximity to each other. Thus, these areas come to be defined as noisy and are often the subject of noise policy discussions. This is often without examining the local and subjective meanings that sounds have to these communities. This chapter argues that noise policy, and definitions of noise, are still intrinsically connected to class and gender categories.

Chapter 6 argues that mediated listening, and responses to the technological soundscape by audio mediatisation are two different experiences. The former, mediated listening, is highly contextual, and this chapter interrogates the various ways in which context shapes mediated listening practices. It examines the role that external sounds play in the strategies of mobile mediation adopted by teenagers. The chapter explores the context of the home as a space for mediated listening and examines how teenagers develop strategies to deal with badly designed social housing (thin walls), silence (non-places or dangerous spaces) and gaining autonomy (controlling one's listening space). The latter analysis, of the 'mediating out' of the technological urban soundscape, argues for a rethinking of urban soundscapes as abstract or unintelligible. Furthermore, it claims that young urban teenagers have adapted to the loud modern city, and use media technologies to maintain a connection to these levels of sound when alone or in quiet spaces. Further, mediated listening is

seen to create a sonic barrier between them and dangerous spaces, also defined as quiet spaces. Something which Blesser and Salter (2009) would categorise as a form of acoustic architecture.

Finally, the study argues that sound should be integral to the creation of sustainable urban spaces. It also asks that developers, designers, urban planners, and managers of space, consider all of the social groups, which inhabit such space, as many groups are frequently excluded from urban planning. Young people are often defined as a kind of noise in public spaces, and many approaches have been adopted to push them out of the public view and into the private; thus young people become users of mediated spaces at home, rather than equal users of public urban space. Future research within soundscape studies, noise policy and urban design needs to reflect on how the sensory impacts on all users of space. Lefebvre argues that it is only through the creation of productive, representational spaces, usually by excluded social groups, that the idea of a community emerges. For Lefebvre, sound is an integral part of productive space, and "space is listened for, in fact, as much as seen and heard before it comes into view", thus "a homogeneous and utterly simultaneous space would be strictly imperceptible. It would lack the conflictual component (always resolved, but always at least suggested) of the contrast between symmetry and asymmetry" (Lefebvre 1974:200).

1 Sound and socialisation

1.1 Introduction

This chapter looks to place sound within an urban social context, framing and contextualising it as an important part of research on space, place and spatial practices. The study of audio cultures, noise cultures, and the soundscape are explored in very different fields of research with very little overlap: ethnomusicology, communications, history and the physical sciences. These all explore sound within society but in very different ways (Schafer 1977; Smith 1999; Sterne 2003; Truax 2000). The result is that while there is a large field of research into sound, there is often a separation between sound as a physical and scientific object and the social meaning of sound. This study brings together the literature on sound as a physical and scientific object and the literature on the social meaning of sound to develop an interdisciplinary approach for the analysis of how young people connect with, manage and mediate sound in their everyday lives.

This chapter will examine the critical theory on space and place, as well as research conducted on noise and the soundscape. Sound, as a phenomenological experience, is non-linear; it exists in multiple spaces simultaneously *and* happens over time. Unlike the visual, which is static and restricted to a point of view, sound is fluid. This fluidity is underexplored in the examination of symbolism within social space. This chapter will explore how theoretical positions on space and time have evolved and will focus on the works of Henri Lefebvre, David Harvey and Edward Soja. Their conceptual frameworks and theories of other spaces, 'thirdspaces' and 'representational spaces' lay the foundations for the examination of the soundscape as a meaningful embodied and social experience. The concept of non-places is interrogated, as it relates to the homogenization of public spaces.

The importance of the role of sound in interpreting and understanding space is examined. It is necessary to understand the role sound has in the use, design and interpretation of public space. This chapter will also explore the history of acoustics

within urban sound research. It is important to interrogate how sound studies have evolved from research predominantly within the natural sciences and science and technology studies to the broader fields of phenomenology and social shaping studies. It is only in recent studies that sound is emerging as critical to understanding social practices; however, there is still a significant gap in the area of sound as an embodied experience with the power to shape and reconstruct social spaces and social practices. The chapter will explore the regulation of sound through environmental research as well as the impact of technologies in the creation of loud soundscapes. Finally, the chapter examines the innovative research of Murray Schafer whose research exposed the impact of modern urban design and economic globalisation on the soundscape. His creation of terms to define aspects of the soundscape, including his description of what a soundscape is, lay the foundation for examining the soundscape of the social world.

1.2 Theorizing the city space

Lefebvre (2004) and de Certeau (1988) adopt different approaches to knowing the city. Lefebvre examines space, as opposed to place, as a series of narratives, social realities and spatial practices. He argues that space, as a social product, is not created by a single person it always in a state of flux, or as Massey argues "it is always in a process of being made" (2005:9). Whereas, for de Certeau (1988), place is static, situated in located-ness, which it defines through the ordered placement of objects; space is where the intersections of time, movement and direction occur. For de Certeau, "space is a practiced place" (1988:117) there is a dependence between spatial practice and spatial narratives (as in the stories of space unfolding legitimises space), whereas Lefebvre's triad of space: spatial practices, representations of space and representational space, makes space a process.

Lefebvre argues that each culture experiences space and time differently, whether they are following a more mechanistic time, based on the capitalist regulation of the working day, or a more natural clock based on circadian rhythms. Time and space are seen to undergo very different types of compression; spatiality is newly defined by new technologies, which can seem to compress geographic boundaries. The idea of

distance as a problem for communication and production no longer exists in a strong technological culture. Even when establishing new familial ties, it is no longer necessary to live close to people in order to form relationships. However, even within large western cities, where numerous cultures exist and the exchange of ideas flows across the city, communities still tend to form locally, as do relationships (Jacobs 1992; Tonkiss 2006).

Lefebvre posits that the postmodern western city operates under new biological and reproductive imperatives, which have changed people's relationship to space. Even if space is assumed to be in "thrall to production", a space, which exists only as a force of representing power and knowledge, will eventually become an "abstract space". Boundaries, for example, become a critical notion in urban space, as do the underlying rules of the use of 'free space'. For Lefebvre, production is the underlying thread of how space is approached and understood; he suggests that "every space is already in place before the appearance in it of actors" (1974:57).

Lefebvre's triadic spaces are, the 'spaces of practices'; these are spaces that provide continuity, spaces of rules and symbols (macro), in which one inserts the flow of money, information and labour (meso), 'representations of spaces'. In the middle of this, one has the symbolic space or lived space, it is the space of "human experiences (Watkins, 2005), of people's sense-making, imagination, and feeling – that is, their local knowledge" it "embodies both conceived and perceived spaces without being reducible to either" (Zhang 2006:221), 'representational space' or symbolic space.

However, it is the ease of which a symbolic space can become ruptured as a result of economic collapse the redesign/re-designation of space, which is problematic in Lefebvre's triad. The triadic approach to space suggests equanimity of control or use of space, the failures of the 1960s student uprisings in Paris and the global economic crash of the 2000s, highlight the fragility of space, particularly symbolic space.

This conceptual framework of Lefebvre's is ambiguous and, on closer inspection, he does not identify particular representational spaces other than to say that they exist within most urban spaces. Rather, he suggests that it is an ephemeral idea that cannot be identified or legitimised through text; otherwise it will lose its intangibility. For Lefebvre, this revolutionary act of re-symbolising space can only exist if it is not clearly identified. However, the redefining of space through symbolic social

practices, the micro-element of social groups, challenges the hegemonic control of social and spatial structures. The use of sound as a symbolic force can help shape or challenge the meaning of space, altering so called fixed structural design and use³. This process can be applied to the examination of the soundscape, highlighted in table 1.

Table 1 Lefebvre's 3 spaces

Material	Representation	Imagined
The sounds of production.	Spaces conceived: the	Directly lived. The
The reverberance of	placement of businesses,	soundscape that is
objects and materials	streets, the arrangement of	interpreted, imagined and
within space, physical	space, alters, shifts and	created, it is ephemeral but
space affecting sounds	transforms the soundscape.	it can also be historical. A
produced within space.	Urban planners do not	space can become known
Acoustics. Interpreting	consider this alteration.	for its practices of sound-
these sounds every day.		making.
Smithfield area in Dublin-	The reconfiguration of	Ritualistic sonification of
the market soundscape,	space through urban re-	space. Street music,
unique to this space	design	groups chatting, teenagers
		gathering.

De Certeau (1988) describes in more detail this idea of remapping space through the use of space. For him, it is in the act of walking through a space, either as a practice of everyday life, in that one journeys through space for very particular reasons, work, socialising, travelling, or touring space (the flâneur), that allows one to change spatial meaning and in turn create a place. Space is designed from above with ideas of use and movement being a coordinated practice, defined by economics and structural edifices of power. De Certeau opposes the use of trajectory (in that one follows marked journeys as if reading a map) when defining movement through a space this type of mapping is

"insufficient precisely because a trajectory is drawn, and time and movement are thus reduced to a line that can be seized as a whole by the eye and read in a single moment, as one projects onto a map the path taken by someone walking

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³ For an example read Skating the 'Burb: The Regulations and the Negotiations of Suburban Teenage Skateboarding by Yuki Kato

through a city. However, useful this "flattening out" may be, it transforms the *temporal* articulation of places into a *spatial* sequence of points" (de Certeau 1988:35).

De Certeau uses the example of the worker to outline in a micro way how power relationships are challenged when it comes to design and use of objects, which can be paralleled with the use of space. De Certeau argues that people renegotiate their use of consumables, destabilizing consumer/producer relationships from the bottom up. The producer/employer has a particular idea of how their goods or time is used. Yet, inherent cultural values play a part in what the user/worker does with his product or time. De Certeau argues that it is possible to analyse the producer/employer's intention or goal, but it is less easy to analyse the user intent. In this manner, one can trace a similar intention towards the use of space and the perception of space and time being very different to the intended use of space. For de Certeau "these practitioners make use of spaces that cannot be seen; their knowledge of them is as blind as that of lovers in each other's arms" (de Certeau 1988:94). Space becomes defined by a subconscious use of space, where meetings and intersections, which are not predetermined, shape new trajectories, thereby 'altering space'. This also opens up the idea of a global problem of use. Consumables have become global products, yet, as de Certeau argues, cultural values alter how products are used. The intention of the producer tends to be global and general, but inherent ways of using materials, specific to certain societies, can alter meanings. A more contemporary reading of space is offered by Doreen Massey whose examination of space has led to her defining place as nationalistic, closed, averse to change and its value "endlessly mobilised in political argument" (2005:5). She rejects the notion of place as coherent, just because it is defined as "home". But Massey recognises the need for place being defined by those securing themselves against the homogenization of globalisation and asks, instead, that we recognise the multiplicities of *space*.

1.2.1 The limitations of visible and material space

But in what way does this multiplicity of spaces manifest itself? This chapter argues that sound is one of those processes. Both Lefebvre and de Certeau site the problems of the dominance of the visible in examining the urban. For Lefebvre it is "the logic of visualisation" (1974:41) which has become enshrined in urban design, setting up space as a view of linear perspectives. In other words, only that which can be seen immediately can be experience or interpreted in space. This ignores the phenomenon of sound as representative of spaces unseen, which can also be experienced, and sound as a process for making space and changing the everyday experience. For de Certeau the visible is even more intractable, as our society becomes "characterized by a cancerous growth of vision, measuring everything by its ability to show or be shown and transmuting communication into a visual journey" (1988:xxi).

Thus we can begin to explore the materiality of sound within space as a by-product of spatial interaction. Lefebvre's holistic triadic space allows one to embed sound within spatial narratives, it becomes the "sphere of the possibility of the existence of plurality" (Massey 2004:109). Sound allows space to become manifest with infinite possibilities that fixed objects and actions cannot generate. The design of global spaces or the top down approach to urban planning ignores or does not identify the sounds occurring in space which define spatial practices and the interpretation of space. Schafer's (1977) examination of urban soundscapes identified the making of placelessness through the homogenisation of space as a result of global urban planning. Sound, as a force within space, is invested with specific social/local codes, which are difficult, even impossible to interpret by outsiders. To locate sound within Lefebvre's' triad we need to examine sound as part of space.

Harvey argues that space is conceptualised differently by various cultures but also by different sub cultures within communities such as "children, disabled, oppressed minorities, men and women of different class, rural and urban dwellers" (1995:203) and the elderly. So when describing space objectively, one must be careful not to generalise. In a city one is surrounded by architectural structures that shape the space, its sounds, people's use of space, and economic practices (Lefebvre, Moore, and

Elden 2004). The local, the inhabitant of a place, is not explicitly aware of the multitudinous types of information that they encounter as they move through a space (Lefebvre 1992). The flâneur, the newcomer to the city, is surrounded by the input of data that is the everyday of a place; she must parcel out this information in order to be able to understand it from a subjective perspective. It is through the interpretation of space, seeing space as both material and phenomenological, that one can imagine space.

This imagined space or 'thirdspace' is a space that is spatialized, in that it incorporates, historical, geographic and social exchanges, which according to Soja (1996) allows for "extraordinary openness" when it comes to reading space. In this way, Soja argues, space becomes three dimensional, beyond the traditional notion of physical space as obviously three-dimensional. This is a progression of the Lefebvrian concept of space as a container of non-linear information, which aids in the formation of new social and productive spaces. History and material processes, as well as social practices, do not follow a progressive line of thought; rather, they are spatial. Information and practices flow in a more temporal way. For Soja this way of seeing the world more spatially is a rejection of the binaries of modernity, although he does not dismiss it completely. For Soja (1996), space is also made up of marginalized spaces or radical spaces and these too must be included in studies of urban spaces. The 'dizzying' array of spaces that have been articulated, which Soja lists alphabetically, include "contradictory, dominated, epistemological, fresh, plural, sensory...true" (Soja 1996:59), even fractal spaces. Spaces of this type, according to both Soja and Lefebvre, are a means of creating different social and political spaces. They also "straddle the breach between science and utopia, reality and ideality, conceived and lived" spaces (Lefebvre 1974:60). They are ways of repossessing the spaces of production and social life. Sensory information constantly allows space to be imbued with alternate meanings (Degen 2008:40). Additionally, sound has been used intentionally to alter space and spatiality (Blesser and Salter 2009). Accordingly, the increase or decrease of sensory information, such as sound, which is not often considered within space, will create new understandings of both the temporality of space and spatial practices.

Examining the thirdspace perspective means, as Soja (1996) argues, exploring the 'polyphonous' nature of voices and sounds within space. Soja uses musical analogies to denote how space can be represented as a production; although his terminology is linked to the language of music, which reflects both de Certeau (1992) and Schafer's (1977) examination of the world as rhythmic and sonorous. This may be because of the traditional notion of music being more transitory, rhythmic and not static, or because concepts around music and the arts in general are viewed as being less objectively experienced, where the production of both art forms is not linked or tied to power structures, even if they are tied to knowledge structures. The arts and music in western cultures traditionally privilege "heterogeneity and difference" over the 'absolute truths' of modernity" (Harvey: 1995: 9). However, it does not altogether work in discourses of the soundscape, with its links to transience and ephemerality and aesthetics, instead, the soundscape can, for various reasons, be a permanent part of space, through its repetition and connection to historical, cultural practices.

The space of the city, if seen from above, (and this view from above is not confined to a view of the above of a city but a removal from the city machinery), does not allow one to witness the flows and rhythm of a city (de Certeau 1988). De Certeau (1988) argues that when we become part of the flow of the city we cannot see the whole; the city becomes a series of places, which one navigates through. Adams (2008), Westerkamp (2007), Shafer (1977) and Augoyard (1979) argue that it is precisely at ground level that one understands the city/urban space. They argue that sound, which moves from the outside in, allows users/walkers of space know their city beyond the physical view of the eye. The soundscape by definition is both an immersive and holistic phenomenon, it defines activities (the sounds of production and consumption), the shape of space (through acoustics) and the time of day (sound is cyclical). These sounds are not just heard where they are produced, rather sound, because of diffusion, spreads beyond its source.

1.2.2 The production of non-places

Finally, we explore the opposite of space or non-place, as defined by Augé. Augé (2009) argues that the issues which arise from assigning places codes of practices and behaviours, can ultimately result in a place's loss of meaning. Universalising meaning, particularly in the global consumerist context, leads to non-places, as spaces vie to identify with certain social groups through ambiguous metaphors. For example, spaces, which are designed to become public spaces, are increasingly aimed at types of publics. However, the definition of a public space is fundamentally ambivalent. Designers of public spaces therefore seek to rationalise an "ideal-type idea about which possible role and meaning public spaces could or should entail for the development of more human cities" (Houlstan-Hasaerts et al. 2012). The public space today is often defined as a place within a city; they are "squares, parks, streets or simply all those spaces in between home and workplace, home and shopping centre, home and another home" (Parsa 2012:33). Public spaces exist because of a process of continuous definition, over time, of a place in which to assemble. This is critical because it claims that the public space is also a political space, a place in which people can gather to debate, dispute, even become active in political dissent, as well as a space for leisure (Lefebvre 1972). Through the redesign, or making of public space, these freedoms or rights to the city often disappear, as the desires of public planners rarely "match the requirements of the fulfilment of the right to freedom of assembly" (Parsa 2012:33). Harvey argues that the right to the city as a public space is " a common rather, than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization" (2008:23). Augé argues that a public place which no longer concerns itself with history and identity will become a non-place. He advances that 'supermodernity' "produces non-places, meaning spaces which are not themselves anthropological places" (Augé 2009:77) because they do not integrate the earlier identities and memories. Instead, new public spaces, such as the Smithfield square "are listed, classified, promoted to the status of 'places of memory', and assigned to a circumscribed and specific position" (Augé 2009:78). The sounds within public spaces are also increasingly marketed to cater for types of publics, the public park for example, in which it is presented as "a stage and an oasis for our busy city lives" (Yang and Kang 2005:62) where sound is defined as a sensory aesthetic. However,

few urban planners examine the subjective engagement with aesthetic sound, instead designing objects in space, which they consider will provide a universal experience.

1.3 The emergence of sound studies and its relevance to the city

The topographical and outline/skyline of a place are a visual descriptor and metaphor for the activities, economic, social, and often religious that take place within most western cities (Harvey 2001; Schafer 1977). The architectural materials used to build cities often define a city's social, cultural and economic activities, for example, the use of stone within cities such as Paris and London play a role in their representation as high cultural capitals. This is created through the design of imposing edifices, wide boulevards and grand stately buildings. In opposition to these cities are those of steel, chrome and glass, for example, New York, Tokyo and Hong Kong, features of modernity, capitalism and globalism. The meaning of these visual descriptors of a city or town are not solely written into the physical; some would argue that without the sonic, meaning would be not attributable and space would become an abstract set of geometries through which humans would travel without recognisable markers (Adams 2009; Blesser and Salter 2009). Sounds within each of these sites will have significantly different meanings but will also sound different as they reverberate off these distinctive materials. Schafer (1977) suggests that contemporary cities around the world have developed, over time, a set of aural signifiers, which identify place and space more significantly than physical structures. He proposes that this is one of the reasons that cities, both local and global, become sites of significance. As western cities become more homogeneous in their physical make up, Schafer argues that what is left to identify place as unique are the sounds. However, some argue that even the sounds of cities are edging more towards homogeneity because of globalized urban design (Blesser and Salter 2009).

The term soundscape is used to define sounds that exist in space (Schafer 1977); the sounds of a place, both natural and manmade, play a large part in defining space, culturally, economically, socially, and geographically. Schafer (1977), in creating a

language for the soundscape distinguished three terms: 'keynote sound', 'soundmark' and 'sound signals'. He later appended 'archetypal sounds' to this list, as a means to delineate ancient sounds inherited from antiquity. Each description designates meaning to particular sounds within the soundscape. The 'keynote sound' is the fundamental tone of a space and is analogous to a musical term, for example, the sounds of forklift trucks moving crates within a market space are identified as a fundamental tone of that productive practice. Within the Smithfield area of Dublin, one hears this sound from approximately four a.m. onwards. It is a sound that sits frequently in the background of a space, which subconsciously becomes an identifier of that space. This 'keynote sound' is unique to the soundscape of this part of the city, as it is the only area within Dublin city to have a fruit and vegetable wholesale market.

The 'soundmark', is a sound that emanates from one space. Schafer saw this type of sound as a 'community sound', one that signified a specific meaning to a community. The 'sound signal' is a sound which attracts your attention: a fire alarm, bell, whistle, something which is in contrast to a 'keynote sound', in much the same way "as figure and ground are contrasted in visual perception" (Schafer 1977:275). Though these conceptualizations help us to analyse the sounds of a place, from a more subjective perspective, the words themselves limit the elucidation of sounds as a social contract between people and space. Schafer's terminologies appear frequently within soundscape studies, but such research regularly ignores how sound can be co-opted and transformed through everyday social practices. Schafer's terminologies have become a framework imposed on sound research and has become somewhat universalized and rigid as a method for interpreting the soundscape. Though an urban space is made up of Schafer's sound descriptors it is also more than, or beyond these. Sound is socially constructed; it is navigational and geographical and the physical characteristics of sound have to be "understood from a human perspective" (Truax 2000:xvii). We either engage with sounds actively or with 'passive detachment'. This is critical to understanding how the urban soundscape involves or removes social discourse from a space.

1.3.1 The soundscape of history

In his research on medieval towns in Europe, Schafer (1977) recognised that sites of power are often situated within geographically important spaces which, over time, become more significant. Schafer examined the positioning of castles, forts, churches and cathedrals, arguing that these architectural forms are historically situated near rivers and seas, close to developed travel routes, and that both the geographical location and the developing city or town had distinctive soundscapes based on natural and manmade sounds. However, Schafer argued that as cities increased in size and capacity, it became difficult to distinguish individual sounds. As towns evolved into larger spaces, with more areas assigned to production, and living spaces becoming overcrowded, the ability to hear, and know what one was hearing was lost.

Medieval city profiles had clear indicators of the most important structures, one of which was height, the other sound (Schafer 1977). The bell from the church and the sounds from the mill would have sounded out through a town, defining the economic and religious powers within the space, unifying as well as creating symbolic profiles which people understood. These profiles were as much aural as physical (Schafer 1977; Bloch 1987). The water mill, the church, the bell and the clock regulated the day in pre-industrial Europe; they marked time, worship, work, play and sleep. These sound markers, were incredibly important not only in describing a place, but in linking sites to each other and equally separating them out (Schafer 1977). If the church bell could be heard in neighbouring villages or towns, then the sound mark could be seen as encapsulating and describing not only a place's religion but the hold this religion had on the space, in this way a sound could constitute the emerging life of the city. Dublin, as a medieval city, was a centre for trade, it surrounded a river, contained numerous churches and its citizens had multiple languages. The two main cathedrals have dominated the soundscape with their church bells: Christ Church cathedral built in 1030 and St Patrick's cathedral founded in 1191. It is only in recent times that their sound has lessened with the increased presence of technological and mechanical sounds in the city. Although Dublin was never a major industrial city (like Belfast), it remained a trading post for agricultural produce and brewing as well as garrisons of soldiers. While the medieval city was based on the south side of the

river, the 18th century developments were more on the north side, around Smithfield (this will be explored in more detail in chapter 4).

From the 16th century on, factories were increasingly placed within city zones in Western cities such as London and Berlin (Smith 2004). These cities also saw an increase in population as a result of the decline of farming communities, with more people moving into cities for employment and housing (Smith 1999). These changes, by themselves, would present us with a city, which was not only increasing in population but also in the production of variant sound types. These sounds were socially and culturally specific; they suggested the city's economic and productive practices, and the subsequent social soundscapes that evolved shaped the modern urban village. Smith (1999) argues that the ever-changing flow of wealth within London for example, consistently changed both the physical and aural landscape. Early forms of gentrification occurred in numerous areas where traditional economic practices had occurred, such as street marketing and street entertainment. In an effort to gentrify space these forms of economic practices and street entertainment would be pushed out of areas into more marginal spaces, thus creating the necessary 'silence of wealth' (Bijsterveld 2004). In the 19th century industrial city, the soundscape would be defined by the factory whistle, the sound of traffic, dockyards, construction, or whatever particular industry dominated cities in the west (Braun 2012; Thompson 2004).

Sounds are described as both centripetal and/or centrifugal: that is, sounds that draw people towards them or push people away. In some circumstances, certain sounds can do both, for example, in the modern industrial city, the sounds of a factory would be defined as centripetal, "it attracts and unifies the community in a social sense" (Schafer 1977:54), and yet, it was considered also centrifugal as it was categorised by the middle classes as a form of necessary noise, one which no educated or wealthy person would choose to live near (Thompson 2004). During the 19th and 20th century cities were defined as spaces of fluctuation, shifting in design and meaning. Thompson (2004) argues that the large scale changes in the structure of cities, during the modernist period, failed to reflect or consider how the sounds of the city would

also change with design. It was argued that the "hum" of industry up until the 18th century had "now made way for the shriek of industry" (Thompson 2004:121).

Schafer's (1977) layering of space into distinct soundscapes has allowed researchers of acoustics to connect the social, economic and political to the sonic descriptions of space as well as examine texts for historical sound types and soundscapes. Schafer examined how communities created unique sounds connected to historic and familial connections, whether this was through language or other daily practices of living. Sound, Schafer argued, as a force, would dictate the use of space.

1.3.2 Sensing sound and the contemporary urban landscape

Walking through a city requires the use of all of our senses. When examining the construction of cities, buildings and public spaces such as parks and squares our understanding of meaning and intent is perceived through a number of senses. Sound, both constructed and as a part of the production of a space, informs us of a space's purpose (Adams 2009; Sterne 1997). In an attempt to describe the city and the urban as a space, one needs to explore how the phenomenological sets a path through space which one follows. It is important to recognise that the individual interprets the soundscape subjectively, moving a space beyond structure into definition and character (Blesser and Salter 2009). Sound is not simply a force that moves around objects; it passes through and vibrates space and objects, including human organs. Blesser and Salter (2009) argue that while sound is rarely considered in the design of buildings, institutions or streets, it nevertheless, becomes an integral part of a space. Augoyard and Torgue (2006) have adopted some elements of the Shaferian view of the soundscape as a way to describe space, however, they have advanced the social implications of sounds and society, specifically, how the "basic sensual effects" (2006:207) of space allow the user of space to feel a sense of place. An example of this is the bare marble floors and walls of an office lobby loudly announcing the arrival of visitors by the resounding echoes of their footsteps. In contrast, thick carpeting, upholstered furniture, and heavy draperies, all of which suppress incidental

or reflected sounds, mute that announcement. The aural architecture of the lobby thus determines whether entering is a public or private event (Blesser and Salter 2009:3).

Rarely are spaces, which are meant for public social use, such as health clinics, social welfare offices, council offices and hospitals, designed to suppress sounds. Instead, the floors are laid with parquet flooring, stone or tiles. In Ireland, numerous public offices are floored and walled with stone. Sounds invariably reverberate loudly in such spaces, making every person's presence known when they walk through or speak; it becomes a space, which inhibits sound making. In other words, people accessing these spaces, such as welfare recipients, sick people or housing applicants, may feel intimidated at the prospect of their voices reverberating in these spaces, thus, bringing attention to their presence or business. This suppression of the voice speaks of positions of power and observation from above (Foucault 1995). The large reverberant spaces of bureaucracy act like an arena in which all sound is contained and monitored. The concept of these acoustic designs, even if accidental, speak of bureaucratic and governmental principles of design, which are interpreted thus, while also seeking to make those who enter respect the space as they would a church. While interpretations of the nature of materials can be useful, one must be careful of narrow definitions, as historically the choice of building materials was often based on the materials available within a country (Schafer 1977).

Sterne (1997) in his exploration of the soundscape of the 'Mall of America' examines how constructed 'muzak' creates significant meaning within interior spaces of consumption. In contrast to Blesser and Salter's exploration of the materials themselves creating acoustical information, which is thought to have implicit meaning, Sterne argues, that 'muzak', is a type of architecture, which configures and shapes space. Unlike the patriarchal style of architecture of modernist buildings which hold meaning within them (Harvey 1995) Sterne's malls present themselves as spaces of the 'banal' and as such they incorporate music and sound to designate zones of consumption. Sound is also used to construct barriers or doorways: "through clear acoustical delineation, the music produces a sense of inside and outside". It is also used to create spaces defined as part-time, recreational spaces. In addition, the

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⁴ A definition given to music, which is specifically created to mimic styles of music for use in public spaces

removal of muzak from a space, the silencing of space, is seen to discourage 'loitering' (Sterne 1997b:32).

1.3.3 Sonic geography

Harvey (2001) in describing the post-industrial city of Baltimore points out that there are extreme differences between the description of an urban space and what actually takes place within them. While he alludes to forces such as politics and economics, he rarely signifies the sensorial as data that can be used to map space. Yet, the soundscape of a place can be as specific a map or descriptor of an historical moment as its architecture. The city, therefore, is made of locative sonic sites, places in which the sounds are as much a marker of the activities of the area, community, government, industry etc. Schafer's (1977) research on describing and analysing the soundscape of place revealed many historical and contemporary links between people, politics, economics, architecture and the soundscape. These spaces contain what Olick and Robbins (1998) call "collective memory" or memory traces. They argue that the rise in interest of collective memory is linked to the "rise of multiculturalism" (1998:107). Further, they go on to suggest that the everyday memory traces are part of historical frameworks and that there have been distinctive differences between historiography studies and memory studies, usually the difference is interpretation. Sonic memories can locate and define the changes in a space, political, social and structural (Woodruff 2013), as is evidenced in the data collected in this research discusses in chapters 4 and 5.

Schafer (1993) suggests that the soundscape can definitively shift the relationship people have to space if changed; whether this is a subtle or forceful shift depends on the culture and community, their connection to space, familial ties etc. Harvey (2001) explores how Baltimore was plunged into a spiralling economic downturn in the seventies by the transformation of its industrial centre as well as the shifting geographies within the city. He examines how the physical landscape of the industrial period had now become an 'eyesore'. These depictions of urban decay and decline remain within visual descriptors, which ignore the sonic geographies tied to community and local identity. Thus, the response to urban decay and unemployment continues to be embedded within ideas of construction and the creation of new physical spaces, businesses, and cultural or shopping quarters. When economic goals

are pursued by businesses and city councils, usually these improvements take on the form of new designed public and private spaces, and, as such, are seen as enterprises, which will improve the course of the city. Harvey notes in his reference to Baltimore that this for the most part has not paid off:

Even with the costly modernization projects recently undertaken with taxpayer dollars, the port of Baltimore is barely competitive as a major seaport on the East Coast. (Harvey 2001:145)

This reshaping of architectural forms and the shifting of economic activities within a city do not coincide with improved social conditions for the people who live there, who have operated within a particular soundscape shaped by the economic and social as well as cultural activities of a city for a period of decades (Corcoran 1998; Hamnett 1991; Lever 1991; Peillon and Corcoran 2004; Punch, Redmond, and Kelly 2004; Truax (2000) argues that external stimuli create 'subjective Zukin 1987). impressions' of the world to the individual, and that increased stimuli also increases our subjective responses to space, a discovery within modern psycho-physics. If, over time, individuals and groups are increasingly exposed to particular external acoustical information, relating to the everyday practices of an industrial city for example, from the work-a-day activities of labour to the movement of people through space, the audio information that exists in that space becomes a fundamental keysound to the lives of people who live and work there. To become familiar with this keysound one must have a relationship to a space as "whatever is communicated by an environment takes a longer period of exposure to become evident" (Truax 2000:52). Additionally, environmental sounds are not passive, there is a response mechanism which equally develops over time, which allows people to alter this communication through the coopting of spaces for different social uses (Lefebvre 1974, 1992). Truax's model of the relationship of sound to society, or as he terms it the 'acoustic community', is based on a feedback system, whereby sound "structures includes not only the elements of the sound environment and their relationships, but also the pragmatic level of the context within which all of it occurs" (see figure 2) (Truax 2000:55).

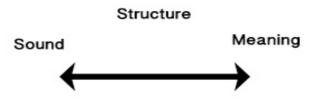


Figure 2 Based on Truax's model of sound and meaning..

The space itself is also configured by the activities that take place within it; real objects and real sounds which have practical and definitive purposes only have a definition because of the bodies that co-exist within any space (Lefebvre 1974). It is the link between the sound, the structure and the meaning that is not defined in this model; how is meaning constructed from the structure of sound? It is the interpretive city, the city of the day-to-day activities that suggests how meaning may be applied to understanding the soundscape.

The view that all meaning frameworks have histories and that explicitly pastoriented meaning frameworks are prominent modes of legitimation and explanation leads to increased interest in social memory because it raises questions about the transmission, preservation, and alteration of these frameworks over time. (Olick and Robbins 1998:108)

The sounds of a place are markers with layers of meaning that define a spaces economic activity. However, this is only one layer of meaning for which Lefebvre (1974, 1992) would argue reveals part of a space's function. It is representational and symbolic space, which is necessary for the cohesion and continuity of space. However, if a space is only defined by its productive practices, and given legitimacy through concrete ontological and binary codes, what is lost is the potential for a continuous discourse of space, the representational space, a space with a "multitude of intersection(s)" (Lefebvre 1974:33).

1.4 Regulating the soundscape

Bijsterveld (2008, 2004) argues that the suppression of sounds within cities is a twofold argument, one that is based on the dramaturgical element of sound. For example, there are sounds that describe social and economic activities of space, and sounds that are described as noise in the sense that they cause a disturbance to the general well-being of a populace. The management of sound has a long history within a number of western countries, the USA, France, Germany, Britain and the Netherlands, to name a few (Adams et al. 2006; Bijsterveld 2008; Thompson 2004). Yet the sound of a city can be as much a landmark as any other site-specific object. Cities are bounded, not only within walls and walkways, paths and roads, but also within sound. The propagation of sound is only limited by taking actual action against its proliferation (Bijsterveld 2001, 2003, 2008). The soundscape moves outside and within place where the city is made up of 'acoustic arenas', walls and partitions. The grouping of buildings and the density of population create very different acoustic spaces within a city (Blesser and Salter 2009).

The awareness a culture has of their soundscape is understood and managed in various ways, one is the control of sound through legislation, which is a macro project, and the other is the control of the individual or small group soundscape through the use of information concerning the damage of sound to both the physical body and the psychological mind. As shown below, government agencies have taken it upon themselves to highlight the dangers of noise to their citizens in the broader governable space. For example, the US Congress argues:

- 1. That inadequately controlled noise presents a growing danger to the health and welfare of the Nation's population, particularly in urban areas;
- 2. That the major sources of noise include transportation vehicles and equipment, machinery, appliances, and other products in commerce; and
- 3. That, while primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce control of which require national uniformity of treatment.

(Law Revision Council 2010)

The end goal, as Foucault would argue, is the self-regulation of sound in the sense of 'bio-politics' for the broader good of society (1990). Sound management has arisen side by side with the increase in sounding or sonifying technologies; one could argue that there is a constant link between the production of sound and the management of sound.

Schafer (Schafer 1977) first posited the concept that sound needed to be assessed in its own terms; it needed to be studied and critiqued as a field of both historical and ecological consequence. Schafer's approach was to segregate sound into two parts: sound that was pleasing, a part of nature or natural sounds, generally non-invasive, and informative; and noise, noise being categorised as unwanted and uninformative sound. Truax (2001) later critiqued this split between positive and negative sounds and developed further theories which examined the connectedness or designated meaning of sounds to individual communities, societies and cultures.

Nevertheless, Schafer highlighted a particular problem relating to the idea of noise and society that was, up until that moment, excluded or ignored in the literature. He examined the ambiguous and problematic relationship between industrial sound and contemporary society. Schafer was based primarily in North America, close to the 'Rust Belt' of America. He witnessed first-hand, what he considered the side affect of modern industry collapsing in the major cities of the USA, Chicago and Detroit. Industries, such as car manufacturing, smelting, ceramics, mills, etc., were defined as having a serious impact on the environment and society at large. Schafer linked industrial practices, the increased presence of technologies such as cars and planes to noise, which he argued was as much an environmental hazard as other pollutants.

While Schafer's research has highlighted a fundamental process for understanding the soundscape, his work has been limited to the examination of sound volume and proliferation. Schafer (1977) posited that from the late nineteenth century on, the world became a noisier space; representing a romanticised notion of the world as a quieter place before 19th century technological advancements. Schaferian terminology began to be seen increasingly in the literature in most fields of research

into the soundscape (Mags Adams 2009; Truax 2000; Sterne 2003; Thibaud 1998). However, his ecological perspectives are problematic primarily because they are based on a simplification of the city versus nature differential.

Schafer's research revealed divergences between the perception and relationship to sounds within urban centres. The idea of noise as a universal concept was rejected by the World Soundscape Project, which has collected significant data on the sounds of numerous urban cities worldwide, since the 1970s. The most common differences in the perception of noise were traffic sounds. For some cultures; Canada, USA and Germany for example, the increase in traffic sounds were seen as a negative byproduct of city life - the sound of cars, trucks and other vehicles were seen to cause high stress levels within city centres and the highest number of complaints made against nuisance sounds was against traffic. In contrast, Schafer's data on the causes of noise in South Africa, found that insects and bird sounds were categorised as noise by urban residents.

What Schafer highlighted was the deep connection between people and place; place as a force, which produced sound, and people who experienced it. He does not however, explore the interpretive or imagined space of sound or as Lefebvre would argue the 'representational' soundscape, which embodies "complex symbolisms, sometimes coded, sometimes not, linked to the clandestine or underground side of social life" (1974:33). Although Schafer (1977) establishes clear connections between sound production and sound intention, there is little qualitative discovery of interpretation or use of sound by the listener, beyond that of a comparison between loud and quiet, or sound as a symbolic representation of an activity. His attention was clearly focused on the preservation and exploration of the soundscape as an environmental space. This way of approaching the soundscape removes it from the control or everyday experience of people. The interest in sound causes, sound pollution and noise issues, instead, shape sound as meaningless within space, it becomes an object separated from subjective interpretation or community differences and is seen as something to be controlled, ignored or managed, rather than understood. The problem with thinking about sound as an object to be classified and managed is that one becomes fixed on a concept driven by the visible rather than the audible.

Technology is often seen as the harbinger of acoustic noise, and contemporary practices of noise reduction have grown over the past century as a response to the belief that such noises are detrimental to health (Bijsterveld 2004, 2008; Thompson 2004). This is further explored in chapter 2 and chapter 4.

1.4.1 Sound as an environmental issue

One can accept that the city is a complex entity, sometimes considered an organism by those who approach from an ecological perspective (Gottdiener and Hutchison 2006), limitless and profound, made up of physical as well as sensory experiences, crowded with cultural uniqueness and community and individual ways of approaching, adapting to and navigating the city (Anderson 2008; de Certeau 1988; Harvey 2013; Hirschkind 2004; Schafer 2012; Zukin 1995). Exploring the eco or environmental city has also altered the concept of the city as definitions for positive urban landscapes i.e. green cities, are advanced by various researchers (Campbell 2003; Irvine et al. 2009; Poredoš 2011), including Schafer (1977). Schafer and the World Forum for Acoustic Ecology (WFAE) have supported the concept of environmentally aware cities as spaces where one can hear the soundscape in high fidelity (the ability to hear individual sounds within the wider soundscape, with Whereas, low fidelity soundscapes (spaces where there is such a concatenation of sound that no individual sound can be heard with clarity) are described as noisy spaces, and that new forms of urban governance must tackle the causes of these noises.

Increasingly noise policy papers argue that certain sounds over stretch their boundaries, invading public and private spaces, as well as impacting on the body (DCC 2009; Radovac 2011; Rylander 2006). Researchers in environmental studies argue that the modern city soundscape is no longer a part of the so called uniqueness of cities, rather, it is seen as a ecological and social problem, linked to the over consumption of oil through traffic and the presence of industry in urban spaces (Bijsterveld 2008). The sounds of the city block off the interpretation of the city as one moves through; the flâneur can no longer enjoy or parcel the city into unique destination points, as the city as a whole is surrounded by ambiguous noise.

Increasingly, greening a city means investing in how to make the city quieter. However, there are significant challenges in attributing environmental problems to sound because of the very nature of environmental activism. Harvey examines the ambiguity of the word environmentalism, and how its use in different settings, by different groups highlights the inability of groups to have definitive meanings assigned to the term environment: "that a single word should be used in such a multitude of ways testifies to its fundamental incoherence as a unitary concept" (Harvey 1993:2).

In this way, attributing to a sound the term noise and qualifying it as a nuisance, pollutant etc., without first asking what part that sound might play in the everyday lives of those who inhabit the soundscape, ignores the possibility that sound segregation might have more to do with the social dynamics of spatial meaning and control than environmental concerns.

1.4.2 Noise as a class concept

Smith (1996) in his exploration of the early modern English soundscape highlights the links between unwanted sounds and the peasant classes in cities. These sounds were often connected to economic production, markets, deliveries and textile mills, Shafer also examined the links between sounds connected to peasant classes and production such as weaving and metal work i.e. blacksmiths. Complaints about noise are part of the earliest documents of mankind, from the ancient Romans complaining about traffic noises, to the ancient Greeks prohibiting industrial sounds in urban areas (Bijsterveld 2004; Schafer 1993). Schwartz (2011) argues that noise and its inherent class and gender associations stem from antiquity. Certain sounds became associated with particular classes and their associative productions and social spaces, and were defined as noise by an elite educated and moneyed class, specifically the upper classes. Intellectuals from the 17th century to the early 20th century, such as Babbage, Schopenhauer (1818) and Haberlandt, argued that noise destroyed the ability to reason and think. Schopenhauer went further arguing that the producers of noise "the mob" or working classes, had very little use for thinking; "there can be no harm in drawing the attention of the mob to the fact that the classes above them work with their heads, for any kind of headwork is mortal anguish to the man in the street" (1818:48). This suggested a particular elitist or intellectual class associated with quiet

and silence, or an appreciation of both, and another class associated with the production of sound, a working class who had no need to either think or reason.

This particular standpoint connects sound or noise to production and the working classes, which according to Schafer (1977) and Bijsterveld (2004), culminated during the age of technology and modernism in the latter half of the 19th century into the early part of the 20th century. They explore this association of the working classes to the production of sound, but they do not expand beyond this connection. This production of sound and the association of human force creating this sound, suggests that sound became more than a set of signifiers relating to activities such as production; it is part of social structure. Schafer's polemic on noise unfortunately continues to legitimize types of sound segregation or suppression, where sounds are defined as negative, damaging to the psyche or environment. This is without trying to understand the subjective meaning of sounds or even sound levels. What Schafer (Schafer 1977, 2012) has created, which is undeniable in its contribution to the field of study, is a case for examining sound as a social phenomenon.

The next section argues that it is the centrality of sight and the visual in urban design, which has played a part in the shaping and production of 'loud cities'. (where I will look at class)

1.5 The dominance of the visual in western urban design

The relationship between space, place and person is often defined in terms of physicality, presence, vision and perceptibility; expressions relating to sight or seeing (Sterne 2003). Dialectics, which have evolved over the course of decades within social theory, favour a dominance of visual critique, a syntax, which has evolved on the back of the Enlightenment. The Enlightenment is said to have revealed, through the natural sciences that which was traditionally hidden by layers of mysticism. With the natural sciences, knowledge was measured as the ability to reveal through sight the meaning of things, a move away from the mysticism of religion. Sight therefore became the dominant sense connected to the sciences, almost at the expense of the other senses and their abilities to reveal truths amidst other sense observations. This

rearranging of meaning, through language, places the experiential or empirical information at a distance. Attali argues, "Western knowledge has tried to look upon the world. It has failed to understand that world is not for beholding. It is for hearing. It is not legible, but audible" (1985:3).

Lefebvre argues that the conflicts between the sciences and urban design arise when a space is divided into "logico-mathematical space on the one hand" and the "practico-sensory realm of social space" on the other (1974:15). What occurs in the design of city spaces when the phenomenological is ignored, tamed or controlled through scientific management is abstract space (Blesser and Salter 2009). Often the construction of urban space is shaped by more practical ideas, such as stylistic concerns, material use and aesthetics, as sensory information is relegated to the fields of subjectivity and interpretation, therefore useless in urban design (Blesser and Salter 2009). The sensory space is seen as having to figure itself out after the fact. In contemporary terms, there are a number of projects within capital cities, not the least of which is Dublin city, where the designers/planners of space neglected to examine the sensory experience of the urban and the everyday.

The process of urban design and public social planning has become anchored within graphical representation, even when extensive examinations reveal that "the quality of a place does not derive solely from the attributes of the physical environment" (Reflecting City 2012). Designing space does not automatically mean that one constructs a social space; instead, space is, as Massey argues, always under construction. This reconstruction of space involves a re-imagining of the everyday use of space, which Augovard argues goes unseen by the managers of space "preoccupied as they are with the major characteristics of "social life" (1979:23). This reshaping of space takes the form of aural architecture which is "a complex amalgam of spatial attributes, auditory perception, personal history, and cultural values" (Blesser and Salter 2009:11). As an essentially invisible phenomenon to the managers of space sound is easy to ignore, yet it is crucial to the inhabitants of space as "sound mediates the affective and emotional energies within, across and between human and nonhuman bodies" (Duffy and Waitt 2013:469). Consequently, the sounds produced within urban spaces are "crucial to making sense of self and the world" (Duffy and Waitt 2013:467).

However, the dominance of visual based design has frequently created ruptures between former communities of space and new urban designs.

"Visually disposed language, furthermore, favours thinking about sound as an object, but sound functions poorly in this regard: it dissipates, modulates, infiltrates other sounds, becomes absorbed and deflected by actual objects, and fills space surrounding them." (Kahn and Whitehead 1994:4)

Paul Rodaway (1994) argues that language and the use of metaphors are based in the aesthetics of the visible and visual. Metaphors, constructed in part as a way of describing things as a whole, do not work in describing sounds, they materialise sound, presenting us with a fixed image of the world.

"We seem to think primarily in terms of synthetic wholes—the view, image, scene—or attend to a particular angle—or point of view, perspective, outlook—and identify discrete objects set in the context of other objects as a relatively stable image. An auditory world unfolds like a tune, a visual world is presented already complete like a painting." (Rodaway 1994:82)

Historically, sight has been significantly overestimated in its ability to reveal the accuracy of things, including the experience of things, 'seeing is believing'. Sight is said to be how we assess the spatiality of space. We see how large a space is, the tallness of structures and the skyline tell us about the possible activities economic or social that may take place there (Harvey 2001, 2011). Inde argues that "sounds are first experienced as sounds of things" (2007:60), when describing sounds there is the tendency to describe the object that produces the sound. Buildings are structures, cars are vehicles, and factories are a combination of concepts and architecture, from manufacturing/ economical structures to physical places. Experiential listening, for example, is not taken into consideration in the construction of objects, for example, groups and individuals come to have an association or link between an object and the sounds it makes and this can affect our engagement with that object (Degen 2008). Ihde suggests that our ability to discern minute details within the listening experience is taken for granted, yet, "this common ability of listening contains within it an extraordinary richness of distinction and the capacity to discern minute differences of auditory texture, and by it we know to what and often to where it is our listening refers" (2007:60).

Synnott (1992) argues that "human history can be "seen" as a progressive sensory shift from olfaction to oral-aural to vision, from the nose to the mouth/ear combination to the eye. But in both theories the eye is supreme" (1992:621). Yet spaces are not silent, waiting to be filled momentarily with objects and people, neither are they spaces that we interpret visually, spaces are filled with sounds, detailed, crowded, temporal and spatial, as much as they are filled with other sensory information which describe space (Degen 2008). Synnott's argument however would place viewer and space as separate, and that spaces are perceived through an evolving set of sensual priorities. Lefebvre argues that the traditional model of exploring space is one of a body occupying an empty space. This places the space and the body as 'indifferent' to each other therefore "anything may go in any 'set' of places" and again "any part of the container can receive anything" (1974:170).

In today's modern western cities we are increasingly surrounded by technological sounds, which are amplified by the architectural layout of cities and towns (Bijsterveld 2008; Blesser and Salter 2009; LaBelle 2010). There are key points within cities where we can distinguish between traditionally produced soundscapes and a modern industrial soundscapes. Imai (2008) argues that these divisions are usually between low level, low volume sounds produced by older methods of production, versus modern, technological methods of production and consumption. Each way of communicating something that is sensed is a sign that must also be interpreted through the politics of culture or social meaning. The production of technologies from computers to aeroplanes, cars to industrial lines, and various architectural buildings styles, all add to the sounds within the inside and outside spaces of the urban. The amplification of sound, whilst transforming how and where sound is now heard, has irrevocably altered the experience of most spaces, exterior and interior.

The acoustical side effect of increased sounds in the everyday is the advances that have been made in soundproofing and noise cancelling (Hagood 2011). Buildings and vehicles for example, have become spaces of acoustic privacy (Bull 2008; Cleophas and Bijsterveld 2011). We are increasingly constructing spaces, both virtual and physical, that remove us from the experience of the technological soundscape, or

that allow us to control our interior soundscape in the same way that we can control air conditioning or heating (Sterne 1997). There are of course cultural differences between acceptable sound barriers, as there are different interpretations of what is considered intrusive sounds (Blesser and Salter 2009). The limitations in isolating oneself from the soundscape are also increasingly tied to economics, what can one afford to pay to shut out sounds from a noisy soundscape? The assumption is that people want to shut out the soundscape; however, very little research has been conducted to examine how local inhabitants feel about the sounds that surround them.

Urban design has developed significantly in western cities. The layout of paths, roadways and other transport systems and the design of structures and buildings, are composed to focus on the flow of space as well as linking exterior to interior spaces (AUT 2011) while exploring the interiority and connectedness to place through focusing on sense perception and immersion (Degen 2008).

A number of design projects around the world have explored this notion of spatial design, where the link is often sustainability. Increasingly, spatial design focuses on new socio economic factors such as the link between design and people,

"creating a correlation between creativity and spatial structure through: Socio economic conditions – Softscape, Morphological structure- Hardscape" (Sarker 2005:1).

According to Sarker, whilst the hardscape is the resources required to make a city, a softscape model of urban design is based on structures of organisation, which bring together different demographics. Instead of designing city spaces from above, looking at zoning, ordinance, physical structures etc., one must examine more creative processes, social inclusion, tolerance, branding etc. and the soundscape, to be included.

1.6 Conclusion

This chapter examined the literature on spatial meaning and the construction of space, it presents the key theorists of social and physical space, exploring how space is imagined as well as realized. The urban becomes a centre of differently created and fragmented spaces. Spaces that are constantly under construction and which are created from the top down through hegemonic structures, and the bottom up through subversion and protest. However space is consistently framed within the context of the visible, the physical and the static, even those theorists who argue that space is symbolic, define these symbols as representations, bodies within space conducting practices which reshape meaning. For example, young people or teenagers using spaces in ways not planned by urban planners or designers or the assembling of protest groups within public spaces. Space, though defined as metaphoric and invisible, is rarely defined as aural, sonic or sounding space. The debates on sound as integral to space are offered by those who suggest that sound plays a significant role in the creation of spaces of meaning, community spaces and even productive spaces. A space without sound is an abstract set of geometries with no possibility for interpretation, because one's experience is limited to a point of view. Instead, sound offers the flows and movement of space; it reveals time and activities through the sounds, which are differently produced within space. Sound is also in constant flux as conditions such as the weather can impact on the dispersal of sound. Because sound radiates from a space it can encapsulate a space within one meaning, in other words a space can be connected to specific activities and practices because of the sounds produced close to or within a space. An example given is the significant sounds of the two main cathedrals in Dublin city and their bells, which have rung for nearly a thousand years. Historically we are given examples of sounds that also defined spaces as places of specific productive practices, the sounds of mills and foundries.

Space now becomes more than a set of structures, paths, objects of symbolic power or productive practices, it is not just the space in which people inhabit, it is a sensory and sensed space. Sound is produced within a space through reflection (where it reflects off different surfaces changing its sound) and reverberation (the echo of sound in space). Communities and individuals also produce sounds in order to claim ownership of space, to give space more than a physical meaning. This is explored in detail in chapter 4.

Conversely, sound is now considered in the design of structures and the re-design of older spaces, as it is considered useful in the shaping or creating of sensory meaning. In much the same way that buildings and spaces are designed to reflect conceptual ideas such as culture and history, for example, the laying of cobbles within redesigned spaces in Dublin city, Temple Bar and Smithfield Square, which are meant to bring awareness to the history of such spaces. Sounds and the ability of sounding spaces are now considered within urban projects (Cain et al. 2008). Further, certain projects have considered the importance of retaining soundscapes and specific sound markers, in order to maintain the continuity of spaces (Adams et al. 2006).

However, the chapter argues that it is the centrality of sight, the visible over the aural, within scientific studies of space and city design, which has led to the ignoring within the literature, of the importance of sound in spatial practices and city planning. Instead, noise as a subject has dominated studies of sound, a focus on sounds as either negative or positive (sometimes positive can mean silence) within urban spaces. The problem with this focus of a binary soundscape is the history of sound as a measurement of volume, tied intrinsically to a class and gendered system of analysis, this is explored in some depth in chapter 5. Within this regulation of the soundscape, is the move from systems of analysis which would explore sound as subjective and interpretive, leading to a more holistic approach to urban design, to systems of segregation, whereby spaces become identified as noisy without asking what these noises mean to local inhabitants, or even asking how they feel about being identified as a type of noise. One cannot separate the production of sound from the producers of sound.

With the development of the technological city, the city of cars, trains, plains, mediated music and tannoy systems, policies of noise control are supported by stating that it is the technological city that must be managed. However, as stated within the chapter, technological noisescapes are just the successor to the mechanical noisescape of the 18th and 19th century, successors to the sounds of production tied to the working classes, throughout history (Bijsterveld 2004; Schwartz 2011; Smith 1999).

Tonkiss states that "sound threads itself through the memory of place"; it can "deceive and displace, too – or at least can open out spaces to imaginative translations" (Tonkiss 2004:306). We move through space through shifting

soundscapes, or one mediates through space in order to ignore everyday sounds that have no meaning to one's everyday life. Yet, "those who try to explain the difficulty of managing public problems of noise, then, tend to invoke arguments that refer to our culture's interest in, if not its obsession with, economic growth, to the innate characteristics of hearing, and to the apparent sensory priorities of our culture" (Bijsterveld 2008:15). Although many argue that the sounds of urban city spaces have become louder over the last one hundred years, there is now more legislation than ever to monitor and control sounds in cities (2008; DCC 2009; EEA 2009a; Eurocities 2013; Noise Off 2013; NOISE.europa.eu 2011). In Ireland, there are also public policies designed to explore and control the levels and density of sounds within space (DCC 2010; Law Revision Council 2010; HSE 2010). Instead of applying quantitative models when examining urban sounds, one must ask, what does sound tell us about space and the communities contained within them? This is the key question within this research as it directly refers to the inhabitants of the urban, those who live, socialise and work within the city. It is their interpretation of space, sound, place and non-place, which gives space meaning. The next chapter examines how spaces are increasingly mediated and explores how audio technologies have evolved in response to users desire to manage public and private soundscapes.

2 The mediated and technological soundscape

2.1 Introduction

This chapter looks at the relationship of audio technology to sound, space and society. The audible comes to have a very different meaning when it is altered through technology. The presence of sounds created by technological artefacts is a dominant part of the postmodern soundscape. Our engagement or disengagement with these sounds is increasingly mediated. This mediation, particularly with mobile audio technologies, alters our perception and relationship to different urban spaces.

The engagement with macro technological soundscapes (spaces which are either mediated through music or the sounds produced by large technological objects i.e. factories or traffic) and the hegemonies that control the auditory environment, are explored through the experience of mobile mediated listening practices.

This chapter explores mediation, the term technology, and the theories of technology. Technology, which has become broadly defined, implies an ambiguity to the word or process, which define the technological. Audio technologies and mediated listening further stretch concepts of technology because sound, a phenomenological and sensory experience, intimately transforms technological and socio-cultural experiences because of its impact on the body. This chapter emplaces technological soundscapes within the theories of technology, arguing that as a process it shapes everyday experiences.

First the chapter highlights the four key theories of technology, technological determinism, (TD), social shaping theory (SST) and its development within social constructivist theory (SCOT), though some argue that SST provides a broader approach to the study of technology than social constructivism (Williams and Edge 1996). Social shaping theory challenges the "linear conceptions of technology development and its consequences" and offers a greater understanding of the relationship between technological innovation and "social well-being" (Jørgensen, Jørgensen, and Clausen 2009:80). The diverse theories of technology remain divided

in the examination of subjective versus objective scientific and technological innovations. Additionally, SST argues that there should be an openness to the role of technology in shaping a culture, a kind of soft determinism. The chapter also explores the more recent and still controversial actor network theory (ANT), a framework that considers all of the infrastructures involved in the creation of a technology. ANT, in its inclusion of almost every actor in the network of technology, argues for an equal consideration to all involved, an argument which still creates problems in science and technology studies (STS) today, which is argued within the chapter.

The chapter also explores the development of audio technologies, from its origins as a recording technology to the development of communication technologies, the phone. The second half of the chapter places sound and audio at the centre of technological use, design, mediatization, the body and technological spaces, using the framework of SST. It argues for the inclusion of sound within STS not as a central part of technological use or design but as a key component, which must be considered in an increasingly mediated society. This is key when examining processes of mediation and mediatization. This chapter will also examine social structures such as class, gender and politics in their shaping of audio technologies and the technological soundscape. In keeping with the social shaping approach, it is important to explicate the broad processes involved in the production and use of technology. This chapter highlights how minority groups, excluded groups and non-western cultures, come to have very different experiences with technology, and how the consumption of technology is shaped by these diverse groups.

2.2 Mediation and mediatization

Van Loon (2007) in his critique of media technologies reveals the historical narratives associated with the introduction of new media. Context becomes critical in understanding the impact of media on a culture, what are the socio economic situations that countries find themselves in when a new media is introduced and how does this media change a culture. Van Loon argues that historically change is not necessarily dramatic, that the cultural ethos and episteme are perhaps prepared for the

introduction of a technology such as print. When print was first introduced to China during the Qin Dynasty, it decentralised the bureaucracy of Chinese culture but still contributed to a similar style of disseminating power, information and learning, only over greater distances. However when he looks at the introduction of print technology in medieval Europe the context is radically different as the introduction of print created new ways of reinforcing older power structures related to feudalism. The document becomes the legal binding power of relational ties and commitments to Lords and land; this replaces face-to-face contact, which was the traditional method of maintaining feudal systems. In contrast, Thompson argues that it was the printing press, which allowed for the diffusion of ideas, playing a fundamental role in the spread of Luther's and the reformist's ideas. In a comparatively short period of time, the ideas of the reformation were spreading across Europe even though "attempts were made in various cities and countries to suppress the literature associated with the Protestant revolt" (1995:57).

The intertwining of technology and daily life according to Van Loon cannot be easily separated on inspection. This may be because there is no divide between the two, when one fails the affect can be catastrophic;

"In contrast when technology no longer functions as expected; when a danger (or risk) is being revealed, when we are confronted with discomfort and inconvenience, the enframing is no longer 'taken-for-granted' and technology no longer 'holds sway'" (Van Loon 2007:30).

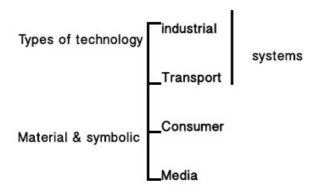
However the idea that technology no longer holds sway when it no longer works, is a simplification of how much technology is used to create and sustain not only our relationship to space but our connection to social groups. Boyd (2007) for example, explores the role of online social networking sites as playing a large part today in the lives of youth. In this way, although technology does not act by itself, or operate without controllers, neither is it neutral.

Leman (2008) argues that mediation is the process by which technologies give us access to information such as music, technology does not replicate the experience of listening in a performative setting, and this is critical. In this way music is not transparent in its representation, as it removes the listener from the sound energy of a

live performance. Stereo headphones are increasingly used to siphon out the urban or technological soundscape and encase us in fields of silence, thus, we mediate through various social spaces through shaped sonic experiences (Blesser and Salter 2009; Bull 2000; Hagood 2011; Thompson 2004). The concept of media technologies as mediating devices between real world and mediated worlds is now a common enough theme, but it is necessary to explore this mediation (Leman 2008; Stald 2008; Thompson 1995). It is argued that technology acts as a conduit to other spaces; social spaces for example, now extend beyond real geographical boundaries (social networking sites (SNS)) (Boyd 2007). They are also objects that we use to experience our world in a different way, using them to remediate our spaces, for example, using headphones to listen to music. This mediation allows us to have new sensorial experiences, which fundamentally change how we perceive space and time. Couldry (2008) defines mediation as transmitting something, sound, image, text, through a medium. This is quite a limited explanation but it sums up the process of using media technologies to access information such as music. However, Thompson uses the term mediatization (according to Couldry "he avoids the term 'mediation' because of its broader usage in sociology" (Couldry 2008:379)), to define the large organisations established with the development of media technologies, which he argues, profoundly changed "patterns of communication and interaction" (Thompson 1995:46). This is a broader social and cultural process, less focused on the technology. Mediation is closely tied to the technical and is medium focused. Meditization takes on the emergence of multiple media platforms, for example, blogs, SNSs', YouTube etc. "as new communicative forms" (Couldry and Hepp 2013:193). For media theorists it has become necessary to look beyond the triad of media research, production-textaudience, "toward the open-ended and nonlinear (as we would now call them) consequences of media as they circulate through our lives" (Couldry and Hepp 2013:193). The use of audio technologies to mediate space or the mediatization of music and broadcast radio have arguably altered the way in which people not only interpret music and audio information, but the ways in which we listen.

2.3 What is technology?

Technology has come to mean many things. Ellul (1980) states that the term technique, which technology derives from, meant a certain way "of doing something". However, as the machine and technology began to dominate life, *technique* or now technology, began to "designate the processes of constructing and exploiting machines" (Ellul 1980:24). Williams (2003) states that the technological is all of the systems within the creation of technology as opposed to a specialist one, it is the "practical application" of technique. For Williams technology is a process of networked techniques, which create a technological object. There are numerous types of technologies and technological systems.



Mackenzie (2006) argues that technology is part of the structure of society. It is:

- Physical: technology operates to manage the use of space and the control of space, such as networked systems that manage traffic and the movements of people.
- Infrastructures: government agencies from the local to the national, welfare systems, medical and health board agencies, education and environmental agencies now more than ever are heavily computerised, which means that in essence all information could be centrally accessed.
- Virtual: Within the space of the internet and other mediated environments we use technology to map systems of disease, the spread of work forces and the movement of information and money. These systems operate to look at layers of information within a virtually generated environment to explore various social and political ideas.

These technologies overlay most of the real world and are a superimposition of

geographies that shape how the world is organised. Winner would argue that the effects of technology have become inscribed even within the sense of the self, "when we use terms like "output," "feedback," "interface," and "networking" to express the transactions of everyday life, we reveal how thoroughly artificial things now shape our sense of human being" (1989:ix). This deterministic approach however ignores processes at work which play a significant role in shaping technologies and their use from design to use (Bijker, Hughes, and Pinch 1989; Bijker and Law 1994; Kitchin and Dodge 2011; Oudshoorn and Pinch 2003).

The use of technological systems to send and receive information has altered not only the connections we create in business, it has challenged for example, through the use of email, fax machines and mobile phones, the way we communicate ideas. It also questions the way we form relationships over long distances, for example, phones, social networking sites and mobile technologies (Berker et al. 2005a; Hirsch and Silverstone 1992; Livingstone and Bovill 2001; Winston 1998). The ability to package and send data, which contains intricate and large amounts of information, has altered the meaning of information, as well as our relationship to technology as a mediator of ideas (Mackenzie 2006).

Technology has altered concepts of borders and spatial geographies, and created problems in relation to the governing of information and access. In 2010 Google (an internet search engine) complained about the excessive control of information access of Chinese residents. This was in response to an apparent cyber-hacking of Gmail accounts belonging to human rights activists made by the Chinese government. The BBC stated that "China operates one of the most sophisticated and wide-reaching censorship systems in the world" (2010), and in a time when technology and access to information are becoming synonymous with democracy, the ideas of controlling technology and information become intricately political. Feenburg (2002) argues that technological democracy is linked intrinsically to 'cultural Westernization' which denies concepts of 'pluralism'. Western cultural ethos is linked to a more individualised society whereby everyone has the apparent right to an opinion or to

different ideas. Therefore, the use and access to technologies are seen as not just a possibility but also the right of the individual. This is only one definition of use and accessibility; the western ideal also means that anybody should be able to design or redesign technology. In this sense the political idealism of a culture can be intimately connected to the shaping of technologies and ideas around technological use.

"Critical theory argues that technology is not a thing in the ordinary sense of the term, but an "ambivalent" process of development suspended between different possibilities" (Feenberg 2002:15).

The systemic use of technology in everyday life has definitively altered our relationship to space and ideas, and technological determinists would argue that this is of course the natural process of a ubiquitous technological world. However social constructivists and social shaping theorists argue, that this "promotes a passive attitude to technological change" (Wajcman and MacKenzie 1999:5). The development of technological systems or objects is neither linear nor inevitable. Whilst, actor network theorists argue that technology is only part of a series of nodal or social consequences in the relationship between man and machine (Latour 2005).

Before a technology is created it has embedded within it the social and political interests of a culture, and that technological "design is an open process that can produce different outcomes depending on the social circumstances of development" (Klein and Kleinman 2002:29). Additionally, every result of analysis, even within the natural sciences is open to interpretation, a part of "intergroup negotiations". Examples of some of these include Hagood's (2011) examination of the development of noise cancelling headphones, Cleophas and Bijsterveld's (2011) research into modelling sound experiences and design in electric cars as well as Pinch and Bijker's (1987) seminal work on bicycles and fluorescent lights. This is quite relevant when we explore the adaptability of early communication technologies (telephone and radio). Sterne (2003) and Winston (1998) explore the evolutionary progress of audible devices from the telephone to the phonograph. They argue that despite the fact that the inventors were trying to create technologies for the hearing impaired or the deaf, these technologies have transformed in their use, value and design by adjusting to the demands of the public and other actors (Oudshoorn and Pinch 2003).

2.4 Theories of technology and media

2.4.1 Technological Determinism (TD)

McLuhan (1962) in the 1960's, (at the beginning of the age of modern media after print, manuscripts etc.), acknowledges the power of a medium and the power of the media. For McLuhan, technology is not only deterministic but also inherently embedded with its own motives. The medium itself implies its use and power in shaping society. For him the TV as an object, transformed family life, it altered our use of space in the home, and peoples everyday lives were increasingly constructed around programme schedules (1967). This was similar to the scheduling of family life around radio programming in the 1930s (Verma 2012). The media opened up new avenues of information whether this was introducing new types of music, political ideas, products or drama. McLuhan argues that before the medium of TV and radio we lived in a kind of ignorance of the broader world.

This deterministic approach, presents a dystopic view of the world, whereby the control of ideas and behaviour is under the influence of the technologies that surround a society (Ellul 1980, 1990). In part this is because of the increasing ignorance people have about the technologies they use. Some technological systems are so complex that they have become a kind of contemporary magic, where the ability to design technologies are placed within the hands of a few experts. However, Winner (1989) argues that the approach of technological determinists is to highlight the moral and ethical implications of technology, areas which theorists of the social constructivism of technology (SCOT) and actor network theory (ANT) fail to explore. Determinists argue that if society is shaped by technology then we must examine the extent of this shaping, for example, the inscribing of behaviour based on responses to technological systems. Implicit within TD is the notion of the passive user and designer, acceding to the advances within technology.

Winner (1993) argues that technology and media play a role in altering our daily practices, in more ways than ever before, but this argument ignores the fact that technological innovations are often reactions to social or structural changes (Bloch 1987; Schwartz Cowan 1987). Adorno and Horkheimer (1993) in their examination of the impact of the culture industries on society, present the dominant pessimism of

TDs. That is the lack of control that humans have over the development of technologies, which may ultimately lead to their downfall, such as the atomic bomb. They were looking at the side effect of culture industries such as music and film etc., connected to technology, as creating the greatest divide between the rich and the poor as the power of these mediums and technologies were increasingly monopolised. Technology, by definition, becomes a commodity, which they argue creates a 'demand over need'. In other words the public bought into the notion that technology was something that had to be acquired in order to be *like everyone else*, and that the "technological rationale is the rationale of domination itself" (Adorno 1997:121). Technological determinism is still a prevalent approach in popular and academic circles. As Wyatt (2008) argues, technological determinism is for the moment, here to stay as long as it remains, by certain actors, a justification for certain changes.

2.4.2 Social Construction of Technology (SCOT)

Social constructivists such as Pinch and Bijker (1987) as well as Schwartz Cowan (1987) argue that technological design is secondary to the power of human shaping. They describe detailed evolutionary processes by which a technology becomes part of society, fuelled by such minutiae, as the ability to promote one's technology over a competitor (Schwartz Cowan 1987). Core concepts of social constructivism are:

- Interpretive flexibility- this is taken from the empirical programme of relativism,
 EPOR, which states that scientific findings are open to interpretations rather than fixed or closed results. Interpretive flexibility allows for technologies to have multiple design outcomes; technologies and technological systems have different meanings to different social groups.
- Relevant social groups-The essential social groups are the users and the producers of the technologies, in that "all members of a certain social group share the same set of meanings, attached to a specific artefact" (Pinch and Bijker 1987:30), but groups can also include competitors, journalists and even those disinterested in the technology.
- Closure and stabilization addresses consensus in the design of technology, during the design of a technology, particularly in a multi-group situation, there is often controversies as different interpretations of its use "lead to conflicting images of an artefact. Design continues until such conflicts are resolved and the artefact no longer

poses a problem to any relevant social group" (Klein and Kleinman 2002:30).

Schwartz Cowan's (1987) examination of the home refrigerator reveals extensive factors such as cash flow, the power of electrical companies over gas and the political influence of interested parties, as some of the main factors leading to the success of the electric refrigerator over the gas powered refrigerator. However the invention of materials, which allowed for the production of this technology is ignored in her research. Research into the properties of metals, chemical reactions and even electricity itself is not included as playing a part in influencing how we now eat and store food.

The social constructivist approach to technology implies that technologies alter or change in their design according to feedback from other actors/stakeholders/nonusers. These can include investors, politicians, men, women or children. The phone for example, originally designed to be used in business and state agencies, altered in design and access as a result of a form of co-opting, by home users, particularly women, in the early 1950's (Winston 1998). Winston, who examined the development of the phone only marginally recognises the role of women in the change of communication practices and technological development. The use of the phone in the home rather than in the office played a part in the networking of phone lines, and the placement of phones in certain spaces in the home, as well as in all probability the design of the phone. Early texts cited in Winston (1998), highlight how Emile Berliner, one of the first designers of the telephone, was told by a telegraphic operator, that the use of telegraphs by women was limited because of the pressure required to hold down the buttons for long distance messages. Berliner, in response, went on to design the first lightweight telephones. In other words the type of user, (women), shaped the construction of the communications infrastructure. Van Oost (2003) in her research into the design of shavers also explores the impact of gender on technological design and advertising. Gender, she argues, is understood by designers to mean one thing, whereas, technology is designed to respond to gender and technology assumptions.

The social construction of technology was a dominant theory from the 1980s on, and became a part of critical media and technology theory. It developed in response to

technological determinism. Technological determinism, as argued by McLuhan, meant that technology had the power to shape society, which ignores political, social and economic motives. Social constructivism offers an alternative approach to how technologies become embedded within society, though it is, as Latour (2005) argues, another binary position. It places the human as the instrument in the design and use of a technology. In this way SCOT argues that a non-human entity cannot shape its existence or use. Where the argument becomes weak is in a culture where technology is now such a huge part of daily life that the potential for the collapse of social structures is almost inevitable if a catastrophic failure were to happen (Castells and Cardoso 2006). Certain new social structures have been created as social groups are linked together by technology, for example, the creation of virtual technological spheres like Facebook, Bebo, MySpace and emailing. Young people use technologies to alter their experience of space, create new friendship networks and sustain long distance relationships (Boyd 2007). Ito (2004) argues that for young teenagers the mobile phone allows them to have a new sense of freedom from the home and structures, which manage other parts of their life and day. If any of these systems were to collapse it would greatly impact on the ability of people to maintain international and local networked communities.

Networked systems, mobile phones and public transport have created the potential for global business and social relationships to mobilize despite time/space differences. The possibility for expanding one's social sphere and the transformation of social life in general is made possible by the use of technological networks and technologies if one takes the soft deterministic approach. It can be argued that, technology, though it may not be a living entity, can become a way of living, so much so that social groups and social structures can form networked relationships and alternative social spaces. Winner argues that social constructivism must put aside its neutrality or 'interpretive flexibility', where flexibility "soon becomes moral and political indifference" (1993:372).

2.4.3 Actor Network Theory (ANT)

With ANT, formulated by Latour, Callon and Law (1997; 2005), there is a radical shift from the polarities of determinism and constructivism, towards a more integrated

theory of technology and society. They argue that society, which is intricately technological, is part of a network that shapes both spaces. In fact it could be argued that for Callon and Law (1997) there is no real distinction between the two. Latour argues that we must return to the origins of the term social to examine the intricate elements, which make up the social. However he also argues that the word social is too broadly used to suggest a social world that forms the basis or sits behind every activity from war to politics. Instead the world is made up of micro processes which have their own fundamental structures such as the technological or scientific fields, which can either form a society or not. This concept makes up the basis for ANT; Latour argues that sociologists "begin with society or other social aggregates, whereas one should end with them" (2005:8). In the case of technology we must first examine the aggregate points or networks that form or are formed by technological spheres or shape technological objects. To apply ANT to mediated listening the sociologist must examine the society of the technological listener, the auditory culture of mobile listeners, the design of technologies, the policies of music dissemination, advertising, proponents for or against mediated listening, and downloading of music etc. Although Latour subscribes to using the term Actor Network, he does consider it a useless and almost meaningless term, but its very meaningless makes it useful in debating the term social and the associations made between inanimate objects and networks of people.

Callon and Law (1997) argue that the social is heterogeneous, that the dualisms that previously made up social theory, that of the 'subject and object', do not work. The reason this does not work is the limits in its examination of cause and effect rather than integration, embeddedness or networking. Callon argues that "an actor network is simultaneously an actor whose activity is networking heterogeneous elements and a network that is able to redefine and transform what it is made of" (1989:93). For Callon and Law objects are given the status of materials of expression tied to the body, but also separate from the body, materials that are also social and part of the social. In supporting Callon, Law and Latour's argument for ANT, a single person can be said to hold or contain the network, which brings about the eventual production of an idea, technology and culture, which consumes this technology. The issues that arise from this theory are that equal status is given to every node within the network. It ignores the hegemonic powers, which regulate and often control

technological systems, creating an imbalance between technological systems and users. It is much harder to grasp a beginning or end point in the use or creation of a technology when one must consider every possible standpoint, opinion, object, materiality and subject. However what can be postulated within ANT is the interactions that happen between actors in the network, how these alter and shift the goals of either the design or the use of a technology. And that out of every interaction within the network there is the possibility of creating a 'new entity' or social group.

2.4.4 Social shaping of technology (SST)

Finally, we examine the social shaping of technology, a theory developed to integrate 'natural and social science concerns' (Williams and Edge 1996). Even the original authors of SCOT have altered their radical approach to the construction of technology (Bijker and Law 1994). Williams and Edge argue that central to SST is the concept "that there are 'choices' (though not necessarily conscious choices) inherent in both the design of individual artefacts and systems, and in the direction or trajectory of innovation programs" (1996:866). The initial argument of SST was that TD over simplified technological use, arguing for a reorganization of society as the means in which a technology could be sustained. As Mackenzie and Wajcman argue, "if technology's physical and biological effects are complex and contested matters (and, for example, the literatures of perceptions of risk strongly suggest this), it would clearly be foolish to expect its social effects to be any simpler" (1999:4).

If we choose technological determinism as a theory of technology we must accept that society and developers must "adapt to technological change" not shape it. Social shaping advocates exploring both the macro structures and the micro structures within and around technological development. It argues for seeing technology as not separate to society but as a part of society. It also explores notions of challenging and shaping technology via smaller social groups, who contest and confront the dominant systems. This reflects Lefebvre's analysis of representational space, whereby "representational space overlays physical space, making symbolic use of its objects" (1974:39). Further, third space or representational space is the space "imagination seeks to change and appropriate" (ibid). While there is the possibility of directly shaping technology in smaller systems, as systems increase in size the types

of shaping becomes limited, because as "a system matures, a bureaucracy of managers and white-collar employees usually plays an increasingly prominent role in maintaining and expanding the system, so that it then becomes more social and less technical" (Hughes 2008:144).

Mackenzie and Wajcman (1999) suggest that sections of society, such as the media and politics, promote the rational of TD, spouting claims which imply radical changes, advances and alterations in society based on the introduction of new technologies. Those who advocate politicizing technology are defined as "antitechnology", such as technological theorist Donna Haraway (1990) amongst others (Zorn et al. 2007). They argue for the examination of technology as socially constructed, examining gender as one of those constructs. Further, Preston (2005), argues that technological innovation is politically driven, often based within "supranational state policies" which seek to shape technological initiatives. However, Preston's research highlights how policy and policy initiatives often fail to address the "unequal distribution" of technologies and other material. Thus, top down approaches to the social shaping of technology ignores inherent social and cultural differences and inequalities, which continue to prevent equal access to technology, or fail to realise that users have very different ICT needs.

The shaping of technology, involves a wide range of processes, including:

- Science shaping technology
- Economics shaping technology
- Technology shaping technology
- Politics shaping technology

Each element influences the development, integration, use, trajectory and diffusion of technological systems, materials and knowledge. SST theory argues that throughout the history of technological development, nothing was created in a vacuum, no flash of insight springs forward a device or idea.

Determinist's will argue that no matter what processes are in place to effect the outcome of technology "the intrinsically best technology will ultimately triumph" (MacKenzie and Wajcman 1999:19). However, the response to this is twofold. First

that what is best for one person may not necessarily be best for another. Second, in order to create a usable technology (removing flaws or problems in design), it must first be adopted into society. This process either alters or improves a technology. For example, the early use of the telephone highlighted problems in its use and design (Winston 1998), whilst the technologies of audio listening and recording were constantly transformed because of political, artistic, social and scientific innovations and ideas (Hagood 2011; Mody 2013; Sterne 2003) (discussed later in this chapter as well as in chapter 6).

Within science and technology studies (STS), SCOT ignored the structural influences involved in the shaping of technology, whilst early social shaping theories ignored the value of a kind of soft determinism (Wyatt 2008). ANT sensitized us to the "material resources" such as buildings, writing, music, art, agriculture etc., "which make large scale society feasible" (MacKenzie and Wajcman 1999:23), whilst stating that technology did not sit outside this in its own separate sphere, it is part of the everyday experience of society. Though SST theorists argue against ANT in its treatment of "symmetry", where humans and non-humans are treated equally, social shaping allows us to include the many actors, agencies and structures as well as the materials in the examination of technological development and use. This also means that certain agents, groups etc., can play a larger role in the development or diffusion of technologies. In chapter 6 this is interrogated by the use of mobile phone technologies amongst Irish teenagers as well as the mediation of mobile audio technologies in negotiating and developing tactics and strategies to shape experiences of different social spaces. SST allows for supra-structures and small groups to dictate the use and diffusion of technological systems, for example, the creation of wireless nodes within cities, controlling information and access through these networked systems (Mackenzie 2006). In this way we can link SST to Lefebvre's theory of the production of space as one constituted by a top down and bottom up approach, within which excluded groups can potentially, but not necessarily, manipulate technological systems to create new technological spaces (representational technological spaces).

2.4.5 Social structure and technology, politics, culture and gender

Feenberg (2002) explores how some technological designs are politically motivated. If countries operating under radically different political systems adopt technologies from other political systems, these technologies may play a part in challenging political ideologies, such as the Google example mentioned earlier. In this sense the networks involved in shaping such a technological sphere, are political, social and ideological. For example, the design of the Bose noise cancelling system, a set of headphones that are meant to cancel external sound input, were created from a set of ideas based on "fabricating space through sound" which was shaped by the designer's first contact with racism as a child (Hagood 2011). The technology arose from a set of circumstances, which enabled the inventor to consider using technology to create a barrier between the sounds of racism and the listener. However, Hagood (2011:576) argues that like most creations that are seen to shape society, there is a sense that the technology rather than a social group is seen as the singular process by which these transformations occur.

Bijsterveld and Pinch argue for the inclusion of sound within science and technology studies (STS). They assert that sounds, whether produced by technologies, in the field, the lab, by artists, engineers or doctors, become culturally appropriated. Additionally, these sounds become materially embedded within culture, which become remediated through new technologies over time. This approach reflects the increasing awareness of sound within society as integral to certain disciplines such as urban and industrial design, ecological and anthropological studies, music and art theory. Pinch and Bijsterveld suggest, that this interest echoes the increased presence of audio monitoring technologies, which are appearing within western cultures, such as in schools or industry. Additionally, sound, as a process of technological design, dissemination and consumption remind us that the "Soundear, is part of the lived politics of everyday life" (Pinch and Bijsterveld 2011:20). Cleophas and Bijsterveld argue that with the sensory under increased signification within technological design, it is up to STS studies to take "the sensory qualities of products into account when studying the co-production of technology by consumers and producers" (2011:120). Culture shapes our understanding of the technological and auditory sphere. For example, a culture's practices of listening are as diverse as the potential uses of a technology (Hirschkind 2004). For Hirschkind (2004), mediated listening allows for

the spread of religious ideas and the sharing and critique of religious practices. It allows for the user of audible technologies to have a bridge between the intention of the sound creator, radio producer, music maker, and the listener, to create their own definitions of use and meaning. The sound of pre-recorded or live events are not always seen as being part of an immediate audible experience or even a sense of 'being there', rather they exist to send sound out into space to be experienced in new spaces which can alter the cultural appropriation of these ideas.

Du Gay's (1997) examination of the development of the Sony Walkman points to various processes involved in the cultural embedding of a technology, and advances that the process involved in the production and design of a technology is as diverse as its dissemination and proliferation, adding that technology gains meaning because it is embedded with cultural codes from the design outset. However, he also adds that users and consumers do not passively accept these codes. Rather, "meanings are actively made in consumption, through the use to which people put these products in their everyday lives" (1997:5).

Gender and class played a key role in the early development of technological literacy, (as in the rural and poor being defined as uneducated and women defined as without technological abilities), "ignorance was a virtue of "good" women" (1988:23). Even the notion of the user was gendered.

"Talkative women and their frivolous electrical conversations about inconsequential personal subjects were contrasted with the efficient, task-oriented, worldly talk of business and professional men" (Marvin 1988:23).

Lerman et al. (1997) argue that the role of women within technological innovation has, until recently, been ignored within the literature. Equally, most of the major theorists on technology were men, which would seem to dictate a kind of male centred approach to analysing technology. This may be tied to concepts of appropriation and use of technology by particular genders. However, within advertising there are extensive examples of men idealised as technologically adequate whereas women are presented as the opposite, technophobes. Van Oost (2003) explores the development of the female electric shaver developed by Braun in the 1970s. The female electric shaver was not even considered until research highlighted the shaving of the body as important to women as it was to men, and rather than sell

the shaver as a single product or object separate to gender, gender values were adopted in the construction of the female shaver. In the design of electric shavers, notions around shape and colour as either feminine or masculine are constructed from a set of cultural values already in existence. Implicit in the design was that a gender type would appreciate a type of design (Van Oost 2003). Rommes (2011) has examined the role of gender in the design of online space, the internet and websites. She argues that gender, as a social construct, eventually shapes the constructions of technological spaces. It is not a simple case of men building or designing technology differently to women, but that because boys are educated differently, this shapes normative behaviours expected from western women. Some responses have been to create policy to promote gender equality as there is a general lack of women within technological spheres, however, these policies can also be problematic.

Butler argues that gender identities are acted out and are in no "way a set of stable identities" (1988:695), and that gender is a materialisation of historical and social constructs. Technology has also played a part in the embodiment of gender and technology, the design of technologies such as the electric shaver imply a particular identity associated with a type of technology.

2.5 The social shaping of audio technologies

SST argues that sometimes dominant or hegemonic systems, social, political and scientific can play a stronger role in the shaping of technological use or diffusion than users. Radio for example, designed to allow the sending of information across great distances, has become in some circumstances a national and local community asset. Instead of the act of listening being connected to single body or as a solo experience, it has become connected to societal and cultural structures, even subversive political structures (Fisher 2004). Fisher argues that radio within Bolivian culture has evolved along very different trajectories to western use, as a result of political turmoil. Bolivian radio has adopted two roles, the promotion of a type of cultural identity and the promotion of cultural ideologies. Andean radio stations are "centrally implicated in the mass-mediated constitution of a "popular" class and "national space" (2004:212), which according to Fisher, creates a homogenization of cultural identities,

not so different to western cultures where public service broadcasting operate under similar imperatives. Yet it is also responsible for altering the relationships and social connections between small villages in the outer regions of central Bolivia through "collective and social" radio projects. The technology of radio however, has altered very little in design, other than the restyling of its containers. Instead, programming and the politicizing of radio production have increased within certain cultures, in developing countries, where access to media technologies are limited (Fisher 2004). Unlike TV programming, which has become global and monopolised even centralised, similar to the film industry, radio continues to remain local in its production and consumption (Crisell 2002). It is a technology of the social, because communities and individuals can engage with it and interact with presenters. In this way it is similar to social networking in its immediacy. In terms of shaping the social, one could argue that society recognises the radio as a working technology, which engages with the social, by meeting the users needs. Thus, there is no need to change its function or design, which is vastly different to the constant emphasis on the new of most other technological innovations, but perhaps similar to older technologies such as the bicycle (Pinch and Bijker 1987).

When examining the evolution of the phonograph, a technology created initially for the hard of hearing, we see that instead of becoming a medicinal or social tool for the deaf it became part of an evolutionary change in the practice of music listening. Music became non situational and commercial as a result of recording technologies, which later led to the development of the recording industry. Equally, other industries evolved as a result of these new technologies, for example, the microphone and tape industries (Clarke 2007). These technologies also created philosophical and economic questions regarding sound: the problems of sound quality, related to live experience versus recorded reception, compression versus uncompressed audio and ownership rights of recorded sounds. The two audio technologies of the phone and recording technologies were shaped and reshaped in response to decisions concerning accessibility, use, culture, consumption and economics in addition to the intention of the artist/recordist.

Mobile phone technologies are constantly inscripted with new meanings, which in turn generate changes in design. Ito (2004) argues that teenagers use of mobile

phones in Japan have transformed the design, hard and software. For urban Japanese teenagers, in a society where space and privacy is at a premium, the mobile phone has become a tool for the transformation of space. The mobile phone allows teenagers create private space and maintain social and geographical relationships. In response to the needs of teenagers, mobile phone designers and operators have altered the software and financing for teenagers use.

In a world increasingly defined as noisy, particularly urban spaces, audio companies have responded with constant innovations in headphone listening. However, noise policy, as dictated by the EU, has enforced notions that cities are noisy and impacts negatively on mental and social health (EEA 2009b; NOISE.europa.eu 2011). It can be argued that policy and political movements of sound segregation allow headphone designers legitimize noise-cancelling technologies.

Telecommunications, as a process of communication, and as a technological system allowed for "the obstacles of space and geography" to be conquered (Van Loon 2007:10). Therefore telecommunications are set firmly within the structures of social and political change. Marvin argues that the early development of the telephone and thoughts on its use began "from specific cultural and class assumptions about what communication ought to be like among particular groups of people" (1988:6). Assumptions were made about technological abilities and progressive thought. For example, those who did not accept technological advances, were defined as technologically illiterate, and became associated with the uneducated, poor and rural This meant that the control of technological development and communities. proliferation was made by what Marvin calls insiders; those defined as technologically savvy, technologically literate or scientifically objective. This power struggle over the ownership of knowledge meant that user groups defined as "non-Europeans, Indians, blacks, women, criminals, and the poor", were forced to accept "the authority of electrical expertise" (Marvin 1988:62). Thus, the telephone was never a neutral device; it was surrounded by and embedded within the larger social constructs of its time.

Feenberg (2002) argues that it is the ambivalence of technology rather than its supposed neutrality which allows for alteration in design based on cultural or social needs. He argues, that the struggle for the shaping of technology is a space where

"civilizational alternatives contend" (2002:15) (which G Doppelt critiques). A technological object or structure according to Feenberg is responding to the imperatives of a user, "technology is a two-sided phenomenon: on the one hand, there is the operator; on the other, the object" (2002:16). In this sense technology takes on the submissive role, in that it has no say in its use. Its existence stems from numerous points of origin and context where social and political structures may have the capacity to influence its use and even redesign. However, technological determinist's argue that the ubiquitous nature of technology means that every decision the individual or a society makes is governed in one sense by the overriding infiltration of technology within that culture (Ellul 1990; McLuhan 1969; Winner 1989, 1993).

Technologies are as diverse in meaning and use as they are in design, from media technologies to industrial and home based. The technology, as in the physical, software and skills needed, is not necessarily what shapes decisions or alters human behaviour, though it does play a strong role (Wyatt 2008). For TD's it is technology, which shapes our level of access to wider ideas, but it also shapes our behaviour and bodies (such as in the fields of genetics) (Ellul 1990). For McLuhan (1962) listening and the audible were connected to nature, and tied to non-western non-technological cultures. Listening or the ear "is a hot hyperesthetic⁵ world and the eye world is relatively a cool, neutral world, the Westerner appears to people of ear culture to be a very cold fish indeed" (McLuhan 1962:19). However, this analysis ignores the political motives and the social actors behind the construction of audio technologies and the media. Ellul and Winner further argue that technology as ubiquitous can not possibly be challenged or shaped by society, as most people are unaware of its part in their daily lives. For Winner most people are 'sleepwalking' "through the process of reconstituting the conditions of human existence" (1989:10). However, user demands play a significant role in shaping technological developments. For example, Van Oost (2003) argues that the telephone altered in its design and function with its appropriation by women, which gave the telephone 'new social meaning'. Therefore, technology constantly undergoes transformations through a system of modification, domestication, design, reconfigurations, and resistance (Van Oost 2003; Oudshoorn and Pinch 2003).

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⁵ Hyperesthetic is the abnormal increase in sensitivity to sensual stimuli.

This dis-embedding of technologies from higher structures of control is a form of decentralising technological access and control. Audible technologies, technologies which pre-date visual technologies such as the TV and cinema, are seen to have altered our relationship to sound, making visible and controllable that which only had an "ephemeral character" (Sterne 2003). However, the development and eventual use of audio technologies are clearly routed within numerous social structures, political and cultural imperatives and technological and scientific structures.

2.6 History of Audio technologies: telephone to phonograph

I would merely direct your attention to the apparatus itself, as it gave me the clue to the present form of the telephone. -Alexander Graham Bell (quoted in The Audible Past: Sterne 2003:32)

One cannot understand the nature of any medium without taking into account the historical context in which it came into being- (Van Loon 2007:12)

Audio technologies have a history that dates back over a hundred and fifty years, coinciding with many socio-technological transformations within most western civilisations (Stankievech 2007; Sterne 2003; Winston 1998). Stankievech (2007) argues that it was a natural evolution from the stethoscope, a tool to listen to the interior body, to the phone and audible music technology, technologies which placed sound within the body. For Stankievech, the progression from "listening to an interior space of the body and creating an interior space in the body" (2007:56) was inevitable. His concept of interior sound spaces coincides with historical ideas of sound as pneuma or breath, which could be contained within the body (Ong 1982).

Winston (1998) argues that the telephone was "the child of commerce" for the first fifty years of its creation. It was mostly situated within offices and political spaces, and no one foresaw the potential for domestic users. The development of the telephone, a device which today inhabits most spaces, either as a mobile technology or place based, was initially designed to improve the American economy. As a predominantly English-speaking continent, the opportunities for the expansion of economic and political ideas were limited to the slow exchange of information offered by the post and telegraph. It coincided with such events as the great depression of

the USA (1930s), a result of rampant capitalism, the start of municipal socialism in the UK and joint stock companies created as a result of the wide spread use of the train (Van Loon 2007; Winston 1998). Winston argues that these key social and political movements impacted on the use of this technology as business and communications required more instantaneous modes of contact. Which resulted in a more international marketing system. As cities became nodal points for industry and goods were being shipped further away, a technology was required that allowed people to communicate over large spaces in short times, and the telegraph (the technology of the time) and its text based process, was insufficient. Van Loon argues, "the link between transportation and communication was a key component of the colonization of the 'Wild West'" (2007:10).

In this way the telephone becomes embedded within commerce and spaces of economy. This form of spatial practice meant that industry could operate over wider distances as communication systems altered time and space. From a deterministic standpoint it could be argued that the telephone helped drive the internationalisation of the economic market. However, this deterministic view ignores the social and political as the economic forces at play in the design and use of the telephone.

The persistent use of audio technologies in the last several decades is worth noting, especially since the invention of talkies (early sound cinema) and then the TV. Historically, the 'mediation of sound through audio' technology, otherwise known as audiophony, has at its core a crossing and delimiting of space and time (Dyson 2009:6). Information spread rapidly and more widely as a result of the proliferation of radio and TV in homes. The sharing of sound, through audible technologies such as the phonograph helped transgress boundaries of types of listening as a class experience, for example, it allowed sections of society who would not have had access to concert halls or theatres, the opportunity to listen to a variety of recorded performances (Sterne 2003). It also provided opportunities to listen to recordings of music from different countries, enabling access to geographies of sound not formerly available to certain social groups. The Irish radio broadcaster Harry Bradshaw started recording Irish traditional music from the 1950s – 1970s. His intention was to broadcast these performances on Irish and international radio stations. These

recordings transformed the dissemination of traditional Irish music, once confined to "homes, crossroads and dancehalls" (Smith 2001:116).

The key role of early recording devices was to inscribe or make sound permanent, an object of consumption and dissemination. It allowed recordist's document and save voices, stories and music. This is quite an interesting point as it reveals how the technologies of listening and recording were designed to replicate and reproduce sound, in much the same that print did to language. These technologies helped shape peoples relationship to sound, space and music by repositioning music as a transferable and reproducible medium (Brady 1999; Kahn and Whitehead 1994; Taylor, Katz, and Grajeda 2012). Van Loon argues that this changed how people acquired knowledge. Rather than learning by rote, "socially acquired through learning" (2007:12), it was now possible to access documented knowledge and engage with it over time. A pedagogical approach is necessary when deconstructing the experience of recorded listening as an alternative interpretation of a sensory phenomenon.

The storage of ideas on to technologies has always concerned the power brokers of knowledge (Ong 1982). They have argued that the more we remove the control of ideas from the originator of these ideas the more we dumb down society. However, Ong (1982) argues there are two sides to this argument (as demonstrated by the invention of print). The ability to reproduce ideas allows for the levelling of the ability to access knowledge hence "everyone becomes a wise man or woman" (1982:80). With the 'materialisation' of the phonautograph and then the phonograph, we have a media designed specifically to document numerous types of sound such as plays, music, stories and even prayers. With the materialising of sound as an object, it allowed for the production and reproduction of an object, which generated an economic value, (vinyl, cassette and eventually compact discs (CDs)). Thus sound became material, identified as good or bad quality, a commercial object and a cultural commodity.

2.7 Mediating the soundscape

Teenagers shape and are shaped by technologies. They create autonomous spaces using music, but they also subtly shape technology⁶, a factor omitted within current literature. It is easy to use the hyperbole of technological determinism, mostly because it does not ask for reflexivity. Thus, exploring the social part of technology requires a deeper examination of how individuals and groups make technology an integral part of their lives.

When we listen to audio technologies while working or travelling, the sounds that we listen to add a new interpretation to the space we occupy. It is often noted that people exist in their own soundtrack, creating a new impression of their world (Bull 2000). But this expression is very limiting. It suggests that all sounds perceived within audio technologies simply add new layers of virtual sounds to our real world experience, which enhances (in an aesthetic sense) the experience of the everyday. Listening technologies can be used to negotiate space, compress time, and create the illusion of both privacy and boundaries (Bull 2000). Certain media technologies (such as the mobile phone), allow us the space to connect with people when we are otherwise restricted spatially, and they are "often perceived as an emblematic technology of space-time compression" (Ito 2004:1). This reflects a passive and deterministic relationship with technology. Instead, the use of technology has expanded well beyond that of the designer. In fact there is a constant negotiation between the design of a technology and what users demand of technology, which reflects the growing use Jansson argues that mediatization can be of technology in spatial mobilities. examined through Lefebvre's triad of spatial production. He argues that mediated/mediatized mobility blur "the distinctions between texts and contexts; between symbolic and material spaces, and makes the settings of media use (production and consumption) increasingly fluid" (2013:280) in this way technologies seem to shape spatial conditions in a deterministic way. However, pre-existing values relating to space/place and mobility creates feedback. Instead of technology or media, shaping mobility's and movement, it enhances spatial experiences. Jansson proposes a reconceptualising of Lefebvre's triad of space, "(1) material

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⁶ Teenagers use high frequency sounds as ring tones-older people cannot hear them, in this way they create silent communication spaces, which adults cannot control.

indispensability and adaptation, (2) premediation of experience, and (3) normalization of social practice" (2013:282). In support of Lefebvre's argument, to not separate the spaces of practice, representation and representational space, Jansson proposes that the media and mediatized practices not be studied in isolation. One must examine how mobile mediatization becomes part of the practice of everyday life and spatial configurations. Then we include the broad ways in which mediatization tries to "encompass the everyday struggles involved in the contemporary social and cultural transformations to which media-related processes contribute" (Couldry and Hepp 2013:199).

2.8 Audio technologies and the mobile experience

Audible technologies, unlike visual based technologies, are now closely tied to the mobile experience in urban spaces. For example, people travel long distances for work and education and social groups no longer live near each other, so mobile technologies are used to mediate space and transform social relations. But listening has become a primary experience within technological mobility, whether through sounds played in an elevator, music in one's car or moving through space wearing stereo headphones; sound and mobility have become intrinsically linked. Sound, which is spatial is now experienced separate to public or real spaces. This creates an alterity of perception; one feels removed from the experience of space and natural sounds. However, mobile listening also allows people access to spaces they might normally feel restricted from or within, quiet spaces or public transport, because mediated listening alters and transforms our experience of the exterior world (Bull 2000; Howard and Angus 2009; Thompson 1995).

Contemporary listening technologies play many roles in everyday life, from mobile phones to mp3 players, gaming devices, cameras and voice recorders, and with the millions of apps (a web application that you can download onto your mobile device) one can turn their mobile technology into a heart monitor and a navigation system. People live in such close contact to each other in western cities, and are surrounded

by multitudinous aural information (Bijsterveld 2008), that portable audible technologies are used to create a representational space (Agar 2005; Castells et al. 2009; Ito 2004; O' Brien 2010; Stald 2008).

Bull (2008, 2000) would argue that engaging in mediated listening with iPods and Walkman's, is an isolating experience and that mediated listening means inhabiting a perceptual sound bubble. He argues that people who engage in mediated listening are separating themselves from the urban environment. This description of how media devices remove us from reality is what Loon (2007) describes as the mass speculation of certain theorists who have argued that this type of mediation will result in the isolation and "hyperindividualization (the death of the social)" (2007:34), a process he calls 'cyberphobia'. It is connected to concepts of technologies, which are in some way immersive, not simply that they surround us but are seen to alter our sense of reality. These concepts are often linked with ideas around utopias of existence prior to media as if media only existed at a certain point in time, rather than considering the idea that human beings have mediated ideas since the invention of language. To a point the description offered by Bull (2000), of an aural urban landscape which infringes on our spaces and forces people to tune out for peace of mind and privacy, is important because it highlights how little attention has been given by urban planners to the subsequent soundscapes created as a result of urban projects.

However, contemporary practices of listening and accessing media, or using audible technologies to navigate through space, is a phenomenon brought about by numerous factors (Bull 2000; Courtois et al. 2012; Hagood 2011; Ito 2004; Lenhart 2010). Some of these are based on the rapid transformation of audible technologies in the past one hundred years and the increased mobility of society as a result of neo liberal ideologies of mobility and freedom (Hagood 2011). It allows people to be linked to wider communications and networks, whilst apparently giving them a sense of freedom from space and people (Mackenzie 2006). The convergence of different types of technologies onto one device has created significant changes in our ability to transport and access information. Whilst this may seem beneficial to our ability to work and be contactable whilst on the move it can also have its drawbacks. Hagood (2011) argues that the very freedom we strive for through our technological devices, the ability to move beyond constrained space and away from noise, can actually

create its own restrictions.

"In these spaces designed to promote the efficient and friction-free circulation of economic agents and capital, there is an effort to suppress the unfamiliar, idiosyncratic, and potentially uncomfortable. In short, any kind of difference" (Hagood 2011:578).

Audible technologies are created to allow us the freedom to remove ourselves from "relations with others that do not result from individual choice" (Hagood 2011:574). Some argue that the use of mobile technologies, as tools to manage the everyday experience of the city, is as a direct result of the numerous different relationships that we have with urban space (Bull 2000, 2008; Hjorth 2007; Ito 2004). Mobile technologies allow us (on multiple levels), to control our experience of the world, to shape and be shaped by/with technology as opposed to distancing us from the experience of the real (Bull 2000). The city soundscape becomes a place in which the mediation of sound plays a distinctly cultural role in adapting to and reconfiguring social and physical space. It also "reorganizes the senses so as to prioritize the auditory over the visual" (Bull 2000:121). This critical approach challenges concepts of the visual as a superior process of mediating space, which is usually posed in contemporary culture (Mody 2013; Synnott 1992). The importance of challenging this view lies predominantly in the over-use of visual metaphors and design in the construction of urban spaces (Blesser and Salter 2009; Harvey 2011; Thompson 2004).

2.8.1 Mediating the city noisescape: sonic architecture

Without understanding the power of sound in space one can create cities of noise, not in the sense of loud spaces but rather in the sense of ambiguous soundscapes. An over proliferation of non symbolic sounds which merge as one continuous background sound (Schafer 1977). Urban theorists argue about the dualistic nature of cities; there are the objects (structures, both physical and structural) and the subjects (groups and individuals). The subjects are defined as responding, sometimes passively, to the objects within a city (Drudy and Punch 2000; Lever 1991; Thorns 2002; Zukin 1987). Sound is seen as a non-passive subject within space, as its production is challenged by other sounds, or the creation of spaces or technologies to block, remove or filter out sound (Cleophas and Bijsterveld 2011; Thompson 2004).

In this sense although sound is amorphous and unfixed it is also seen as physical and malleable.

The city is often defined as one that we must traverse in order to get from one place to another: for work, school, shopping or socialising (de Certeau 1988). Therefore, the act of mediated listening becomes one of control over the distance between two places, a compression of the amount of time it takes to get there, and the space between. However the control of space offered by mobile listening and the use of various types of mobile technologies is more than a process of compressing time. Mediated listening allows individuals and groups create, within structured spaces, new audio mediated space. This is often temporary, but it means that abstract or controlled spaces are open to a shift in meaning (Lefebvre 1974:36).

Mobile technologies become a tool that allows listeners form a protection for their ears and mind by distancing them from sounds that are unwelcome, "sound becomes a medium for the production of forms of centeredness through the reconstruction of narrative and place" (Bull 2000:118). It controls the input, type and volume of sound that we hear. Thus, the technologies of listening become a cultural commodity, which allow one to shape one's experience of the soundscape. The object (portable players, mobile phones) becomes a hybrid, an embodied technology for the management of everyday sounds (Haraway 1991). It permits one to disengage from the everyday rhythms, both circadian and mechanical/technological, of structured city life (Lefebvre 1992).

However, the emphasis on mobile technologies as objects for removing oneself from unwanted soundscapes is setting up a similar dualism of sound as noise and mediated listening as an escape from noise. The focus of mobile technologies removing people from their immediate environments highlights the so-called individuality of people in a city. One must instead examine how the urban life is not just a space in which individuals move but also a space in which small groups and communities inhabit. Young people for example, tend to congregate in small groups in urban centres, for various reasons, from defining themselves as a cultural group or for their safety (Curtin and Linehan 2002; Matthews et al. 1998). Yang and Kang (2005) for example, examine how public spaces within cities are designed to create spaces for the group and the individual to take time out from the sounds of the city. Yet their

research highlighted that teenagers and young adults have a greater degree of tolerance to urban sounds; they "are more favourable to, or tolerant towards, music and mechanical sounds" (2005:74). Yet it has been argued that the city is a mass of uncontrollable 'congested sounds', which offer very little meaning (Schafer 1993; Thompson 2004).

The concept of acoustic protection is not limited to what is traditionally considered noise or nuisance sounds. Rather it is the monotonous or intrusive sound, which can alter spatial connections. The sense of self is felt to be loose and untethered to space and the ability to construct space becomes harder the more we are exposed to sounds which don't seem to fit or locate space. The ability for the senses to reconstruct meaning and space allows people to feel a connection to the centeredness. It embeds them in a sense of time and place. Lefebvre (1974) argues that it is our ability to reproduce space into new imagined spaces that allows the local, the individual and the social group, take control over top down designed spaces. Thus, mobile listening offers the potential for "the right to difference, to be different, against the increasing forces of homogenization, fragmentation, and hierarchically organised power" (Soja Conversely, outdoor live music listening, amongst groups of teenagers creates acoustic bubbles (Blesser and Salter 2009), which encase them and separate others. In this way they reshape space creating representational spaces through sound (Lefebvre 1974; Soja 1996). These symbolic spaces are thus mobile; neither fixed to indoor our outdoor locations. Often this is in response to their having no particular space which they are allowed access to (Soja 2010).

2.8.2 The cultural discourse of audio technologies

Rodaway (1994) argues that the world is experienced through a set of cultural filters. We "see, hear, smell, taste and touch the world through the mediation, the filter or lens, of our social milieu, the context within which we have become socialised, educated and familiarised" (1994:23). Additionally, the markets and advertising are part of this circuit of culture (du Gay et al. 1997). The technological filter or mediation of the world through, or by technologies, is drawn from the cultural and social ideas of use, which filter our view of the social world (Pinch and Bijker 1987). With technologies such as stereo headphones and other audible mobile technologies, the companies, based on what are considered cultural norms create a discourse of use. The headphones are sold as "a reprieve from the noisy world around you"

(www.bose.ie 2011), or mp3 players are advertised as 'technologies which help you learn' to "Refine your listening" or "Suit the mood or moment" (www.sony.ie 2011). Advertisement is a form of social construction, whereby meaning is assigned and needs are created for society. When we use technologies to negotiate space there is an underlying notion that mediated listening is part of the cultural capital of owning and using mobile technologies (Hagood 2011; Livingstone 2002b). This capital is not the ownership of just contemporary or new model technologies, but rather a technology, which enhances our experience of everyday life. The cost of such equipment, approximately 300euro, makes it a technology not accessible to all.

2.9 The construction of the technological soundscape

In order to examine the construction of the technological soundscape we must include the scientific (natural sciences), as well as the socio-cultural, political and material cultures. Blesser and Salter argue that we should also incorporate "perceptual psychology" and "cultural anthropology" (Italics in original; Blesser and Salter 2009:216). They argue that the sciences alone, which have purportedly done the most to highlight the complexity of sound, cannot reveal "the complexity of the aural experience" (2009:216). Whether we focus on the use of mobile audio technologies, experience sound in specific acoustic environments, or are immersed in the real world soundscape, understanding the phenomenological aspects of audio does not necessarily reveal the social significance of sound experienced in different environments.

Technological sounds support the city's topological profile, adding layers of information in a rich immersive way. LaBelle, in support of the urban soundscape argues that the information provided from numerous electronic, digital and human sources reveal not only the pace of the city but the various "flows and rhythms" (2010:xxiv) that are part of being in an immersive soundscape. He argues that there are spaces of "micro-epistemologies" of sounds, that inform us of specific meaning, spaces with echo, vibration, and rhythm; they open up "specific ways of knowing the world" and identify soundscapes as unique and recognizable places (2010:xxv). The pulsing sound of traffic stoplights on streets, external sounds of air conditioning units in large apartment complexes, echoes within underground passages and narrow street

corridors, all produce sounds that can become markers not only of place but also of energy, movement and atmosphere. The sound of traffic as it moves through the city throughout the course of the day provides information of activity levels and time. If sound and other sensual experiences, are predominantly associated with perception, then this ignores the communicative element of the technological soundscape,

"The senses can also be pictured not as neutral physiological receptors, but as active channels for interpretation, communication and constructive world-making with human beings moulding the processes of perception as they formulate their experience and differentiate selectively within it" (Finnegan 2002:36).

2.9.1 Consuming the Technological Soundscape

Imai (2008) in her soundwalks of back alleys in Kyoto Japan describes the scene, which divides the modern urban city and its new sensorial expression from the diminishing soundscape of old Kyoto. Although she does not discuss class, her examination of the different soundscapes of a Japanese city highlight related points, that the modern metropolis creates sounds connected intimately with the production and consumption of material and in particularly technological goods. Technologies are advertised by the blaring of "electrical goods and gadgets" which are surrounded by the roar or air-conditioning units from apartments and restaurants, with a "constant room temperature of 24°C" (Imai 2008:333). The poorer backstreet areas contain the sounds of the intimacy of neighbourhoods, local street vendors, women talking on streets and the rattle of footsteps on pavements. The 'din' of the city is seen as progression, expansion and wealth, connected to power and ownership, whilst the relative silences of the backstreets are connected to a poorer older way of life. This counteracts Bijsterveld (2008), Degan and Thompson (2004) who argue that noise is usually associated with the working classes and sites of production. The consumption of soundscapes becomes a culturally specific process, linked to historical narratives of spatial meaning and productions within space.

The neo-liberal era, according to Hagood (2011) and Haraway (1990), produces technological soundscapes and technologies of privatizing sound. But these

technologies are responding to concepts of personal freedom and the reproduction of moveable spaces, specific to western ideologies. Conversely, Yang and Kang (2005) argue that technological soundscapes are the soundscapes enjoyed by urban based teenagers, part of the cultural identity and are linked to an enjoyment of consumer spaces. This is expanded on, through the data, in chapter 4. Lefebvre argues that we construct spaces out of a sense of restriction, that we imagine a space and through these imaginings we produce that space. Yet this is a sort of technological feedback loop, we use technologies, which produce sound (mobile technologies, Mp3 players, iPods, mobile phones) to counteract our experience of the urban technological soundscape (traffic, air and ground as well as other urban mediated sounds, 'muzak'). This enables the creation of private sonic spaces, particularly within cities of increasing populations where space is limited. However, private does not necessarily mean isolated or the individual.

When we explore the city as a technological soundscape and examine sounds in the everyday, we find that sound is increasingly regulated, controlled and customised in the modern city. Furthermore, Sterne (1997) argues that soundscapes are designed to create spaces of consumption. This is not to say that these spaces have become silent, but through regulation and redesign, the soundscape has become increasingly managed. The ubiquity of technological soundscapes is arguably one of the reasons technological sounds and urban environments are seen as spaces of non-conductive soundscapes. However the sounds of the city can be seen to be "registering a particular vitality within the cultural and social sphere: noise brings with it the expressiveness of freedom" (LaBelle 2010:xxiii). The city has long been associated with concepts of freedom, freedom from traditions, freedom to work, opportunity and self-expression (Finnegan 1998; Hall 2004; Smith 1999).

2.9.2 The Body, technology and listening

The persistent link between technologies of sound is the body, the phenomenon of the body experiencing sound, producing sound and constructing ideas and a concept around the meaning of sound, as it is experienced physically. Each practice of sounding either embeds or dis-embeds us in space; it deconstructs our relationship to

objects and dismisses the preconception of visuality as primary in negotiating space (Dyson 2009). Donna Haraway (1990) discusses cyborgisation as one element of the enclosure or immersion of technologies within the body as being a "condensed image of both imagination and material reality" (1990:150). The wearing of technologies to alter our perception of reality is a hybridisation process. Not simply because we wear a technology but that the technology becomes imperative to our experience of the world. The insertion of devices into the ear or the constant wearing of a technology to be connected to a network, is for Haraway, a tight coupling, but not an equal one, "our machines are disturbingly lively, and we ourselves frighteningly inert" (1990:4), an approach that reflects why TD's argue that technology ultimately shapes society.

The visible world is a series of nodal points, which become a frame of reference, each point sits within a technological soundscape. The body becomes a pivotal point in this landscape, it is immersed within the soundscape, sometimes by two layers of sound, the mediated and real world sounds. Both Dyson (2009) and Sterne (2003) suggest that the phone had at its earliest conception, a link between the body and breath (of god), that sound was defined as being emplaced within the body, which fills the body with new sound. This link between the external sound and the interior of the body presupposes a process of incorporating sound within a space of the body, making a space for sound. This interiorising of sound via technology suggests that sound comes from one space to another and that the space between sounding and listening are untouched by the media transporting it. Mediated listening, a process of technological entities embodied (in ear microphones and mobile phones), are not created to fill the body with sound. Instead, designed media content such as radio programmes, music and even telephone conversations connect the interior body with the exterior of other social and phenomenological spaces.

The idea that technological listening is connected to a sense of immediacy "that belie its technological construction" (Dyson 2009:9) as opposed to technologies of seeing, film, photos etc., is perhaps one of the problems with developing a language that can describe the act of mediated listening as a process of embodying a mediated soundscape.

Framing mediated listening as an immediate connection to a source of information ignores the basic bodily and social needs of listening and using technologies to do so.

In the examples given by Bull (2000, 2008) and Hagood (2011), listening to music through mobile technologies enables users to negotiate space in meaningful ways and think about sound as object and cultural materiality as well as a new space. It allows for the user of audible technologies to have a bridge between the intention of the sound creator, radio producer, music maker, and the listener, to create their own definitions of use and meaning. Pre-recorded sounds are not always seen as being part of an immediate audible experience or even a sense of 'being there', rather they exist to send sound out into space to be experienced in new spaces, which can alter one's experience of space and place.

Barthes (1991) argued that recorded sound connected the listener to the body of the speaker, as if the act of listening was to enhance the experience of the other corporeal But Dyson argues, that between the layers of "symbolic, material, and technological filters, enhancements, vehicles and infrastructures", which sound must pass through in order to reach the listener, there is very little connection to the original sounding corporeal body (2009:19). Similarly, the act of listening to either the voice or sound, (sound will in this case be identified as music, but depending on what technology you use it can also be sound effects for example, games and films) particularly when listened to on a mobile device, acts both as a barrier as well as a receiver and sender of information. The experience of mobile listening is more about the immediacy of experience than the immediacy of sound. The listener wears, in a sense, a prosthetic of sound, not just to enhance a listening experience, but also to embody and be embodied by sound. Shilling argues that bodily needs and desires are the drive behind the invention or enhancement of technologies within and without the body, that for example, "the flesh-and-guts body constituted a productive impetus for the elaboration of cyber-technologies" (2004:175). However this singular approach is quite narrow theoretically. Van Oost would argue that for example, gender plays a role in the shaping of technology, whilst Feenberg (1999) would argue that technology contains political motivations. SST theorists would argue that these process and many others are part of the multiple social structures that play a part in the technological society.

2.10 Conclusion

This chapter makes the argument that social shaping processes are implicit in the design, use and proliferation of audio technologies and technological soundscapes. This includes social structures such as class, gender and politics, but also incorporates the senses and the body as playing a key role in technological mediation. It also acknowledges the impact of technology on the experience of sound within mediated and technological environments, a kind of soft determinism. Listening plays a major role in ones relationship to the social world, whether this is mediated listening or listening to the technological soundscape. Listening, which is different to hearing, alters our perception of place, time and connectedness. However, sounding (the producing of sound) is a vastly different process because it suggests an active approach to changing a place, space or experience. The production of a sound, whether teenagers playing stereo players in public or private spaces or music played in stores, is an intentional process used to alter perceptual experiences. Increasingly we are living in a sound and music mediated world. There are sounds that tell us when to cross a street, move through a turnstile, answer a phone, watch out for traffic, or react to an action a game space. Our consumption of sounds is filtered through the structures of culture and politics. There is no such thing as general, universal listening experiences (Feld 1993; Schafer 2012; Wrightson 11:05:11). Each process of listening or producing technological sounds, embodying technological soundscapes or mediating sonic environments is specific to types of audiences and producers, additionally structures such as class and gender shape the production and dissemination of sound and technology. In this way the chapter argues explicitly that the production and consumption of audio technologies is socially shaped. However, it also argues that space matters, where and when we listen to or use sound. relates most specifically to Lefebvre's (1974) representational spaces, within productive spaces, and argues that sound is increasingly used as a process for creating new symbolic spaces. This argument coincides with Jansson's triad of mediatization, in particular the "normalization of social practices" (2013).

Hearing new spaces changes one's perception of the world, viewing the microcosmic world, or seeing pictures from space is just a two dimensional representation of our universe. Sound enhances our experience, as it appends spatial and temporal

resonance, which allows us to become immersed within a particular environment. This type of sonic immersion is used for example, in gaming technologies and incorporates sound design and immersion. Game companies understand that sound is integral in creating user immersive experiences in games (Grimshaw and Schott 2007; Hjorth 2007; Lumbreras and Sánchez 1999; Pichlmair and Kayali 2007). Yet, the development of sounding technologies is intimately connected to intricate networks of user, designer, the social construction of sound and noise as well as a range of external stimuli (Hagood 2011; Oudshoorn and Pinch 2003; T. J. Pinch and Bijsterveld 2011). Audible technologies have not evolved as a result of a simple need to document sound; if this were the case their use value would have lessened over the years. They have developed because of multiple social, economic, political, classed and gendered interests in sounding media. Because of the various cultural and social differences in society, sounding technologies have become radically diverse in use and design. As Ito (2004) argues, even generationally the adoption of technologies within cultures of youth have altered the specific use of audible technologies.

What this chapter emphasizes is the strong link between technology, mediatization and space, to sound and sounding practices, particularly practices of listening and using sound to shape the urban experience. Not just as a response to over stimulus, but as a response to suppression, to the spread of knowledge, and the alteration of geographies.

3 Researching the soundscape: triangulated methodological approach

3.1 Introduction

This thesis is concerned with sound and how the experience of listening, mediated or unmediated, influences our perception of and our relationship with space. The research focuses on teenagers' experiences of sound in an urban space, which has undergone significant physical and social transformations. This thesis argues that the sounds that surround young people [whether technological, mediated or natural] play a significant part in their associations with a place and that young people construct meanings and sense of place, based on the sounds that they hear.

This chapter presents the epistemological approach, which informed the selection of methods. The understanding that the soundscape exists both inside and outside the listener situates it in the realm of phenomenological study. Sound is interpreted as an ongoing phenomenon, which may, at different times, come to have different meanings and methods of transmission. Sound may also become part of the experience of a place as it is given historical and social meaning. Attached to this dissertation is a sample of recordings from the ethnographic soundwalks and the young participants soundwalks.

The methodology used in this research draws from a range of qualitative approaches and was developed in order to consider sound as both a phenomenon and a social construct. One of the theoretical approaches used was interpretivism because it allows for the exploration of the experience of sound from an aesthetic and social perspective. However, this research also examined the macro social structures, within society, which also influence the perception of space and the interpretation of sound.

Research within acoustics, sound and art practice, as well as traditional sociological methods influenced the methods used. The challenges faced in introducing new research practices into sociological research will be explored within the chapter, as will the potential of such approaches to explore the experience of sound within space. The chapter will examine, in detail, three different stages of qualitative research:

- 1. An exploration of the Smithfield area through a series of autoethnographic documented soundwalks:
- 2. Qualitative research undertaken with 84 teenagers from secondary schools situated on the North side of Dublin city from 2011-2012;
- 3. Semi-structured interviews with 5 older people from or who grew up in or around, the Smithfield area.

These three stages were designed within the theoretical framework of interpretivism and phenomenological studies, which will be explored at the beginning of the chapter.

3.2 The interpretivist approach/ methodology

Interpretivism involves the joining of "evaluative concerns with descriptions of facts" (Rabinow and Sullivan 1988:1); it is opposed to the positivist approach and is viewed by its proponents as the ultimate way of perceiving life (Palmer et al. 2010; Yanow 2006). Using it with other research approaches "displaces the significance of the interpretive turn and ultimately empties it of its capacity to challenge the practices of knowing in our culture" (Rabinow and Sullivan 1988:2). Interpretivists contest that how we examine and interrogate our world is subjective, where each experience is tied to the surrounding social and cultural environment. Additionally, interpretivism seeks to understand how these subjective experiences generate meaningful constructs of the social world. Here, generalizing one's findings becomes difficult and research is more "likely to concern communicative, meaning-making processes than substantive rules or principles" (Yanow 2006:71). In response to these challenges, the interpretivist argues that each social group experiences space in a social context. Equally, situating social practices within historical narratives, which interpretivists see as "concepts...embedded within literature", involves moving towards fixing ideas around social practices, which "violate(s) interpretive presuppositions about the historical locatedness of scholars and actors" (Yanow and Schwartz-Shea 2006:xvii).

For interpretivists, producing data which is robust does not mean working with large comparative groups across the field of research in order to generalise one's findings, rather one may work with a set of presuppositions or one's own a 'priori knowledge' as well as a relatively small number of research participants, which can

underpin the research questions. Within the interpretivist approach one develops the questions and the theories one uses based on an understanding of the research field. In general, it is an approach, which is used alongside phenomenology in order to explore an individual's experience of their world. Phenomenology, which is frequently used in psychological research, explores the ways in which we describe the world we live in as a set of subjective experiences. This is useful when we wish to explore space as experienced through a single sense and as the "lived experience" of people (Groenewald 2004:5). The phenomenological experience is a subjective one and therefore hard to conceptualize and describe (Groenewald 2004). Equally, through interpretivism which is 'phenomenologically influenced', researchers accord "the full range of human agency", in as much as can possibly be understood or collected, to their cohorts (Yanow 2006:70). Interpretivists explore the purely subjective consciousness of an experience as opposed to the metaphysical assumptions about what actually exists (Husserl 1977). The positivist approach argues for the relevance of the individual's experience of a phenomenon, and insists on generalising the experience, but perception is not apodictic, as in beyond dispute (Merleau-Ponty 2008). The challenge that can arise when using both the interpretivist approach and the phenomenological is that the former focuses on concrete descriptions of experience, whilst the latter investigates how each person can experience it differently (Rabinow and Sullivan 1979:4).

Using interpretivism within sociological research means situating the experience of the individual in relation to the meso and macro of social structure. In this research it was important to locate the individuals within the structures that surrounded them, including: the economic practices of the area; the urban design of the space; how space was expected to be used versus how space was used (Lefebvre 1974); and policy considerations relating to urban design and sound control. Within interpretivism, one can look at these larger macro theories or macro social structures and consider how in the reshaping of urban spaces one's experience of place might be altered. The interpretivist approach allows for this examination of the individual or group within the larger contemporary setting of society.

When explaining the perception of space and time an interpretivist emphasizes the moment. As sound alters one's sense of space and time, so too is sound altered by

space and time e.g. by changes in exterior conditions such as weather, the shape of buildings, the layout and design of streets, lanes and pathways (Blesser and Salter 2009; Schafer 1977). Sound is both a physical stimulus and a perceptual response; it is the context which defines the differences between the two (Goldstein 2009). In the course of a day, sound alters and the alterations can carry a message of meaning: a factory whistle signalling the start or end of the workday, a church bell suggesting a call to prayer, or the constant hum of traffic moving through and around the city. Sound is constantly changing as a result of interactions between objects and experience, and our perception shifts alongside these changes (Truax 2000).

In turn space competes for our attention and we choose to move through space often without understanding the choices that we make (Augoyard 1979). People trace "indeterminate trajectories", that seem meaningless because "they do not cohere with the constructed, written, and prefabricated space" (de Certeau 1988:34), but the meaning is often guided by our experience of a space.

While we can argue that each space has unique social codes, we can also suggest that similar spaces may create comparable perceptual responses (Fisher 1993). Williams (2000) argues that the ultimate problem with using the interpretivist approach lies in its repudiation of generalizability. He argues, it is not just necessary but inevitable in interpretivist methods. The interpretivist approach was appropriate for this research because the intention was not to make general statements of fact concerning types of spaces, rather to focus on individual and group experiences in detail, in order to examine how connections to space occur as a result of engaging with the soundscape. Additionally, the role of the researcher, her biases, assumptions and opinions are also examined, as they play a role in designing the methodological approach. This does not make the research any less valid or credible even if not generalizable.

The interpretivist approach relies on the description of things, places and people, as well as the sensory experience of these events i.e. 'thick description' (Geertz 1977). Thin description is one where the only details provided are the factual accounts without any interpretation (Geertz 1977). By contrast, thick descriptions are based on memories and experiences one has of an area. They play a role in describing the space and the sounds heard. My background as a sound artist shaped my approach to the methods and the reasons behind why I was exploring the soundscape. Thus, my

interpretation of the sounds of Smithfield was informed by a connection to the space and a background in sound studies. This meant I could provide rich details about sound and the experience of sounds in space, during the ethnographic walks.

It is both an analytical and methodological process. It argues for ongoing analysis of collected material and requires an immersive and reflective approach. The researcher explores the data explicitly given by the recipients, but is also attentive to what is occurring within the space. For example, when interviewing a person, a researcher listens to the interviewee, but simultaneously interprets the sounds, smells, or other exterior events occurring. Interpretivism therefore requires an examination of the experience of the moment, recognising that place and time can affect one's responses to given situations. Generalisations of such data are therefore very difficult because a critical part of interpretive theory is the examination of the researcher's standpoint. For interpretivists, people are intimately connected to their surroundings. The researcher and the subject are inextricably linked by the fact that both exist in the same world and that both researcher and subject are reflected in the study (Emerson, Fretz, and Shaw 1995; Ortlipp 2008).

For Geertz the thickest descriptions are those based on the extrovert expressions of culture, in other words, what local people tell us. Within this project the research explored the subject of sound through various methodological approaches: focus groups, soundmapping, soundwalking, interviews, audio and image documenting, including auto ethnographies. In exploring these specific and contextual approaches the research gained a much deeper understanding of how young people move through, document, interpret and engage with sound, beyond the discussion of the description of things that take place during a focus group. For Geertz "rather than following a rising curve of cumulative findings, cultural analysis breaks up in to a disconnected yet coherent sequence of bolder and bolder sorties" (1977:25). The task being "to uncover the conceptual structures that inform (how)our subjects' acts" (1977:27). In addition, though interpretivist researchers start from the standpoint of collecting thick descriptions, theoretical concepts play a strong role in shaping the study, 'refining' each element of data collection.

The strength of the interpretivist approach is that the findings can place the reader in the setting of the research (in the interviews, focus groups and/or ethnographic field).

Because the setting can influence both the researcher and the subject, the setting can also be understood as an object of research; the space is also a subject, which can be analysed and interpreted. In this study, it was important to spend time within the space, actively engaging, watching and listening to the area of focus. At the same time we need to attend to the wider social structures, which shape a person's experience of space. Lefebvre (1974), de Certeau (1988) and Harvey (2001, 2009a, 2011) argue that top down social structures, including political organisations and policy makers, large bureaucracies, designers and urban planners, have a role in shaping space, which in turn alters the phenomenological. This cannot be ignored in the examination of the individual or group experience of space.

3.3 Interpreting the soundscape

Sound like any other social activity, or cultural practice, develops alongside cultural and social changes. Even in small places, like street corners, parks, bars and housing estates, sounds that are culturally and locally specific to either a community or a small group of people, can exist. An interpretivist will examine what meanings people place on their relationships to these sounds as well as their perception of space. If we wish to examine the etiology of a sound, instead of sound as a measure of aural impact on the aesthetic and health senses, we need to explore sound as it evolves culturally. Each space can be said to have its own unique soundscape, based on cultural, social and economic practices (Blesser and Salter 2009). It was important to examine the microcosms of sound within Smithfield. The methodological challenge associated with this research project was to research sound as a sociological experience, that is, one experienced by individuals and social groups, in order to explore what part sound plays in re-structuring social space. This thesis asked what meaning the soundscape, mediated or experienced in the real world has for young and old people. In examining possible ways to empirically explore this research question it was necessary to review the existing research.

Earlier sound studies focused on listening practices within communities from primarily a quantitative perspective. Previous sociological and media literature on spatiality and place have researched the production and consumption of space or movement through space using theoretical and qualitative methods (de Certeau 1988, LaBelle 2010, Augovard 1979). Augovard for example, conducted a series of in-depth interviews with inhabitants of a small French town in the 1970s, exploring their use of everyday space. LaBelle and de Certeau took the ethnographic approach to exploring peoples everyday use of space. Technological theorists use a range of methods, usually qualitative, to focus on the use of technology as important in negotiating space, the urban and the home (Bijker et al. 1989; Bijker and Law 1994; Callon 1989; MacKenzie and Wajcman 1999, 1999). Because the production of sound is often unmediated and unorganised in space, particularly urban spaces (Bijsterveld 2008), one must manage one's experience of sound on a daily basis. Through this process the patterns and confluences that city sounds contain are recognised and they become part of the daily order of life. In order to investigate how people experience and understand sound in space, one must explore the personal and subjective use of space. This thesis examines how particular cohorts of people (i.e. teenagers and older people) experience and negotiate space through soundwalking, and then how sound reconfigures our experience of space.

3.4 Soundwalks in context

Soundwalking dates back to the early research of Murray Schafer and Hildegard Westerkamp (2000). The practice of soundwalking is to evoke memories of space through sound. These spaces can be familiar or unfamiliar to participants. The soundwalk has been further developed by other sound researchers and used to explore different terrains within cities, as well as the relationship between sound, space, economic and social practices (Adams et al. 2008; Augoyard 1979; Imai 2008; Tonkiss 2004). One of the difficulties with soundwalking is that while we are walking, we are watching; most people find it difficult to separate these two, or to think about what they hear as opposed to what they see. There is also a lack of terminology to describe what one hears (Thibaud 1998). In the English language there are many words for describing how an object looks: size, colour, shape, texture. Thibaud argues that there is a need for a praxeology of sound, which means ignoring the "three main socially recognized categories of sounds: music, speech and noise" (1998:1). This is arguable as sonic descriptions can be vocalised in ways that are not necessarily typified by the tradition of language, and each culture, as argued by Feld

(1993), may have different ways of describing something through sound.

In the 1970s the Step by Step research project, was designed by the French sociologist Jean-François Augoyard (1979). The project involved designing a set of walks through a French urban housing estate. This research and the method created for it were heavily influenced by Lefebvre's theories of space (1974). Augoyard regarded space as something constantly reconstructed by movement and use. Instead of creating specific walks his group followed people on their routes to places, shopping, work, socialising etc. This allowed an in-depth examination of how people appropriate space. The walks were designed to cover very small areas within certain neighbourhoods, which were frequently used by different people within the community. Augoyard argues that communities' spaces are increasingly compressed as a result of economic as well as housing pressures. He contends that we can only hope to explore small places in an attempt to understand the use of space as "qualitatively speaking, we have no foothold upon the city as a totality" (1979:8); it is too large to grasp.

Soundwalks or 'walkarounds' have also been used to explore how social networks operate in spatial contexts (Emmel and Clark 2009). Emmel and Clarke's project 'Connected Lives' used 'walkarounds' to explore meaning making in space, arguing that space "resonates with spatial practices" (2009:9). They suggest that the walk acts as a mnemonic device⁷, and that the walks are used to focus on points of meaning in space that become significant in the formation of communities and social networks. The walk is an important sociological method when advancing or opening up ideas on space and spatial practices. These walks tend to produce a kind of trajectory and can create new points of contact in space. Augovard (1979) reconstructs a much wider phenomenological field that highlights, not just movement and use within space, but the impact or 'resounding' effects of certain sounds within space. He argues that new things appropriate space: markets, carnivals, gangs, etc. and these sounds alter a local's perspective of once familiar spaces. Both Augovard and Emmel and Clarke's projects examine space as either 'nodal' points of interest or 'units' of space. However, when examining the sonic within space we cannot parcel the sounds of space so easily. The physics of sound means that it propagates through and around

⁷ Small sounds met on the walks become fixed in memory and may remind one of larger events.

space, which makes it a very important sociological factor in understanding spatial practices. Public sound is the one phenomenon, which is almost impossible to compress.

3.5 Research ethics

As with any research project, there were ethical issues to consider in this work. It was important that the research adhere to the Sociological Association of Ireland guidelines on working with human subjects, whereby "researchers must consider the ethical implications and, where applicable, psychological consequences for the participants in their research" (NUIM 2012). Ethical approval was obtained for this study from the Maynooth Social Science Research Ethics Committee in December 2010. A detailed consent form was submitted to the committee, which included a draft of the interview questions and the consent and information forms to be given to cohorts. Because this research involved working with minors it was also necessary to obtain Garda clearance for the research (the Garda are the Irish police force). This was received in February 2011. Garda clearance or vetting is usually required when working with children in state institutions (Garda 2012).

The process of obtaining ethical approval and Garda vetting highlighted certain important issues, such as the necessity for two consent forms; one for the older and one for the younger participants. Both were considered potentially vulnerable groups. The consent form designed for the young participants required their and their parents'/guardians' signatures. Although it was recognized that legally these were minors and therefore one had to consider parental consent, it was felt that each student involved in the research should be allowed have a say about their participation in this project. Realistically, it is likely that there was little choice given to the students with regards to their participation or otherwise in this research as it took place during school hours, and was negotiated with teachers and schools. The consent form created for older participants was very similar to the one used with the younger group. A key consideration for the older group was the issue of confidentiality. This group were interviewed using open-ended questions and they discussed aspects of their lives in some detail. Thus data, which contained identifying information such as names, dates and addresses, was anonomized.

As part of the ethical approval, it was noted that the data gathered, including the recorded interviews, photographs and audio recordings, would be saved on a hard drive and stored in a locked drawer for a period of five years from the date of the final submission of the thesis. In addition, each participant was asked if they would allow their data to be archived in the Irish Qualitative Data Archive, (IQDA)⁸. Confidentiality was assured in the publication of findings and subsequent presentations.

3.5.1 The Emancipatory Process

The emancipatory process is "the placing of control in the hands of the researched, not the researcher" (Oliver 2002:18); it is allowing the researched a type of ownership of the knowledge they produce. Emancipation was not initially part of the goal of the project. It is only on reflection we can see what occurs when the researched becomes the researcher. Feminist methodologies argue that we must take into account "the observer's standpoint, a direct challenge to universality and objectivity" (Schwartz-Shea 2006:89).

In asking the young people to use audio and visual technologies, to document their environment, the control of data collection was placed within their hands. In this way the researcher had limited control of the data collection. Emancipation also examines the empowering of people through new knowledge. At the early stages of working with the young people, it was intended to not overly guide them in how they would document the space; this was to allow for their own subjective viewpoint to come across. However, this could not always be accomplished as there was a necessity to shape, to some extent, their data collection both through the technology used and the terminology employed to describe different sounds (Oudshoorn and Pinch 2003). This is unavoidable and is not necessarily a negative; the emancipatory approach is based on informing and influencing people's views of the world, as well as respecting their opinions. In this way the research group not only became researchers within the research, they also developed skills in new areas of technology and a new understanding of a type of social phenomenon which is a critical part of emancipation.

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⁸ "The Irish Qualitative Data Archive (IQDA) is a central access point for qualitative social science data generated in or about Ireland" see www.iqda.ie.

3.6 Research space - Smithfield Square and environs

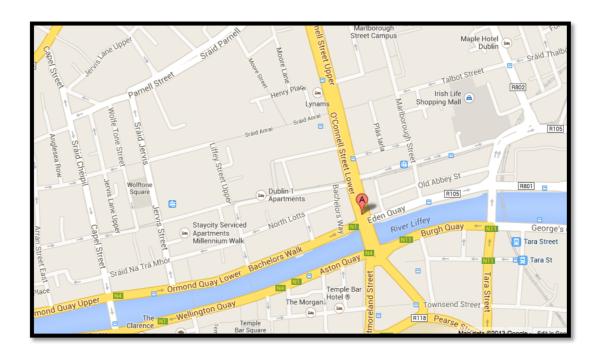


Figure 3 Map of Dublin city centre, including O Connell St and the Liffey (Map Data © Google)



Figure 4 Map of the Smithfield area (Map data ©2013 Google)

Smithfield, like other areas in Dublin, has undergone a series of publically driven regeneration projects since the mid 1990s from the HARP project (Historic Area Regeneration Project) in 1996, to the Integrated Area Plan, which began in the North

East Inner City in 1998. These two projects were designed to redevelop "deprived" areas in Dublin and to enhance "the quality of life for residents, business and visitors" (HARP 2012). The reasons advanced for HARP were based on the high level of unemployment in the area and the general neglect and degeneration of buildings within Smithfield. The documentary film maker Joe Lee recorded how a generation of people from the north side of Dublin city had been living in dire conditions right up until the late 1980s (2009). In his film, Bananas on the Breadboard, there is footage of the area that highlights the neglect of the infrastructure in the north side of Dublin, particularly around the Smithfield area. The radical transformation of Smithfield during the 1990s and 2000s has created quite a distinct soundscape, noticeably because of the continuous presence of construction.

3.6.1 Research group selection

In designing a methodological approach for this research, a series of stages of fieldwork were devised in order to explore sound and space from different perspectives, with a view to interpreting sound both subjectively and analytically. The methodology was designed so that the research group would become active participants in the work through collecting data, documenting spaces and interrogating the urban soundscape and its meaning. As noted previously, the research was concerned with the perception of teenagers and older people; these cohorts were represented by the two groups in the study: teenagers aged 15 and 16 years, and older people between the ages of 55 and 70 years.

The participants were chosen based on their relationship with the Smithfield area. It was decided that the best way to work with the younger group, over an extended period of time, was to work within a secondary school⁹. There were four schools within a 3km radius of the Smithfield area and based in or around the North inner city of Dublin. Most of the students attending the local schools either lived within or close to Smithfield, or were familiar with the space because of travelling to and from school. It was important that the teenagers have a familiarity with the Smithfield

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⁹ The rationale for working with teenagers was also based in part, on the funding received for the research from the Department of Youth and Children Affairs during the second year. A stipulation was that the focus be on youth.

area. The research was asking that one listen to a space that is already familiar, examining if, in the act of listening, spatial meanings and interpretations change. The schools were selected using purposive sampling. It was also important to work with both male and female students within a particular age range.

In order to work progressively with a group of teenagers over a 6-week to 2-month period the schools needed to be located near the research area. Three of the schools were public/state schools and one was a private fee paying school. Although most of the fee-paying students were not local to the Smithfield area, all knew the space with some familiarity. However, their examination of the space would be filtered through their experiences of growing up in private housing estates and within suburban or rural areas. This allows for the potential of examining possible class structures in shaping the interpretation of urban soundscapes.

After a discussion with the principal of the first school, it was decided that transition Year pupils would have the most time available to participate in this project. The age group of transition Year students is approximately 15 years. Transition Year is a programme of work designed by the school to promote the "personal, social, vocational and educational development of students" (schooldays.ie 2012). The curriculum structure for students in this year is less rigid than in other years and the students have more free time. This time flexibility was necessary as the participants in each school contributed to a workshop, three soundwalks, and a series of small focus groups. The first two schools selected were exclusively girl's schools and the second two were exclusively boy's schools. When the schools were first approached, there were some reservations voiced. Each school stated that numerous individuals and research groups had contacted them to work with their students. Because they have limited time within their own school schedule, they usually just say no at the outset. However, after meetings with the principals of the schools and then meeting with their Transition Year co-ordinators, the schools recognised that this research would be both interesting in its findings and interesting for their students.

The Catholic Church runs each of the schools in the study and most, most, if not all-Catholic schools in Ireland are sex segregated. According to a 2010 OECD report, approximately 52% of post primary schools in Ireland are under the patronage and management of a religious organisation (Street 2011). This posed a significant

challenge for the research study; one must consider if the behaviour amongst the teenagers in a sex segregated environment could sufficiently represent their social practices outside of school. For example, when students went into the field, they were in all females or all male groups. This raised a question about how their behaviour might change in front of the opposite sex. However, in a country whose schools frequently segregate the sexes from early youth, it was considered that socially, this is a typical environment for Irish teenagers. As was later revealed, through the focus group conversations, most of these teenagers segregate themselves from the opposite sex outside of school, unless they are dating. Three of the schools, the public/state schools, operated a very flexible education structure for the transition year students, which meant that attendance would fluctuate. Whilst the private school had a very structured transition year designed for their students, which included end of year exams, and necessary attendance. However, the private school participant attendance was weaker than the public, in showing up for the workshops and focus groups. All of those schools required the students wear uniforms and have neat appearances. The three public schools were physically in poor condition and had limited arts programmes, whilst the private school offered music lessons, competitive sports in private training grounds, and drama workshops.

The older group were selected using snowball sampling. There were two criteria for their selection: firstly their age - they had to be over 55 years; secondly, that they had grown up in and around the inner city of North Dublin. It was vital that each group had strong connections to the research site.

Consideration should be given to the reasons why a researcher chooses to work with one cohort over another; this is particularly so when the potential groups are deemed vulnerable. The research was examining a group that is seen to have less control over the contemporary environment and to attempt to understand what strategies they used to navigate the city. Bull's (2000) research focused on adults in their mid to late twenties in order to examine their experience of the soundscape. One might expect that this age group would have certain control over their experience of space, through their choice of living conditions, their habitat, and their ability to purchase technologies of sound suppression (Hagood 2011). While they may not choose to challenge the authorities in relation to environmental or physical harm to their social

space, it is reasonable to assume that they could if they so desired. The study was examining how a soundscape shapes a teenager's use of space, particularly spaces controlled by social structures such as schools. A number of publications have examined regeneration within urban spaces, focusing on economic and social factors (Corcoran 1998; Degen 2008; Drudy and Punch 2000; Punch et al. 2004). However, the impact of regeneration on teenagers in Ireland is underexplored.

The older participants explored historical sound narratives whilst examining how and why the contemporary soundscape differs to the past soundscapes of Dublin city.

A final consideration was the relationships between the teenagers within the focus groups. When working with a group who have close contact with each other on a daily basis, particularly young teenagers, it is important to be aware of the "power differentials" or hierarchies which have developed between individuals in certain social situations, such as schools (Hofmeyer and Scott 2008:2). These can become apparent in certain situations e.g. focus groups and in research where there is ongoing contact over a prolonged period of time.

3.7 Qualitative mixed methods

In choosing a qualitative approach it was hoped that the data produced would be varied and rich. Using the interpretivist approach enhances the process of data collection and forces one to consider, at each stage, how an understanding of the space influenced the structure of the methods. It is through a combination of research data and social theory that this thesis aims to explain and understand the part sound plays within urban spaces. This following section will detail the 3 stages of fieldwork:

- 1. Autoethnographic soundwalks,
- 2. Working with teenagers,
- 3. Interviewing older cohorts.

Stages two and three did not occur concurrently; rather, they were dependent on the availability of the cohorts. However, it was important that the ethnographic soundwalks occurred prior to working with the participants.

3.7.1 Stage 1: journaling and soundwalking

In stage one, the researcher began a journal, which continued throughout the project. Because there was a prior connection to the space and because it had played a significant part in childhood, it was necessary to examine past memories and impressions as part of the research. Journaling, particularly reflective journaling, is "the ability to locate yourself as researcher squarely into the research act" (Fook 1999:1). This includes, examining the motives and rationale for choices made in relation to subjects, area and methods. As a researcher, it is important to explore the choices made in the questions one asks. This analysis can impact on the direction of the research. This type of reflectivity is situated within feminist theory, which argues that one's bias and subjectivity, gender, class and age, can shape the research (Butler 1988; Harding and Norberg 2005). Feminist theorists do not argue that we must remove these influences, as that is impossible, but rather that we must be aware of them. One must also examine the setting or framework within which the research is based: historical background, contemporary social and political situation, and the individual socio cultural details (Mills 2000:224). Our biases and inclinations favour certain viewpoints, which may be explained through journaling. Journaling, while it involves the recording of the field logistics, for example, time, date, and numbers of people engaging in an activity, also records the subjective experience of the researcher, during the research (Ortlipp 2008).

In this thesis, the practice of journaling was part of the research and contributed to the findings; it is therefore contained within the body of the thesis and is reflected in the writing. The point of a reflective approach is "to make visible to the reader the constructed nature of research outcomes" (Ortlipp 2008:695). This may lead to an over consideration as to what form the notes may eventually take (Emerson, Fretz, and Shaw 1995; Wolfinger 2002). The process of deliberation over context and language and not necessarily the observation and reiteration of the facts as perceived by the researcher, may lead to equivocation within the text (Wolfinger 2002).

However, even these considerations of language and choice of viewpoint are important in reflective journaling. It is not the external unknown reader that is generally considered in journaling, but rather the researcher as reader of their own processes (Adams 2009; Fook 1999; Ortlipp 2008; Watt 2007). Journaling is an ongoing methodological process - this is the fundamental difference between journaling and note taking though some overlap between the two occurred in this study. The process of exploring the phenomenological within the interpretive approach requires the noting of the conditions that one is in, as well as what one experiences (Truax 2000). Interpretivism is concerned with the given moment, as it is experienced, one's account of it, and one's subjective opinion of what is taking place. As a researcher exploring the soundscape, through the process of soundwalks, careful noting of the conditions that impact on the experience of sound must be documented. These might include, for example:

- The weather;
- Time of day;
- Type of places passed through;
- Types of activities taking place;
- The grouping of people;
- The speed at which one walks and why.

This documentation makes up the field noting. The other element, the practice of noting what is experienced, is where the researcher records how she is feeling about the walk. The following journal extract demonstrates the blending of both elements in this research.

Journal note:

"After a day of soundwalking I found it frustrating to find that all I noticed was either the traffic or the absence of traffic. Is it a case that when I try to hear a place, I stop actually hearing it as whole and break it up into pieces? This seems similar to photographing a space, we take a snapshot of the whole. The idea of Smithfield being in anyway an area of a particular kind of practice (as in economic or social activities) seems nil. When I walk up Grafton Street I hear footfall, people, music, laughter, bags

banging. It's the sound of a shopping district. Smithfield seems empty of sounds that signify anything.

Conditions: Dry windy day, very difficult to hear at certain angles. Lunchtime traffic and lunch time crowds. Walked through Smithfield to markets, not too busy with market people, no kids" (Researcher notes, 2010 Feb. 7th)

Ortlip argues that journaling becomes a type of "critical self-reflection" during the process of research, and that this can impact on the overall research design (2008:704). In this thesis, reflective journaling played a large part in the design of the methods. Throughout the fieldwork and long after, the journals were used to reflect on the research, on changing ideas and on future research projects related to this thesis. The journal also deepened the research by adding an experiential layer over the theoretical studies: the world was no longer examined as a set of abstract theoretical concepts; rather, one could apply and compare the theoretical knowledge to the experience of space. The researcher was exploring her own participation and presence in the spaces she was walking and exploring her biases, reflections and memories both during and after the walks. In this way the journal acts as a kind of memoir of her experience as well as a collection of information about the space. Field noting usually occurs during ethnographies where the researcher is either overtly or covertly taking part in some group experience. It is important in this case to take detailed notes of what she sees happening around her, including what she perceives others to be feeling. Field notes have a theoretical, observational and analytical dimension, which leaves room for reflection.

3.7.1.1 Designing the soundwalk

The soundwalks undertaken for this research involved concentrating on a very specific area within Dublin's north inner city. Traditionally the north side of Dublin city was distinguished by its economic (agricultural markets: fish, livestock, fruit and vegetables, and particular trades which developed alongside these) practices. Now it is characterised as a cultural quarter, an abandoned set of sites and a public square. There is a small dedicated area in Smithfield now called the Market Area, which has

the remnants of a wholesale market. This makes the space a container and producer of varied sound profiles connected to production, unemployment, poverty and culture. Walking through this space would allow for an examination of how different economic and social structures shaped the urban soundscape.

In designing the soundwalks, it was necessary to develop a walk that took in the Smithfield area as well as a small section of the surrounding housing and shopping areas. It was important to walk through very different soundscapes in order to highlight how spaces, which are close to each other, could sound differently based on the activities taking place within them. It is argued that contemporary western cities have a uniform soundscape, one which is derived from a set of similar economic practices and architectural designs (Degen 2008; Truax 2000). Part of the purpose of the walks, which passed through several different economic and social spaces, was to explore whether or not a uniform soundscape existed in Dublin city.

Exploring this one area, Smithfield, means examining a distinct space within Dublin. Smithfield still contains a wholesale fruit and vegetable market, whose opening and closing times operate differently to most businesses in the city. Its economic practices are connected to wider networks, such as shipping and farming, as well as deliveries to local and national businesses. This makes it sound distinctly different to the rest of the city – (see figure 5 and 6).



Figure 5 Smithfield market 2011 (Picture by researcher)



Figure 6 Interior of fruit, flower and vegetable market 2011 (image by researcher)

There are a few traditional wholesale food markets left in Dublin, but they are retreating in size and importance, which makes them all the more special within a modern western city. In using soundwalking as a method to explore social and cultural practices, it is important to source spaces, which differ from each other. This allows the soundwalker to experience unique soundscapes, which are dissimilar enough to other parts of the city to warrant investigation as to the meaning of these differences. This soundwalk was designed to take the researcher from the west side of Smithfield through to the main shopping district at the east end of the city. A walk allows the researcher the opportunity to casually observe the practices of everyday life and to explore its daily rhythms (de Certeau 1988); this walk was designed to experience the space over a 24-hour period. Rather than walk the space in one 24hour period, two hours on Thursday of every week, were walked until the cycle of a day was complete. These walks took place from February 2010 to June 2010. A recording device was used to document the experience of the walk, which included recording personal reflections as well as describing the source of some of the sounds heard on the walk.

The difficulties involved in recording a space, frequently do not lie in the quality of what is recorded or the directionality of the sound but rather in the listener. When training as a deep listener with Pauline Oliveros in 2009, the researcher discovered that there are different modes of listening: passive and active, or directional and focused. Similar to sight, one can focus in on sound; one can also tune sound out, either to deal with monotonous sounds or loud sounds (Ronayne, McDonald, and Smith 1981). The issue that arises when recording a space is where to focus. The microphone is not so directional; it hears a wide variety of sound and does not choose what to record or what to listen to. However, a recording can reveal what sounds are dominant in a culture at a particular time, without the subjective listener intervening.

The overriding issue when recording environments for later listening/viewing is how memory and experience might interfere with our interpretation of the experience. Interpretivists contend that it is the experiential moment that is important, but a recording is only an indication of what sounds were in the space at a given time. However, alongside the notes that were taken during and directly after the walk, the recording adds to what is collected, as material data of what was experienced. This

data, when listened to later, can add information that the observer, for whatever reason, chose to ignore. It is necessary in using the interpretivist approach to be open to the more holistic experience of soundwalking, which is listening in the moment combined with later reflective listening.

Rabinow and Sullivan (1988) argue that the structuralist approach to research is to describe the social world as a set of stable moments that can be analysed. Sound by its very nature is unstable. We cannot guarantee that even the same sound, such as a bell ringing, at the same time everyday, will produce the same reaction in locals, or even sound the same. The interpretivist approach argues that we must explore what meaning the bell has to the social group connected either spatially or through some cultural practices to this bell or to other significant sounds in the area. That it happens everyday, along with the sounds of production, nature, and the social, means that we can interpret it through a set of subjective and inter-subjective processes of repetition and change. In the soundwalks and journaling, the researcher can examine how sounds alter throughout the course of a day, and what ways they repeat. The signification of each element of sound as it relates to the process of its production can also be explored. For example, at four o'clock in the morning during the walk, the sounds heard included: delivery trucks parking, pallet trucks and fork-lifts driving around; men talking to each other and the opening of metal shutters; groups gathering together; women purchasing produce; and people walking to work. It was deduced that certain actions were taking place related to production and that these actions happened cyclically. It is important to note that while there was this dedicated 24 hour walk, the researcher, throughout the project, continued to walk this part of the city. As will be described later, she also took part in numerous other soundwalks, (see figure 7).

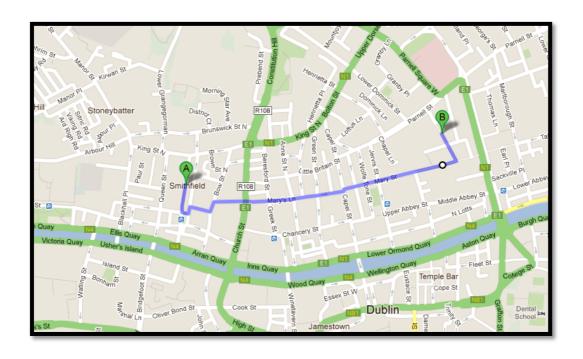


Figure 7 Researcher soundwalk, A = Smithfield B = main shopping area of Henry St and Moore St (Map data © 2011 Google)

Walking in a city reveals the conduits created by inhabitants. However, when we examine the everyday use of space, which is fluid, we see that life "does not yield states of affairs, behaviours whose typological structure could be fixed in place" Rather, the social is constantly unfixed in space while (Augovard 1979:5). simultaneously being constructed around the static (Lefebvre 1992). De Certeau (1988) suggests that we examine not what we observe but what we make of what we observe and what interpretation we have of that experience. He argues that when a visitor walks through a city they are observing the city as a whole, instead of understanding the context and meaning of particular perceptual experiences. In exploring an unknown space, we walk through it blindly perceiving information in random snatches, devoid of context. Alternatively, when we know a space well, we may bring our own assumptions to our interpretation of the space. While walking a space, the observer is not taking part in particular social practices within the space. In this research, the question of how one can interrogate spatial use and sounds and how it might be possible to understand spaces if we are strangers to them, with no cultural connection, came to the fore.

The collection of data via a soundwalk can be difficult; one needs to ascertain what

material adequately reflects the experience of the journey. As this research concerns the soundscape, it seems obvious that the collection of audio materials was the primary goal. Though recorded audio can reveal certain practices taking place within an area, as mentioned previously, the microphone is not a discerning ear. Soundwalking implies intentionally walking and listening to what is heard both in the foreground and the background. However, how one chooses to listen to a space is influenced by social and cultural norms and practices; one's *ear view* will tune in subjectively to what is familiar and unfamiliar to the listener. During the walks, the researcher had to be both a vigilant listener as well as a discerning observer. This meant overcoming cultural associations about city spaces and the sounds they produce, such as the sounds of groups of men, emergency service sounds and even moments of silence. In interpreting the soundscape of Smithfield, particularly in the early hours of the morning, the researcher had to overcome her own fear of the city at night in order to accurately listen to and document the space.

3.7.2 Stage 2: researching with young people - the teenage ear view

Little attempt was made to understand the way that they themselves lived, instead, the emphasis fell on trying to measure how far their efforts fell short of what the average adult or healthy person was capable of accomplishing. (Merleau-Ponty 1948:71)

Working with young people was part of exploring a gap in the field of sound research. Merleau-Ponty (1948) argues that historically the voices of young people were ignored. He suggests that researchers and philosophers believed that there was such a "thing as a fully formed man" (1948:71) and that before adulthood children existed in a state of ignorance of the world around them. However, contemporary research into space and spatial practices has highlighted the importance of working with young people (Kato 2006, Matthews, Limb, and Percy-Smith 1998, Travlou 2003). These researchers explore governmental policies concerning youth which has led to "the exclusion of young people from public space through the criminalisation of certain activities (i.e. skateboarding, graffiti) and the policing of their movement (i.e. juvenile

curfews)" 10 (Travlou 2003:3). Bull argues that there is "no contemporary account of the auditory nature of everyday experience in urban and cultural studies" (2000:2). One could build on this statement by suggesting that there is no contemporary account of youth and their relationship to the auditory in everyday life. Although Bull presents a very detailed account of the adult experience, there is no account of the experience of a generation which has grown up with sound technologies built into Ihde (2007) examines technology and the urban through an their social life. exploration of how we embody certain technologies in order to re-experience a phenomenological world. These theorists argue that the phenomenological, technical and urban experiences are interrelated and culturally specific to modern western However, numerous publications, exploring media use in non-western cultures, cite similar behaviours (Cawley and Hynes 2010; Hirschkind 2004; Imai 2008; Ito 2004). In 2012, with the ease of access young people have to audible technologies, no researcher in Ireland has entered the ethnographic field to investigate how technological use impacts on teenagers' relationship to their physical environment. Equally, no social research has explored what part sound plays in the everyday experience of Irish cities for teenagers.

The second stage of this research focused on teenagers between the ages of 15 and 16 who lived or studied within the research area. The choice of age group was based on the relationship these teenagers would have to the Smithfield area. Smithfield was designated a space for rejuvenation in the early 1990s so these teenagers would only have known this part of the city as a space undergoing physical transformations.

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¹⁰ The Irish equivalent is the Juvenile Diversion programme, "the intended outcome of the Programme is to divert young people from committing further offences" www.citizensinformation.ie.

Table 2 Dates and types of soundwalks from 2011-2012

Gender	School type	No. of students	School	(1) Soundwalk	(2) Soundwalk & Photo walk
Duration				40 min	40 min
Girls	Public School	23	a	9th March 2011 (Silent)	16 th March 23 rd March 2011
Girls	Public School	20	b	23 rd Sept 2011	30 th September 8 th October 2011
Boys	Private School	21	С	18 th January 2012	25th January 2 nd February 2012
Boys	Public School	20	d	18 th January 2012	26th January 2 nd February 2012

3.7.2.1 Soundwalks

The first phase of working with the young people, which was supposed to be conducted in each school, was the silent soundwalk. This walk would take approximately 40 minutes and the route was designed to pass through several shopping, market and housing areas, *en route* to the Smithfield area. According to existing literature when we walk a space in silence, we learn a new method of communicating with it and new ways of communicating with each other (Street 2011). In the act of silent walking the students would get a chance to really listen to the city without the interference of conversation or mediated listening. Bull (2000) argues that we are enclosed, surrounded by and immersed in sounds that have no symbolic meaning. He also argues that the city has become so noisy that we must

preserve the parts that encourage quiet such as public parks or quiet neighbourhoods (Schafer 1977). It was hoped that the silent soundwalk would interrogate these theories.

The aim of the silent soundwalk was to examine what young people listen to in their environment, to attempt to understand what the experience of listening to the environment means to them and to see if they could differentiate between hearing and listening. Walking in silence is extremely difficult for people especially when they are part of a group. When participating in the *Deeplistening* seminar in Spain 2010, the researcher discovered that humans, as a group, find it difficult to be near each other and not communicate. Deeplistening is a philosophy and method created by the composer Pauline Oliveros, it argues for a deeper attention to the sonic environment. When one listens deeply, they can discover not only the nuances of sound in space, but also the ability to reflect on the meaning of these sounds in their everyday lives. The Deeplistening philosophy asks participants to distinguish "between the involuntary nature of hearing and the voluntary selective nature of listening" (Oliveros 2005).

By asking teenagers to participate in a silent soundwalk, one is challenging them to pay attention to what they hear while walking, essentially the sounds of the city, and not to engage with each other verbally. As a social group in Ireland, in general, teenagers tend to travel in pairs or small groups and they are only alone when they are at home and in their bedrooms. The 1st silent soundwalk, which took place in February of 2011 (see table 2), was the last. Confronted with the idea of being together but abandoning the usual social norms of conversation caused much confusion. The group of girls, of which there were 23, could not understand why they could not simultaneously talk and listen. During the silent soundwalk, it was noted that the group seemed to wander aimlessly on the walks; they described feeling uncertain about what they were supposed to be paying attention to, even with the direction of the researcher. The researcher also walked in silence, to observe and actively participate in the walk. Soundwalking as a process involves listening but does not always involve silent listening. However, Deeplistening walkers are guided towards exploring the environment through silence for periods of a day. This is not just to allow for the opportunity to hear the environment, but to develop the ability to

silence the thoughts inside your head. Even for adults, this practice can be extremely difficult, but for teenagers, being quiet for a period of time in the presence of their peers, was a real challenge. It was described as "painful" and "exhausting" (several participants complained about the tiredness they felt after a silent walk). The researcher decided, that for the subsequent three schools, there would be no silent soundwalk; instead, the students would walk the same route, but be attentive to the environment. Each group completed three walks; a soundwalk, a photographic soundwalk and an audio recording soundwalk.

The second soundwalk involved the students being broken up into pairs and given a disposable camera to visually document sound producing objects e.g. cars, people and animals. For the final soundwalk the group was again broken into pairs and given a digital recorder with which to record the soundscape. The participants were asked to consider recording sounds that they could identify, as well as sounds, which could be described as coming from an indeterminate origin, such as background noise/sounds. Asking young people to listen to the environment while documenting it gave them a clear focus.

During the walks, the researcher paid close attention to the young people, examining their interraction with each other and the environment. This is important when exploring how young people interrelate in groups. The silent soundwalk forced them to listen to the soundscape, but when the groups were allowed walk without having to be silent, their behaviour in space altered. The connection to listening and vocalising became group orientated; in this way the researcher is not just following a group, but examining how they listen *in* groups. Aarts and Dijksterhuis (2003) suggest that patterns of normative behaviour can be witnessed within typical group settings.

3.7.2.2 Focus Groups

Raby (2010) suggests that focus groups allow for possible dissemination and negotiation of ideas within a group of people. Focus groups can reveal common assumptions and highlight differences of opinion not previously considered. As teenagers in general tend to socialise in groups, it was felt that the focus group situation would be both more familiar and comfortable than one-to-one interviews. Most teenage social activities take place within groups of people: classrooms, parks, discos or just hanging out (Boyd 2007; Curtin and Linehan 2002; Kato 2006). There is always the potential for unruly behaviour in focus groups because they "provide

less studied personal "account-making" than that emerging through interviews and life histories" (Raby 2010:2). There is also the problem of confidentiality and the risks involved when openly sharing opinions "because the group dynamic of sharing opinions can create vulnerabilities between participants" (Hofmeyer and Scott 2008:1); this is known as 'spatial familiarity'. In this situation the researcher must operate very carefully when asking her questions, so that no potential problems arise at a later stage. Ging (2005) and MacKeogh (2002) argue that focus groups do not necessarily reveal a person's 'real views' because of the nature of the group conversation. However, there is the potential for revealing how the group, on a social level, share and negotiate their understanding of things. Ging argues that in the situation of an all male teenage focus group, their responses and engagements are "considered to be as relevant as individual responses, since it is in formal and informal group situations, (....) that boys and young men learn and perform the rules of normative masculinity" (2005:32).

3.7.2.3 Sound diaries

Initially the researcher had planned to get the participants to keep sound diaries. In the first school each participant was given a notebook, which was divided into sections, 1) sounds in the home, 2) sounds outside and 3) sounds in school. The participants were asked to note throughout the course of their day, for one week, the sounds that they heard in each space. It was also suggested that if it was easier, they could instead write a description in the evening of the sounds they remembered hearing throughout the day. However, it became clear after one week in the school that none of the participants were interested in notating their daily sound experiences. We discussed why this was; most felt that describing sound was a difficult and unusual experience. After several attempts to encourage them to use the diary, it was decided that as a method it did not work.

Table 3 Focus groups 2011-2012

Groups and gender	No. of students	Dates		
Group A Girls ¹¹				
13a	1912	16th of March 2011		
14a	5	6th of April 2011		
12a	5	16th April 2011		
Group B Girls				
10b	5	7th October 2011		
11b	5	14th November 2011		
8b	5	25th November (1) 2011		
9b	5	25th November (2) 2011		
Group C Boys				
1c	5	9th February 2012		
3c	4	23rd February 2012		
2c	4	22nd March 2012		
Group D Boys				
6d	5	15th March 2012		
7d	4	16th March 2012		
4d	5	29th March (1) 2012		
5d	5	29th March (2) 2012		

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¹¹ The lettering and numbering are tied to the use of excel for analyzing the data, and is somewhat random

¹² The size of the first focus group occurred as a result of miscommunication between researcher and staff, however, the group discussion occurred and was recorded and whilst too large for a proper focus group, still created a dynamic discussion.

table 3). In school A each focus group took place in the school library, a very quiet space. The other groups, B, C and D, took place in classrooms within the schools. The duration of the focus group was dictated by the duration of a single class. In most instances, this averaged 40 minutes, with the longest at 54 minutes and the shortest at 33 minutes. Except for the first focus group with group A, where the teacher was present, the researcher facilitated the rest of the groups. The conversations were recorded on a digital audio recorder. The purpose of the focus groups was not just to explore the participants' interpretation of sound, either technological or natural, it was also to create a space for more active participation in the research. The focus groups were designed as a natural progression from the soundwalks. Typically the aims of the focus group were to:

- Investigate the sounds the participants hear on a daily basis in school, at home and while socialising;
- Explore redesigning city spaces for better soundscapes;
- Explore meaning and language to describe sounds, with a focus on the difference between noise and sound;
- Explore sound and space in the context of digital audio technologies;
- Discuss the various ways that participants use their mobile phones e.g. phoning, texting, listening to music, and the places they use their phones.

The researcher was investigating where, spatially, different types of technological use took place e.g. where participants listened to music and why they chose particular spaces for certain activities. It was important to examine why different methods were used in different spaces to communicate: texting, phoning, emailing, social networking within online sites. There is research that supports technological use as spatially specific and that social norms have developed alongside audible listening (Bull 2008; Hagood 2011; Ito 2004).

3.7.2.4 Sound maps

Within the focus groups the participants also worked with sound maps and sound pyramids. The maps were intended to explore how we understand space geographically by designating spaces of sound, noise and ambiguity, and identifying spaces where the keynote sounds were non-directional and consequently hard to

describe or place. A key question that was asked in the focus groups was, if the students could potentially alter the soundscape through the reconstruction of place, where and how would they do that? This question was always left to the end of the focus group, as by then several topics would have been addressed such as: noise, sound, audio technology and urban sounds. The questions focused on meaning making within the area of technological and natural sounds.

The sound map consisted of a map of the city, placed in the centre of an A1 white page. The participants and the researcher sat around a table with the sheet placed in the centre. Each student was given a coloured pen and while referring to the map, would highlight or draw a line from the map to the white space and write something about the sonic description of that space, (see figure 8).



Figure 8 participant/researcher produced sound maps

This approach was used with group A, and for the first focus group of group B. However, the researcher felt that this map did not generate real dialogue around the subject of the city's soundscape; the students tended to focus on good or bad sounds rather than spaces of sounds. Additionally, the researcher started to examine the

motives behind using paper to map sounds. If the students were expected to discuss the city as an immersive space, it was important to design a process, which addressed the concept of immersion. A sound pyramid was designed and employed for the rest of the focus groups, (see figure 9).

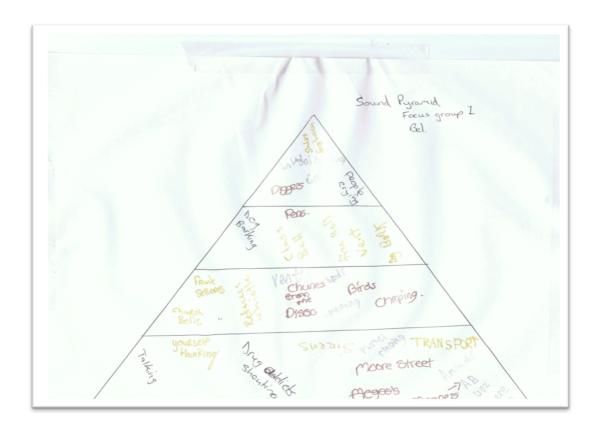


Figure 9 Participant/researcher produced sound pyramid

The sound pyramid is based on the concept of sound as three-dimensional. The design of the pyramid guides the participants to think of sound in terms of layers, each one sitting on top of the other. Acoustically this is not the case; however, as a visual prompt it worked better in stimulating a discussion than the maps. The students were asked to see the bottom layer of the pyramid as the space for sounds that are constantly around them or in the background, and the top layer as sounds that are heard less frequently. The sound pyramid opened up a wider debate about the meaning of sounds in their world; it highlighted differences in the perception of sound and generated some discussion about positive and negative soundscapes. It also brought attention to sounds which appeared at certain times and dates, and sounds that were present in certain weather conditions. This representation of sound as immersive

took participants away from the two dimensionality of space that the earlier maps had represented.

The mapping and pyramid writing took place after the focus group discussion. The focus group discussion usually took up three quarters of the class time with the last quarter being devoted to the maps. The sound maps helped develop some of the ideas and opinions discussed at the beginning of the focus group. The map/pyramid was a physical space in which the students could transcribe their ideas about sound. The map of Dublin city was kept for every focus group, as it helped to keep Smithfield and its environs at the centre of our discussions.

3.7.3 Stage 3: research with older participants: a historical comparison

The researcher wished to examine how the local soundscape has changed since the 1950s and what this might mean to the local populace. Whilst the researcher wished to investigate how sounds impacted on youth within the area contemporarily, she also wanted to examine the difference between what young people would have heard in Smithfield during the 1950s versus how it is heard today.

To explore comparative sound narratives, five semi-structured interviews were carried out with older participants. These interviewees had lived within the area of Smithfield, Sheriff Street and the Market Space, as children and young adults. It is important to be exact about the origins of the participants, as communities, even very small neighbourhoods and streets, can have very different social, cultural and economic practices. The participants in this study consisted of five adults, two women and three men, between the ages of 55 and 70 years (see table 4). Through a process of purposive sampling and snowballing, these participants were recommended to the researcher. Each participant was considered to have a particular knowledge of Smithfield and the north side of Dublin city.

Table 4 statistics of older cohort

	Age	Education	Status	Occupation
1 st male	65	Public school	Retired	Taxi- markets
2 nd male	63	Public school	Working	Local Historian
3 rd Male	56	Public school	Working	Lecturer
1 st female	66	Public school	Working	Secretary
2 nd female	74	Public school	Retired	Secretary

The participants found it difficult in the initial stages of discussion to understand the purpose or focus of the research. They felt that the researcher was asking them to separate one type of experience, a sense experience, from their memories of the past. However, Adams (2006) argues that sound is something that is experienced in context. When discussing the research with the interviewees it was important to highlight that information on sound would appear while talking about their past. The researcher explained that although the research was focusing on sound as a subject, she was also trying to get an overall picture of what Smithfield was like for youth in the 1950s.

These questions were part of a series of questions, which explored the activities within Smithfield from the economic to the social. When one asks people to talk about remembering their past, there is often a concern amongst participants that they will not be able to tell an interesting story and in the initial discussion with the participants, they voiced a concern about their ability to remember something worth telling. Atkinson (1998) argues that most people think in 'story form', often retelling the past in a way that sets up a type of genre narrative, a story told with an emphasis

on a theme such as poverty, love, work, etc. When discussing the transformation of the area of Smithfield, the participants all had a story to tell about changed sounds in the area. With this subject in the foreground, the participants immediately understood how they could contribute to the research. The purpose here was to gain a comparative perspective of the same area from two groups.

In recording a life story, particularly one that focuses on the sounds of things from memories, it is important to try to explore, in as much detail as possible, all that your interviewee remembers, as well as their interpretation of those events (IQDA 2013). This means understanding, as Shaw argues, how the world 'looked to him [sic]' (1966:vii). The questions were shaped in the style of life history questions, but the focus was on their teenage to early adult life, as opposed to their entire life history. As this research was examining not just the participant, but also their connection to place, in this instance an area they had grown up in, the questions were framed to examine this relationship. The questions explored the experience of growing up in the Smithfield area and the sounds that structured their days, weeks and seasons. They also explored their first experiences of audible technologies and what changes these devices made to their lives.

3.8 Qualitative Data Analysis

For the human sciences both the object of investigation-the web of language, symbol, and institutions that constitutes signification-and the tools by which investigation is carried out share inescapably the same pervasive context that is the human world. (Rabinow and Sullivan 1988:24)

The researcher subscribed to a process of inductive and deductive analysis. There was no hypothesis rather, a broad research question exploring sound as a socializing process guided the analysis. Though the methods used the interpretivist approach, interpretivism is also a framework for qualitative data analysis, using an inductive approach. Interpretive analysis does not restrict or privilege "information authorized by experts" instead, social life, as understood by the research participants, "appears as an ongoing conversation in many voices about current reality, a process of

interpretation, not a reiteration of permanently fixed truths" (Rabinow and Sullivan 1988:23). The theories allow for the shaping of the methods, using the research question to inform the type of theories and identify the potential phenomenon, which the researcher was examining. This included examining what might already be known about the subject of sound and its experience within urban settings. Having collected the data the researcher identified some themes and patterns across the data, which presented, if not new theories, at least new conceptions and findings around sound and the youth experience of sound. This thesis is not offering a grounded theory approach to analysis. It was however, open to new data, which would add to existing information within sound and sociology studies.

The researcher designed a process of coding which involved three phases:

- 1. Coding during transcribing using colour coding
- 2. Coding in software: Maxqda and then Excel
- 3. Hardcopy coding (the transcriptions were printed out and the researcher coded using colour coding and stickies)

However, the interpretivist understands that even the codes may well be problematic as coding may suggest a way of generalizing parts of information under headings, subheadings and within frameworks of meaning.

During the analysis phase of the research, the researcher explored patterns within and across the data sets as well as triangulating the data. Some of the themes explored within the data emerged from within social theory such as family, work, gender and class. Yanow and Schwartz-Shea argue that for an interpretivist, concepts are also "embedded within the literature" (2006:xvii). Gender, technology and the phenomenological as processes of socialization and spatial practices were also part of the coding. These theories were examined in chapters one and two and are seen as critical within sound studies. However, as elements of the research are significantly new to social theory, this is where bottom up, inductive coding and the interpretivist approach allowed for new conceptualizations about space, the urban and the phenomenological, to emerge.

The maps, recordings and images gathered were coded alongside the text, as they were part of the overall project. Microsoft Excel is one of the tools used during the

data coding as it allows for multiple fields of information to be accessed simultaneously through work sheets¹³. Technology has played a large part in both the collection and the analysis of data in this research, and a significant amount of audio and visual material was collected throughout ¹⁴.

3.9 Conclusion

Today there are numerous documents highlighting the causes of noisy cities, most of which have focused on measuring technological and mechanical sounds, which are largely seen as the main cause of noise pollution (HSE 11:25:05; McManus 2004; Ronayne et al. 1981; S.D.C.C 2009; Wrightson 11:05:11). This literature fails to investigate the experience of the urban dweller whose lives are intimately connected to urban spaces (they have lived, reproduced and worked there for most of their lives).

The methods in this thesis were designed to explore this gap in the research and are one of the key contributions of this thesis. The combining of qualitative social methods with sound methodologies allowed the researcher access to information, which would not have appeared in most social science studies. Equally, working with two cohorts allowed the researcher access to historical and contemporary descriptions of the urban soundscape; rarely has research into the soundscape of cities, offered such rich comparisons of a changing urban soundscape.

Combining methods, which examine sound as an immersive social experience, connected to all aspects of life, means using approaches not typical in social research. Methods such as soundwalking, deep listening and even sound mapping have a basis within numerous studies examining the urban sound experience (Adams 2009; Adams et al. 2006; Augoyard 1979; Gell-Mann and Tsallis 2004; Schafer 2012; Venot and Sémidor 2006). However, the exploration of the qualia (the qualitative aspects of conscious experience) highlights the seldom-explored phenomena of sound as integral

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¹³ The researcher moved away from working with software programs such as Maxqda, as she felt that they hindered, rather than helped, in the analysis of the qualitative data.

¹⁴ The researcher used Cubase and Isotope in the analysis of audio recordings Cubase for cleaning poor quality recordings and Isotope to remove noise and study frequency levels.

to spatial relations and community (Augovard 1979; Degen 2008; Waskul, Vannini, and Wilson 2009).

In using the interpretivist approach, the researcher must continuously examine and interrogate their methods, allowing the participant and the space to shape the research when necessary. Although interpretivism, emancipation and the participants, as well as reflexivity pushed the researcher towards a constant re-examination of her motives, they provided the rigour necessary to counter the criticisms of bias and subjectivity. However, interpretivism and phenomenological interpretivism often only focus on the personal subjective experience, but this research project also explored the social structures, which shape the individual and group experience of place and space.

4 Sound as a process in the shaping and creation of social spaces

4.1 Introduction

Space is imbued with meaning through its physical design which in turn conducts or reflects sound. The sonic information is read by the space's inhabitants, who respond to it in various ways depending on their relationship to the space. The relationship inhabitants have with a space is cyclical. Each time a space is transformed the inhabitants respond to these changes and the positive or negative nature of the changes become reflected in the success of the space as a producer of things such as: cultural goods; social relations; economic practices as well as the reproduction of certain behaviours within the space that relate to historical traditions. Sounds within a space are a key identifier of either productive or non-productive practices.

This chapter draws on ethnographic research (soundwalks, pyramid mapping), which focused on embodied soundscapes in a post-industrial society and is divided into two sections. The first section explores the experience of space and the development of non-places from the walker and the listener perspective, and the interpretation of the researcher of the sounds, processes, and activities within the research site, experienced during the soundwalks. It clarifies how sounds can be a subjective phenomenon in local communities and it introduces sounds experienced in the Smithfield area of Dublin city. This space is central to the study and, alongside the older and younger participants, it plays a part in the representation of space, the soundscape, and meaning making in the city. Those who live within spaces like Smithfield state that, as an area, it has played a significant role in shaping their development and relationship to community and work practices.

The second section of this chapter explores embodiment within space and the part that sound plays in one's connection to place. It focuses on the experiences and interpretations of place and the sounds within space of the two participant groups. This section also explores notions of public and private spaces and how sound shapes the experiences of these spaces. Using Augé's (2009) theory of non-place I advance

the argument that rejuvenated spaces which do not consider young people in the redesign, become non-places to this social group. Much like when the design of a technology does not consider certain user groups it may exclude them implicitly and explicitly (Oudshoorn and Pinch 2003). Wyatt argues that non-users of objects are expected to conform or adjust to the design (2003). However, for teenagers to be user appropriate in certain city spaces, they must become other than teenagers. It will also advance the notion that sound is key when factoring in this interpretation and designation of place as non-place.

4.2 Walking the city: the ethnographic self

It was important to explore a brief history of Smithfield prior to the ethnographic soundwalks. This was to have a better understanding of the area in order to design a suitable series of walks. To fully interpret a space it is necessary to examine what circumstances led to its current state in order to have a sense of both the phenomenological and practical processes happening within the area. This would also help understand how those who live within or around Smithfield might perceive the space. The walks also helped shape the questions she designed for the research participants.

For over 200 years, the north side of Dublin city was connected to agricultural markets and the docks (Cahill 1861; Drudy and Punch 2000). More recently, the relationship between the north side of the inner city area and these trades has diminished. Up until the 1970s the Smithfield Square and its environs was a central meeting point for the trading of cattle and agricultural produce according to the older interviewees. This space sits alongside several still active wholesale fresh produce markets – (see Figure 10, Figure 11and Figure 12).



Figure 10 Market area. Pictures by researcher



Figure 11 Inside old English market. Picture by researcher



Figure 12 Delivery trucks delivering fruit and vegetables. Picture by researcher

This part of the city contains the remains of a much larger local community, one that was clearly connected to the Smithfield markets. Surrounding this area is a collection of large public housing and flat complexes (see figure 13), as well as a mix of large private apartment complexes, the Fours Courts (a large courthouse), the Jameson distillery, a police station and the youth courts.



Figure 13 Social housing and flat complexes

The west side of this area leads towards the largest public park in Ireland, the Phoenix Park, and the east side leads towards a busy shopping district and the docks. The soundwalks design was influenced by Smithfield's relationship to these various spaces. It is both a commercial and residential area; it has like many areas in Ireland high unemployment, Dublin city accounted for 24% of those unemployed nationally in 2010 (DCC 2010); it is a space in transition both physically and economically. This means that the soundscape is also in transition. The space still operates as an urban residential area as well as a commercial one and the types of people who live there and the economic practices have changed several times (within the lifetime of the researcher). In this way the space of Smithfield is both familiar and unfamiliar to the researcher. Knowledge of a space requires at least partial interactions and some of the knowledge acquired was based on having an arts studio in Smithfield in 2007 and from stories remembered by the researcher's mother.

In researching Smithfield for the soundwalks the researcher had to reflect on assumptions and interpretations she had of the research area, due to these prior

experiences. It allowed for an insight into the space that a completely unfamiliar researcher would not have. It would also help develop the methodological approach used with the young participants.

As noted in the methods chapter, a period of five months was spent soundwalking one day a week for two hours at different times of the day to cover the 24-hour cycle. These were purposefully designed to examine the various degrees of sound levels connected with different types of work or social practices around the north inner city. She noted how the space as a whole rarely offered the sounds of social activities, such as neighbours chatting or children playing on the streets. However, each street offered particular sounds, or obstructed sounds from particular areas. For example, one could hear traffic at all times but, depending on the shape or design of a housing area, she would either hear more or less of this sound, which meant that other sounds in the space would either be muted or amplified depending on the traffic volume. The walk followed a route that led from the quays of the river Liffey to the inner part of Smithfield. As one walks inwards the sounds from the quays diminish; there is a wall of buildings that block the sounds of traffic from the North Quays of Dublin. The quays are particularly busy with traffic but in contrast Smithfield was relatively quiet. Most of the buildings within Smithfield and the surrounding space are not uniform. Two story housing estates sit alongside tall apartment complexes, dilapidated factories, period houses and disused plots of land. There are no shopping quarters and few pedestrians.

The most extreme contrasts in terms of noise and quiet were heard in the early hours of the morning, from approximately 04:00 hours. Around Greek Street, Mary's Lane and Little Green Street, the streets were full of market workers, the rumble of pallet trucks with their constant beeping, the sounds of boxes banging onto wooden pallets, the cacophony of men's voices talking in several languages, shutters being opened, the rhythm of a busy market (see figure 14 Figure 15).

When the researcher walked through this area and on to Mary Street and Henry Street, the shopping districts of the North side, the area was extremely quiet, with a number of homeless people sleeping in large doorways (see figure 16). At 04:00 the rest of the city had yet to wake up while the Smithfield markets were busy taking in and bringing out deliveries of wholesale fruit, vegetables and flowers, amongst other

goods.



 ${\bf Figure~14~Early~morning~deliveries~Smithfield~markets.~Picture~by~researcher}$



Figure 15 Early morning deliveries. Picture by researcher

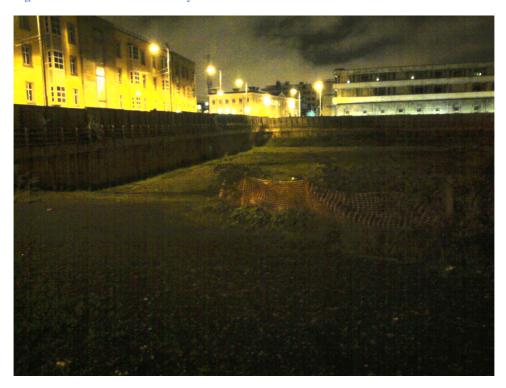


Figure 16 Homeless people sleeping in doorways, Henry St. 5am. Picture by researcher

Walking around the outskirts of these market streets without the buzz of activity was a slightly threatening experience for the researcher. She found that numerous sites surrounding Smithfield were demolished with many empty buildings with 'To Let' signs and the area generally, including Smithfield Square, had very low lighting, narrow streets and laneways (see Figure 17 Figure 18). The lack of ambient sounds in these areas emphasised sounds such as footsteps or small bangs, creating an eerie sensation as they echoed in the predominantly empty streets.



Figure 17 Low lit street. Picture by researcher



 ${\bf Figure~18~Excavation~site.~Picture~by~researcher}$

For those working in the markets the rhythm of this area operated at a very different time to the rest of the city. The non-linearity of space and time, as theorised by Lefebvre (1974, 1992), is reflected when one walks a city, particularly when walking to listen, rather than view a space. One becomes mindful of sound in the immediacy of the market, these are eurythmic and part of the polyrhythms of the city (Lefebvre 1992). These derelict spaces or those under development might be seen as arrhythmic. The sounds heard on the walks constantly reminded the researcher that outside of her immediate vision, processes of economic and social activities were taking place. This is a key factor when listening to space; sound is not limited to one area, it spreads through space and can impact on physiognomy and the psyche, resonating or echoing in the real world as a social force on community as well as on the individual. A space can be encapsulated within a soundscape making a wider space part of the processes happening elsewhere in the space. Sometimes these sounds can be extremely loud and their presence can interfere with the community soundscape, such as the sounds of traffic, resting trucks, or loud voices.

"What I don't like is the noise of them big Scannals (type of truck), or the fumes that come out ... you can't see, you can see nothing, they just block your way with a big noise, do you know what I mean? There's other noises that's open and nice. I don't mind motorcars going by at this hour, you could say they're floating by, if you're inside, they're floating by, really. But the big Scannal trucks stop and start and turn, and you feel they shouldn't be on my street, and how dare they block outside the Greek Street, like now I would complain". (1st female - 66)

The researcher noted the presence of these large trucks on several of the walks but did not find them loud. However, their continuous presence and the low engine rumbles would almost certainly be described as interference to the residents. Though it was particularly difficult to accurately state the direction from which sounds came from on the researchers' soundwalks, especially the sounds of trucks delivering or pallets banging on the ground and men shouting; these kinds of processes set a distinctive rhythm within this space. The market workers, the setting up of stalls and the selling of produce happen outside the typical rhythms of the modern capitalist city (de Certeau 1988). These sounds are linked closely to the rhythms of the countryside, to farming and shipping, transforming this space in time and practice setting it apart from the rest of the city. The variety of sounds and the diversity of the sounds contradict the belief that cities are homogenous; the sounds of a city can tell us more about the diversity of the urban than its architecture. Lefebvre argues that rhythms create balance, whether this is within the body or within space, he called this

eurhythmia (1992:16). The homeostatic condition of the city may depend upon actions and processes taking place, which regulate the system. When one area, or set of practices, cultural or economic breaks down, or becomes out of sync, the conditions of a space may deteriorate. The outcome of this deterioration can be sensed, within the space, through the phenomenology of perception (Adams 2009; Imai 2008; Kreutzfeld 2006). For the older participants in this research the daily rhythms within Smithfield and the Dublin docklands set these areas apart from the rest of the city.

The researcher's walks from 09:00 in the morning to 14:00 highlighted activities central to criminality around the Smithfield Square. The Four Courts, the Youth Courts, a Garda station and the Law Society are located within the vicinity of Smithfield. These places bring in people accused of crimes, criminals, police and associated legal professionals. In addition the area attracts drunken people and drug users; as one young participant noted "all the junkies do be sitting there drinking" (Group 12a: female). On walking this space the researcher was well aware of this situation and often encountered large groups of men and women, many homeless, often inebriated and sometimes aggressive and very loud. This was seen predominantly during the day, particularly around midday. Groups would gather around the Smithfield Square, trading insults or drinking in public. Although the researcher did not feel overtly threatened by these groups, they were not pleasant to hear. The square allows the sound to travel and bounce off the buildings where the close reflections of the space meant that a group at one end of the square would be heard from the other. A jobs and unemployment centre is also situated at the back of the square. Often when walking by this place, the researcher would see large groups of unemployed men, talking loudly and queuing to get inside.

The differences in building shapes and sizes in the area influenced the sounds experienced by the researcher. For example, one area, a laneway off Smithfield Square, contained a small housing estate, which was also a cul de sac. This space was quite muted and this was due largely to the extremely tall apartment structure, which sat right beside it, (see Figure 19).



Figure 19 Tall apartments and small social housing. Picture by researcher

This tall building acts as a sound barrier between two spaces in the area: the square, which on the east side contains some small housing estates and the west, which also has small housing estates. On the opposite side of this complex is situated another very tall apartment complex, hotel and tourist site. The square resembles the centre of a sports stadium. Extremely busy roads surround the square as well as the Luas tram line and, further south, the quays by the river Liffey. Each small housing area is surrounded either by a busy roadway or a tall building. The space offers no fluid passage or walkways; thus, as you walk through the area, you come across loud sounds all of a sudden and not gradually. Lefebvre asks that the rhythm analyst hear space as a whole: that one situates oneself and one's own rhythms in the space being observed and heard (1992:20). However, whilst the researcher wished to experience the space as a single entity, there were so many disparate designs that it was difficult to appreciate Smithfield as a whole and therefore to actually locate a rhythm to the area. This is not to say there was no rhythm, rather, that as an outsider one cannot immediately detect or perceive a community rhythm, whether this is a productive or social one. This is integral to understanding why the rejuvenation of spaces like

Smithfield and the Dublin Docklands created controversy. The rhythms of a space may not actually be connected to obvious visual symbols; instead they may happen in different spaces and at different times.

A walker becomes immersed in a space and movement, which makes it difficult to capture a rhythm. Were the researcher to stand in the one place for a period of time and over a period of days, she might experience a kind of rhythm in the space e.g. through actions that repeat, or even new events taking place, like the view from the window where Lefebvre sits (1992). However, the walker, particularly the soundwalker, experiences a relationship with space that is in constant flux. The walker hopes to establish a connection to the space through the sounds that she hears; what she hopes to find are the "unique soundscape characteristics of a location" (Westerkamp 2006). Although the soundwalking in this research highlighted the impact of incongruous design, which made the establishing of patterns challenging, it did however, allow for the formation of smaller sound profiles distinctive to individual areas. For example, outside one block of flats the researcher heard the sound of children playing in a courtyard, though she rarely heard the sound of adult voices; on one street corner facing George's Hill she heard, surprisingly, the sound of children playing from above where a primary school had placed their outdoor play area on the roof of a building (see Figure 20). These pockets of sound filtered down on top of the sounds of pallet trucks and market sellers on Mary's Lane. This was a part of Dublin city with "diverse spaces affected by diverse times: rhythms" (Lefebvre 1992:33).



Figure 20 Rooftop playgroup. Picture by researcher

4.3 The changing landscape of Smithfield: from industrial to post-industrial space

Tonkiss (2006), Castells (1992) and Harvey (1995, 2001) note a change in urban spaces since the 1960s dominated by a move from industrial to post-industrial production and to consumption. Despite the global financial crash of 2008, Dublin's post-industrial landscape is dominated by economic practices in the service sector industries and retail: culture, information, consumption and banking. The industrial city of Dublin pre 1970s was one based on manufacturing, mining and quarry work, with the docks and traditional industry the city's major employers (Drudy and Punch 2000). The decline in these industries played a significant part in the reshaping of Dublin city, particularly the urban regeneration projects which began in the early 1990s (Corcoran 1998; Peillon and Corcoran 2002, 2004; Punch et al. 2004; Redmond and Hearne 2011).

During the period from the 1940s to 1960s, most locals living within the Smithfield area would have had some connection to the Markets. Either working directly for the

wholesalers or purchasing produce to sell from small market stalls (mostly women). Generations of families lived within this area and expected to continue living and working there once they were older. With the physical transformation of Smithfield during the 1990s and the 2000s numerous families moved out of the area and were rehoused in suburban housing estates; though this exurbanisation process began in Dublin city during the 1950s. Equally, during the recession of the 1980s local business in the Smithfield area, which connected in various ways to the markets, e.g. tanners, leather workers, butchers, slaughterhouses and other traditional practices closed. This destabilising of the central industries of this area led to a complete breakdown of the social and economic conditions of Smithfield and the Dublin docklands area (Drudy and Punch 2000; Lee 2009). The physical decline of Smithfield in the 1980s then reflects the neglect, the decimation of communities and high unemployment in this area. As the space changed economically, socially and physically, a radically altered soundscape emerged which echoed the phenomenological impact on locals of change and subsequent rejuvenation.

Interviewer: when can you remember a significant point when you felt that the city changed, the sounds changed, everything

Interviewee: well people sort of, the supermarket then came in, so everyone was buying out of supermarkets, and then the people that owned the big stalls in the food market sort of let go, sort of let go, because the supermarkets were supplying the food, and the old fashioned little merchants, they were called, that supplied the potatoes and all that, that started falling away and then Fyffe's, this huge multicompany took over and took every one of the buildings over, and it's just down there now, my brother works in there. And is just all went very, very commercialised Interviewer: so did that make it quieter?

Interviewee: no it's made it worse because they started bringing in the big lorries and the big Scannals and little horses went off they went out, that was like a thing of the past, then Moore Street started falling away, people was going to the supermarket because they could take their fruit, that start falling away and then everything, then the fish market went so everything started falling away. (1st female-66)

Thompson (2004) argues that the soundscape of modernity, typically an industrial soundscape, was possibly the noisiest time in modern western history. The older participants in this research project argued that although this may have been the case for them, these sounds represented a thriving industry and community. For the older participants, Smithfield and its surrounding areas were not one space; it was a group of different communities with their own social, cultural and economic practices, and a

range of minor differences in social classes, essentially stratified differences within the working classes (Dworkin 2007; Savage 2000). These were defined by variations in: education levels – finishing primary school versus finishing secondary school; employment - office versus factory, and housing - house versus flat. Today, with the decline of the market industry and the changes to the physical landscape, all of the older participants in this study and many of the younger participants argue that Smithfield and its environs is a quiet space and seems disconnected to the sounds of the centre of Dublin city.

Akkar argues that, within urban landscapes, the redesign or rejuvenation of spaces has led to "mainly consumption-oriented, highly speculative, commercial, and prestigious environments" (2005:88). Smithfield has undergone a radical transformation which, one could argue, created an area of gentrification and social exclusion (gated communities and high rise apartments) (see figure 21) (Hamnett 1991; Harvey 2006).

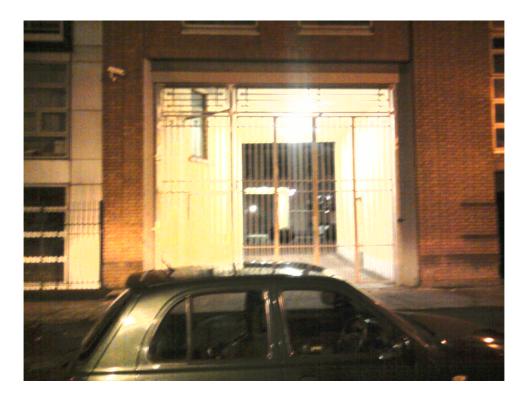


Figure 21 Gated complexes with video surveillance, Smithfield. Picture by researcher

4.4 Teenage perspectives on Smithfield

For most of the participants the city is not a set of distinctive sound markers set against a background soundscape with the occasional symbolic sound appearing at particular moments. Rather, their relationship to the city, on a sensorial level, is symbiotic, tied to their connections to particular spaces, where they live, go to school, socialise and even fear to go. There are also intersections of other sensory experiences, particularly within the Market area. They move between these spaces heading usually to something or somewhere else. They pay attention only in the spaces they are going to rather than the ones they walk through. Their relationships to spaces are defined by the activities in which they can participate, thus consequently to the sounds produced in these spaces. The young participants, when defining their important social spaces, are able to articulate clearly the soundscape of these spaces. When describing these places, they often state the particularities of sounds whilst mentioning how these sounds create a positive atmosphere, an upbeat ambience. Where they fear to go are spaces absent of this ambience.

For the young participants and for young people in general their voices are often ignored or not considered in the design or management of urban spaces (Neuburger 2004), yet their engagement with the city is paramount; they are educated there, they live within the city's boundaries, and they may work and raise their families there. Often these young people have historic connections to particular spaces within the city because their own parents or grandparents may have worked there, as was the case for some in this research. These young people use the city: they hang out on its street corners; they walk through the city on a daily basis; they shop there; they hear the sounds of the city all day and, for some, throughout the night. Their knowledge of the city and its sounds are unique, because of their constant connection to the city's soundscape. Theodori (2004) argues that a person's length of residence shapes their attachment to space, although Corcoran adds that gentrification has threatened to "dilute shared history and collective memory" (2002:50). Corcoran argues that "landscapes and built forms become cultural symbols" and "are crucial to developing a sense of place" (2002:51) however, the sounds within a space, which develop over time, can be more significant and their loss even more so. When discussing the cobblestones within Smithfield Square, most of the young female participants stated that it was not so much the look of the cobblestones that gave the space a sense of history, rather it was the sounds made when something moved over them. The lack of people and activities within the square meant that these sounds were rarely activated.

Many of the suppositions which the researcher had with regards to her understanding of what place city sounds have in the aural experience of the city were discarded. Even though open minded in the approach to the research, having already disposed of notions around what constitutes noise, the researcher maintained an underlying bias that Dublin city was too loud. However, the research participants did not hold this same perception. The young participants classified sound differently, not as loud or noisy, but rather as site specific, embodied and informative. The young participants described soundmarks (a site specific sound) notable to Smithfield as the sounds of: shouting from inebriated groups, fighting, car horns and emergency service sounds. Because Smithfield was relatively quiet compared to busier parts of the city there were more opportunities to hear the particularities of sounds within this space. Although the research's younger participants do not have memories of Smithfield prior to its current state, their remarks and experience of the space and their opinions as to why it does not work as a space are linked implicitly and sometimes explicitly, to the sounds, which emanate, or for some, do not emanate from the space. The young participants, when asked about Smithfield, highlighted how it seemed to have no particular purpose, at least during the day; it offered nothing for the casual visitor and it certainly was not a place for teenagers, "it's not a hot spot, it's not a cool spot" (Group 10 (b) female participant). They identified ways in which it might become a space for active participation; more shops and green spaces for example, but often countered these suggestions by highlighting the negative aspects of the area, which would counteract positive changes. For example, the area is situated at the centre of the judiciary, which means there is often either a criminal presence or a police presence, within and around the area. Either presence made the young participants uncomfortable with the soundscape, as each group has very definitive sounds. The sounds of sirens were defined as unpleasant if necessary and the clusters of youths outside the juvenile courts were typically identified as loud and 'common'.

During one of the sound walks through Smithfield one group argued that they thought Smithfield was louder than they had initially assumed. One could argue that silent spaces produce amplification, thus silent spaces inspire a sense of fear, self awareness and even reverence (Blesser and Salter 2009). This was further highlighted by their silence in the space.

Because they were not talking amongst themselves and there was no constant background sounds, such as from a busy pedestrianized area or traffic, they heard the detailed sounds within the space, the clatter of suitcase wheels across the cobblestones, seagulls screeching overhead, the beep of trucks reversing and even conversations. For example, one participant described hearing not just the sounds of voices but "you could hear like their conversation" (group 12a: female).

The young participants, when asked what could be added to the city to create a more positive soundscape, stated that generally green spaces would be good for adding natural sounds to the environment, but that nature sounds were not necessary, except perhaps in city parks. In this research, city sounds were often described as "essential" sounds, sounds that defined the city or imbued it with meaning. The idea of creating quiet spaces seemed like an affront to the essence of a city. This might be a direct response to Smithfield. Whilst it can be characterised as a silent space, it cannot be described as quiet – given the harshness and masculinity of the material landscape, which amplified the sounds in the square. For all of the young people who participated in this research, loud sounds in a city are to be adapted to; they become part of the daily experience of a town or city. Most of the participants agreed that there were spaces within Dublin city, which were quiet but these areas were spaces where they were not comfortable, and generally they were not seen as being part of the city; Smithfield was one of these sites. On numerous occasions the young participants argued that Smithfield was not a part of the city. Its lack of activities, people, consumer spaces etc. contributed to this opinion. For the young participants, living in a city means being surrounded by sounds; they noted that they found the quiet often unsettling and they associated it with rural spaces. When asked about sounds within the city most of the participants argued that loud sounds provide atmosphere and that quiet is not a part of their day or night lives, "like, when there's complete silence I can't really fall asleep" (group 8b: female). For the participants sounds describe the business of place and represent positive activities. Rural spaces were described by them as being too quiet although some quietness was welcomed by some of the teenagers but only as part of a particular event such as a short holiday or day outing or for 'sleeps'

"(Participant 1) I hate the country it's too quiet. (Participant 2) I love the country, for sleeps. (Participant 1) Aw yeah but it is great for sleep, yeah. (Participant 2) Ah yeah

it is great for sleep. Ah I love it. (Participant 2) It wrecks me head, but it's in the middle of nowhere". (Group 9b: female)

The lack of continuous sounds for the participants was discomfiting. It is a soundscape that they find intimidating and to which they cannot relate. They would rather gather in groups or hang out in the busy parts of a city such as the shopping districts, Henry Street or Grafton Street; the sounds of these parts of the city are exciting, entertaining and continuous, apart from the sounds of emergency services, which they found jarring. It is a constant in their soundscape yet something they have not really adapted to.

Interviewer: what would you change or not change about the soundscape of Smithfield?

Group: (Participant 2) Did you ever see the statue at the end of Smithfield it's a big huge and it has steps up to it with all the drunk people sitting on it

Interviewer: is it new?

Group: (Participant 2) No, it's their ages I think

Interviewer: Is it, what is the statue of?

Group: (Participant 2) I don't know, I never really paid attention to it. All I know is that steps go to it, and all the junkies do be sitting there drinking and all.

Interviewer: All right

Group: (Participant 2) I'd get rid of that, I'd get rid of all the places that have shut down and just make them into something that people are interested in. (Group 12a: female)

Interviewer: What about Smithfield, anybody know Smithfield?

Group: (Participant 1) yeah, I used to live across there

Interviewer: Is that quiet or is that...

Group: (Participant 1) It's not loud but it's not quiet either like ye know what I mean, it's like normal. (Participant 2) All kids crying I usually hear that. (Participant 3) that's not loud, that's not loud. (Participant 4) Smithfield's not loud.

Interviewer: No

Group: (Participant 4) Not quiet either though. (Participant 2) It's not loud either... its threatening. (Participant 5) I think it's very quiet. (Group 9b: female)

Interviewer: do you think that town is loud?

Group: (Participant 1) Yes. (Participant 2) Yeah. (Participant 3) If you walk through Henry Street you'll hear background noise, everyone talking and walking by that's the main like background noise you hear

Interviewer: would you take any of that away?

Group: (Participant 2) It's good. (Participant 4) You don't want it to be too quiet (Group 2c: male)

Interviewer: any other streets in Dublin that you say, that's nice, I like the sounds there

Group: (Participant 1) Grafton St. probably

Interviewer: yeah, why?

Group: (Participant 1) cause people are playing music. (Participant 2) that's true

Interviewer: alright, so music is nice,

Group: (Participant 1) yeah (Participant 2) and there's no cars. (Group 7d: male)

Group: (Participant 1) Do you know what noise I hate, when you're in bed asleep and a helicopter goes over your roof. (aw yeah I hate that. I hate that. Group)

Interviewer: You hear that a lot

Group: (Participant 2) yeah that's always around our flats

Interviewer: so what are the helicopters for anybody know what there for. What do they have helicopters for in the city?

Group: (Participant 3) emergencies. (Participant 4) Emergencies or something! (Participant 1) Or that, you know, when someone's on the run and the helicopter shines down and sees where you're going. (Participant 2) Yeah that's what there for, if the guards can't find them the helicopters do. (Group 10b: female)

It was easy for each participant to define key sounds in various places e.g. school, street, home, town etc., but sounds were not separated from an emotional or social connection. They defined the sounds as embodied. They also identified these sounds with social structures, schools, production, and a cities infrastructure. These sounds often indicated a controlling function in their lives where they play a part in ordering their use and experience of space. However in order to be a part of a city space one must understand the meanings of sounds beyond explicit sound signals. For the inner city urban participants, sounds defined as construction for example, were not simply an annoyance but an indicator of new changes to their environment, as in Smithfield Square and its constant reconstruction. The continuous presence of construction sounds often featured during both the researcher soundwalks as well as her encounters with the young participants. One school, in which the researcher worked, had their transition year pupils in an exterior portacabin to the main school building. Often we would hear the sounds of construction through the building. Additionally, on the many soundwalks undertaken with the groups, especially when entering Smithfield Square, the presence of construction sounds would dominate the soundscape. In this way the young participants learn to expect to hear the sounds of construction in the city as it has been a constant presence throughout their lives; part of the Celtic Tiger period of Ireland's post-industrial economic/property boom (Redmond and Hearne 2011). They have embodied this experience as a Dublin city experience, and have accepted it as part of their city soundscape. The public school participants described experiencing very different sounds in their everyday lives compared to the private school participants. They reflect very different social and economic backgrounds. The urban-based young participants are living within the sounds of industry, consumption and emergency services. Nature and natural sounds are not a key

feature, however their sounds are no less part of a community soundscape than the participants who live in the quieter, more rural areas.

4.4.1 Dangerous sounds and silent spaces

Sounds can often create a sense of fear, loud sounds for example, are often considered warning sounds (Rylander 2006; Schafer 1993). Though loudness is not always a signal for danger, often within a city loud sounds are indicative of an activity. During the industrial age of most western cities, whether the principal industry was shipping, mining or manufacturing, the presence of machinery would have created a loud soundscape (Bijsterveld 2008; Smith 2011; Thompson 2004). This was the case with Smithfield and the Dublin docklands. For most of the older participants the sounds they heard as young teenagers in the 1950s and 60s, which linked Smithfield and the Docklands, were arguably loud sounds.

"Where I lived in the flat, I have an interest in trucks, there was always loads of different sounds of trucks, the Connor truck had a strong hum of it, noise of it, (makes low rumbling sound), you could hear it coming up the docks, emm, you know the different sounds of petrol engines, and diesel engines, yeah, oil company trucks as well, when you lived in a block of flats on corner which I did, I moved around the city a lot, you would get to know the sounds of the trucks." (1st male - mid 60s)

"We had the fish markets beside us, and all through the night them fish lorries came in during the night and they had to be unloaded, and you'd hear them banging the boxes, the banging of the boxes, and then at about 4 o'clock in the morning you'd have all the farmers coming up with their, now this is the 60s we're speaking about, you'd have all them coming up from the country with their cabbage and the market at that time all had cobblestones, and you'd hear the horses on them, then we had the fruit market and you'd hear all the sellers roaring and cursing you know, the boxes packing and unloading, so it was all, all different sounds (1st female - 66)

For the younger participants it is the very lack of sounds within the areas of Smithfield, the market area and other quiet spaces on the north side of the city that causes them problems. Their connection to the Smithfield area is more limited than that of the older participants. For a large portion of the younger participants, no member of their immediate families, apart from one participant, works within the area

and they had no intention themselves of working there. They indicated that there was also no reason to be in the area, either for socialising or consumption. When conducting the soundwalks the researcher was surprised by the lack of knowledge the young participants had about the Market and Smithfield areas. For example, none of them knew that there was a park in Market area, and they were surprised when they came across it. They also did not realise the extent or size of the markets in the area. The researcher had assumed that as urban youth living close to this area they would have, at some time, visited this space either because they walked through it to go to the centre of Dublin city or because a parent had brought them as children. Even so, the Smithfield area in general and the Smithfield Square in particular were still described as quiet and lacking in any central or key sound to demarcate either social or economic practices. Their description of the space is that it is either quiet or empty, especially in comparison to the busy shopping districts.

Group: (participant 1) It's not loud but it's not quiet either like you know what I mean, it's like normal. (Participant 2) All kids crying I usually hear that. (Participant 3) That's not loud, that's not loud. Smithfield's not loud.

Interviewer: No

Group: (participant 1) Not quiet either though. (Participant 1) It's not loud either... its threatening. (Participant 1) I think it's very quiet. (Participant 1) buggies wheels, you know on the path. (Group 9 b female)

Interviewer: Smithfield, do you remember Smithfield the big square, with the cobblestones? I noticed that when we finally got to Smithfield Square where you were all sitting down on the steps, do you remember?

Group: yeah

Interviewer: Is that because you thought there was nothing to record in Smithfield?

Group: (participant 1) yeah it is. (Participant 2) It's real quiet there

Interviewer: you thought it was really quiet?

Group: yeah

Interviewer: there was no sounds down there

Group: (participant 3) although, there probably was sound for somebody who listened to it but like, because we were all meant to be coming down, eh like, the city, space seems to be nothing.... because we're after coming out of Henry St. Mary St. and all it just seemed real quiet. (Group 11b female)

Smithfield contains restaurants, pubs and an art house cinema, and for tourists, the Jameson visitor centre. There are no facilities or even spaces of consumption for teenagers.

The Smithfield Square is a very large flat public space which, when one stands in the centre, sounds extremely quiet in comparison to the rest of the city. With this in mind the researcher considered how to design the participants soundwalks to reflect on listening in relatively quiet spaces. The researcher adopted two approaches to the soundwalk based on the positioning of the schools. The two schools situated closest to Smithfield started their soundwalk at Smithfield Square and proceeded to the busier parts of the city before heading back to their schools. The second two groups, who lived closest to the city, began their walks in the busier sections and ended at Smithfield Square. The researcher wished to observe if they would react differently in the square depending on when they entered it i.e. after walking a busy space and being surrounded by sounds or before entering a busy sounding area. The researcher noted that on entering Smithfield all groups reacted the same. She saw that most of the participants walked on the outside of the square or headed towards the shops or buildings, which surrounded the square. The researcher mentioned this phenomenon in later focus groups and the participants replied that Smithfield was too quiet at the centre; you had to go to the edges to find sound and activities. Even when the participants were encouraged to walk into the centre of the square they were reluctant to do so. Even if they did they often failed to record something. There was a sense that the young participants felt exposed in the square, where little was happening and the silence seemed pervasive.

For the young participants the quiet of Smithfield was not a city sound; it offered no information on how to behave in the space. Because the square was so big, with large walls of concrete and class, sound bounced of various sources making it difficult to locate. The taped recordings do however reveal more key observations of sound than when they walked in the busier parts of the cities. Because they had to listen and look harder for sounds and their sources the participants actually recorded more detailed sounds in Smithfield. This however led them to describe Smithfield as not part of the city and as having no function. If one can hear individual sounds within a space then that space is too quiet, this quietness is associated with no activities, social or productive. For the young participants a city is a space filled with sounds. A space without loud and continuous sounds is defined as not part of the city, or having no meaning/purpose, a non-place in the sense defined by Augé (2009). Loud or 'buzzy'

soundscapes create a larger space of protection in which the young participants feel safe, particularly if they are alone.

Interviewer: So then, do you find town noisy?

Group: Yeah, no Interviewer: No?

Group: you don't notice it, but when I think about it, it is very noisy, especially the

amount of cars on the road

Interviewer: do you think that it should be?

Group: yeah, yeah I'd rather it noisy, cause then you feel safe, you really do (Group)

yeah, yeah

Interviewer: really?

Group: yeah, and do you know if you're out late, there's still sounds in the street of

cars, there's no quiet area.

Interviewer: what about you, do you have the same feelings about it?

Group: yeah (Group 9b: female)

This concept of safety appeared throughout the research particularly as it relates to sound. The presence of larger groups of teenagers in public areas and the sounds they produce act like a protective net around the group. If they cannot meet in large groups the participants stated that they would, instead, use their homes and bedrooms to socialise. The problem with the removal of teenagers from public spaces, whether this happens through deliberate exclusion or through fear of the public space, has meant a move towards the use of media technologies as a means of socialising (Ito 2004). The use of mobile technologies, computers and other media devices to socialise was seen as linked to a feeling of public social exclusion¹⁵, these findings are discussed in detail, in chapter 6.

Within large social groups loud sounds act as a deterrent to the quiet of urban spaces at night; loud sounds block out loud silences or other sounds which the young participants did not wish to hear, which might suggest danger. Curtin and Linehan (2002) argue that a group activity "amongst the lads" offers security; the security is from girls and not standing out in a large group. However this research project highlighted the fear of silence within quiet, dark spaces. To counteract the quiet of spaces the teenagers produce their own sounds, which creates a kind sound bubble, which encloses and protects them. In these silent spaces sounds become amplified

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¹⁵ However, the researcher also found that the young participants used mobile technologies such as Ipods, Mp3 players and mobile phones to tune out of a quiet soundscape whilst moving through it. It gave them a sense of safety and helped pass the time. The use of mobile devices to traverse space and its implications for spatial awareness will be discussed in detail in chapter 6.

thus, only a group can produce a buffer to the silence. Blesser and Salter (2009) refer to this type of sound production as sonic architecture. As discussed in chapter one, sonic architecture is not just sound produced by sonic reflections off physical surfaces or reverberation, it is also the production of sound by groups of people. Sound in social contexts is produced to create a presence, a sense of a group's activities and social structure. Blesser and Salter argue "group silence is the ultimate manifestation of social cohesiveness because silence can exist only if all members cease from speaking" (2009:33). However, within groups of teenagers, noise making is a form of social cohesion; it defines their presence as well as their membership of the group (Curtin and Linehan 2002; Watt and Stenson 1998). In this way, the production of sounds made by teenagers, creates new temporary spaces, which they can inhabit. These spaces are necessarily transitory because the sounds teenagers produce are considered out of place, particularly in cities. Matthews (1995) argues that in most western cities young people, particularly teenagers between the ages of 14 and 18, are invisible, in the sense that they are excluded from many spaces (Kato 2006). Their thoughts and opinions are not considered in the design of space or its potential use. By ignoring how young people might inhabit space and how they are subversively excluded from space through design, young people can become 'significant outsiders'. In this way space, particularly public space, is feared. Following Lefebvre (1992) it could be suggested that Smithfield's lack of polyrhythms and/or eurhythmia means that any intrusion on the silence of Smithfield introduces dissonance and conflict.

For the young participants small intimate spaces have their own soundscapes, some of which they play a part in creating: their bedrooms, street corners, laneways and entrances into public buildings. Within these soundscapes there is a sense of containment and separation that has a physical reality. They inhabit and create discreet spaces, these spaces are transient and dependent on their presence to give them symbolic meaning. However, when young people congregate away from watchful eyes, or adult supervision, the group must produce sounds to ward off potential danger. Sound therefore becomes a physical barrier in which they can exclude other people and other sounds. It acts to contain and surround them. Akkar (2005) and Travlou (2003) argue that it is the very grouping of teenagers, which excludes them from space. They are then pushed further to the borders of space,

becoming more isolated in public areas or they are pushed into their homes where socialising becomes a mediated process (Livingstone 2002).

With no defined spaces for teenagers they engage in spatial production in these inbetween spaces using sound to create both an acoustic barrier and an architecture of enclosure. These spaces allow for the close reflection of sounds, discreet echoes, which mean their sound is not lost in big empty spaces. This might also be seen in terms of their sounds being amplified or reverberated, thus attracting the sanctions of surveillance or an awareness of being surveilled. Although teenagers occupy such spaces to "create their own identities", they are always in danger of being moved on (see figure 22) "as adults spatial control becomes stronger" (Travlou 2003:8). In this way, aside from graffiti as a way of demarcating space, sound becomes a significant factor in demonstrating their use and even ownership of space, even if it is only temporary (Lefebvre 1974).



Figure 22 Dublin city park. Picture by researcher.

4.4.2 Gendered and classed soundscapes

4.4.3 Mapping sound

The sound pyramids and even the earlier soundmaps created discussions about particular sounds: sounds in the mind, class bells, animal sounds, phones ringing, church bells, laughter and weather. The pyramids helped to elicit detailed descriptions of the urban soundscape. The pyramids supported a lot of the focus group discussions, which had happened prior to the mapping, but it also allowed the individual voice to appear in the discussion. In this way the researcher was able to collect a wider set of data and sound descriptions defining both Dublin city and the Smithfield area. It also raised the issue of subjective descriptions of the soundscape. There were, as mentioned earlier, differences of opinion regarding where on the pyramid a sound should be placed. Also, the researcher had to remind the participants during the mapping sessions that they were not exploring volume levels, but the presence of sound at given times in space. This reconceptualization of exploring sound through soundmapping allows the researcher to examine sound, within a space, through processes removed from quantitative models. It allows one to classify sounds based on "their strength, whether it rises clearly out of the ambience or is barely perceptible" or whether the sound is "semantically isolatable or is part of a larger context or message" (Schafer 1977:134).

4.4.4 Gendered listening

In exploring sound in the environment, the use of space and the meaning of sounds, it was apparent in some instances that gender played a part in the construction of meaning. Although the researcher sought to have a gender balance, there was no initial motive to examine gendered listening or gendered sound production or practices. However, there were instances were gendered practices of listening and making sounds became obviously different. Their behaviour in public spaces were dissimilar, boys made a point of making sounds or shouting while on the soundwalks, whilst girls walked in small clusters, whispering. Sometimes the participants highlighted differences in the genders in sound production; for example, the male participants argued that girls talked for longer on the phone, were more demanding of attention, and were louder when in groups. Additionally, the researcher noted that the

female participants described sound environments differently, often professing to love or hate sounds, in a dramatic manner.

Group: (participant 2) "aw do you know what I love the sound of, wind. (Participant 1) yeah the leaves on the wind did you ever get, on like a real cold night, like coming up to Christmas right, you just stay, you just stay in, and it's, and it's lashing's of rain, and it's so windy and you watch a film, have a cup of hot chocolate, (participant 1) aw yeah (group)" Group: I hate the traffic sounds. (Participant 1) I hate ambulance and police. (Participant 2) Aw yeah. (Group 11b: female)

For the boys the sounds of emergency services, annoying as they might be, were seen and described as necessary:

"Like there is nothing that I can think of that is so like annoying I want it gone. The ambulance sirens they have to keep them because they are transporting someone" (Group 2c: male).

It is in these very differences of perception that one could argue for gendered soundscapes; sounds that perhaps exclude or include gender into a space, or that a space may produce sounds that are gendered. As a participant observer within the research I observed differences in the conversational styles of both the male and female participants. The female participants were more talkative in the focus group sessions and on the soundwalks. However, this may be due to the gender of the researcher, a female. It was also noted that when in the presence of their teachers the male participants were more talkative than in the presence of the researcher. Being observed by a stranger seemed to inhibit the male participants more than the female participants. The researcher also noted, when visiting the boy's schools, that in general, the ambience during their break time was much louder compared to that of the girls schools. The expectation being that boys were allowed to be louder than girls when no longer under direct supervision. During one lunch break the researcher noted;

I was standing in the main foyer where the students congregate when changing classes or going on their lunch break. There is a room of this area, which is a canteen. There is no canteen in the other schools. While standing there, I heard shouting, whistling, laughing a bell ringing. Nobody tries to have order, the teachers just moved through the noise. The boys gather in groups and talk loud, what is interesting is that it seems like all of the boys must be talking, however, on closer inspection, a group may consist of 5 to 8 boys, gathered close together, while three or

four at most might be talking loudly, the rest are just standing and listening. I noted this in a lot of groups. (researchers notes 2011)

On the soundwalks, the researcher also observed the female participants, when walking by groups of young teenage boys, alter their behaviour, becoming more muted in their speech. This highlights how gender separation in schools may impact on teenagers behaviour – sound production – in public, particularly when they meet (Pipher 2005). Kimmel argues that the experiences of the classroom plays a part in shaping notions of gender and gendered sound production, where social and cultural norms have categorized male and females as fundamentally different, allowing for traditional assumptions to appear within the education system from both peers and staff as "schools are like old – fashioned factories, and what they produce is gendered individuals" (2009:159). This may be one of the reasons why the participants, particularly the boys, define gendered differences in sound production.

Group: I don't like to be sexist here but if there's more women there's more sounds, more noise actually. Yup.

Interviewer: so would you think that women make more noise than men

Group: (group response) yes Interviewer: in what way

Group: (they find it difficult to describe what they mean) (Participant 1) they talk loud. (Participant 2) Women they can't have quiet time either to themselves and are constantly talking. (Participant 3) And when they do they want perfect conditions. (Participant 2) Girls would be on the phone to their mates, lads just don't have any of that. (Group 4d: male)

The concept of gendered sounds is found throughout history. Schwartz (2011) argues that the female voice has, throughout history, been associated with noise, aggression and possession but also seduction. The devaluing of women in society, including the suppression and segregation of their voices was, he argues, part of a move to supplant women from positions of power. The silencing of women today in public is not restricted to religion, or even a particular culture; there are distinct processes in play within various cultures to suppress the sound of women (Fortune and Enger 2005; Konrad 2006). The female voice, as a public voice, operates differently than that of the male. Within this research, most of the female participants stated that their spaces for hanging out with friends were generally in a house or bedroom, whereas the male participants discussed hanging out outside. The older participants offered similar

views, the women remembered as teenagers, hanging out at home with friends or at least staying close to where they lived. Conversely, the older male participants would bring their portable music devices i.e. radios, on to street corners or into parks, whereas the women remembered listening to the radio with their friends in their bedrooms or sitting rooms. Kimmel argues that "boys and girls learn-and teach each other-what are the appropriate behaviours and experiences for boys and girls and make sure that everyone acts according to plan" (2009:197). The public performance of sound or expression is situated within different arenas, both public and private, for each gender. Literature on this in Ireland suggests this may be due to the traditional notion of women's place being in the home and women being described or presented as the weaker, less educated or able sex (O' Connor 2000; O'Connor 1998). The continued segregation of the sexes in education means that teenage boys and girls may be conditioned to perceive both the sounds they produce and the sounds they hear, differently.

One research tool, developed and used during the focus groups, was the sound pyramid (see figure 23-26), the purpose of which was to look at the soundscape as a series of layers, from the bottom layer of continuous sounds to the top, sounds least heard. A number of key findings emerged from this approach, one of which was the different ways in which the sexes describe and perceive sounds. participants used more descriptive language and connected their experiences of sound with life experiences, whereas the male participants tended to define sounds as groups of sounds: traffic, people, birds, sounds of production etc. For the male participants there was a sense that offering a more lyrical or personal description of the soundscape would lead to criticism. Although the boys in general offered very little descriptive definitions of the soundscape, there were differences between the public and private school participants. The private school boys referenced sounds as if they existed in isolation in the city, rarely linking them to production, community, etc., whereas the public school boys would connect a sound, such as the market sounds or the tram, as an interruption to sleep, or that a relative had either worked in the markets or still worked there. However, the private school boys often connected the sound of traffic to consumption and city processes.

4.4.5 Class and the soundscape

One area where these differences become apparent was in the social class of the young participants. This is connected, in part, to the last key finding from the pyramid approach whereby, one's relationship to space radically altar their perception of the soundscape. Most of the public school participants lived in the city and in social housing. Their connection to and descriptions of sounds were closely tied to their daily experiences of the city and they found it difficult to separate this relationship when examining sound. The public housing spaces of north Dublin city have many basic design problems and are "smaller than modern minimum guidelines leading to problems of overcrowding" (Redmond and Hearne 2011:2). For many of the respondents the sounds of the city are not filtered through insulation or for some, double glazed windows. Instead, sounds from the outside invade their interior private spaces.

Whereas the private school participants had an objective distance from the city soundscape, it is only something they hear when they are outside. In contrast to the public school participants, who lived in Dublin city, the male participants from the private school had a different perspective of the city soundscape. Most of these boys have grown up in middle class suburbs and when asked about their home soundscapes they often described quiet environments with the presence of intermittent sounds. For them the city is noisy; the sounds represent general activity and they found it difficult to describe individual sounds within the city. Thompson (2004) and Schwartz (2011) argue that middle, educated and upper classes have traditionally identified urban soundscapes as noisy, with loud sounds defined as having no particular social or cultural value.

The private school boys rarely found the sounds of emergency services problematic; they were just something that you had to get used to when you come to the city. They also pointed out that the city, for them, provides no sound alternatives; they see Dublin city as one soundscape, where you cannot escape to "the beach or fields or anything" for a different more "enjoyable" soundscape (Group 4d: male). There are clear problems inherent to defining a social class to the type of housing they live in and the study recognises this. However, in taking the Olin Wright's concept of 'class as objective position within distributions' where class is "defined in terms of material standards of living, usually indexed by income or, possibly, wealth" (2004:3), the

research argues that the critical differences in material wealth, i.e. access to private education, social housing, and material goods, their use off different technologies highlight class differences (see in chapter 6). Further, these differences impact or shape their descriptions and relations to the urban soundscape.

The pyramid approach used within the focus groups generated heated discussions as to what place particular sounds had in the Dublin soundscape. Without prompting, the groups explored the meaning the sounds had for them. See below for examples of pyramids, as discussed in chapter 3, the lower end of the pyramids represented sounds heard frequently in the city, including Smithfield. The top layers were sounds heard the least.

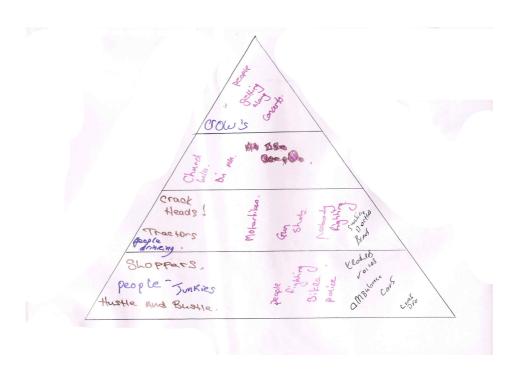


Figure 23 Group B female participant sound pyramid

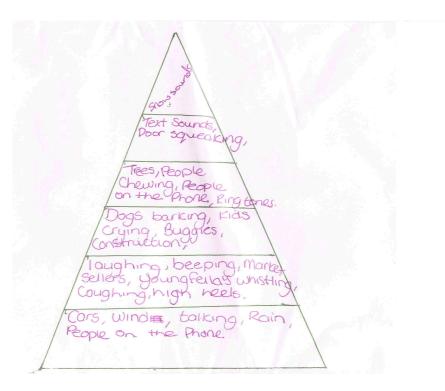


Figure 24 Group B female participants sound pyramid

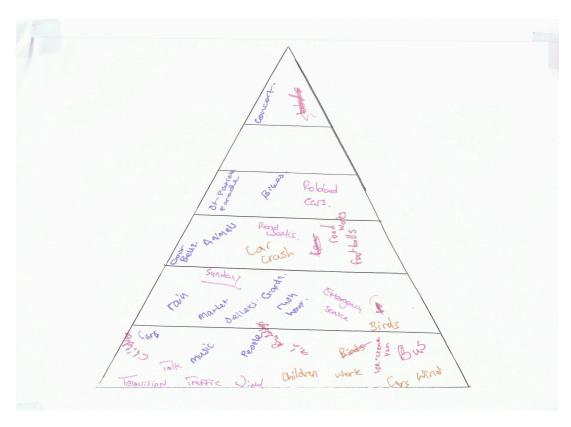


Figure 25 Group C male participants sound pyramid

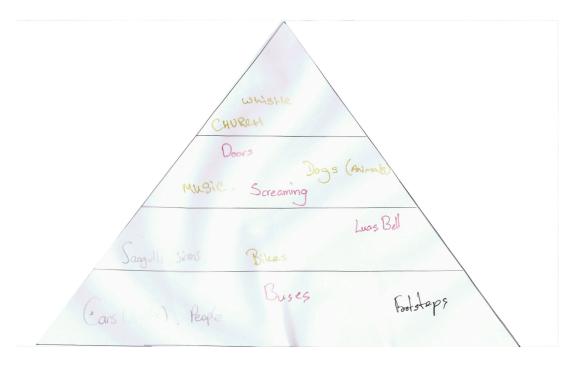


Figure 26 Group D male participants sound pyramid

4.4.5.1 Female participants interpretations of the soundscape: body, home and city

The female participants in their discussion of the urban soundscape included sounds produced in their homes. They describe sounds that emanated from the body such as laughter, 'farts', crying, screaming from market stalls and babies crying-screaming was defined as a significant public city sound. The body, as a producer of sounds, features within their definition of the urban soundscape. It was noted that both male and female participants reflected on city sounds, which occurred at different times of the day. This made it difficult to segregate sounds into the particular spaces within the pyramid, because, during the day a type of sound might be dominant but at night it becomes less so, this also included weekend and weekday sounds. The female participants described hearing numerous animal sounds; birds, dogs and horses were identified as key sounds in the city even though during the discussion sessions they rarely, or some groups never mentioned animal sounds as part of the city soundscape. The pyramidal design allowed the participants to both segment sounds within the city, and envision the city as layered with numerous sounds. In this way they would examine and discuss sounds on two levels. When working with the pyramid it soon

became clear that thinking about sound altered when faced with exploring it as immersive, rhythmic and operationalized.

The next level identified as sounds heard least often was connected to movement and activities e.g. ice-skating, buggies on cobblestones and footsteps; these were specific sounds connected to Smithfield. The sounds of boys whistling, high heels, buggies and construction are some of the sounds within the first two layers on the pyramid and were less frequent. When they reached the top of the pyramid the body again appeared as a significant sound, though this created differences of opinion because they started to state what they liked and disliked about these types of sounds. Foreign accents were also mentioned here as something they disliked to hear in the city especially when foreign nationals were seen to speak too loudly (this casual form of racism was only raised in groups where no foreign national students were present). The narrower the pyramid the more the sounds are linked to feelings. Loud shouting was something heard by some of the participants, they associated this with drugs or alcohol, which they connected to loud and threatening behaviour. They also discussed the emergency services as a dominant sound. One participant who lived near Smithfield associated these sounds with home, her house was located near an old folks home and a hospital. Even though they described the city as a space of loud and continuous sounds they have adapted to these sounds. The clarity in which they were able to remember individual sounds is interesting. Perhaps this was based, in part, on the fact that most of the female participants lived in the city.

One participant noted that although the Luas tram featured heavily in her urban soundscape, because she could close her window and shut this particular sound out, she did not see it as something that dominated her soundscape. One participant during the pyramid mapping noted that she sometimes felt overwhelmed with all of the sounds in the city. Though they mentioned fearing certain sounds in the city as well as having no control over the soundscape. They offered justifications for the sounds in the city, for example, emergency service sounds were necessary but even if they wanted to change these sounds there was nothing they, as young people, could do. They felt powerless.

4.4.5.2 Boys: private school

During the pyramid soundmapping discussions with the male participants in the private school, the researcher noted that disagreements arose over what were general and differential sounds. They would often cite times of day or place differences in regards to what would be a dominant soundscape.

One key sound distinction offered by the male participants was between centre sounds, these sounds were connected to consumption, play, music, etc. and located in a few streets in Dublin's city centre, and "edge" sounds. Edge sounds have no specific purpose they are random sounds in a space. A space with few sounds and no dominant soundscape would have an edge soundscape. Smithfield was for them an edge soundscape.

They very rarely mentioned individual sounds, although, when some boys did the group criticized their subjective responses. The individual would be jeered by boys within the focus groups for suggesting a particular sound such as children or birds; as if making note of a particular sound was not manly. Instead, the boys from the private school grouped sounds together by naming streets or areas as having a particular sound ambience. Some individual sounds that were defined on the pyramids were bikes, music, seagulls, fruit sellers and drug addicts shouting. Some of the boys were concerned over how they should talk about addicts. Because the private school participants were mostly from outside of the city, they often described sounds from their home areas; these descriptions tended to be specific because they are heard on a daily basis and are foregrounded sounds; sounds, which are not hidden by a cities ambient soundscape. One group discussed how sounds would be experienced differently depending on their volume and the space in which they occur, e.g. narrow streets versus open spaces. These participants had an understanding of how sound propagation works in outside spaces. The private school boys offered distinctly scientific and objective definitions of Dublin city. To them, the soundscape was sound waves and propagation and the city's main function was as a space of consumption.

4.4.5.3 Boys: Public school

The public school male participants were generally difficult to manage in the focus group discussions, they did not work together well as a group. This was, in part, based on the fact that they did not know each other well, and might have felt intimidated or inhibited in expressing opinions in front of each other. However, during the mapping session the participants were more comfortable discussing the soundscape when using the pyramid. One group's use of the pyramid was extensive; they described a vivid city soundscape. Notably, they did not segregate inside sounds from exterior sounds, defining the background soundscape as traffic, children, TVs, wind, music and talk, amongst some of the ambience always heard in the city. A key sound in their description of the Dublin soundscape was that of the emergency services and connected to those sounds, "robbed cars", "car crash(es)" and "junkies screaming". This reflects the types of housing and the positioning of their homes within public housing areas where the public school participants lived. differences between the private and public school are located in connections to city spaces, historical and social. The soundscape of the city to the public school boys is a lived experience.

4.5 The production of spaces and non-places

4.5.1 Smithfield Square: the historic and contemporary soundscape

Public areas are usually part of the design of urban regenerated spaces intended for events or the socializing of communities. However, Degen (2008) argues that these spaces are designed for a particular kind of public and the exclusion of others. In this way, there is less opportunity for spaces to be constructed or representational spaces to be created within these segregated public areas. Lefebvre argues that public spaces are sites in which rhythms, "rites, codes and relations" (1992:96) are developed. However, the top down design of public space ignores the social construction of space as a community space. It is important to note that Lefebvre does not disagree with the concept of designed public spaces. Instead he argues that public spaces are spaces of representation and should be sites in which "walks and encounters, intrigues, diplomacy, deals and negotiations" (Lefebvre 1992:96) occur; in other words, the possibility of spontaneous actions.

Akkar argues one of the features of new public spaces, in the post industrial city, is that they are "rarely used by the general public or used predominantly by a more homogenous public than previously" (2005:88). This is true of Smithfield; though the public square is designed for public use, this is rarely the case. This square is predominantly paved with cement footpaths and cobblestones, tall metal lighting and stone and steel seating, it is a hardscape. The Smithfield Square, a wide-open space, is often empty, with people using it only as a means to get to somewhere, a transitory space, or even a tourist bypass, (see figure 12).

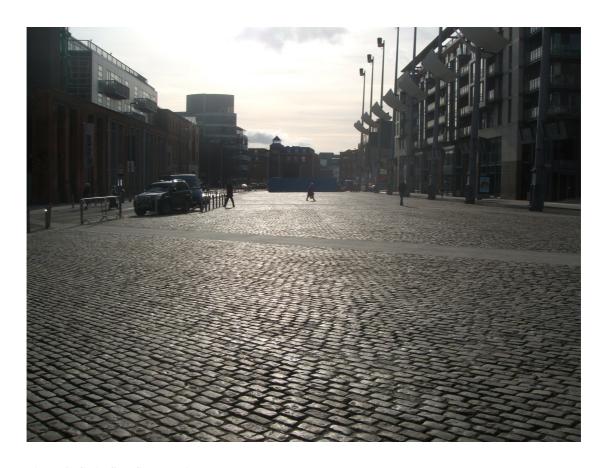


Figure 27 Smithfield Square. Picture by researcher

The square is situated within the redesigned high-rise commercial and housing quarter of Smithfield. This square has existed for nearly two centuries, however its purpose has altered significantly; up until the 1960s it was part of a network of markets: cattle, flowers, fruit, fish and vegetables. The surrounding commercial buildings are today noticeably empty, many having for sale or to let signs on them. This is also reflected

in the emptiness of the square during the day. Throughout the three years the researcher walked the space both alone and with the young participants. Smithfield Square was undergoing constant re-construction, finally finishing at the beginning of 2013¹⁶.

Harvey (2001) argues that often with the reimagined or redesigned city the design focus centres on commercial enterprises, with the argument offered that rebuilding an economy, almost any kind of economy, will lift a space or city out of an economic downturn. However, as in his examination of the Baltimore area in Detroit, this is not always the case and the reshaping of a space often ignores the implicit social relations which develop within urban communities and are often connected to the production and reproduction of social practices, which in turn frequently connect to economic practices.

Truax (2000) argues that a space and its inhabitants communicate acoustically where some sounds will offer information which allows those who live there insider knowledge of the space. However, the sounds within Smithfield and its environs are rarely distinguishable over traffic and construction sounds, and when those sounds cannot be heard, what is left, according to the younger participants, is the sound of footsteps, the wind and the sounds of seagulls.

For the older participants, the areas of housing and flat complexes surrounding the Smithfield Square and markets were rarely quiet when they were younger. Each of the sounds were connected to a particular time of the day, particular work or social processes and were informative keynote sounds and broader sound signals. The sounds announced a schedule of events from rising for work, to church times, play and socialising times, as well as numerous sounds indicating various activities. There were the sounds of ice cream men, bin men, birds, whiskey barrels rolling on cobblestones, as well as various animal sounds:

Interviewee: you had the rag and bone man he had a horse and cart and pick up any household stuff that you didn't want. Whether it was good or bad and you'd go out with it, and he'd give your mother a China cup and saucer or he's give your kids balloons and we would run after him like.

Interviewer: and did you know that he would, come at a specific time?

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¹⁶ The delay in finishing Smithfield was due, in part, to the absence of services to support events in the original designs i.e. underground water and electricity infrastructure, (source: former Mayor of Dublin).

Interviewee: no, no he would just arrive

Interviewer: did he announce himself in anyway?

Interviewee: the bike had a bell, and then he'd give the kids what you'd call scuttin, a scut as you know is a rabbit's tail, so we didn't know that at the time, my father explained to me why it was called scuttin, and you'd say Mr can you give us a scut and you'd get on the backside of the cart, you know, you'd hang on, you'd hang on, it would be dangerous now (2nd female aged 74).

Interviewee: so south of Brunswick Street right would be all the markets, so Smithfield itself would have been very specific to me in terms of that was that square Interviewer: so was that square a market or that's just a square, in the old photos I have, it just seems to be a square of nothing

Interviewee: yeah, and it was, part of the reason why yet again it was a square it was the sort of place that local farmers would bring up, because the cattle would go to whatever, you'd find a lot of potato merchants there especially on the kind of the North West end of the square, it was also the children's court there, what I can remember is as being particularly nasty and rundown, empty, even back then Interviewer: when was that?

Interviewee: that was the 70s, but there was a lot of activity there so at Christmas that would come alive because that's where you'd get your turkeys and Christmas trees would have been around Smithfield. So I suppose it was more seasonal but that when he went in and you crossed over Church Street is that in one sense is where the markets proper started because that's where it was incredibly vibrant (3rd male-mid 50s).

In most of the housing areas in Smithfield in the past, whether tenements or housing estates, there was a public space or square and within these spaces the sounds of various events would be heard. One older participant recalls the various religious events which took place during the year such as the May Day parade which involved a public procession of children and adults walking through Smithfield singing religious songs. The outside work places such as the fish markets, fruit markets and other small industries also produced sounds, which would filter into the housing areas.

Degen argues that public spaces, traditionally, were often characterized by their "accessibility to all" (2008:11), this however ignores other social and legal dynamics that existed in these areas. For example, several of the older participants argued that as children they could be prosecuted for playing football on the streets in Smithfield and generally this misdemeanour would result in a small fine. Typically, the authorities looked down on using the street as a playground. Furthermore, one participant suggested that in her housing area neighbours would either complain to the Gardaí (local police force) or to the parents of children about the sounds they were making.

Interviewee: well when my mother was meant to go to court the day my father was laid out, here, in this room, there was about 4 or 5 of them who were fined for playing football and my mother couldn't go....

Interviewer: was it that people didn't just like the sounds of kids or what was their problem?

Interviewee: well, you'd probably get them now what people would call a grumpy oul one or a grumpy ould fella

Interviewer: they just wanted quiet and no kids around

Interviewee: they just wanted quiet and no kids around, and we used to skip as well but they couldn't stop us doing that, it was kicking a football obviously and if the young fellows kicked it and it went over the wall, you'd be knocking, can we have the ball back, but they might sometimes, but we knew one woman used to rip them and send it back out to them. That's a fact, or someone used to keep them and they'd have a bucket and they'd be all, can we have our ball back (laughter) but my mother, I remember going, she couldn't go (to court) and Lizzie went, her grandson was fined, 5 shillings, which was a lot then. 1952 was when my father died. (2nd female aged 74)

Although the older participants describe a vibrant soundscape during their teenage years, it is important to note that these sounds and their lives were considered for all of the participants a fixed concept. The participants would not necessarily be seeking to elevate their social status, either through education or employment, and most expected or wanted to live close to their families in Smithfield when they got older and married. It is also important to note that there is an idealising of their pasts and the sounds remembered by most of the participants. When reflecting on the past they tended to highlight sounds that were positive to them and the area. For one participant, however, being poor and living in Dublin city as a child during the 1950s and 60s meant having no control over one's life. The presence of authority figures such as the police featured strongly in his sound descriptions of childhood. The sounds of police raiding the tenement complexes, accompanied by the barking of dogs warning the locals of their presence, are strong memories for this participant. For him, the social structures of Dublin city consisted of the policing of the poor, particularly children, who were constantly arrested for petty crimes, which arose from extreme poverty.

Fraser argues that a public space can be distinct from the state and can even be a space for critiquing the state; a public space has the potential to become a place where the disenfranchised and citizens can "deliberate about their common affairs, hence, an institutionalized arena of discursive interaction" (Fraser 1990:57). However, feminist writers argue that accounts of democratized public places are often idealized notions

around what a public space is and how they are used (Degen 2008). Within the Smithfield housing areas of the city a policing of behaviour and practices was undertaken within the community and enforced by the state. There was a kind of lateral surveillance taking place within the tenement blocks or housing estates. Today, there are a number of video surveillance cameras in the area. Thus the role of policing the area becomes one of self-policing as a result of being constantly watched.

For the young participants of this research project, so called public use spaces such as public parks are an intermediary space, one that they will only use when they are preteens. For teenagers their socialising times operate outside of public space times such as during the evenings. The public park rules often prohibit teenagers from play areas. However to go somewhere away from safe spaces such as a park was not an option.

Interviewer: are there parks that you would go to?

Group: no.

Interviewer: no (laughter)

Group: I stopped going to Broadstone (public city park) when I was about 9. It's dark

out.

Interviewer: dangerous?

Group: no it's not even that. It's just like you know, you'd be sitting in a big dark park

(Group 3: male).

For these participants, the public square of Smithfield is a particularly uninviting space. They state that groups such as addicts, whose voices create an unpleasant soundscape, often inhabit it, which in turn makes for an unpleasant public space atmosphere. Additionally they see no particular purpose to the space. For teenagers, there are no shops or other consumer spaces, which they could inhabit within the square. Also the vastness of the space, in their eyes, made it too open. They grouped together in this space unsure of where to go. Teenagers in general, congregate in small areas, laneways, streets etc. (Travlou et al. 2008; Travlou 2003). A space like Smithfield Square, for the younger participants, has no inherent symbolic meaning attached to it, which might suggest an activity. The openness of the square and the way sound reverberates reflects Foucault's panoptican (1995), whereby, from every angle in the square one is potentially both watched and heard. For the young

participants this space offers no potential for privacy or the potential for reproducing space.

The younger participants indicated a different level of surveillance; they noted that when they entered into the public space of flat complexes (the central square or playgrounds) they immediately knew that people were watching them, they felt out of place. These spaces although public outdoor spaces are actually private spaces to those living in the surrounding flats. In this way public housing areas have spaces similar to gated private housing, which act to exclude outsiders. Thus, designating a space public or private is not based simply on physical boundaries "but rather that social conventions and practices determine who and what is allowed to be 'public" (Degen 2008:12).

Mitchell (1995) argues that, by contrast, it is only in public spaces that the outside can be considered part of the public, and that those who are usually excluded from certain spaces, such as homeless people or teenagers, can become legitimate members of the public. But for teenagers this legitimacy is not guaranteed. The mere fact that they are considered, as Akkar (2005) argues, an undesirable group means their presence in public spaces with corporate interests will be seen as undesirable because they are not there to participate in the act of consumption or indeed the performance that surrounds consumption. In addition, they are not part of the ideal aesthetic agenda of urban planners (Bowden 2006; CRIN 2008; Matthews 1995).

4.5.2 Public space as event space

Akkar (2005) argues that, traditionally, public spaces were accessible to all. However, they are increasingly managed by private entities for profit and to "serve the interests of particular sections of the population" (2005:75). In an interview conducted by the researcher with a representative of (DCC), the public space of Smithfield Square was described as a place for potential commercial opportunities, from food markets, to temporary ice rinks, fairs and other seasonal events. Although the space is defined as public, it functions more as an 'event space'. Furthermore, the representative stated that as there were no children living in the area it had been seen as unnecessary to explore youth participation in the design of the space. Meeting the needs of those who produce places for profit (Gieryn 2000) has led to a "much greater emphasis upon product differentiation in urban design" (Harvey 1995:77) and a

uniformity of sorts that results from designing for those who have money to spend (Lovink and Rossiter 2007). In new developments this is typically in the form of *on trend* cafes and bars, tourist venues or apartment complexes for short term letting, such as those in Smithfield. The spaces that emerge from this type of development are homogenous in their differences, i.e. these spaces try to respond to the needs of multiple groups of visitors. However, this is frequently done without a consideration for the meaning of place, history and of the culture of its pre-existing communities. This leads to places designed for the sensory privileged middle classes (Degen 2008). Those who can afford to live and buy a type of sense experience that is itself an homogenous, passive space, where rest, eating and thinking take place; "in other words, quiet consumption", and in these "regenerated environments chance events are kept to a minimum" (Degen 2008:70).

One of the few public events that take place in Smithfield Square is the horse fair which happens on the first Sunday of every month. In recent times controversy has cloaked the fair. In 2011 a shooting occurred at the fair, which caused it to be closed until March 2013. Animal rights activists have argued that horse welfare is severely in question in relation to the dealings at the fair and there is an element of ethnic and class tensions between various communities. Many of those at the fair are from the Irish travelling community. During one walk of the Smithfield horse fair¹⁷ the sounds heard were quite varied, there were horses neighing and whinnying in panic (listen to track 5 on CD), horse shoes on the cobblestones, traders shouting out their wares of horse paraphernalia, seats, stirrups etc., the voices of old men, the dominant background sound, as well as traditional Irish music. Outside of the gated fair were the sounds of large groups of teenagers, shouting and calling to each other. What was observed was the lack of horses. There seemed to be no real horse-trading. Instead, the space had become a gathering space, with groups of tourists wandering around taking pictures of anything and everything.

This fair does not fit within the cultural ethos of regenerated urban spaces such as Smithfield, where culture is defined as a consumerist process or part of the arts. As mentioned, Smithfield contains an arts cinema, some gallery spaces (often closed), and a tourist centre. Recently, one of the blocks has been turned into an arts

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¹⁷ This researcher attended the Smithfield horse fair in April 2013.

residency and studio space. In general, all of the cultural activities that occur here are quiet and controlled. The sounds produced by the fair are counter to the types of sensory experiences, which Degen (2008) argues, are acceptable to the middle classes who purchase a type of sensory/sonic experience.

Whilst attending the fair in April of 2013, the researcher noted that there were several dozen local teenagers looking or visiting the event, mostly teenage boys (see figure 28). Because the space was busy with people, activities, music and even security there was a reason to use the square, even if you were not actively taking part in the event. However, the researcher did note the extreme amount of policing; there were private security guards and state police on horseback and leading guard dogs, and the fair was surrounded by fencing, (see figure 29 and 30), in essence all things suggestive surveillance and exclusion. One of the entrances to the fair stated that no young people could enter without adult supervision. Notices were placed on the surrounding fencing stating that no young people or children could enter the fair unaccompanied by an adult. This fair has often been categorised as noisy, smelly and dangerous by the media, Dublin City Council (DCC) and even by some of the research participants. Some of the older participants have even argued that it does not belong in Smithfield. Yet the presence of so many teenagers within the space on that day highlights how the 'buzz' of such an event attracts young people. Enclosing this event does not contain the sounds, it spreads out from and beyond the square bouncing and echoing of the buildings. But the act of enclosure, the policing of youth and the space, visibly suggest exclusion. The soundscape of the fair on that day transformed Smithfield, lifting it out of its everyday silences, which seemed to invite young people to participate. It was reactivated with life.



Figure 28 Teenage boys outside the fair in Smithfield Square. Picture by Rebecca O Keeffe



Figure 29 Fencing around the fair. Picture by Rebecca O Keeffe



Figure 30 Security at the fair. Picture by Rebecca O Keeffe

The oldest participant interviewed argued that the fair had no historical place within Smithfield even though the selling of livestock has occurred in this space for over two hundred years. She also argued that the noise from the fair and the mess left behind was disgraceful, one of many arguments presented at DCC to support shutting the horse fair down. Nevertheless, the horse fair began again in March of 2013 as a cultural event. The official flyers suggested that the event would have artist exhibits, Irish traditional music and market stalls selling cultural artefacts. The researcher attended this fair, having also attended the horse fair in the past, to observe these new cultural additions. Although the fair had two traditional music bands playing around the square, they seemed an innocuous presence (see figure 19). Nobody was paying attention to them and they were away from the crowds. There was also an art exhibition taking place in an unoccupied ground floor building. The artworks on display were images of past Smithfield horse fairs and two video pieces. This exhibition is arguably a type of authentication or validation of the horse fair as a cultural event or product.



Figure 31 Traditional musicians at the fair. Picture by Rebecca O Keeffe

There was little evidence of a cultural, tourist style event, taking place. There were horse traders gathered in large groups, mainly men and young boys gathered around horses arguing over their qualities. The space was thick with the sound of men chattering, horses neighing and teenagers shouting. One could argue that the cultural event taking place is the horse fair. However in order to legitimize the fair DCC created other activities in order to attract potential outsiders i.e. tourists (O'Callaghan 2012). The researcher did not think the space particularly loud but she did note that in comparison to previous years there was a distinct lack of horses, which considerably reduced the soundscape of the fair.

In order to democratically design spaces which include the needs of the poor as well as the rich one needs to explore and include the local residents in the planning stages (Harvey 1995:76). However, as Harvey argues, this presupposes "a series of well-knit and cohesive urban communities as its starting point" (1995:77), something which Jane Jacobs (1992) argues is necessary as a reaction to the urban monstrosity of modernist design which took place in the west after World War II. This type of

design ignored the "social processes" necessary for the integration and development of the urban landscape. These processes include the sonic as part of the shaping of communities. Different cultural practices as well as languages and public social practices are the body and soul of the urban village. Amongst the older participants in this research there are strong memories of various sonic events, which shaped their experience of place. An example was the tradition of street singers,

"Singing, singing was a big part of it, because of a Sunday morning, Sunday around noon, sorry, Sunday around noon, you had the street singers coming around oh yes, they came through the streets, they start their way through from the likes of Summerhill, and sing their way from Summerhill down through Sean McDermott Street down, and all through where the blocks of flats were, and you could hear their voices, beautiful singers". (2nd male aged 63).

Another was the radio being placed on the windowsill for the neighbours to hear. These sounds were part of a shared cultural and social experience. These sounds in Smithfield were what Schafer calls 'archetypal sounds' or historic sounds, sounds that are linked to traditional practices. These sounds change over time, e.g. horse and cart to trucks, town criers to alarm clocks; but the transformation is usually gradual and part of wider social and technological transformations. In contrast, urban regeneration projects, such as that which occurred in Smithfield, tend to be large projects, which radically transform the physical landscape. In these areas the soundscape altered very rapidly with no bridging period.

For the younger groups from the research area, public space is anywhere that is not home. The young people in this study wanted to be in places where "something is happening" (group 2c: male). Most of the teenagers argued that for them the place to be is the city centre where the shops are. They want to be surrounded by the bustle of city life complete with buskers, music pouring out of shops and people chatting. Deliberate public spaces do not hold any attraction for them. In the city most of the teenagers have come to associate public spaces, like parks and squares, with drunks, drug users, children and regulations.

The participants from the private school do not see the city as somewhere they would hang out, they prefer their home areas and they tend to see the city as somewhere that you go to for a specific purpose e.g. shopping. For the private school participants the city is not a space where one uses public spaces, such as parks or squares because they have those where they live. The young male participants, who live in the city, have only the city as their public space, but the public spaces they use are non-designated; for example, they identify street corners and doorways as public spaces. For a lot of the female participants public spaces are not characterised as safe by either the female participants or their parents, though this does not prevent some from hanging out there. Other spaces are seen as exclusionary by default, especially if you do not belong there,

"Interviewer: Right, when you're hanging out, do you hang out outdoors mostly or do you hang out with your friends indoors?

Group: (Participant 1) It depends, it depends on what we're doing for the day.

Interviewer: do you feel like there's any spaces that you're not allowed, that you're not welcome?

Group: (Participant 1) See right, it sounds very stupid right, but, see if you're like from (area in Dublin city), and you go up to like (area in Dublin city-different neighbourhood), and you're not related to, or you don't know anyone, they'd be like, who are you?

Interviewer: How would they know that you're not from there?

Group: (Participant 1) They just would, just dangerous

Interviewer: They just know, all right, is there any other places that you feel you can't hang out in the city, that you're not welcome?

Group: (Participant 2) I wouldn't go over to central bank. (Participant 3) No I wouldn't. (Participant 4) I hang out there (Central Bank). (Participant 5) I used to hang out there when I was younger, oh by jaysus, I wouldn't go back over there again." (Group 8b: female)

The Central Bank in Dublin (banking regulator building in the centre of Dublin city) contains a square, which traditionally has come to be associated with meeting people, teenagers grouping together and public protest. However, some of the participants feel that they would be rejected or would not fit in to this environment, even though it is a public space, the participants felt excluded from it. Some female participants argued that the Central Bank was a space for 'emos'. When the researcher asked the groups to elaborate on this word they explained that it meant an emotional person, they defined some as rockers (people who listen to rock music and dress a certain way to reflect their musical interests), though they were unable to articulate why this was a

problem. The suggestion was that 'emos' were expressive in gesture, clothes, voices, music and opinions, something they found uncomfortable.

4.5.3 Smithfield as a non-place

A space, for Augé (2009:79), is an area where places are enacted through the movement of bodies within the milieu. For Lefebvre (1974:48) space is the potential for place making and this can be defined as the inherent possibilities of spatial use, connected to its geographic layout. The presence of people moving through, using and re-imagining space, are required in order to have a space with permanent and impermanent possibilities and meanings. For the young participants in the research, identifying place is identifying a soundscape: the presence of people flowing through and to a space, traffic, music and noise; in these circumstances space becomes place.

During the focus groups, the young participants constantly highlighted the apparent lack of meaning that the Smithfield Square had both to them as a social group and to the area in general (it important to note that these differences were not the same for both the public and private participants). This concurs with both Matthew et al. (1998) and Akkar's (2005) concept that spaces are not as public as they may be presented and that when the voices of youth are excluded from the debates over public space design, the spaces can become exclusionary by default. For the teenagers in this research Smithfield became a non-place (Augé 2009). recognise the temporal events that take place within the area such as the monthly horse fair, and the various seasonal festivals, but they see these events as connected to outside interests and not related to their needs or the needs of the locals. These events have also become unreliable and have been cancelled without notice or public consultation. In this research, for example, during one discussion with a group of young participants they discovered that the Dublin winter ice rink (usually at Christmas), which had been situated at the Smithfield Square for a number of years, had been moved to a different venue. The sense of frustration and even annoyance within the group was obvious, they couldn't understand why this would be taken away.

Interviewer: What about Smithfield, anybody know Smithfield? Group: (participant 1) ice skating, (participant 2) no, it's real loud when the ice-skating there. (Participant 3) The ice-skating's not going there anymore. Interviewer: Is it not?

Group: No, (participant 1) why?

Interviewer: How come?

Group: (participant 3) because they're building everything new or something

Interviewer: Is it not finished?

Group: (participant 3) No, they're putting the lights... (Participant 2) they're always

building something over there, (participant 1) eh buildings...

Interviewer: The building never, yeah construction

Group: (participant 1) tell me, is there going to be crap now about this... (Participant 5) yeah cause the city like needs it, (participant 1) ah I love it, eh sorry are they not doing it? Why? (Participant 3) I don't think they are (participant 3) aww. (Group 9b:

Female)

The sense of disempowerment was underscored here by their acceptance of the fact that they would never be included in discussions over changes to the area. The ice rink represented a time in Smithfield when the area had a sense of happiness and life, and part of this was the sounds produced when the ice rink was in *situ*.

Group: (Participant 1) the ice rink used to be there as well. (Participant 2) Yes you used to always hear the music there, and all the people you know like everyone, everyone like screaming and laughing and all

Interviewer: and that made Smithfield sound better?

Group: (Participant 2) only during the winter. (Participant 3) Yeah because everyone

is real depressed during the winter

(Group 13a: Female)

Interviewer: have you been to Smithfield?

Group: (Participant 1) Only when ice-skating is on. (Participant 2) when ice-skating

is on (laughing),

Interviewer: it's the only reason to go there?

Group: (Participant 3) yeah, that's the only reason I know that cause it's called...

(Participant 1) Smithfield ice rink, (Participant 2) yeah

(Group 11b: Female)

Interestingly the boys did not mention the ice rink or the horse fair in their discussions of Smithfield. Only the girls discussed these events. When the removal of the ice rink was raised with the representative from DCC she stated that the removal had occurred for further infrastructural design in Smithfield. Apparently when the first construction of Smithfield took place they had forgotten to install electrical and water mains for events in the square as mentioned earlier. The side effect of this was that the sounds made by the generators powering the ice-rink and other cultural events had, according to the DCC spokesperson, caused a number of complaints from local inhabitants concerning noise levels. However, when asked when the ice rink would return, the representative stated it might never return because it would be difficult to

attract paying visitors to this area. This conflicts with both the researchers and young participants experience of the ice rink within Smithfield. Both she and the young participants witnessed, over the years, the winter market and the ice rink attracting large crowds. The ice rink was often so crowded one would have to skate very slowly because of the large numbers on the ice.

Though these activities within the Smithfield Square could be described as "fleeting, the temporary and ephemeral" and "ascribed to places of memory" (Augé 2009:78), to the young participants it had become a permanent temporary event, one which allowed them to identify, along with the horse fair, Smithfield as a social space. Their descriptions of the space during these times were imbued with sounds; socialising, productive and consumerist sounds. At these times, the space became a place where families, groups of young teenagers and visitors congregated together, giving the area a vivid soundscape.

The redesign of Smithfield is arguably a search for a kind of permanent identity (R.I.A.I 1991) which inevitably ignored its history. The design of the space reflects the contemporary configuration of space as predominantly visual, this is, in part, "due to postmodern trends in urban planning that have led to an increased stylization and theming of the urban landscape" (Degen 2008:36).

Visual display matters in American and European cities today, because the identities of places are established by sites of delectation. The sensual display of fruit at an urban farmers' market or gourmet food store puts a neighbourhood 'on the map' of visual delights and reclaims it for gentrification. A sidewalk café takes back the street from casual workers and homeless people. (Zukin 1995:9)

The constant reconfiguration of Smithfield with temporary events situates it within what Augé (2009) calls 'non-place': a palimpsest which has the needs of different groups constantly written on to it. However, it is also argued that festivals and events animate static cultural forms, promoting them to new markets through the pervasive media-tourism complex (Nauright 2004) and they can help spectacularise fixed structures (Richards and Wilson 2004). However, these temporary events can have a

negative impact on traditional cultural formats by "failing to enable local cultural ownership" (O'Callaghan 2012:186).

Because of advancements in technological design, from communications to travel, the shaping of place can ignore the concept of a locus space - a central community place. Spaces are re-designed without real consultation or consideration for that which is already present or existed in the past. As a result, spaces such as Smithfield are difficult to define in terms of any particular purpose and the side effect is a fragmentation of space and community (Harvey 1995). The same could be said for other parts of Dublin city, which have undergone similar rejuvenation projects such as Temple Bar and the Dublin Docklands (Corcoran 1998; Drudy and Punch 2000; Punch et al. 2004). Lefebvre (1974) argues that over time, and this can be a very lengthy time, representational spaces are formed within structured spaces of production, consumption and reproduction. These spaces, often invisible, are what actually shape or construct community. In deconstructing spaces for the purpose of regeneration/rejuvenation, these invisible symbolic spaces are taken apart, which in turn alters a community's spatial connections to place. Massey adds that space is something in flux, never fixed, and constantly moving, it is also a "a simultaneity of unfinished stories" (2004:108). In this way both Massey and Lefebvre see space as full of potentialities until urban planners/designers try to fix space with specific meanings.

De Certeau (1988) argues that the design of space is rarely done by those who live at the ground level; designers and planners do not live in the areas they design, so their connection to the space are not influenced by local social need. Rather, they design for policy makers, planners, with the local populace brought in for general discussions on the overall development. One of the older participants noted that the discussion for the redevelopment of Smithfield in the 1990s did involve community groups, however, she regarded these talks as pointless stating that the voices from the community were generally ignored in considerations for the space's design.

Interviewee: it was all talk, everything fell through.

Interviewer: were you all part of the discussion in the neighbourhood

Interviewee: a wasted of their own time and wasted our time, by going to meetings

and all, it was all talk

Interviewer: and now that space is just

Interviewee: and there is beautiful land left there, that's there nearly 20 years, and then there was the Daisy market, that sold second-hand clothes, oh yeah the Daisy market that still there

Interviewer: is it?

Interviewee: that's nearly 40 years, 35 years left idle, closed; prime land left there,

and never did anything with it, (1st female - 66)

The city designed from afar, becomes a "simulacrum, in short a picture, whose condition of possibility is an oblivion and a misunderstanding of practices" (de Certeau 1988:93) particularly the practices, which have developed over time. Even if new practices evolve in such non-places, they would, at the very least, take as long to become embedded into the local culture as previous social practices (Lefebvre 1974). Gieryn suggests that "the struggle between those who produce places for profit and those who consume it in their daily rounds is played out against a global struggle among places for the wherewithal to grow" (2000:470).

For the young participants the lack of amenities and the soundscape of Smithfield play a significant role in defining Smithfield as a non-place. The sounds in the area that can be categorized, such as ambient sounds like wind and the distant sound of traffic, the young participants argue are sounds that are not specific to place. The young participants stated that because one can hear particular sounds in Smithfield: footsteps on cobblestones, people having conversations, bird cries; that the quiet of this space highlights the lack of social or productive activities.

Group: (Participant 1) its real quiet there Interviewer: you thought it was really quiet?

Group: (Participant 1) yeah

Interviewer: there was no sounds down there?

Group: (Participant 1) although, there probably was sound for somebody who listened to it but like, because we were all meant to be coming down, eh like, from the city, the space seems to be nothing, ..., because we're after coming out of Henry St., Mary

St and all, it (Smithfield) just seemed real quiet. (Group 13a: female)

Interviewer: and do you think that there is an important sound that belongs to Smithfield, were any of the sounds that you heard part of Smithfield?

Group: (Participant 1) No. (Participant 2) The Luas. (Participant 3) The wind.

(Participant 2) A bit, you could hear the ding a ling of the Luas.

Interviewer: so that's probably a key sound, any other sounds?

Group: (Participant 4) The people wheeling their trolleys over the cobbles.

(Participant 2) You always hear people screaming in the background.

Interviewer: so, aside from the cobblestones, the sound of the cobblestones and the

sound of the Luas and the sounds of the wind

Group: (Participant 5) no, you kind of always hear the diggers, you kind of always hear them (group 13a: female)

If any sound defines Smithfield, according to the young participants, it is the constant sound of construction, sounds which belong to spaces of transition.

Interviewer: but you know Smithfield seems to have a lot of construction going on is that not loud

Group: (Participant 1) yes, and it's still not finished. (Participant 2) That's

going on 10 years now.

Interviewer: and that's kind of loud isn't it

Group: (group) no

Interviewer: no, you don't think so

group: (Participant 1) you don't even see the construction even happening, they just built a brand-new shop at the end of it and no one even seen it being

happening

Interviewer: really

Group: (Participant 1) there's a new shop right next to it. (Participant 3) Where

is the new shop? (Participant 1) Down the corner

Interviewer: and you didn't even notice it going up. (Group 3c: Male)

For these participants the sound of construction is a constant presence, so much so that they have adapted to it and don't even notice that the space has changed, mostly because they expect the space will undergo changes again.

Lefebvre argues that space has no "reality' without the energy that is deployed within it" (1974:13), in this instance, the energy required to make areas such as Smithfield into *places*, requires the presence of social and economic energy; because of the presence of a large community these practices must be dyadic with both areas working well together. The instability of this space is based on that connection and relationship of community to work practices, which has altered over the decades since the 1950s. Social space is a social product that is real and physical and beyond the control of the state, even if the state plays a part in the construction of it. In order to imagine a space beyond structural functional use and beyond "market processes" (Tonkiss 2006), one must have more than the "narrowest leeway to representational spaces, which are limited to works, image and memories whose content, whether sensory, sensual or sexual, is so far displaced that it barely achieves symbolic force" (Lefebvre 1974:50). A space needs the capacity for re-imagining. The constant act of constructing Smithfield has meant that the presence of necessary bodies within the

space that could contribute to its "shaping and re-imagining" of space (Lefebvre 1974:50) has been withheld.

The soundscape was not considered in the regeneration of Smithfield. The reasons for this may include the ease in which the visual "can be captured and replicated" (Adams et al. 2006:2386) unlike the soundscape. However, sounds are integral in shaping and framing the rhythms of the city and the "visual experience of cities is not independent of the sound experience" (Southworth (1969) cited in Adams et al. 2006). Paradoxically, within urban rejuvenation policy a process of pacification of space is actually identified and intensified: spaces are seen as places to be "cleaned up and spurred on" (Tonkiss 2006:84). The result is a space with no designated meaning and concurrently no social value amongst the locals - a non-place.

4.6 Sound as a resource for making place

Gieryn (2000) asks that we move away from geographically fixed terms and a reconsideration of the definition of place within sociology. Place is a unique somewhere that can be defined by one's position and association to place. It is definite in terms of its culture and history its "people, practices, objects and representations" (Gieryn 2000:465). It is also imagined, interpreted, narrated and conceptualised and space is also elastic (Degen 2008; Geertz 1977; Gieryn 2000; Soja 1996). Cyberspace in contrast, cannot be *place*, according to Gieryn, because it does not contain things/objects. However, this limited characterisation of cyberspace as non-place, fails to take account of how technologies can facilitate entry into virtual places, which can enhance an experience of place. Sound shapes or helps conceptualise place as relational not physical.

One issue underexplored by previous researchers examining sound in urban spaces is the idea that young people can know a space through the sounds it produces. The fact that teenagers inhabit public spaces on a daily basis means that they can interpret space through the sounds they experienced and they become familiar with its daily rhythms. For most of the participants paying attention to the city means experiencing it as a whole, sight, sound, smells etc.; they do not set out to hear the city and find it

strange to think about listening to it, but they are clearly aware of sounds in the city. This awareness of the urban soundscape is almost subconscious, however it was noted by the researcher that their behaviour changed in response to the sounds they heard during their soundwalks. In the Smithfield Square the researcher witnessed how the groups documented sounds, either with their cameras or their digital recorders; they would walk towards shops or the edges of the square clustering in groups, with the male participants generally staying in larger group numbers than the female participants. The young participants stated in later discussions that they had to go to the edges to find a sound: doorbells in the surrounding houses, traffic light sounds, cars driving around the square, shop fronts; and even then they noted that there was little to record. However, the recordings gathered by the participants reflect a different story, there were plenty of sounds documented within the space. On listening back the researcher reflected that what was missing was the typical ambience of a city centre or a suburban community. In their recordings it was heard as a distant sound a background sound, rather than a foreground sound. City sounds were heard in their recordings of the busier shopping districts. Furthermore, the young participants stated that what was missing sonically, from Smithfield, was the sound of individual or notable sounds such as sounds connected to the everyday: living, walking, talking and consumption. The emptiness and relative silence of Smithfield contributes to the failure of the space/place. It fails to provide the 'cover' that the hustle and bustle of the city centre provides. It is both exposed and exposing.

During the discussions the groups found it difficult to remember sounds within Smithfield. Some identified the sound of the Luas, but this may be because they know the tram runs through the area on a daily basis and that this sound is synonymous with that part of the city. The space around the square was unfamiliar to them and they had no connection to the minimal sounds produced within the area such as the sounds of trucks, construction and birds. This is not to say they did not understand what they heard, rather, they had no relationship to these sounds. As a result they do not know how to act in the space; the sounds elicit no responses from them and they react by clustering in groups and becoming alternatively louder and quieter. However, when they were in the busier parts of the city, such as Henry

Street, a busy pedestrianized shopping district, they separated into smaller groups and a few documented the space alone. They walked towards shop windows and street musicians, listening, recording, and generally responding to the sounds of these areas; at times, some participants recorded the interior of shops. The female participants were not inhibited when recording in busy areas; they would approach women with children and ask to document the sounds of their prams or their children, through photographs and with their digital audio recorders. They would also record the sounds of street buskers and traders as well as groups of people chatting. The male participants however, were reluctant or cautious to approach people to record their sounds and on several occasions the researcher had to prompt some groups to ask permission to record their sounds. Once, while facing a street market vendor the researcher asked on their behalf if they could record her voice when she called out her goods. Sometimes in these areas it was difficult for the young participants to document the sounds with their digital recorders, they felt that there were so many sounds layered on top of each other that they would not record a distinguishing soundmark or key sound. Truax (2000) alludes to this behaviour through his energy transfer model, discussed in chapter 1, whereby the magnitude of stimulus will affect the subjective responses to sounds.

In the busy city centre areas the sounds are familiar, symbolic, meaningful, and they prompt certain actions and behaviours. When discussing the sounds of these areas the groups were able to identify most of the sounds emitted in these spaces, whilst simultaneously linking them to the producer and the necessary activity, for example, people talking, footsteps, music and shopping. Unlike in Smithfield, here in the city centre they could not identify single sound sources only background ambience, which gave them a sense of the activity of the city and a sense of safety. In contrast, Smithfield with its minimal soundscape was deemed uncomfortable, even dangerous.

For the teenagers in this research, sounds, which are produced by the presence of people, suggest an active space. The participants suggested that sounds could be part of the process of making place. They argued that place could be achieved by the reconfiguring of space, in this case Smithfield, to include more shops and green spaces. Whilst this sounds plausible and even achievable, the making of space through the creation of sites of interest or green spaces, has thus far not worked in the

Smithfield area. This failure may be due to several factors, the most pertinent being the process of gentrification in a traditional area with a local populace, which has embedded social and economic practices. In the process of gentrification one must exclude the stationary community (Degen 2008; Hamnett 1991; Zukin 1987). The transitory community who live in the apartment complexes have no vested interest in the long term shaping of such spaces. Though the space was in physical decline and the area was in a severe economic slump from the 1950s until the regeneration project of the 1990s (Brown 1981; Garvin and Garvin 2011), it still contained the many residents of this space, their families and their traditions. Pasting a new constructed sphere over this history, without considering how it would work in this space, has meant that as yet, Smithfield does not function as either a regenerated or gentrified space. For the older participants the area surrounding and including Smithfield is too quiet today.

"I miss, I miss even fellas going by on a bike whistling, you know what I mean or even people going by, now they don't do it now, now and again you'd hear people, but people going by and saying "good morning to ye" you know what I mean you miss that kind of, you mightn't know the person or isn't it a bad day, don't hear that at all, so some people might like that, I like a bit of peace and quiet I don't like rough stuff, but the sounds of a city or a town, I miss that". (2nd female aged 74)

4.7 Conclusion – the sound of silence

This chapter has shown that space and sound are intimately connected. Space; as in real and symbolic, and sound; the sounds of economic practices, social activities, even silence. Augé argues that 'place' (different to space), is an assemblage of things and the movement of bodies is the "animation of these places" (Augé 2009). Whereas space is authorised as its inhabitants write meaning in it through movement, interaction and participation (de Certeau 1988). Lefebvre argues that social space is a social product, this is breaking with the widespread belief of space "as an independent material reality existing "in itself"" (Goonewardena et al. 2007:28). Because it is socially produced space has no universality, instead a space can only be understood and interpreted by a specific society because sounds historically and socially evolve becoming part of the culture of space. In this way space is not only 'relational' it is also historical (Lefebvre 1974).

Young people identify the modern urban landscape as the soundscape of consumption. This they argue is a positive soundscape, it is not limited to consumption but to the activities and sounds that surround consumption and participation in the dominant culture. Spaces such as Smithfield Square do not recreate this type of sound, it is a place without specific meaning, its size and the surrounding architecture are intimidating but its silence is even more so. The older cohort described an area of many sonic particularities and even unique sounds for a city, connected to productivity, sociability, tradition, religion and even danger. They also argue that the resulting downturn of the space and its subsequent rejuvenation have left the space relatively silent. They reflect that the reason was the destruction of traditional work practices and the exurbanisation of Dublin city from the 1960s on. Two older female participants, who still live within the area, both observed that Smithfield and the surrounding housing areas were much quieter today.

The soundscape of Dublin city described by the young participants is divided between the homogenised western city soundscape and local soundscapes. The local soundscapes are connected more to the geographic position of their housing rather than traditional or local specific sounds. Most of the young participants identified the sounds of production, consumption, cultural activities and community and they argued for the retention of these sound types in the city. Unlike the older cohort, they have no connection to specific types of sounds found in the Smithfield area: market traders and machinery, sounds on cobblestones and horse traders. According to the young participants these sounds are part of the city's marketing of cultural activities, they are no longer a part of the city's traditional economic practices.

The city, as a consequence of engagement/disengagement, has spaces and non-places. This engagement in space is not limited to movement and participation, rather it is a process of engaging with the senses, being contained within, and in turn, reproducing sensory information. For the young participants Smithfield is an empty quiet space where you don't hear anything "aside from the odd bird". Simmel (1903), in his exploration of the different social experiences of urban versus rural spaces, suggests that when one lives in a small area, such as a village, there exists stronger emotional connections and ties to place. The younger participants argued that where they live in Dublin is not the city centre but a kind of urban village, a space on the edge of the

city. For the older inhabitants of Smithfield and the north inner city, each housing area was its own small community where everybody knew everybody, where families lived for generations and where you shopped and worked locally and where the sounds of place were "vibrant". Social connections featured strongly in these small areas especially for the working classes and women. Inversely, quiet within small urban areas is unsettling largely because of its association with emptiness, non-productivity, depression and danger. Conversely, this research has highlighted a connection to space that is intimately linked with the continuous presence of external sounds, which are seen as positive and comforting; some of these sounds were identified, by the young participants as historical sounds, sounds which Schafer (1977) calls archetypal sounds. The Smithfield area has undergone numerous physical changes to its design, the one constant being the large stretch of cobbled land known as Smithfield Square. These were sounds within Smithfield, identified as historical, and part of its cultural heritage.

"Group: (Participant 1) Do you know where all the pebbles are, I'd just leave that just leave it. (Participant 2) I like the cobblestones. (Group) Yeah. (Participant 1) Even though you'd probably break your neck on them and all like.

Interviewer: so do you think that the cobblestones they sort of have a sound?

Group: (group) Yeah. (Participant 1) They have a feeling, it reminds you of back in the day. (Participant 4) It reminds you of the horses and the horses walking on the cobblestones. (Participant 3) It's lovely. (Participant 1) It shows you that it is Smithfield." (Group 14a: Female)

Although Smithfield has no particular function or relevance at the moment to young people, the echo of earlier soundscapes still resonates and allows them to attribute meaning to the space. When exploring this space in the focus group sessions, a key issue was silence. Although it would be hard to argue that Smithfield is silent, as it has certain sounds that are a constant fixture in the space such as the Luas tramline; the meaning of silence within Smithfield, for the young participants goes beyond a measure of volume. Some of the young participants who were very familiar with the Smithfield area (for example, participants who lived close by) had no memory of the space before the construction projects, which began during the 1990s. Therefore they remember the space as one of constant transformations and constant construction, whilst stating that it is a silent space.

For the younger participants changing either the urban or Smithfield soundscape, drew conflicting opinions. For many, the sounds they hear in the everyday have some kind of significance, traffic, people, sirens, children etc. They signify events, times, work practices and consumption. Therefore any substantial change to a space potentially alters these sounds and thus the young people's relationship to a space.

Others argued that some changes, which might seem positive, such as the introduction of a park, were problematic, particularly in areas with social problems such as poverty and addiction. For others, change is pointless. In their world a city is constantly under construction so spaces by definition are not fixed. The young participants have not previously participated in discussions of urban planning, therefore they find it difficult to imagine new designs of space and the impact this might have on the soundscape.

There has been a move to not only reconfigure Smithfield and the surrounding areas but also a rebranding of traditional practices and cultures. These cultural/economic practices are part of the uniqueness of the site, which led to its potential or intended rejuvenation and branding as a traditional cultural quarter. Harvey would argue that this is part of the process of creating "monopoly rent" (2009b:93), whereby a site (because of its uniqueness, authenticity) is designated as having the potential to attract investment and high rent. However, this rejuvenation is in actuality a gentrification, and Harvey argues, this kind of transformation can lead to the removal of "long-term residential populations and destroy(s) older urban fabric(s)" (Harvey 2009b:104). Gentrification leads to the eventual homogenization of types of cultures and the inability for pre-existing local populations to purchase or live in these areas. Additionally, the re-branding takes only parts of what was considered cultural like a market, traditional businesses or architectural designs and sells it as a cultural commodity until their originality is lost and the indigenous population is identified as an inconvenience.

What has happened in Smithfield is that despite marketing its traditional history, its location in the city and the restoration of some of its architecture, there has been a failure to develop this site as a cultural quarter. One could argue that ignoring the associated symbolic, sensual characteristics of the space and the relationship locals

had to these forms, and only considering physical objects as having a market value, has led to the creation of a non-place (Augé 2009).

5 Noise: subjective experience and social construction

5.1 Introduction

This chapter explores the social construction of noise. It examines in more detail the histories, which have shaped noise as a metaphor for various social agendas. Few authors have examined noise as a sociological issue; noise has been relegated to the fields of natural science, acoustics or as a process of disruption; a metaphor for breaking meaning apart (Lindgren 2013; Watson 2009). Instead, historians of noise, researchers in the fields of fine art, psycho-acoustics, communication and media theorists, have dealt with the subject of noise from various theoretical positions (Bijsterveld 2001; Braun 2012; Kahn 2001; Labelle 2006; Schwartz 2011). This has led to the separation of noise from the everyday social world: its impact on and interpretation by, communities and individuals who live within what is increasingly defined as noisescapes. This chapter lays the foundation for noise being situated firmly within the field of sociology. The rationale for this lies within the contemporary links between noise, urban policy, and class, as well as the historical connections between noise, gender and class. Increasingly policy has been used to legitimize noise as a social and health issue, which ignores how historically noise was linked to the sounds of the working class and production. Thus certain types of sounds were socially constructed as noise.

The first part of the chapter will examine how noise has come to be defined, as well as its inherent connection to modernity: technology and growing populations. Schafer's research first raised concerns within academia as to the problems of noise in the modern city, making a case for the regulation of sounds in cities. However, his work is grounded in the histories of sound suppression linked to growing industrial cities and the growing working class populations connected to industry.

Following the aforementioned, this chapter will then examine how the research participants have come to understand noise as a concept, what part noise plays in their lives, and how social groups can come to be defined as a type of noise. This is a key point in this research as it argues against the quantitative approach used to both analyse and define urban spaces as noise. Instead, the research argues that sound is subjective and that social groups embody and produce the sounds often defined as noise. Additionally, labelling the technological soundscape as noise ignores the connections made to the sounds of post-modern cities by its citizens. Finally, the chapter explores noise policy in Dublin, how it is defined and understood, measured and controlled.

5.2 Defining Noise

Noise is a complex issue: it is regarded as a disrupting process, inserting itself into the living world, and it has, until recently, been defined as the binary opposite to *quiet* (Thompson 2004). This limits the social meaning of noise and its impact on forming and shaping voices in communities. Noise policy and studies of sound levels are used to shape space; noise is subsumed under aesthetics and public health, allowing planners to shape space as places of calm, or solitude, or for particular social groups (Degen 2008). However, noise is constructed from histories of suppression and segregation, used to push out, move on or repress the voices of the marginalised. This chapter examines how noise is part of the city as well as a part of social life. Defining it as good or bad, as a measurement or a level, limits its part in the shaping of space and communities.

Babbage, Schopenhauer (1942) and Haberlandt (1900), post enlightenment intellectuals, blamed the working classes for noise. However, what is regarded as a key contribution to the sounds of cities in the 20th century is technology, especially the sounds of automobiles, industry and public transport systems. Schwartz (2011), traces the history of noise to early modern society particularly within ancient Greece. Here, noise was often linked with production, madness, and poverty, and was often used as a method for the segregation and suppression of certain groups, (as noted in

chapter 4). Sounds defined as noise were emplaced within notions of class identity. Those who have defined noise throughout history were often scholars, intellectuals and the wealthy (Schwartz 2011; Smith 1999; Sterne 2003; Thompson 2004). This defining of the soundscape, by the intelligentsia, continued through to Smith's (1999) early modern English soundscapes of the 16th century, where an increase in urban populations in English cities, due in part, to a rural populace leaving the countryside for work in the cities, created louder soundscapes as peasant classes increasingly lived their lives in the public domain. Thompson (2004) has examined the distinction between civilised and uncivilised sounds within modern western cities during the 19th and the early part of the 20th century, where loud sounds/noise linked to industrialization and increased populations were characterised in the same way as a waste product or a bad smell.

Noise, post enlightenment, from the 19th century onwards, gathered steam as a concept when it was relegated to the sciences and linked to production, industrialisation, and modernity. Electric light for example, increased the presence of noise on the street: at night time "darkness was being transformed into a louder place and a noisier time" (Schwartz 2011:254). Schwartz links poverty and class structures to the new industrial landscape of the 19th and 20th century. It was the landscape of forward motion and economic progression; modern cities increasingly surrounded working class societies with the sounds of production as "boys and teenage girls in harnesses hurried tubs of iron along rough floors or pulled carts of coal along screeching rails" (Schwartz 2011:254). However, noise as some binary opposite to quiet is not reflected in the working class experience.

Ideas around the search for quiet and tranquillity, which are seen as necessary to those who use or live in a city, have existed for centuries. Yet the very purpose of a town or city is defined by its 'hustle and bustle', its modes of production and consumption, its places where people can experience culture, music, the arts, entertainment and socialising.

Linked to the idea of defining noise, is the second issue around the production of quiet spaces: how does one define quiet? And, is quiet a measure or an interpretation? Categorizing quiet is as difficult as categorizing noise. Pinch and Bijsterveld (2011) in their introductory chapter to the *Oxford Handbook of Sound Studies* tell of a new phenomenon within German and Swedish primary schools. Within German Kindergarten schools a device called the Soundear was being considered for the monitoring of sound levels within classrooms. This device is used to measure sound and when sound levels are below a certain level the device glows green and when above a certain level it glows red (see Figure 32).



Figure 32 A SoundEar¹⁸

This technology has been installed within Swedish schools for several years and was being newly introduced to German schools. Pinch witnessed, between a German and Swedish colleague, an argument over the merits of such a device. The argument

¹⁸ Image from http://www.noisemeters.com/product/soundear/ 2013.

presented was centred, according to the Swedish person, on the Swedish concept of noisy spaces and loud sounds as uncivilised. The German colleague countered that making noise was a natural process for children, which helped them socialise and develop their personalities. Here we see the cultural specificity of approaches to noise and quiet, (as mentioned in chapter 2).

The debates on noise within European and North American cities have evolved alongside scientific developments and focused on quantifying sound and noise. Noise is no longer situated within the messy debates of subjectivity (Bijsterveld 2008). European policy on sound levels has evolved into debates around what constitutes noise from an objective perspective. EU policy states that "noise pollution relates to ambient sound levels beyond the comfort levels as caused by traffic, construction, industrial, as well as some recreational activities" (NOISE.europa.eu 2011). This limited explanation does not examine the many ideas around what people regard as noise, which is important when one is considering policing sound levels within schools, for example. It also ignores data, which argues that people can become habituated to high or continuous sound levels (Ronayne et al. 1981). Ronayne et al., argue that continuous sounds, at very high levels, are not as problematic for people to work within as aperiodic "intermittent" noise (1981:4). They conclude that if a person feels that they have some control over the sounds around them "though they never attempt to do so and in reality would not be able to" (Ronayne et al. 1981), then they are likely to perform normally in loud sounding situations i.e. factories or other industrial sites. This working paper does not include an examination of the loud city, but it does necessitate reflecting on how one becomes habituated to sound levels if they have a purpose or value that is understood, even if that value is simply that noise or sounds define a space.

5.2.1 Everyday (social) definitions of noise

This research project revealed contexts within which young people felt it necessary to control the sounds they heard on a daily basis, either through mediated listening, the construction of their own sonic architecture or by physically shutting out sound. This contemporary process of monitoring one's noise or sound experience is not connected to notions of noise as defined by public policy. Rather the monitoring of one's sound experiences is part of the daily management of one's relationship to various urban spaces and social engagement with the city. The younger participants state that controlling their sonic experiences is related to context and not noise. Noise is too abstract a term, it has too many meanings to have a specific worth. The young participants were asked, during the focus groups, to define noise and sound. The responses were varied¹⁹:

Interviewer: so, what about the definition of the word noise?

Group: (participant 1) sound. (Participant 2) something that isn't nice to hear like. (Participant 3) I don't know... (Participant 3) maybe like a noise like, I don't know, maybe putting their nails on a blackboard then scrapping them down, that would be a noise like.

Interviewer: alright, anybody else?

Group: (participant 1) just eh... don't know really, don't know how to describe it, waves that the ear picks up (Group 4d: male)

Group: (participant 1) something that makes a sound. (Participant 2) Something that makes a noise. (Participant 3) A form of energy, can be transformed, that can be formed into sound. (Participant 1) Yeah that's exactly what the definition is. (Participant 3) It is. (Participant 1) That's the scientific definition. (Group 1c: male)

Group: (participant 1) When really, really loud motorbikes go past you. (Participant 2) And an airplane. (Group 13a: females)

Group: (participant 1) when someone says the city is noisy I think of cars for some reason

Interviewer: but do you think that's bad or that's just the sounds

Group: (participant 1) that's just the sounds. (Participant 3) Like a town. (Group 10b: female)

Sound and noise as terms were used interchangeably and were defined almost in the same way. However, there were differences between the young male and female participants in their description of noise. The young male participants often gave a scientific description of sound and noise: "waves that the ear picks up" (participant

 $^{^{19}}$ The question of what is the difference between noise and sound only started during the $6^{\rm th}$ focus group .

group 4d male), "vibration in the air" (participant group 5d male); whereas girls often described noise as an emotional experience, something which physically affected them, "noisy, noisy sounds is just so disturbing, it gives you a headache or something" (participant group 14b female). Even when one female participant suggested a scientific definition she was subject to some ridicule for such an oversimplification. For the young participants, defining something as noise means assigning a classification which limits it from other meanings. For most of the young participants noise also meant one particular loud sound or an interruption in their soundscape as opposed to a continuous loud sound. When asked if hearing noise, as they understood the term, was a bad experience most argued that a noise was often connected to its production, and one could not separate the two, hence noise cannot be assigned a positive or negative value, it depended on the source. In contrast, one older participant argued that the city today is much quieter than in her youth but noise for her was a positive indication of community at street level. In particular, she noticed the absence of children's voices:

Interviewer: so it got quieter, why did you think it got quieter, because I would have thought, like at the very beginning of my research what I was looking at was you know, cities, cars, noise!

Interviewee: ... mostly in the 90s, but in the 80s starts to kind of creep in... Interviewer: was there any other changes that happened that made it quieter?

Interviewee: the kids not playing in the streets Interviewer: no, why do you think that was?

Interviewee: because most of these living here, the children living here grew up and left, like my brothers have all gone, so there'd be no kids, so the people left are getting older and there is no children. (2nd female)

For this participant noisy or busy streets are part of neighbourliness and sociability, not levels or background sounds. The loss of keynote sounds features strongly in the discussions with the older participants. Noise for older people in Dublin city are loud sounds without meaning:

Interviewer: you think sound should be regulated?

Interviewee: I think so today, because people are at a stage when they need that kind of space, peace and tranquillity that type of stuff in their lives, a lot of the elderly would say that too, I spend my time going around and talking to them, " it's very noisy now", they'd even say that. That would be some of the stuff that would come up in interviews that I would do, " it was very noisy out there today".

Interviewer: I guess the sounds don't have any real meaning to them

Interviewee: no, no, no

Interviewer: in the same way that, the post man or the ragman, where it had a meaning they don't have a meaning now,

Interviewer: more electronic?

Interviewee: electronic, yes, yes, to me, it's progression it's moved up its technology now today, what you don't hear much of now today is the bells ringing, the church bells ringing, the convent is gone, certain changes are after taking place within the community, you see the community changed in a sense, this sounds, when the community, when the de-tenementing of the inner-city took place it took away a lot of the sounds, the voices, but it replaced them with the noise, the heavy traffic and different things like that you know. A lot of building work going on, you'd hear the likes of cranes drilling and that kind of stuff, it took away a part of the city when redevelopment took place in this area you know it took away a lot of that (2nd male).

Noise is many things, it can be the loss of meaningful sounds, and conversely, noise can mean ambience, a busy soundscape. Yang and Kang (2005) argue that gender and age for example, shapes peoples enjoyment of sounds in public spaces, particularly parks and squares. For example, "as people grow older, their sound preferences tend to be shaped by experience" (2005:75). The older cohorts for example, argued that noise was an essential part of the city as long as it was connected to their everyday lives. However, young people "may prefer a high-arousal soundscape in public spaces" (Yang and Kang 2005:75). The young participants in this research preferred shopping soundscapes over the quiet of parks and public squares and the types of sounds associated with parks - children's voices and nature sounds.

The young participants associate noise with ambience and busy streets. For them this is a positive noisescape. Noise as a negative term is a discrepant sound, a loud sound, but again this is not always a bad sound. For the older participants, noise was reflective of purpose, productivity and community and for the younger participants noise was connected to consumption and socialising. The young participants argued that there were no particular sounds, which were so noisy they should be removed from the city. It is important to note that at the time the researcher was working with the young participants Ireland was in the third year of an economic recession. One of the loudest sounds to emerge during the economic boom in Ireland during the 1990s and early 2000s was the sound of construction. Up until 2008 Dublin city was under constant construction (Corcoran 1998; Peillon and Corcoran 2004; Short et al. 1993) from the docklands to Smithfield. With the recession came a dramatic collapse in the construction industry (Redmond and Hearne 2011). However, up until 2012 Smithfield stood out as a sonic space in Dublin city as until April of 2013 it was still

under construction. This is why the young participants often mentioned construction sounds as part of their experience of the Smithfield soundscape. They described it as a constant background sound.

Representational spaces appear as a result of challenging the agenda of urban design or capitalist expansion, for example, the growth of groups and movements contesting spatial use seen in New York, Dublin, Holland and other cities since the recession of 2008 (Harvey 2009a, 2013). Most north Dublin inner city public housing is situated close to, or surrounded by busy roads, in public policy terms, these would be defined as noisy areas. The busier roads and major access highways into the city and on to the docklands run through several housing districts, often dissecting streets and neighbourhoods. With such injustices of design and positioning of housing it is difficult for people to reclaim a spatial justice. This is how one connects spatial justice, representational spaces and the soundscape alongside the politics of space (Soja 2010). Space in the city is a commodity: cities are sold as places for commodification and production (Harvey 2006). This ignores the lived, phenomenological space, space that is 'coded', "space as directly lived through its associated images and symbols, and hence the space of 'inhabitants' and 'users'" (Lefebvre 1974:39). Defining the city as noisy means coding spaces as sites of sound levels rather than spaces with particular social activities, which come to have associated community sounds. Zoning the city for quiet or loud practices ignores the 'right to the city' (Harvey 2008); it does not reflect the inhabitant's right to decide what they hear and when they hear the urban milieu (DCC 15:26:43; EEA 2009b).

5.2.2 Demarcating the urban soundscape-noise as subjective

Noisy cities are a key focus of urban planning and environmental impact studies for a number of European cities, including Dublin (European Commission 2013; HSE 11:25:05; NOISE.europa.eu 2011; UKNoise Association 2011). Environmental policy usually ignores subjective data as material in which to assess the urban soundscape. Instead, policing noise in cities becomes part of a capitalist agenda

rather than an environmental issue, where productivity outweighs social needs (Harvey 1993). When spaces are defined or zoned for particular processes, whether this is economic, social or leisure, the trend is to operationalize the city to work as an effective capitalist rather than community space.

Whilst Dublin has had areas demarcated as noisy, these definitions are emplaced within the context of traditional quantitative assessments, which reaffirm historical models of noise classification. The contemporary western city is clearly louder, in general, due to the increased presence of motor vehicles (Bijsterveld 2008), and in Dublin both the younger and older research participants immediately identified traffic as a prominent sound within the city. Paradoxically, the younger participants did not identify this sound as noise. The older participants argued that the city today is quieter than in their youth as a result of the loss of industries such as coal, shipping and markets, which would have created an increased presence of truck and other vehicle sounds in Dublin. These sounds represented the link between industry and community as well as economic survival for families.

Interviewee: ...the docks back then, it was fantastic very exciting

Interviewer: really?

Interviewee: the sounds of the boats going, there was the activities the cranes hoisting up the tubs of coal, there was the cattle being drove through the streets, there was mechanical power, there was horsepower competing with mechanical power in the race to unload cargo, to break cargo down, to collect cargo. So you could see the horse and the lorry, you know your man driving the horse, and the Bedford truck going side-by-side with it, and they would be going down together like you know, so it was. The thing on it would be, there was lots of people would use the transport, so people didn't need kind of bus fare, once they hit the ports the docks the far end of the docks to bring them into the main end of the port. Anybody that was in the docks, that needed a lift, all these horse and cars and lorries used to stop and let them on so they would get them a lift back down into the main part of the docks. (2nd Male)

For this participant, the sounds of the city were directly connected to industry, productivity and employment. Additionally, the sounds were "fantastic", they were new, modern and were the sounds of progress. They have interiorised the sounds at a young period of their lives, the cohort effect highlights how age and upbringing, shape one's experience of sounds.

The soundmapping conducted during the focus group sessions highlighted interesting points about what would be a noise to the young participants. For example, the sounds of children shouting in a park and seagulls were described as noise, using the term noise in a negative sense. Whilst transport was often positioned as the baseline sound situated within Dublin city, this sat alongside the sounds of drug addicts, certain streets soundscapes, talking, people, footsteps, laughter and market sellers, traffic-cars and Luas tramline etc. For the young participants noise was used to define any sound that has no meaning, or, a sound which suddenly and loudly appears, jarring or interrupting the ambience. Yet, these sounds are also defined as part of the city and often particular to certain areas. In contrast to the older participants, the young participants argued that traffic sounds were part of the background sounds of a city – they did not connect these sounds to types of industries or productivity. Instead, the sounds were linked to travel; getting to and from the city. They were not meaningless they were a part of the Dublin city soundscape. Traffic sounds are an embedded sound within western cities: most of the young participants argued that traffic sounds are not noise they are sounds which are sometimes "very annoying, but in a way I'd miss it, if it wasn't there" (Group 8b: female).

Instead of using noise as a term to identify what are typically cited as noisy spaces or noisy sounds, the young participants often stated that sounds, particularly mechanical and technological sounds were just loud sounds. They did not think that loud sounds interfered with their experience of the city. It was in fact walking through quiet spaces in the city, which made the young people feel uncomfortable. The loud sounds, including traffic sounds, are part of the overall experience of the city. The relationship between the walker and the street is "an intense sensuous encounter" one which plays "a crucial role in mediating and structuring (the) urban experience" (Degen 2008:3). It is the surprising encounters with bursts of noise, experienced on thoroughfares and roadways, where one experiences the sensual and phenomenological of urban space.

Benjamin (1969) argues that the flâneur walks the city - particularly the modernist city of gargantuan structures, monolithic architecture and vast footpaths i.e. Champs-Élysées, Manhattan and O' Connell Street in Dublin, alone and removed from the milieu, and is constantly "bombarded" by stimulus - with their conscious mind acting as a buffer. The city in this way seems alienating. Simmel (1903) also argued that the modern city overpowers the senses with an onslaught of sounds, which one must choose to ignore, adapt to, or become depressed by. It is the technological soundscape which "the human sensorium" is exposed to today that requires the mind to have a "complex kind of training" (Leach 1997:29) in order to manage this exposure. The modernist portrait of the noisy technological and psychologically invasive city, is the city of Hegel and Engels who defined the modern city of the 19th century as "distasteful" in its bustle, even "repulsive, something against which human nature rebels" (Engels 2009:24). Yet contemporary examinations of the soundscape have revealed that even with the increase in the presence of technologies, western cities have become quieter (Bijsterveld 2008). With this decrease in congested soundscapes comes unique and street specific soundscapes, connected to particular sounds: sociability, community and technology. In this way the "street obtains a particular identity" (Degen 2008:44), one which was defined by both participant groups.

Alongside these identifiable street sounds are the spaces which no longer contain sounds: empty streets, empty squares and derelict parks. Furthermore, these new quiet spaces i.e. Smithfield Square, initially defined as commoditised spaces for a middle class cultural consumption (Degen 2008), have had historical, cultural and community sounds removed. In order to maintain these sterile zones/soundscapes, no arbitrary sounds are allowed enter: groups of youths, women gathering for a chat, or unauthorised activities. Soja argues that a "location in space will always have attached to it some degree of relative advantage or disadvantage" and that injustices of spatial division are often based on "race, class and gender" (2010:73). Yet, what occurs is an influx of voices, which are regarded as a form of noise, particularly by the young participants. These are the noises of the outsiders in society: homeless people, alcoholics, addicts and criminals, subaltern sounds.

5.3 Youth sounds as noise

The sense of exclusion the young participants feel in urban spaces is often as a result of their voices being classified as a kind of noise and an unwanted sound (Bowden 2006; Goffman 1966; Watt and Stenson 1998). The young participants stated that this was the rationale for their exclusion from spaces. In order for teenagers in a city, to make a space within the urban milieu, they need to insert their presence, both physically and phenomenologically. However, reshaping space can only be achieved when one feels one has the power to do so. The young participants argued, that it is the fixity of the city, as in the structures of power as well as physical structures, which they perceive cannot be challenged. Though some did make suggestions for possible changes, the counter argument is always present "you wouldn't be allowed" (Group 4d: male). Although Lefebvre (1974) argues that one can alter the fixed meaning of space through the appropriation of city spaces, this is not always the case for young people within urban centres; their presence is often described as negative and they can only participate or use public spaces for very short periods (Dee 2008; Kato 2006; Travlou 2003). It is through the deployment of urban planning and the law which deal with "perceived public space issues" which "impacts adversely on children and young people, contributing to their partial or complete removal from public space" (Dee 2008:2). Participants in the research expressed this view:

Interviewer: when you go out with your friends outside, do you tend to stand in places? Do you tend to hang around corners or...?

Group: no, (participant 3) no, (participant 2) no not really

Interviewer: no?

Group: (participant 2) a lot of people think that though, cause they do be like... don't be hanging around streets or anything.

Interviewer: but you don't any way?

Group: (participant 2) we don't really like, we were standing at, right the church wall, (participant 1) we go on a walk or something (participant 2) yeah, you just walk around like, but we were standing at the church and the Garda (Irish police) some of them like, and we were deciding like, standing on Church road, whether to go up to the playground or go to the park, and all you're doing is standing there and a Garda goes by and he tells you to move and you don't even be doing anything". (Group 11b: Female)

In this way, the creation of ephemeral spaces for young people in the city is restricted. Curtin and Linehan (2002) argue that teenage boys often feel excluded from space because their presence is seen as threatening. For the young participants both genders

experienced this reaction to their presence in public spaces. Often young people are forced to find new spaces to socialise outdoors because of restrictions on their presence in public spaces (Kato 2006). Their presence in these spaces is often marked by the sounds they produce. A number of the research participants argued that in the evenings there are no acceptable places for them to hang out.

Most of the young participants don't require or want structured spaces to go to, or cannot think of a type of space they would choose to have built for them to hang out. For the young participants being on the outside of structured space means being at the edge, the spaces they use/inhabit are in their control, they are spaces becoming something different, a thirdspace (Soja 1996). The reaction by the authorities to this behaviour is to quell the subversion and to design public spaces that enclose, patrol and restrict the behaviour of the teenagers in public e.g. the Horse Fair in Smithfield Square. The space becomes a panoptican, a constant implicit controlling and observing of bodies in public spaces, an "unequal gaze" (Foucault 1995).

Labelle argues that public spaces, away from the home allow one to make "important discoveries that come with public interactions and social negotiations" (2010:60). However, there are differences which are encouraged in order to create spaces for those allowed i.e. "us", and those restricted i.e. "them" (Soja 1996). There exists hegemonic power over space, which works actively to produce and "reproduce difference [sic] as a key strategy to create and maintain modes of social and spatial division that are advantageous to its continued empowerment and authority" (Soja 1996:87).

Travlou (2003) argues that it is only since the 1990s that researchers have examined the increasing use of policy to exclude young people from urban centres particularly in Britain where tactics "lead to the exclusion of young people from public space through the criminalisation of certain activities (i.e. skateboarding, graffiti) and policing of their movement (i.e. juvenile curfews)" (Travlou 2003:3). *The Growing Up in Cities* project (GUIC) organised in the 1970s and repeated in the 1990s by

Louise Chawla, explored why young people feel excluded from the city and why they feel alienated as a group. Several notable themes are highlighted in both (GUIC) projects were also reflected in this research project:

- Social exclusion and stigma
- Boredom
- Fear of crime or harassment
- The sounds of heavy traffic

However, some participants in this research recognise that their presence in some spaces can be seen as invasive and loud. One participant recognised this problem and even understood why people would have a problem with their sound levels:

"like a housing area, like you'd be sitting there and everyone would be making loads of noise cause like you're having a bit of a laugh, like you'd be shouting you wouldn't realize that you're shouting but you are and you're told to move on like, I understand". (Group 2c: male)

This paradox suggests both a reflexive approach adopted by the teenagers to monitor their sounds and paradoxically, ambivalence to being quiet. However, the participant suggested that part of the reason that young people use particular spaces at night was their closeness to communities, lights, and adults.

Being noisy and making noise is more than a side effect of the grouping or gathering of young people. This is a simplification of the rationale for excluding teenagers from public spaces. The subversive reclamation of space is not just a process of being there, but of being heard to be there. As Watson (2009) suggests, it is not enough to argue that noise becomes a theoretical model. Rather, one must ask why is the noise of teenagers a problem and how did it become a problem? In a city where noise becomes categorised as detrimental to one's health, or a negative in space, how does the sound of youth devolve into this category? The young participants suggest ways in which they are asked to dematerialize from public space; firstly, through the lack of public spaces for their explicit use, and secondly, through policing, using the law to forcibly eject them from non-specific social spaces. They acknowledge that sound

has been used to make them move on from certain areas e.g. the Mosquito which sends an ultrasonic signal to disperse youth from the entrances to shopping centres. Some of the young participants claim they have heard this sound but it has not been successful in encouraging them to leave a space. Sound is used as a counter measure to disband the presence of teenagers, to remove them from what the young participants would describe as safe fun places to hang out.

Spaces such as housing areas and the home provide a measure of safety within a city; they have become a "sanctuary" where according to Labelle the modern individual will go to seek "refuge, clarity and moral conscience" (2010:60). However, most of the teenagers want to be outside, their homes are often small, with the sounds of family members, outdoor sounds or media penetrating their bedrooms. Hanging out allows them to socialise with their peers. With few spaces designated for public socialising they are forced to go where they feel safe. It is equally clear that being on one's own, even at home with a computer and access to social media networks is not a substitute for face-to-face engagement.

5.4 Silence and non-places

The design and designation of Smithfield for example, its vast size and its occasional use as a cultural event space, makes this a non-place for both the local young and old participants. Thus, noise becomes one of the processes needed to create a symbolic space. What is required then is the presence of those who will give symbolic meaning through the production of certain activities. However, the policing, design and divided aspect of the space (tall apartment complexes, hotel and tourist centre, social housing, youth courts and tram line) mean that the space is too abstract for young people to engage with. The square then remains a vast silent space for most of the day and throughout the year.

Silence is also suggestive of criminality. Labelle argues that silence is usually the punishment for prisoners in jails; silence is the "absolute form of surveillance, control and isolation" (2010:69). Thus, one could argue, that for teenagers being silenced is a type of punishment. As Travlou argues "it is when young people congregate together that they are often seen as discrepant and their behaviour as threatening" when for most teenagers "all they are doing is making themselves feel safer by being together" (2003:17).

The problem with notions around structured areas of play, or, encouraging teenagers to choose their homes over their outside spaces for socialising, is that this leads to young people ignoring the possibilities of face-to-face interaction. This, as Sennett (1992) argues, creates a discordance between what creates communities, particularly working class communities, where "high level(s) of tension and unease exist" because of the very different types of people who live in these areas; "blue collar laborers, old people living in reduced circumstances, perhaps some immigrant clusters" (1992). There is a vibrancy in such spaces where sounds and noise profligate. Jacobs (1992) argues that these types of spaces are necessary in urban villages and for the creation of small communities. Even more importantly the streets are a vital part of childhood (Jacobs 1992:75). Structured play areas and quiet zones, even standardizing sound in space ignores the everyday acts of creating community which arise from the interactions of voices and sounds in public. Noise becomes a means of identifying the orderliness of everyday sounds. Without noise we ignore sound, we don't listen to it, "noise might be said to truly make us visible" (LaBelle 2010:62).

5.5 Changing the city soundscape: removing noise

During the course of the focus group discussions the young participants generally expressed a positive opinion of the urban soundscape. However, there was ambivalence in their responses, which the researcher wished to explore. They were asked what they would change in their local/urban space to improve it, if they had the power to do so. This question followed on from the earlier discussions the groups had

around defining sound and noise in Dublin city. It was a difficult question for most of the young participants to answer as it involved examining both the physical and the auditory experience of space. It also involved considering what side effects would be created through the reshaping of space, for example, with the introduction of new buildings, parks and the alteration of traffic routes etc. The researcher understood that for some participants, imagining a different soundscape was more difficult than imagining a different landscape. Additionally, sounds were seen as such an implicit part of space, even didactic, in that sounds imparted information about space, that altering a space might mean the loss of a place's particular sonic identity, which most were reluctant to do.

There were also differences between the public and private school participants when discussing changing the city soundscape in order to remove noise. For one private school participant, noises in a city are necessary, in fact, there were "no unnecessary noises really most of them have a purpose" (participant group 4d). The private school boys also argued that the city and its spaces are regulated by city councils so as to function. These boys described the city as efficient; altering any aspect of the space would have a negative impact on the city. For them, noise was not a negative, it was simply part of Dublin's soundscape.

Interviewer: so the sounds that it has, the ones that you describe as noise are they necessary

Group: (group response) yes. (Participant 1) yet obviously people driving through. (Participant 2) Yes there are no unnecessary noises really most of them have a purpose

Interviewer: all right, okay,

Group: (Participant 4) you can hardly complain about it, it's supposed to be there. Interviewer: so if say Dublin City Council look it, were actually, we are creating a bill or a policy to monitor the sounds in the city and therefore to start to take certain... (sounds) out of city to you, no, change the soundscape, would you be on for that Group: (Participant 1) you wouldn't take anything, what could you take out of the city you're hardly going to stop cars from driving through, and you're not going to stop trains going through or the Luas. (Participant 3) It's mainly cars and it's not like there is a lot. (Participant 1) These are all things that have to happen to get people from A to B you can't say no cars or anything

Interviewer: so you wouldn't say for example, pedestrianize the city

Group: (Participant 1) no you wouldn't be allowed. (Participant 2) Yes there would be more people in the shops. (Participant 1) Yes but think about a pedestrianized city think about things like people had to get from one side of the city to another. (Participant 3) Yes that's if you pedestrianize like I say stuff like the Luas and stuff

like that the Luas can get you from Stephen's Green to. (Participant 1) It would be packed. (Participant 3) Then they would have to put more. (Group 4d: male)

This awareness of consumption and economic processes within Dublin city was particular to the private school participants. As a predominantly middle class group, living outside of the city centre, they were unaware of the sounds experienced by those who are constantly surrounded by the city centre soundscape. They prioritised working practices over the social aspects of the city. For the private school participants it was difficult to argue for a reduction in sound levels. For them, loud sounds and traffic noises were indicative of a busy productive city; for these participants the sounds of commercial activity are the character of the city.

Schwartz (2011) and Bijsterveld (2008) argue that historically, middle and upper class groups took issue with noise in cities, however, the young participants from the private school do not live in the city, therefore, they identify noise as a general rather than a specific sound. The private school participants argued that changing sound levels in the city seemed arbitrary as loud noisy sounds characterized a space:

"You kind of associate different sounds with different places, so, if you took them away, it would be almost like, you change the place, like it's character or something cause in town like all the manicness, traffic and people, all of that stuff is like the city's character but as you go out it gets more quiet and it's like kind of more individual" (Group 7d: male)

The public school boys argued that noise in a city was part of the social process, recognising it as being representative of life in the city. The female participants suggested changes, which would make their experience of living in the city better. However, most of the public school participants identified changes to the soundscape as something that would impact on their everyday lives, not just the city as an abstract place. For example, when the researcher suggested the introduction of green spaces, or parks in the city, most of the public school participants immediately highlighted problems, both sonic and social.

Interviewer: would you add more green spaces to the city?

Group: (Participant 1) There is a park their right beside the McDonald's. (Participant 2) Yes loads more. (Participant 4) No I wouldn't. (Participant 5) I don't know, like places do you know where the Jervis Street is do you ever see Mary Street park there with the big bull in it, I like green in there like

Interviewer: that was a green, do you know that was green, a couple of years ago that was a park

Group: (Participant 1) All the junkies, there's loads of junkies there. (Participant 2) They should change stuff like that and then they should put more grass, there's parts like the ball alley down where we walk past and Kevin Berry (park) and all. (Group 1c: male)

Interviewer: who says we need more parks

Group: (participant 1) but if we had more parks there just going to be wrecked, so if you're getting more parks there just going to be wrecked. (participant 2) Everything is wrecked. (Group 14a: female)

The young participants argued that the sounds of addicts shouting are noise and have become implicitly connected to public city spaces. Therefore, the goal of city planners to increase access to, or create more quiet spaces, such as parks and squares is seen as introducing a noise not foreseen by urban planners, something which de Certeau (1988) argues is almost always a consequence of designing from above. The other noises associated with parks, for the young participants, are the sounds of children, as mentioned. They hear the screaming of children in parks and identify it as an intrusive sound, particularly for those who live in public flat complexes where playgrounds are situated in close proximity. Most of the public school participants live in crowded public housing, filled with the sounds of "little kids screaming" (participant 9b: female), often overcrowded with families living in small flats with few amenities. In contrast, large private apartment complexes in and around Smithfield, are removed from street level communities. With these two disparate housing types occupying the same space, urban planners, architects and Dublin city council have created a discordant social space; a space with no harmony, a non-place with abstract unconnected sounds, which the young participants regard as noise.

5.6 Emotional sounds: institutionalised gender roles

Differences were noted between the female and male participants, with regards to their ideas for altering the city's sound levels. The language used to describe sounds by female participants were often more lyrical or descriptive than their male counterparts. The city, for the female participants, was not noise or quiet it was sounds one loved or hated. Additionally, changing the environment to alter the soundscape was never about reducing levels. Rather, they reflected on enhancing the city noting how one could make a space better through the introduction of objects or the rearrangement of space to create a positive soundscape. They also suggested that if the same kinds of noise which occupies the city centre (the sounds of consumption and large groups of people) were introduced into Smithfield Square, it would create a better, more engaging space. The female participants also argued that certain sounds should remain, because they were a part of the city, their rationale was based on the rhythmic nature of the city. Sounds such as the Luas tram system, were often described as a type of ebb and flow, which suggested a routine in the city.

Group: I hear the Luas a lot. People talking. Yeah

Interviewer: So you like the sound of the Luas? Does anybody else like the sound of the Luas?

Group: Yeah (group) I love it.

Interviewer: Is it because you have just become used to it, what is it that you like about the sound of it?

Group: (Participant 1) It's not too loud, it's kind of peaceful. (Participant 2) It's like a wave. A bus is (vocalises a loud sound). (Participant 1) Yeah it's quiet (The Luas). Like a ballet. (Group 14a: Female)

In comparison, the male participants described the sound of the Luas as 'normal', it is part of their soundscape and they do not assign meanings in the same way as the female participants. This might be due to group dynamics; male participants were more likely to encounter group criticism if they were too descriptive. Peer to peer dynamics can influence gendered behaviour particularly if one is surrounded by the same sex. Similarly, gendered attitudes towards experiencing and defining concepts are demonstrated by such figures as teachers and other authoritative groups. Additionally, there is strong evidence that during adolescence "boys police each other" (Lynch and Feeley 2009:58). The male participants in defining noise and sound in scientific terms, describing noise as neither good nor bad, are discouraging potential "disparagement" from peers.

For the public school boys, noise is a necessary part of the city; it functions to inform people as to the business of a space and its productivity. The female participants use

of language to describe sounds is arguably gendered. They are influenced by notions

of gender and femininities, so instead of using scientific jargon they describe sounds

in lyrical ways. Lynch and Feeley argue that in schools "gendered femininities are

monitored and restrained by the peer group and staff who are active in maintaining

traditional gender roles and restraining transgressive attitudes and behaviours on the

part of girls" (2009:60). The researcher observed very different soundscapes in the

girls schools, particularly during break times, in comparison to the boys schools.

During their break, the girls were all kept in their classrooms with teachers patrolling

the corridors keeping the sound levels down. In contrast, the sounds which the

researcher heard in both boys schools, during their break times, were extremely loud,

the boys were allowed to congregate in large groups and go outside, highlighting

accepted attitudes of boys as boisterous and loud when not engaged in specific school

activities.

In general, each group stated that they would not change the current sounds of the

city. Most argued that the Dublin city soundscape is suggestive of the life and

activities of the city and they would not agree to bring down sound levels.

Interviewer: would you like to change it?

Group: change what?

Interviewer: sounds in the city

Group: no. I think it, I don't know I just love it. Like when I go into town I just love

all the noise. (Group 10b: female)

Though one must consider the economic inequalities between the different

participants as a factor in shaping their understanding and interpretation of noise,

gender plays a strong part in influencing behaviour and attitudes, particularly as a

factor in shaping the interpretation of sound (Kimmel 2009).

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5.7 Class, noise and silence

The older participants within this research, described walking through more gentrified housing estates in Dublin city, when they were younger, and hearing how much quieter these areas were in comparison to their own lived spaces. These estates would have tree-lined roads with very little traffic. The participants stated that their homes, particularly Smithfield and Sheriff Street (a tenement area), were surrounded by the sounds of a busy city: the sounds of horses and carts; delivery trucks; cattle and other farm animals; children on the streets, in schools and play areas; as well as the other sounds that make up a city. This was seen as particular to areas where production and consumption occurred and where one lived in a space where everything happened in public. The connection between one's home life, socialising and work were tied to the surroundings. For the older participants this was a habitus; it allowed them develop a sense of who they were, even their dispositions, as a result of a relationship to sounds connected to social and symbolic cultural capital (Bourdieu 1993). The soundscape was tied to the wholesale markets, which were linked to local histories, traditions and work practices and the sounds of animal fairs were linked to trade and urban/rural connections. There were also the sounds of particular traditional events, like street singing for religious events, (as discussed in chapter 4). This meant that for the older participants, in their youth, the soundscape of Smithfield was a product of the activities, both social and productive, of that space. The sounds also defined Smithfield as a distinctive and therefore important space, within Dublin city. The reproduction of the sounds connected to these practices and processes within this space, formed a stable place where the possibilities of creating representational spaces existed (Lefebvre 1974).

Another example of the relationship between class and noise is the move by DCC and a number of businesses within Dublin city since the 1980s, to move street traders off the main shopping streets (Lee 2009). Part of the process involved using the law to police and criminalise street trading and the predominantly female street traders, this was done through raiding and arresting the women and the confiscation of goods. Lee (2009) argues that female street traders were defined as disrupting shoppers from using the new supermarkets and clothes stores in areas like Henry Street, which

during the 1980s underwent a significant rejuvenation project (DCBA 2013). Female traders have traditionally sold on Moore Street and Henry Street, buying their goods from Smithfield, and living within and around the Smithfield area. Their voices and street cries would have been part of the traditional soundscape of large parts of Dublin city, from Thomas Street, Meath Street and Francis Street on the south side of the city to O' Connell Street on the north side. However, during the 1980s and 1990s female traders and their traditional cries were slowly removed from these streets. criminalising these women one could argue that their voices came to be defined as noise and not suitable to the upwardly mobile and newly gentrified shopping areas of Dublin. In response to this attack on their livelihood women formed groups and started to educate themselves on their rights, which in turn led to protest marches in the city. Their voice became a symbol; challenging their classification as noise, and the new aesthetics of Dublin city, as well as a protest against the suppression of a traditional way of life, which of course was directly linked to working class backgrounds. Using public policy as a tool to suppress so called illegal activities, such as street trading, led to the decline and eventual silencing of a type of soundscape, made by a specific social class. Over time, female traders would gather on street corners watching for police, ready to run away before being caught, their voices becoming quieter as they were too intimidated to let their presence be known. This occurred alongside the decline of the Smithfield markets and as the Market Area gradually receded the spaces of Smithfield began to have less significant sounds.

The public school participants examination of changing city soundscapes are linked to class differences as well as differences of perception – one's relationship to a sound is connected to one's experience of that sound. The research participants who live outside the city, (most of the private school participants and a small number of public school students) in suburban and rural areas, are exposed on a daily basis, to very different sounds compared to the city dwelling participants. Their homes are often sound insulated, even though for most of the young participants this insulation was connected to heat rather than sound; this allowed them to shut out sounds if they wished, though for most, this was often unnecessary. Also, most of the private school participants lived in semi-detached or detached houses close to green areas or the sea.

The noisiest sounds these participants described were children's voices, school or church bells.

Class differences were evident within the different schools. As mentioned in chapter 3, the researcher was working with transition year (Ty) project groups. In the public school only a small number of students took transition year. The participants in transition year tended to be: those who were not doing well in their studies; foreign students, who needed time to improve their English reading and writing; troublemakers (according to one teacher); those with psychological issues (again according to two teachers from different schools). In the private school, all participants had to do TY, which meant that the participants the researcher had access to would have been representative of a whole year group. Most definitions of TY usually relate to "educational disadvantage" (Jeffers 2002), whereby students taking the TY have issues in education or more broadly the schools are considered to have a social or economic disadvantage. Those who attend TY in public schools would have this label attached. Private schools are "more likely to insist that all students follow a transition year programme" (Jeffers 2002:10) and these schools will most likely domesticate their programmes, i.e. they will "adapt and shape TY to integrate it into their existing priorities and practices; they tend to emphasise those aspects of TY that 'fit' with their tradition and sense of identity" (Jeffers 2011:66).

5.7.1 The privilege of quiet

Thompson (2004) argues that historically certain classes within cities associated noise with a working class experience, and that, a part of a middle class upbringing was the ability to access the privilege of quiet. Thompson argues that historically the middle classes assumed that the working classes had no appreciation of the positive impact of peace and tranquillity. Within this research, the focus was on an area traditionally associated with working class communities and their economic practices.

The younger participants highlighted variances between certain spaces in Dublin city, which on examination implied class differences. One group argued that areas such as

Henry Street in Dublin - a busy shopping district on the north side of the city - were spaces of noise filled with "machines as well (as) people" (group 1: male), whereas Grafton Street in Dublin 2 on the south side of the city, an affluent shopping district, was described as quieter with the sounds of "people walking, like footsteps, no one talks they just walk" (group: 1 male)²⁰. On walking both of these shopping areas the researcher also noted the different kinds of sounds heard on the streets, as well as the movement of people. Unlike Henry Street where groups would congregate to chat regularly, Grafton Street consisted of a constant flow of pedestrian traffic. There was significantly less street socialising, which meant a reduction in the overall soundscape. However, there were far more street musicians. This ranged from small bands to a pianist, a classical singer, a jazz quartet or other music groups or individuals. At the top of Grafton Street is the St. Stephens Green Park, the largest of Dublin's Georgian squares. On Moore Street, also based on the north side of Dublin (an area traditionally associated with fruit, fish and vegetables stalls) the prominent street activity were market sellers. This meant there were fewer sounds of music pouring from shop doors, but also as a smaller side street, there were also fewer pedestrians.

Henry Street and Moore Street with their associations to market stalls and market sellers were often derided by most of the young participants; they would imitate the accents of stall workers, indicating that they thought the sounds were 'common'. This was intriguing to the researcher because most of the participants from the public schools, who also jeered these sounds, had similar strong Dublin accents. Several male participant groups from the public and private schools, made racist comments concerning the accents of market sellers from different African countries. For the young participants market sellers were seen as a class and sound type, one which they mocked; they intimated that their voices were a type of noise in the city; "you always hear people in stalls screaming (students imitates stall sellers, "euro, euro" tobacco" (Group 9b: female). This casual form of racism and classicism existed in both the public and private schools. Accents were judged as common, foreign and negative. However, when asked if the markets should be moved or dismantled, most

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²⁰ All of the areas mentioned, Henry St., Grafton St. and Moore St. are pedestrianized.

participants stated that though they did not like the sounds, the markets and the sounds of the markets were both part of the space and part of the history of Dublin.

Interviewer: Do you like the sound of the market, sellers?

Group: (laughing) (Participant 1) sometimes I do, (Participant 2) it's annoying,

Interviewer: it's annoying yeah?

Group: (imitates loud sound of sellers)

Interviewer: would you rather that they were in shops?

Group: (Participant 1) yeah, (Participant 3) no. (Participant 4) they can do what the

want (Participant 5) they don't bother me

Interviewer: yeah, you just think it's part of, that's Dublin it's been there forever Group: (Participant 5) yeah (Participant 3) yeah that's Dublin, you couldn't change it

Interviewer: and of course

Group: (Participant 4) if they went I'd miss them (Group 11b: female)

When the younger participants were asked to describe the sounds of a city, the sounds identified were: the sounds of people talking, footsteps and music coming from shop interiors, traffic sounds and community sounds. These sounds were defined as being present in the shopping districts of Henry Street, Grafton Street and O' Connell Street. Away from these streets, they argue that the city is quiet, apart from the constant background traffic, which in turn is described as sounding (giving forth sound) at different levels depending on the time of day and the day of the week.

However, few if any of these types of sounds could be heard in Smithfield. The sounds once produced within Smithfield would have been as Thompson (2004) argues, all of the sounds that happened in public and were associated with the working classes. The sounds defined by the younger participants within Smithfield, represent the typical sounds of civil disobedience: cars screeching, drunks, drug addicts shouting; sounds which become noise and as such a side effect of poor urban planning and the gentrification of traditional spaces. In reshaping Smithfield into a gentrified space, a space without the sounds of production, i.e. the reproduction of a class soundscape, the city planners instead created a space of no particular sounds, where the sounds of the excluded voices such as addicts, eventually came to dominate the soundscape. The deceased Dublin city politician Tony Gregory argued that this occurred as a direct result of the destruction of Smithfield and its traditional economic practices during the 1970s and 1980s as well as the exurbanisation of local communities which began in the 1950s and 1960s (Lee 2009).

5.8 Embodying, describing and separating from noise

Although the young participants agree that noise is the sound of the city, their relationship to these noises are extremely mixed. They have inside and outside connections to sound and an embodied and disembodied relationship to their sonic environment. For the young participants in this study it was not possible for them to "draw an absolute distinction between space and the things which occupy it" (Merleau-Ponty 1948:51). The young participants who live within the city state that their homes do not block out the sounds of the city, for some, there is no separation between the sounds inside and outside their homes. However, sound connects them to what is happening in the city e.g. emergency service sounds and the sounds of violence remind them of how close they are to the more dangerous elements of the city. Equally, the sounds of screaming football fans or groups heading to places such as Croke Park (a sports stadium in Dublin city) keep them connected to *happenings* in the city. These sounds, identified as positive, are part of the experience of living in the city.

Group: (Participant 1) I hate the traffic sounds. (Participant 5) I hate ambulance and police. (Participant 3) Aw yeah. (Participant 2) I hate that. (Participant 1) Yeah. (Participant 2) Like in the middle of a nice day and if your asleep and its deafening and the police just fly past my window. (Participant 1) I hate that, I like the noise of town but I hate when addicts are shouting, just shouting.

Interviewer: You hear that a lot

Group: (Group) Yeah. Yeah. (Participant 2) Like when its football night I can hear them on the street shouting. (Laughter) (Participant 4) I love that you know when Ireland were playing its just the best atmosphere ever. (Group 10b: female)

For many of the participants, living in the city means living in badly built public housing; small houses with few rooms and designed without sound insulation.

Interviewer: you were saying when you are at home you can hear emergency

services, ambulance fire brigade all that

Group: (group) yeah

Interviewer: do your windows not shut out that sound?

Group: (group) no

Interviewer: do you have double-glazing?

Group: (group) No (Participant 1) do you know what's great I live next to Croke Park

and do you know when there's concerts on I can hear them

(Group 10b: female)

Group: (Participant 3) do you know what's mad, like where I live there's a pub like facing me, and the music in it does be pumping in. (Participant 1) Is that (name of pub 1)? (Participant 2) No it's (name of pub 2), do you know when people stay in my house or anything, cause my bedroom is facing the way of the pub like, and do you know if like someone says, how do you sleep or anything, I actually, I can't hear that music cause I'm so used to it.

Interviewer: really

Group: (Participant 1) I can hear it, but it'd just be background or something, I can't

Interviewer: you're used to it

Group: (Participant 3) yeah. (Participant 5) And they say oh my god that's blaring

Interviewer: do you close your bedroom window?

Group: (Participant 5) no I keep it open, I have to sleep with the window open.

Interviewer: you keep it open?

Group: (Participant 5) I have to sleep with it open

Interviewer: wow

Group: (Participant 3) So do I, yeah my ma has to sleep with the window open as well, and I'd be shaken in the middle of the night cause I'm freezing (Group 9b: female)

These young people develop a sense of the city and its presence through the sounds they hear within their homes. The sounds of a city for some of the young participants are not an intrusion, instead, they have adapted to levels and types of sound. They are a constant ear witness to the rhythms of the city, most of which are technologically produced sounds.

This however, does not differ from the older participants memories of the soundscapes of their youth, whereby, the private soundscape of the home and the public soundscape were intertwined. Although the kinds of sounds heard were different, more mechanical than technological in the 1950s and 1960s, some sounds were similar: music from radios or stereos, 'neighbours shouting' and 'kids screaming', etc. The inner city inhabitants are accustomed to the sounds of the city merging with the sounds of their homes. For both participant groups the sounds heard are not necessarily noise, but rather information. However, this type of ear witnessing is not a choice. Rather, working class people placed within poorly built housing complexes, are socialised to expect to hear the sounds of the city at all times without the choice to block these sounds out.

For those young participants who live in the city, being immersed in the city soundscape means they are connected to the objects and events, which produce these sounds. This forms a deeper knowledge of the city. This connection involves, not just the ear, but also the body. Listening to the city means being informed, knowing what is going on and understanding the rhythms of the city (Lefebvre 1992). It also solidifies routines and social and cultural practices. However, for those young people, living in a city with the continuous presence of criminality, means being exposed to disturbing sounds. These sounds, heard within their homes, can be disruptive because they are beyond their control and remind them of the dangers of living within a city:

Group: (Participant 1) I can hear screaming and shouting even when my window is closed. (Participant 2) Sometimes I can hear and sometimes I can't like, say its about 12 o clock at night you would hear a few people, otherwise it's very quiet. (Participant 3) Do you know what noise I hate, when you're in bed asleep and a helicopter goes over your roof²¹. Group (aw yeah I hate that. I hate that.)

Interviewer: You hear that a lot

Group: yeah that's always around our flats

(Group 10b: female)

5.8.1 Quantifying the soundscape: noise policy

Typically, the measurement and assessment of noise is based on exposure to particular sound levels or decibel measurements and there is no "limits on permissible or impermissible sound exposure levels set down in Irish Statute law" (S.D.C.C 2009:5). Instead the various councils within Dublin prepare joint action plans, which aim to "exclude noise from domestic activities, noise created by neighbours, noise at work places or noise inside means of transport" (S.D.C.C 2009:9).

The sounds, which the young participants often described as intrusive, belong to the authorities; they are sounds, which remind them that danger is near, e.g. the sound of police and emergency service vehicles, including helicopters, which the participants stated on numerous occasions hovered over their locales. In the five annual reports

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²¹ Helicopters, according to the young participants, are usually indicative of a police presence

published by the Air Quality Monitoring and Noise Control Unit (AQMNCU) of DCC since 2004, no mention has ever been made of these sounds as being annoying or psychologically or socially harmful to the public. In fact, most of the complaints made by the public, according to the (AQMNCU) statistics, make no reference to helicopters. Then again, the sounds of all vehicles are listed under the one heading. 'Trains/Vehicles' (see figure 33-35). There is no evidence recorded that suggests children or young people have made complaints to the authorities regarding sounds that are problematic or which they consider unsafe. Equally there is no record of young people ever being asked their opinion, (prior to this research project) on the sound levels of Dublin city.

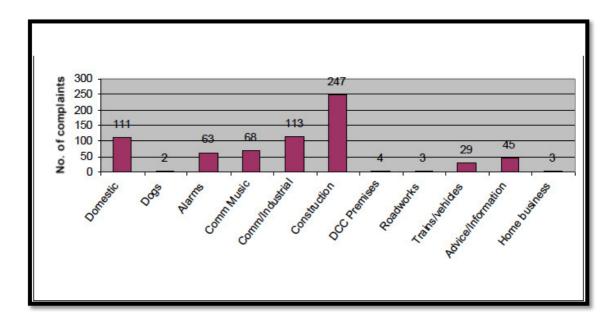


Figure 33 (AQMNCU) Noise complaints by category 2004

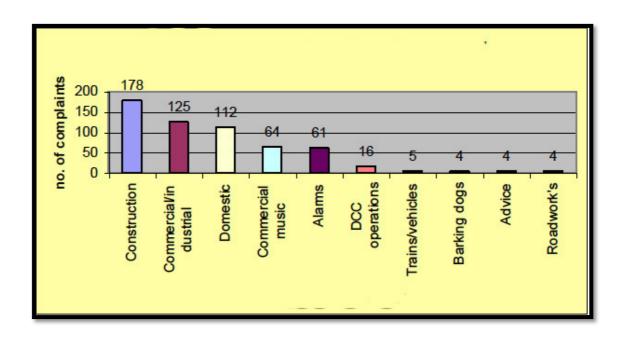


Figure 34 (AQMNCU) Noise complaints by category 2007

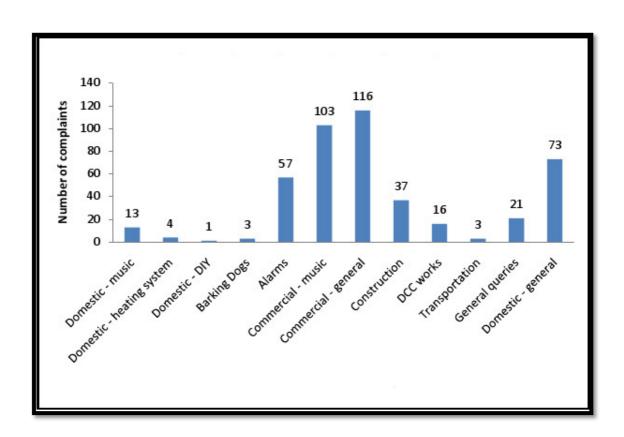


Figure 35 (AQMNCU) Noise complaints by category 2011

What is noteworthy is that from 2004 to 2009 the highest number of complaints about sound levels made to (AQMNCU) were from inner city areas particularly the Dublin 1 area, close to where Smithfield is situated, Dublin 7 (DCC 2004, 2005, 2006, 2007, 2008, 2009). This is clearly related to the rise in construction, as seen on the 'noise complaint types' table, listed from 2004-2007. Yet with the economic downturn complaints about this type of sound dropped dramatically, (see Figure 35), with other types of sounds appearing within the earscape, previously masked by construction sounds. Commercial – general sounds, as indicated on Figure 35, are "centred on noise emanating from amplified music, extraction systems ventilation systems and early morning deliveries" (DCC 2006:12) and are now the dominant source of complaints in the city soundscape.

In general, while there are specific noise targets set for reducing traffic sounds, there are no tangible guidelines for any other sound types. Whilst contextually this information about noise complaints is interesting, particularly given the data gathered in this project, the fact that sound is frequently considered by policy makers in terms of noise and disturbance is extremely problematic as it is an over simplification of the range of sounds and their associated meanings.

In exploring noise and the meanings attributed to noise, the young participants rarely attached the word noise to the types of sounds identified on the (AQMNCU) charts. Instead, noise for the young participants, is neither good nor bad. It is a form of expression or the identification of human life. Generally, what these young people define as noise is neither continuous nor loud. Instead, a noise is a singular intrusion into their daily lives, a sound that skews their sensory perspective of the world: alarms; raised voices; screeching tyres; sounds often connected to danger. However, the sounds of construction, which they see as constant, are sounds that "you just don't like acknowledge" (participant 2 Group 1). Because most of the young participants grew up during the economic boom, surrounded by the sounds of construction, consumption and technological soundscapes, it became part of their daily lives. More so, it became part of their idea of a community soundscape, though this does not mean

it created community. Being immersed in this 'noisescape' was something these young participants adapted to.

5.9 Conclusion

Noise as currently constructed has been defined by particular powerful groups with vested interests (Harvey 1993). The suppression of certain sounds which have become embodied within a culture – a part of the processes of production and the creation of representational spaces - has transformed into the policing and suppression of certain traditional cultural, economic, and social practices. Whilst construction and commercial noises are complained about they are somehow justified, while street criers, horse fairs, and the voices of teenagers and children are seen as out of place or as a 'risk' to the viability of certain spaces being defined as productive. Harvey agues that the city has been "killed by rampant capitalist development...no matter what the social, environmental, or political consequences" (2008:xv). He suggests that finding a right to the city "rises up from the streets, out from the neighborhoods, as a cry for help and sustenance by oppressed peoples in desperate times" (2008:xiii). However, politically and practically the question remains, who gets to decide 'whose rights are being identified'. One's relationship to urban space is based on relational and historical connections and one's identity is formed through these connections. Sound plays a key role in this process. However, with the reconstruction of city spaces within Dublin city, there has been no accountability for the destruction of soundscapes or the creation of noisescapes. Rather, the city is designated as zones of sound and measurements of decibels. Augé (2009) would argue that this type of shaping space inevitably leads to the creation of non-places. As space is constructed for consumerism and sonically suppressed for a passive listening experience non-places start to appear in the city; areas which are designated by symbols of activities, leisure spaces, shopping spaces or sport spaces. Quiet zones, alongside the "monopolized commodification on the streets" (Harvey 2008:ix), is part of the DCCs' plans for the future of Dublin city (DCC 15:26:43). When one fundamentally alters the sounds of place, one creates places reserved for a middle class aesthetic (Degen 2008).

The association of noise with class and increasingly race as well as other more specific social groups such as youth/teenagers and women, can reinforce stereotypes and impact how these groups are perceived in public. Their sounds are repressed, segregated (Kato 2006) and eventually diminish as they are consistently defined as noise (Schwartz 2011). Since the early 20th century the focus has shifted in public policies examining sound and noise levels within cities to "science based" criteria in order to remove the possible suggestion of class based definitions. This has meant that sound levels and noise monitoring are reliant on a "trust in numbers" within a "culture of control" (Bijsterveld 2003:174). However, this in turn affirms the traditional notions of loud sounds as 'uncivilised' and 'anti-intellectual'. Anti noise campaigns, led by the upper classes (Thompson 2004) have fought historically for the suppression of unnecessary noise. This has meant the rejuvenation of urban spaces, seen to have succumbed to the din of poverty and industrialisation (Radovac 2011). This however, is challenged by those who argue that noise is a necessary evil of the "industrial process" (Smith 2011; Thompson 2004).

Contemporary public policy definitions of noise do not coincide with those who live within the urban; those who have come to understand, interpret, and even produce sounds within the noisescape. For the young participants, noise is not one thing to be defined and categorised. The definitions that exist seem arbitrary to them. Despite this, there are sounds they define as negative, but these are not part of the quantitative evaluations typically used to define noise in cities. Additionally, their voices are excluded from the design of these statistical models as well as their opinions about noise in cities. The young participants have thus learned to interpret their soundscape, cognizant that they have no control over the sounds within it or sound levels. This in turn has led to the young participants choosing, in certain spaces, to block out the soundscape. One tactic used to adapt and deal with the post-industrial technological soundscape is with audio technologies. This will be discussed in the following chapter.

6 Mediating the technological soundscape

6.1 Introduction

This chapter explores the contribution and use of technologies within the urban soundscape. It advances research on the modern urban soundscape as well as research on mediated listening practices by exploring the experiences of teenagers. Chapter 4 examined the experience of sound within public spaces, focusing on the perception and meaning making made by young people, while providing an historic contrast with the older cohorts who took part in the research project. Chapter 5 examined noise and its ongoing associations with class and gender. This chapter begins with an exploration of sound as a technological phenomenon.

The first part of this chapter explores the historical technological soundscape of Dublin, with specific reference to Smithfield. It examines what part these sounds played in social life, the creation of community, the production of space and teenage life. There is strong evidence that the introduction of mobile technologies to youth, during the 1950s and 1960s helped transform both their social and spatial experiences of the city. Though it is impossible to generalise with such small numbers the participants indicate a wide use of mobile devices amongst their peers at the time²². Although Castells et al. (2006) examine how mobile technologies come into conflict with "with existing customs", they have advanced this as a contemporary finding. However, the older participants in this research were introduced to notions of mobility and autonomy long before the mobile phone and experienced how this altered traditional notions of family, the home and outside socialising.

The second part of this chapter examines the contemporary technological soundscape, focusing on the experiences of the teenage participants. The contemporary post

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²² The researcher is careful to note that she worked with a small sample of only five older people. However, the responses to mediated listening practices during their youth were so similar, to suggest a typical experience of young teenagers.

industrial city contains very different sounds, some of which have evolved because of changes in economic and social practices as well as changes to the landscape, within Dublin city. This section will examine some of these changes and their outcomes for community and individual life. It will explore tactics used by young people to mediate the post-industrial technological soundscape. This section argues that the city of contemporary consumption is a positive soundscape for young people, whilst non-productive spaces: public spaces, rejuvenated areas, transitional or bridging areas (places one walks through to go somewhere) are seen as negative soundscapes. These types of quiet spaces or non-places, as defined by Augé (2009), are spaces in which mobile mediation is used as a tactic to counter the silences of space.

Finally, this chapter will explore the concept of technology as a tool used to alter the social experience and the experience of space. As the first sentence in this paragraph suggests, for the participants, technology is a tool, it allows them enhance their experiences of the outside world, create and sustain social networks and alter their phenomenological experiences. The question then becomes, is the relationship between user and technology passive or active, what part does the technology play and what role do the participants have in how their technology works? It would be easy to take a stance and choose one theory, however, on analysis it is clear that a single position is difficult to take. This section will explore how in some cases technological use can seem deterministic whilst in others the role that young people have in shaping technology is clear, particularly when it comes to using technology for mobile networking. As Berker et al. argue, technology exists within the "complexity of everyday life" for the young participants it has become part of the "rituals, routines and patterns" of their lives (2005b:1). In order to make technology a useful part of their social lives young people have had to domesticate it. With the new multi media convergence technologies available to young people, domesticating these devices for different spaces has become a key part of youths experience of technology (Berker et al. 2005b; Hirsch and Silverstone 1992). This section proposes that technology plays a significant role in shaping the teenage experience of space, both inside and outside spaces. It will examine social shaping theory as well as the domestication of technology theory in the use of mobile audio devices as processes of adaptation and shaping one's environment. It will explore this creative management

of mobile technologies, the affordances gained by understanding and interrogating the limitations of such devices, and how teenagers overcome these limitations.

6.2 The historical technological soundscape of Smithfield

It is important to start from an historical standpoint given that much has been written about the concept of cities as noisy spaces as a result of the introduction of technological and mechanical sounds. This research however, offers a different perspective, where the city's sounds are presented through the eyes and ears of people who once lived in the older industrial city of Dublin and people who are now living in the contemporary post industrial city. These descriptions highlight the process of producing, over time, spatial practices which involve an embodied and "close association within perceived space, between daily reality (daily routine) and urban reality (the routes and networks which link up the places set aside for work, 'private' life and leisure)" (Lefebvre 1974:38), which according to Lefebvre can only be verified empirically. This approach highlights the different interpretations of sound that can exist within a city, which are often based on one's relationship to a space and sometimes socio-economic circumstances.

Unlike industrial sites or centres in modern cities, where the site of economic practices is within a factory or other facility, the Smithfield area and its environs has traditionally been both a residential community and a working space, (records show Smithfield as a market area dating back over 400 years (Twomey 2005)). The locals were constantly surrounded by and immersed in the economic soundscape of markets and trade linked to markets. These sounds played a significant role in the reproduction of community and production. The older participants in this research argued that the sounds they grew up with, which were inherently connected to local industry, were not unknown or background sounds, rather, they were the sounds that shaped their day, and were a reminder of their connection to productivity and industry. Some of the sounds operated on a range of sensorial levels. Sounds triggered memories and linked to ideas around smell, taste, time and community etc.

Interviewee: ah, it has particular functions, we had the fish markets beside us, and all through the night them fish lorries came in during the night and they had to be

unloaded, and you'd hear them banging the boxes, the banging of the boxes, and then at about 4 o'clock in the morning you'd have all the farmers coming up with their, now this is the 60s we're speaking about, you would have all them coming up from the country with their cabbage ... ²³ (1st Female-66)

These sounds were both transient and fleeting but they existed within what the older participants saw as the "eternal and immutable" (Harvey 1995:2).

For the older participants, technological, mechanical and industrial sounds were features within the urban soundscape; they territorialised certain spaces, demarcating place through sound. One participant recalled sounds he heard in his youth:

Well Brooks Thomas's had a siren I think 8 o'clock was the 1st, it sounded off a big, like a siren to the workers, it was time to be out, the canteen, and then you would hear it again at 1 o'clock and then you'd hear it at 5 o'clock. The thing that was striking that you would hear early, at daybreak 5 o'clock in the morning was the bells of the convent in Sean McDermott Street the convent that's there now today, them bells would ring and they'd ring every hour you know. (2nd Male)

For these participants there were two distinctive soundscapes: the mechanical and the urban. The urban were the sounds produced by the community: the sounds of people' animals, music, and the mechanical: industry and automobiles. These soundscapes were defined by the industrial clock time (Simmel 1903).

The beginnings of the post-modern city was evident in Dublin from the 1950s, where large transformations in economic and social structures were occurring alongside diminishing traditional practices of production and social life (Horgan 2001). The sounds of the markets and the docklands, while slowly diminishing, were part of the daily experience of an urban dweller within Dublin city up until the late 1980s. They connected areas sonically, if not geographically; one knew the sounds of delivery trucks and carts were coming from or going to the docklands. The soundscape of the 1950s and 60s was not a quiet one, but the sounds, particularly the technological and mechanical sounds, resonated with meaning, especially for teenagers, where the possibility of an autonomous life revolved around the work practices connected to these technological sounds.

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²³ As cited in chapter 4

For the older participants in this research, sounds heard within Smithfield in their youth, 1950s-1960s, had many different associations, but technological sounds or mechanical sounds often had very particular purposes. Throughout the course of a day the various sounds heard, indicated specific activities, which they were able to identify. For example, the sound of loud whistles were connected to the numerous small factories around the city; they rang in the morning to indicate the start of the working day, the middle, to signal a lunch break and again at the end of the work day (Schafer 1977). These sounds sat alongside the sounds of men gathering for work, seagulls swarming around rotten fruit and vegetables and children playing on the streets. This was the sound of an industrial soundscape/time circadian/sounds/time, one situated in harmony with the other (Lefebvre 1992). The industrial city, as argued by Smith (2011), has traditionally been represented as the binary opposite-urban versus rural- soundscape; that is, the industrial city is the loud mechanical space and the rural, the quiet, calm space. Smith (2011) argues that this generalisation ignores the distinctive soundmarkers or sound queues which the urban dweller interprets from her soundscape. He suggests that early writers of industrialisation frame the city as a sudden explosion of industrial behemoths that would deafen the workers and surrounding populace. Smith argues against the notion of a quiet city, suddenly transforming into a deafening one; citing the slow processes of change required, including the socialisation of workers within these industrial sites and sounds, as necessary for the creation of industrial cities. For Ireland, particularly Dublin city, the industrial city was never as loud or as large as other western industrial towns and cities (Drudy and Punch 2000; Punch et al. 2004).

Equally, the industries in Dublin of the 1950s and 60s tended to have intrinsic importance, on a local, national as well as international level for the local populace. The Jameson whiskey factory was one the many industries that the older participants recall having particular importance to Smithfield and the north side of Dublin city. This factory had very particular sounds associated with it: barrels rolling across cobblestones, delivery trucks and workers heading to the factory early in the morning.

These sounds resonated deeply with one participant; in his later life he purchased one of these barrels in order to hold on to this sound²⁴.

People from the area were employed in the whiskey factories and offices as well as extended trades connected to Jameson's. There were also many sewing and rosary bead factories, with daily whistles calling women to work. The soundscape of Smithfield was dominated by the sounds of many different types of industry, which in some ways were interconnected. The older participants describe this as a positive economic soundscape, which dominated their young lives. This occurred despite the wider economic climate within Dublin and Ireland of extreme unemployment, severe poverty and emigration (Brown 1981; Ferriter 2005; Kennedy 1989).

The docklands, which were connected to Smithfield for various export and import processes, was the source of the sounds of a working dockyard: coal being poured and broken up, boat horns, trucks, the sounds of crates and animals being lifted. These sounds would emanate through and around the city on a daily basis providing a rhythm to the city soundscape. For the older participants, these sounds represented a kind of stability when they were teenagers; they were the sound of work, of potential jobs and of the community. The city for young people in the 1950s and 60s was in essence a "polyphonic fugue" (Soja 1996). The spaces of Dublin city were heterotopias; "spaces in which we live, which draws us out of ourselves, in which the erosion of our lives, our time and our history occurs" (Foucault 1984:23). With the decline of these industries from the early 1970s, the quiet, which started to seep into Smithfield, highlighted the rising unemployment and emigration. Sounds, which were once indicative of progress and employment, were gradually lost. For the older participants in this research, the sounds of community and the sounds of technology and industry were braided (Smith 2011); that is, the sounds of family, work life and the urban soundscape were intrinsically linked.

The technological and mechanical soundscape for these older participants was part of the city process and soundscape, not an effect. They adapted to and understood the sounds of industry and city practices through these sounds. When they eventually experienced media technologies, first the radio and then the TV, these sounds

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²⁴ This participant has a cobbled driveway in his home, and the barrel was situated outside his front door, he rolled the barrel across the cobbles to activate the sounds he heard as a teenager.

belonged as much to the outside community as to the inside of their homes. This will be examined later in the chapter.

6.3 The technological soundscape – spaces of sound

A focus on the object and techniques has become a dominant feature within urban sociological theory and the examination of technology (Bijker et al. 1989). The default language for sociology researchers is that of the visible, reflecting the fact that the words used to describe and define the social world are inherently words connected to seeing and the dominance of seeing for experiencing the social and physical world. As noted in chapter one, a common praxis for sound research within academia is still under development, particularly as it relates to the technological (Pinch and Bijsterveld 2011; Thibaud 1998). Whereas, the discourses on sound are shaped by other disciplines: acoustics, physics, music and psychology.

This chapter co-opts some of these sound terminologies within its examination of the technological soundscape, when it is appropriate. This multi-disciplinary approach, allows the discipline of sociology to tackle the subject of sound as a social norm (Augoyard and Torgue 2006; Perkins 2003). Augoyard and Torgue have argued that it is the everyday repetition of events, making and "localising periodicities of the world; from a ticking clock to a factory whistle" (2006:93) which have come to regulate and define time and space. The repetition of sounds within society has become associated with technology, which increasingly regularizes the social soundscape, or as Augoyard and Torgue (2006) have termed the social chronophony and synchrophony (2006:123) (the synchronising of the social world with the sounds of the social).

The propagation of technological sounds within the urban, although often repetitious, is not necessarily heard thus, because of processes of diffusion and reverberation (LaBelle 2010; Leman 2008). The former relates to sounds dissipating within space as they move outwards from the source, becoming non directional, and the latter implies the shaping of some architectural spaces which have increased the acoustic presence of certain sounds through reflection and reverberation. In fact it is the

resonances of space, which can become part of a persons/community's knowledge of place, a process of being "on the same wavelength". Not just because of a connection to familiar sounds within space e.g. traffic or the sounds of particular industries, but rather, where a society can become attuned to the sounds within a space, effectively forming a synchronised listening practice, whereby, one acts, responds or is able to interpret the sounds heard. This response is not always a 'synchrophonic' one, a positive feedback; it can create a 'repulsion' effect, whereby one's response to sounds, which we do not want to hear or to which we have to quickly adjust, can force listeners to choose to disengage from spaces where the unwanted sound dominates. For some of the young participants in this research, sounds within space, often individualised sounds, created a dissonance - a word often used within musical terminologies but increasingly used in everyday discussions to describe one's relationship to the soundscape. As Hanson notes;

Sensory dissonance is of a highly physical nature, as at its core it is the activity of actual atmospheric vibrations occurring at a particular point in space. If we imagine all the points in a particular space being shaped by the forces generated by sound sources, it is as if the atmosphere itself has been sculpted by the sound. (2012:5)

It is however, difficult to generalise dissonance, what constitutes a sound that repulses or attracts, depends sometimes on one's relationship to the space in which this sound emanates. Sound is relational and contextual; it can become part of the social norm. When a sound is outside these definitions it becomes problematic. For the young participants, dissonance becomes a physical reality from which they remove themselves, using technological mediation. Thus, where mediation occurs is highly contextual.

Technologies have become such a significant part of the urban soundscape that they have become normalised in all facets of modern city life, including the home (Berker et al. 2005a; Hirsch and Silverstone 1992). So many engagements within the city are accompanied by a sound i.e. when one presses a button to cross the street it produces different warning sounds which are technologically created or when a travel pass for buses or trains is scanned it beeps differently to let us know whether or not we have credit. Engaging with the city means listening and responding, technology being a part of the city, existing within the social (Latour 2005), is thus engaged in a feedback

loop with people. It is not possible here to argue that technology in this way is deterministic, as that would imply a moulding of one's behaviour in response to these sounds, i.e. one hears a sound and must respond. Rather, in the example of traffic stop sounds, one witnesses on a daily basis people ignoring the meaning of these sounds. Instead these sounds become part of the technological backdrop/soundscape, they have a meaning in their design and function but that is not always adhered to. Conversely, these sounds have now become such a significant symbolic sound that most of the young participants mentioned it or vocalised the sounds it makes.

Cleophas and Bijsterveld (2011) argue that the relationship people have to technological sounding objects has become quite complex; their research project, which explored reproducing synthesized vehicle sounds for the quiet car, has led them to acknowledge the cultural phenomenon of the interior mechanical soundscape and the relationship one has to it. Familiar technological sounds become part of the However, when one tries to quantify or replicate this, subjectivity interferes, as connections to sounds are often "immeasurable". Additionally, within different cultures, words connected to sounds are often inconsistent. To examine sound and the city within, for example, the framework of science and technology studies (STS), one is faced with two problems; first, the lack of a language to describe sound types and second the limited language available to define the social meaning of sound. Directly linked to the second problem, is that when one asks for information about the sounding world one invariably hears "more than what was actually asked for" (Cleophas and Bijsterveld 2011:114), i.e. people start to tell stories about their experiences with the vehicle and its sounds rather than using objective sound descriptors. It was important to identify this problem in the discussions with the teenagers. They found it difficult to define a sound as a single object or source such as a beeping horn, bell, bang etc. Instead, technological sounds and their meanings were linked to the interplay between people, space and the technological object producing a sound.

Interviewer: so one last question, what sounds remind you of home?

Group: (Participant 1) Fire alarm.

Interviewer: fire alarm that's the sound of home? (Laughter)

Group: (Participant 1) you see, I'm not even messing, no right my fire alarm is very sensitive if you have a shower and then you open the bathroom door and all the steam

goes up to the fire alarm and the whole alarm goes off

Interviewer: and that happens a lot?

Group: (Participant 1) every single day my alarm doesn't fail. Even when she's cooking the dinner, everyone thinks that my ma burns the dinner, every single day. It doesn't even have a battery. Take it off the wall. (Group 13a: female)

Interviewer: who's in charge of the sound at home? Who gets to turn on the radio or turn on the telly or? Is it everybody or one person?

Group: (Participant 1) anybody. (Participant 2) Yeah, but if me da is in and there's a match or something on like, obviously like he's gonna want the telly. (Participant 3) when I come in, me da comes in from work sometimes he wants to watch like certain things and he does like, go up to your, like I wanna watch this, go up to your room, you have your own telly. (Group 11b: female)

Group: (Participant 1) kids playing, that's all I hear. (Participant 2) Sometimes horses, and ambulances cause you know the way there's loads of ambulances going in and out of the hospital. (Participant 3) Oh yeah I live there, there's an old folks home where I live, just around the corner and the old folks must be going in ambulances going out

Interviewer: really

Group: (Participant 3) there are old folks home, do you know the grove, if you go around that way there's an old folks there. (Group 12a: female)

To engage with how one hears the urban environment means understanding this relationship (see figure 36).

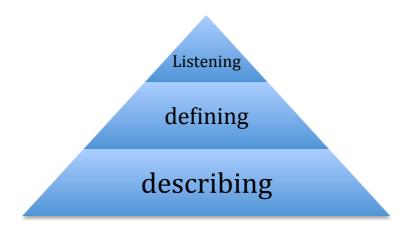


Figure 36 The law of increasing returns

6.3.1 Macro, meso and micro soundscapes: Dublin, Smithfield

When working with the young participants a key question was considered, 'what are the technological sounds of one's environment'? As the starting point to a discussion,

this would help unpack the technological soundscape. However, the group discussions prompted a paradigm shift in underlying theories of technology and the urban. The theoretical focus had been the investigation of technology and its sounds as either deterministic i.e. shaping of one's urban experience or socially constructive i.e. people manipulating technology in order to alter their social experience.

What emerged from the discussions with the young participants undermined this binary framework. According to most of the young participants there are no spaces in the city, which do not reflect, resonate or produce sounds, technological or mechanical. For them, the modern city is a technological soundscape where all sounds have a human source, as one participant stated, "every sound is human made".

From a macro perspective of the city the young participants found it difficult to separate types of sounds from each other; they found it hard to split the sounds within the city. When walking around Dublin city one experiences a technological ambience made up of a myriad of sounds: electronic doors whooshing, amplified music from buskers, horns beeping, street lamps buzzing, mobile phones ringing, music emanating from shops, pass machines beeping, doorbells ringing, alarms screeching and the constant chorus of traffic. For the young participants, the urban milieu is no longer, as Simmel (1903) suggested or even as Bull (2000) has argued, an ambivalent abstract interference interrupting one's urban experience. Rather, the urban soundscape is made up of detailed technological sounds buzzing for one's attention. These sounds are set within the larger soundscape of production and consumption.

Although Dyson has argued that seeing has significantly "shaped the development of western thinking", where one is "scanning, naming, and colonizing the universe" (2009:13), this negates the earpoint of space and removes it from the subjectivity of the world. The young participants in this study did not define their urban experience as one of moving through and around objects. For example, when examining Smithfield in the focus group discussions, the obvious disadvantage this space had in attracting visitors was its lack of positive ambient soundscape. The young participants argued that the sounds produced by technology and people; the types of sounds, which are located in busy shopping districts, were needed in order to create a welcoming space.

6.3.2 Technological literacy and young people

The study examined teenager's mediating tactics within the urban soundscape as well as their interpretation of the urban technological soundscape. Additionally, most teenagers in Ireland own multimedia technologies (Arekibo Communications 2011), and it was taken for granted initially in this study that contemporary youth have an understanding of technology in the broadest sense. The assumptions that can arise from this are that all western teenagers will have a certain level of technological expertise, particularly in the area of video and image recording. This is based, in part, on the fact that most mobile technologies, particularly smart phones, are capable of recording audio and video. In addition, a significant number of young people are connected to social media sites where they upload images, video and audio materials (Boyd 2007; Håkansson, Rost, and Holmquist 2007; Livingstone and Haddon 2009; O'Neill 2008). Because of the proliferation of media technologies, a researcher might assume, that when it comes to technology young people are technologically literate. This is however, different to digitally literate, where young people, exposed to technologies such as computers and mobile phones from an early age are comfortable with these devices. However, technologies such as disposable cameras and digital recorders are not devices they have been exposed to. It was found that there were varying levels of technological literacy amongst the teenagers. Although the young people stated that they used their mobile devices on a daily basis, it seemed that they were only literate and confident with these devices. When handed a different device, one with basic functionality, such as a disposable camera, the young people expressed a concern over how to use it, and asked to be shown on several occasions, which buttons to press.

6.3.3 Capturing the soundscape

As a lecturer in media production and producer of media art, the researcher has an understanding of the ontological nature of capturing audio-visual information. It is not simply a case of point and click, but rather an application of the theories of media production (Drobnick 2004; Manovich 2002). In order to document the phenomenological, it is necessary to explain how that might be achieved through a digital or technological process. With each group in this research, a time was set aside to explain the process of capturing audio, either visually (with a camera) or audibly (with a digital recorder). This led to a certain amount of confusion; the students could

not understand how they would capture sound using a camera. Parallels and metaphors therefore played a part in shaping their understanding of this process. For example, if they were asked to take a photograph of something that had a really strong smell, where would they point the camera? This helped them understand that we were not trying to capture a sensory experience but rather document what might produce one.

It had been assumed that the audio-recorded soundwalk would be the easiest walk to do with the students. However, the idea of capturing sound in an environment filled with sounds seemed problematic to them. They pointed out that they would find it difficult to record a single sound in an environment filled with sounds. We discussed moving closer to a particular sound when they wished to record it. If they felt the digital recorder would not be able to capture a particular sound, they could record a description of the sound they heard e.g. "we hear traffic, birds and lights" (student: group a). In addition to individual sound recordings, such as buskers, traffic or people chatting, the concept of immersive soundscapes was discussed with the students, reminding them of the previous walks undertaken, and how, as they moved through different areas, the overall sounds changed, from busy street districts, to noisy roadways and quiet urban housing estates. Not only were they to record the individual soundmarks of the city but also they had to investigate keynote sounds and different soundscapes. This was to encourage them to think of space and sound as operating at different levels: as immersive environments and productive or socialising soundscapes (Degen 2008).

6.3.4 The technological soundscape of Smithfield – a hi fi soundscape

For most of the young participants Smithfield was described as quiet, as stated in chapter 4, however, when they did identify particular sounds within the area, they generally described mechanical or technological sounds. Although their description of the city soundscape is largely of a traffic-scape, a constant traffic sound that sits in the background night and day. Because of the relative quiet of Smithfield they were not only able to identify particular traffic sounds but also to locate their source. Schafer (1977) defines this as a hi fi (high fidelity) soundscape, a space where no dominant sound interrupts the soundscape, thus individual sounds can be identified. Schafer defines hi fi soundscapes as positive soundscapes, where one can hear

distinctive sound types. However, as discussed in chapter 5, for both research groups, a hi fi soundscape in Dublin city, was a negative one.

The dominant sound described by the young participants was the Luas tramline, but the sounds of lights beeping and external ventilations fans were heard in particular parts of the Smithfield square. The overall soundscape in Smithfield was much quieter than that of the busier shopping districts. There was no locus of sounds coming from a particular business or industry, aside from construction. Yet, the continuous presence of electrical and mechanical sounds, though not as prevalent in Smithfield as other parts of the city, highlighted a dependence "modern society has on its technological base" (Truax 2000:25). Sounds such as these are characterised as examples of "flat-line or steady sounds" (Truax 2000:26), sounds which do not offer any information and which become a kind of 'white noise'. However, to argue that one adapts to these sounds because of their "meaninglessness", ignores associations to the broader social setting in which these sounds emanate. Equally, the quieter technological soundscape of post-industrial cities allows for other sounds to foreground, setting a perspective for the ears over the eyes of the city soundscape, its activities social and productive. For the young participants, natural sounds as well as electronic and mechanical sounds are analogous to each other in the Dublin city soundscape. Labelle argues that traffic sounds become their own rhythm weaving in and out of other sonic entities in the city, they are not simply background but "overlapping singular spatialities that are neither wholly random nor neatly discreet" (2010:132). For the young participants, traffic sounds do not dominate the largely pedestrianized city centre. Rather, they surround the city, enclosing it within an appropriate city soundscape. This is in contrast to public policy, both in Ireland and the EU, which argues that the predominant problem, within cities, is traffic noise. Smithfield, with its low volume environment, allows for the sounds of technology and electricity to attain a kind of musicality and sonic significance. The Luas tramline is the rhythmic sound within the environment.

During the soundwalks in Smithfield and its surrounding areas, it was noted that the young participants would walk up to electronic or mechanical objects, which might produce sound, such as a doorbell, alarm, car or the traffic lights (traffic lights in

Dublin produce a beeping sound to indicate when to stop or cross the road)²⁵ and take a picture or a recording of these objects. They clearly found it necessary in this space, to locate an object, which would at some point produce sound. Paradoxically, in later discussions when asked to describe what they heard in Smithfield most of the young participants noted that there were no sounds; for them, what constituted a 'sound', particularly a technological sound was connected to consumption, i.e. the sound of music from shops, the ringing of tills and street music. The young participants when documenting Smithfield were trying to identify sounds, which signified activity: music playing, people chatting, cars moving, etc.

Interviewer: was Moore Street the same as Henry Street?

Group: (Participant 1) no there was more people in Henry Street. (Participant 2) You

could hear music, and all the people on the street playing music.

Interviewer: and you just thought Smithfield was

Group: (group response) real quiet a bit relaxing. (Participant 2) Smithfield was quieter than walking in town, when you walked by like, the factory things you could

hear the trucks and everything moving around and all

Interviewer: so Smithfield was quieter Group: (Participant 4) ... the machines

Interviewer: yeah

Group: (Participant 4) and then when you get to Smithfield it's much quieter than it

was on Moore St. I think (Group 11b: female)

The areas described as 'buzzing' or 'quiet and relaxing' contain different socioeconomic practices; the buzzing spaces are spaces for consumption whereas the quiet spaces were areas of small-scale production (Market Area) or spaces with no clear purpose (Smithfield Square). Although the city soundscape was often defined by its 'trafficy' sounds by the young participants, they rarely identified the sounds of traffic when describing individual streets. For some groups the city was divided into spaces of human produced sounds and mechanical/technological soundscapes.

Group: (Participant 1) if you were at Henry Street again the sound would be much more human made, if you were back down at the markets or on the quays then it would be much more machine made. (Participant 2) Yeah but if you are thinking about town, Henry Street is different than Grafton Street, Henry Street would make more like, the noise over in Henry Street, like noise in Henry Street is probably more like people, like its probably more machine as well and people, but the minute you go to Grafton Street it's all different, like you can just hear people walking like footsteps no one talks they just walk. (Group 1c: male)

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²⁵ What was interesting was the objects they approached were not always making a sound but they still documented them as sounding objects.

There were some participants however, who did live close to the market area of Smithfield. They discussed particular sounds within this area, sounds that the casual visitor would not necessarily notice, because they operate at particular times of the day, and are related to work practices. For example, several participants noted the sounds of the Market Area²⁶ beginning at around 4am in the morning with delivery sounds. However, unlike the older participants these sounds are often masked by the sounds of emergency services.

Interviewer: does anybody else live near the market, you live near the market and do you hear it first thing in the morning

Group: (Participant 1) he lives in the market. (Participant 2) I live near. (Participant 3) You just hear all like police cars and all because the Bridewell (police station) is just around the corner

Interviewer: really so you actually hear Garda cars Group: (Participant 2) and ambulance (Group 1c-Male)

It is the sounds of things which are first described by the young participants: a truck, a man, an alarm or screech of traffic (Ihde 2007). However, it is the context in which one hears these sounds, which transform their meaning. For the young participants, the soundscape of this space, often technological but interspersed with the sounds of human voices, is contextual. They are the sounds of the market, in the same way that descriptions of the city sounds are the sounds of place, time and events. They are not just the "sounds of things" (2007:60) - they are the sounds of actions, events and work practices.

During each focus group, in order to elicit responses about the sounds heard on their soundwalks, a map of Dublin city was placed on the table. This was to evoke a dialogue, which would provide detailed sonic pictures of different areas, streets, squares etc. Photo elicitation has a strong basis in visual anthropology and visual studies, the elicitation is based predominantly on the use of representative images, such as photos (Harper 2002). Harper argues that image elicitation allows one to "evoke different kind(s) of information" (2002:1). However, for this project it was necessary to work with abstract representations such as the sound pyramid previously

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²⁶ Market Area is an area between Henry Street and Smithfield Square; it has only been recently named the Market Area, one could argue to separate the marketing practices from the newly gentrified Smithfield Square.

discussed, as well as the map of Dublin. It was felt that photographs of the space would draw attention to physical objects and their associated meanings rather than sounds.

A key technological sound in Dublin identified by the young participants is the Luas tramline. This sound transforms often-quiet spaces and especially Smithfield. As a technological sound it amplifies certain spaces resounding and reflecting on walls and buildings, and proliferating in wider spaces (near Smithfield Square). This sound is particularly amplified in Smithfield, as it does not compete with other sounds in the space. Most of the young participants have ascribed meaning to the sounds made by the tram rather than the tram itself. For example, as discussed in chapter 5, the tram was assigned meanings connected to graceful movement and rhythms, with one female teenager comparing it to "ballet". This was disconnected from its function as a public transport vehicle. Schafer (1977) notes that certain sounds come to have meanings attached to them, above what they represent, for example, the sounds of church bells signify faith and community, not just the structure of a church. The sounds of emergency services, sounding their sirens, are not just a warning to drivers on the road, they have come to signify danger, invasion and observation; yet they are also an electrical synthetic sound.

The second type of elicitation, the pyramid, was concerned with creating subjective interpretations of the city soundscape. It allowed the young participants explore where sound dominated or retreated and how time, place and movement altered how sound was perceived. Schafer (1977) uses sound maps to define specific areas; breaking the landscape into text, shapes and charts to create an abstract representation of sounds and sound levels. As discussed in chapter 5, mapping is problematic, as it defines the landscape as a series of trajectories and nodal points (de Certeau 1988; Massey 2005). Using the pyramid removed these references to maps of space and focused on sound as layered and immersive rather than particular to points and times within space. Lefebvre (1974) argues that representational spaces are defined by symbolic definitions; that is spaces which have no particular purpose are defined through symbolic representation. Often this is because these spaces are so structurally embedded in space that people can only have a 'passive' relationship with them, in which case they can then use their imaginations to transform these spaces.

Using the maps and pyramids for elicitation allowed the participants to note when and why the city sounded different. Earlier discussions of the soundscape of the city within the groups seemed to suggest a deterministic viewpoint. The technological soundscape was seen as fixed and unchanging. For most, the city was a space of sounds which one adapted to:

Group: I used to live across from the Mater hospital so I'd hear them every half hour, yeah, I used to live beside Beaumont, they were constantly going in and out all the time

Interviewer: Is it a soundscape that's part of Dublin or do you think that it shouldn't be? Do you think its too noisy or...?

Group: I'm used to it, I sleep with the traffic, not like that, I sleep with the noise of the traffic.

Interviewer: alright

Group: like, when there's complete silence I can't really fall asleep, yeah, (Group 8b: females)

However, the sound pyramids revealed that there was a critical assessment and judgement of the sounds of the city, particularly the mechanical and technological sounds. The pyramids allowed the young participants to define the city as a collection of interspersed sounds with the sounds of the natural world sitting alongside the sounds of the technological. These descriptions create an immersive setting (see Figure 23 Figure 26) in chapter 4. It had been expected that descriptions of traffic would dominate the discussion, however, the order of sounds from constant to less frequent was surprising. For example, some sounds, though seemingly quiet, such as laughter or footsteps, were situated alongside cars and emergency service sounds. Some technological sounds may dominate the soundscape in their levels, but for the young participants they are part of and intertwined with other non-technological sounds.

6.3.5 The sounds of consumption in a service economy

Mediated music within Dublin city, was a key feature of the young participants descriptions of the city centre. Sterne (1997) argues that today one is often mediated through space. On entering a clothes store for example, one is surrounded by prerecorded music. To the young participants the centre of the city is a music-mediated

space, a synthetic soundscape. Although they highlighted that these sounds were often the backdrop to the louder more persistent sounds of people talking or walking in the city, the sounds of music were in general the dominant sound of the city. Some of the young participants suggested that these sounds play a part in creating the consumerist atmosphere. Sterne (1997) has referred to this type of sound as apparatuses, designed not to disseminate music, but to encourage consumption. This push for increased consumption is flexed towards sound and music in a push to mobilise "all the artifices of need inducement and cultural transformation that this implies" (Harvey 1995:156). This is part of the shift towards what Harvey calls, the "consumption of services", "entertainments, spectacles, happenings, and distractions" (1995:285). However for some young participants the continuous presence of different musical soundscapes, used to celebrate "difference, ephemerality, spectacle, fashion, and the commodification of cultural forms" (Harvey 1995:156), becomes a cacophonous melange of meaningless sound, one which becomes a background sound. Attali argues that this form of 'muzak' (1985:8) is used to get people to move through spaces of consumption in an orderly fashion. Both Sterne and Attali argue that the distribution of public music creates and establishes stereotyped and standardising 'daily life' soundscapes. Sterne (1997) has argued that this type of sound becomes a form of architecture in space, which is an extension of the consumer He explored this phenomenon within large American malls, where the programming of music was similar to that of the programming of air-conditioning and lights.

When walking through the main shopping streets of Dublin, the participants described the area as filled with music playing from shops, however, the researcher found it difficult to identify shops where this occurred. This might indicate the specific social group that music in certain shops is aimed at. Dance music in particular can be heard in most high street stores aimed at teenagers. A busy street is not so much an extension of the space of interiors, as a collage of sounds, which represent an overall consumer soundscape. The sounds heard in busier streets change over time; busier shopping days equate with louder street sounds. The competition to attract buyers is often based on one's ability to catch the ear as well as the eye.

For the young participants, their relationship to the sounds of the streets, such as music sounds from shops, street buskers and traffic, is mixed; on the one hand there is a sense of ambivalence in relationship to these sounds; some argue that it is noise and others that it is necessary. In general they agree that it cannot and should not be altered; mechanical, electrical, technological and synthetic sounds are perceived as a phenomenological projection of what a city space is. The technological has come to dominate the modern city soundscape, each space projecting synthesized/designed sounds: bells, buzzers, alarms, ringtones and beeps within the traffic-scape. Technologically specific sounds were rarely defined during the discussion groups. However, on the recorded soundwalks the young participants documented these kinds Smithfield, without the symphony of sounds located in the busier shopping areas allowed the young participants to hear the discreet technological sounds. When asked to define the city sounds, most descriptions reflected a general soundscape, rather than sounds specific to place: Cars, traffic, people, footsteps, bikes, Luas, bells, sirens, seagulls, music, screaming, dogs, animals, whistles and churches, music, buskers, people, chatter, (All groups: see pyramids)

6.4 Selective mobile mediation: home and away

In negotiating these soundscapes the young participants have adopted a strategy of selective mobile mediation. Their use of audio technologies and mobile communication devices occurs at very particular times and places in response to types of sounds, soundscapes and spaces. Primarily, audio technologies are used to avoid both the quiet and invasive soundscape, outside and inside their homes. They are selectively consuming media sound and the urban soundscape.

The use of mobile media technologies is ubiquitous amongst both urban and rural teenagers throughout the modern world (Campbell 2007; Cawley and Hynes 2010; O'

Brien 2010). For the young participants, using mobile phones has become a key strategy in their management of everyday life; a method for negotiating and managing space and their mobile social networks. There are few places on the planet where people do not have access to a mobile phone (Agar 2005) and teenagers in general use mobile technologies extensively in western cultures (Beger and Akshay 2012; Ito 2004). Nevertheless, for teenagers in developing countries there is often "persistent digital divides based on socio-economics, geography and language, as well as in ICT ownership, access, and use" (Beger and Akshay 2012:3), which impact on the use of mobile technologies as a ubiquitous device, transforming the local experiences of teenagers. One of the key factors associated with access is the affordances or "actions" (Gibson 2012) of mobile technologies. Cawley and Hynes (2010) argue that affordances offered by mobile technologies transcend social divides and that with every new layer of technology applied to devices there exists newly imagined uses. However, cost has come to play a large part in one's ability to access and use mobile technologies especially with the development of wireless communication and applications. If one has the money one can purchase types of devices which allow a user access to other forms of media such as access to the web as well as the ability to download and exchange media. If one does not have the ability to purchase for example, mobile applications, one is out of both the technological and social media loop.

Castells et al. argue that mobile technology blurs "the boundary between commerce and everyday life" (2010:108). There is also the cultural capital gain through ownership of such technologies; owning technological objects means a change in a teenager's technological habitus, allowing them increased access to mobile media and new social spaces (Bourdieu 1993; Czerniewicz and Brown 2012). Mobile technologies have played a key part in the transformation of human relations and social engagement. Today, these technologies have transformed into multi-media devices, not only designed for mobile communication, but created for the production and consumption of various media, allowing the user access to the internet, music, the storage of video, and photographs as well as the ability to produce and publish their own media through various applications: RJDJ, AudioBoo and Soundcloud etc. (Cabrera Paz and Schwartz 2009; García Canclini and Schwartz 2009). One could argue that the constant use of mobile audio technologies, for a listening public,

implies that there is increasingly a world of sound views, rather than visual view points through which one is constantly choosing to move in and out.

This research project revealed the extensive use and ownership, among Irish urban teenagers, of mobile phone technologies. This data is not new, as previous research on mobile phone technologies and youth have explored the proliferation of these devices in Ireland (Cawley and Hynes 2010; O' Brien 2010). The mobile phone has been explored in depth by various media and social theorists, and this researcher does not wish to cover similar ground. Instead, she is examining how mobile devices, in all their forms, from iPods to Mp3 players, mobile phones to multi media devices, such as the iPad (though today most phones are arguably multi media devices), are used to negotiate the urban soundscape.

Bull argues that through mediated listening, "users' relations to representational space are transformed, enabling them to construct forms of 'habitable' space for themselves. In doing so users can be described as creating a fragile world of certainty within a contingent world" (2000:41). For most of the young participants these "habitable" spaces were varied and the context of use was tied to autonomy and the creation of private space. The chaos and noise of the city is a soundscape they enjoy being immersed within. Audio technologies are used instead to bridge spaces that have no relevance. The young participants stated that they use their mobile audio technologies at home, while on their own, as a way to create space; music listening particularly, transforms the experience of home. They also used their mobile audio devices (especially phones) to socialize, whilst being mobile; the mobile phone has become an "important appliance as a communication tool with peers" (Castells et al. 2009:131). It allows young people to move away from the "the sphere of influence of traditional socialization structures, such as the home, (and) educational system" (Castells et al. 2009:141).

Conversely, Dyson argues that one should not conflate the use of music or sound to transform one's experiences of space by turning the experience into a metaphysical one; presenting the experience of resounding space as a deterministic one. In other words, concepts around immersion in new media and sound should not be prefixed by virtuality (a simulation of the real), whereby one is supposedly transported into a different environment. Embodiment is not the same as a virtual experience. The

body and technology is central to this research project because of how sound engages with the senses to alter one's experiences. The use of mobile technological devices such as headphones are inserted into the body to negate intrusion, connect the body to other sensory modalities and envelop the listener (Dyson 2009). They do not remove the listener from the real world; they are used to enhance the mobile experience.

One is trying to reclaim space through the act of mediation; however, this mediation is isolated to one sensory organ, the ear. One's reactions to a source/object sound, is often tied to cultural, social or historical connections, in the same way that taste and smell are tied to memory and experiences. Using technology to transform these relationships shifts the connection between these experiences and the connection to that physical object or space. Thus, the connection to space, which Ponty argues is often based on bodily reactions - fortified experiences "associated with the other senses" (1948:60) - is transformed and is no longer an effective measure of reality. As one of the participants noted,

Group: (participant 2) "I feel weird when I listen to music, like you have headphones, and then your just like, you could hear people talking to you and your like, what? (Participant 1), yeah, did you ever get when your listening to music and you think someone's calling you, and there not like" (Group 9b: Female)

The use of mobile audio technologies is not confined to one particular space, but to any potential space, which forces them to tune out. Mobilising oneself, negotiating geographies of perception and using technologies to do so, is a process of shifting between perceptual events; teenagers experience this perceptual shift on a daily basis. They are transgressing the boundaries of physical space by mediating through and around it. There is no specific physical space where this occurs; rather, context has become an indicator of why a young person chooses to transform his or her sound experience of particular spaces. Sometimes mediated listening is used to create a sonic background even when in group situations.

Group: (Participant 1) I always listen to the radio. (Participant 5) you could be sitting in (Mary's) and we'll just be talking and she'll go like, I have to listen to the radio and she'll put on Spin 103, and no songs would be on it and she'd still listen to it Interviewer: Just put it on in the background?

Group: yeah (Group 9b: female)

With the increased ownership of multimodal media technologies amongst the young people, the rationale for shifting from one sense experience to another, in particular auditory events, has extended beyond the removal of oneself from an inhospitable or abstract soundscape: abstract meaning one cannot understand or relate to the sounds heard. Instead, the young participants choose mobile mediation, over any other process, to handle or manage difficult situations, such as having to engage with space, family or strangers. For the urban based teenagers, this can evolve into a constant form of acoustic shifting; they are no longer earwitnesses to their environments (Ystad et al. 2010).

Interviewer: Do you never bring (mobile device) it outside?

Group: (Participant 1) no. (Participant 2) only the odd time. (Participant 3) Only

when I'm walking by myself

Interviewer: so you don't do too much listening to music outside of the home?

Group: (Participant 4) no. (Participant 5) only when you're going out

Interviewer: do you use it going places?

Group: (Participant 2) no only when you're going to a party you can listen to music, (Participant 3) like you wouldn't bring it out. (Participant 1) If you're going on a jog

or a walk or something then I bring it out. (Group 10b: female)

The heuristic approach of teenagers/young people is to reconfigure their sense experiences through media technologies. One could argue that this approach is a precursor to what Dyson (2009) calls the cyborgisation of the senses; a process whereby one's perceptual process are enhanced or altered through the embedding of technology into the body (Haraway 1991).

Bull (2000) examined the sounding out process, the rationale and practices. However, the impact or the wider implications for young people who constantly transform their social experience through mediated listening, needs to be explored, as it relates to the wider implications of young peoples relationships to space. Historically groups and individuals have transformed structured spaces as a counter measure to objective, scientific forms of urban design (Lefebvre 1974). Creating what Soja (1996) would call Thirdspace's is how society negotiates with larger social, political, economic structures in order to make space more than just sites of production. In order to feel connected people must be able to transform space symbolically. The older participants referred to this process as a constant engagement with the outdoors, as

well as a contesting of the rules and regulations of spatial use. They also stated that mobile audio technologies furthered these symbolic protests or re-designation of space as well as allowing for media autonomy.

After the record player was a little transistor, so I would go out to the hallway and sit there and pick up radio Caroline and radio Luxembourg on the transistor. But you couldn't just pick it by sitting there, you had to put it up against a piece of steel so it earthed and gave you an aerial system so to pick up the signal, and you put it to the thing, right inside it, ... the coil was picking up the metal and was extending the signal. And you would pick up radio Caroline, you would have it there and you'd barely hear it and then you would put it against the pipe, it was great. (2nd male)

For the young participants who feel excluded from parts of their city, rather than overtly protesting through a physical presence, though some teenage groups do, instead they mediate out of exclusionary spaces²⁷. Urban teenagers, in deciding to mediate real spaces, thus transforming the sounds they hear in space, are ignoring the sounds of space.

Interviewer: do you listen to music?

Group: (Participant 1) I fall asleep listening to music. (Participant 2) When I'm

walking alone to school I listen to music.

Interviewer: What about you, do you listen to music?

Group: (Participant 3) never. (Participant 4) If I'm going somewhere on me own or

something. (Participant 1) If I was going training or something

Interviewer: so do you mostly listen to music when you're by yourselves!

Group: (group response) yes. (Participant 2) Say if he was in town like say he told me he was in O'Connell Street I was walking from my house I could listen to music until I got to him

Interviewer: why?

Group: (Participant 2) Just something to amuse you it puts you in a good humour I think

Interviewer: what about you why would you listen to music?

Group: (Participant 5) if I was in bed and I wanted to go asleep I'd listen to music

Interviewer: you listen to music for travelling like going on long journeys?

Group: yes (Group response) (group 1c:male)

One could argue that so much mediated listening forms a kind off disconnect to space (Bull 2000). One possible outcome might be that young people will no longer use public spaces, which will enable urban planners to decide that teenagers should not be considered in urban design. For teenagers bringing one's mobile phone or iPod

²⁷ The researcher suggests that exclusionary means, in this research, spaces from which the teenagers feel excluded, rather than spaces particularly defined as exclusive to adults, for example.

outside means that at some stage they will be consuming media. The reasons for this consumption are of concern to this researcher.

6.5 Away: mobilizing the social

For the young participants technology has been a part of their lives since early childhood:

Interviewer: Everybody here has a phone, how long have you had a phone for?

Group: (participant 1) four and half years.

Interviewer: what age were you when you got a phone?

Group: (participant 2) Since my communion. (About 7 years of age) (Participant 3)

Since I was about 5. (Participant 4) Since I was around 4. (Participant 5) Around 7.

(Participant 1) Around 6 or 7. (Group 1c: Male)

The possibilities of mobile technologies to socially shape one's experiences is not something they discovered in their teenage years, rather, technologies' possibilities are a part of their social existence as they have become embedded into their daily routines through a process of domestication (Berker et al. 2005b; Hirsch and Silverstone 1992). The use of mobile phones as a mechanism for social engagement, while being mobile, plays a large part in the social lives of teenagers. Most of the teenagers argued that they rarely use their phones to talk to people, instead they use their phones to send text messages, go online to SNS sites such as Facebook and engage with their friends; "cell-phone texting has become the preferred channel of basic communication between teens and their friends" (Lenhart 2010:2). The phone however is not necessary to maintain their close relationships, as most of the teenagers argue that they predominantly socialised face-to-face. Mobile technologies are thus used to maintain a type of social existence, but are not necessary for maintaining or shaping their everyday social lives.

For the research participants, mobile phones were used to listen to music extensively, take photographs and choose what types of media they would watch. The technologies gave them control over their social spaces and their engagement with media. More importantly, their mediated spaces and their social spaces were almost one and the same. Courtois et al. (2012) argue that for most teenagers the use of

technological devices for media consumption allows for the creation of autonomous spaces. The young participants in this study documented their activities with their phones, taking pictures of events happening in their lives, and uploading these images to the internet. In fact, the documenting of their lives with their phones was extensive, with some participants stating that they had thousands of pictures on their devices. The young participants were using their mobile technologies to merge their real world spaces with their virtual spaces, defining their presence in both spaces simultaneously.

Interviewer: All right, and em, do you take photos with your phone?

Group: (participant 2) yeah sometimes. (Participant 3) Yeah. (Participant 2) Well I did, but since I have this phone... (The participant sounds regretful). (Participant 3) I'd a thousand and seven hundred pictures. (Group 11b: female)

Interviewer: what do you put on your phone?

Group: (Participant 1) video sometimes. (Participant 2) I don't take loads of photographs. (Participant 1) It depends on what it is though. If something is moving you take a video. (Participant 3) If I seen a Ferrari just stopped there, I take a picture of it

Interviewer: and then what do you do with them do you upload them or do you put them on your computers or what?

Group: (Participant 4) no. No. (Participant 3) Just up load them onto Facebook, if it was pictures of me and my mates I'd put them on Facebook or something funny I'd put them on Facebook (Group 1c: Male)

There is no sense from the young participants that they are trying to escape into the virtual, although mobile listening is often presented as a form of escapism. Rather, they interact with their technology through co-presence e.g. sitting in front of a computer, being present in their SNS's while hearing and sensing the world around them. Thus, co-presence means being more available than actual presence as "physical presence is not equivalent to availability for interaction" (Beaulieu 2010:2).

Audio technologies allow them to block out one sense experience, which alters their sense of place. However, their visual perspective is still negotiating real spaces; they are both here and there. In this way, autonomy is achieved on multiple levels; they have control over music or sounds and control over their experience of space. Autonomy is achieved by strategically using their mobile devices for specific purposes, using them to shape their social world (Bijker and Law 1994; MacKenzie and Wajcman 1987). Technologies such as mobile audio devices give teenagers

access to places and spaces from which they would feel restricted, as well as providing a sense of security in dangerous areas. To be more exact, technologies provide a sense of distance from sounds understood as potentially threatening or uncomfortable. For some of the teenage participants, particularly the females, mobile technologies provide a sense of security; for example, their phones are a connection to parental control and safety. Having the phone means they can travel away from home because their parents are able to contact them if worried about their safety. When one participant was asked what it would mean to her if she forgot her mobile phone, rather than talk about not being able to access media or call friends she noted, "me mam wouldn't know where (I was), I'd be in trouble." (Group 8b: female)

This divide between autonomy and control exists alongside a sense of security provided by the invisible link of parent to child; the same kind of imagined security which music listening provides in public spaces. In many ways, being tuned in all of the time suggests a lessening of distinctions between public/private spaces. Livingstone (2002a) argues that parents use technology as a form of control; the rationale is based on fears propagated by various sources, such as the news media, of the outside world being defined as a dangerous space for children and teenagers. This is, in many ways, reflected in the older participants experience of Dublin city. For the older participants the outside spaces of Dublin city were not regarded as safe spaces. This echoes the fact that for working class children and teenagers of the 1950s and 60s, Dublin city was a dangerous and restrictive space. They did not have the same technologies in which to circumnavigate through space. However, with the introduction of mobile music technologies into their teenager lives, such as the radio and record players, they were able to control interior/home soundscapes, and transform their exterior social worlds.

Interviewer: so then you start being able to bring your music out with your friends? Interviewee: yes, yes, that came from the house, you had this portable kind of battery-operated transistor.

Interviewer: and was it a big battery, was it a big device?

Interviewee: no, no, it was a small, these were small transistors in a leather, there were various sizes it all depends, but the ones we had were just a small little hand ones, but some of the lads had the bigger one, that held about, I think about 4 or 5 treble A batteries, it was just portable then you could take out.

Interviewer: and did you bring them out to beaches or

Interviewee: yes, you brought them to parks and beaches and things like that,

Interviewer: and dates

Interviewee: yes you would you brought things like, it was stupid stuff, it was great to have the transistor to listen to the music, now we used to go down and sit on the canal bank and listen to the radio and just listen to the music. But it became a big feature, then you would move on, then you were going to the dance, starting to go to the Sunday dances then. So it was the whole thing you were into the major record playing things like you know, these little dance halls.

Interviewer: I guess it was probably important to know what the current pop music was for dance halls.

Interviewee: oh yes, that's because he would hear people singing it, so you know you'd say what song is that, like you know. (2nd Male age 63)

Being portable and having control over one's listening experience transformed aspects of this participant's social world. There is the autonomy gained in choosing one's media as well as the advantage of knowing what is happening in music at an international level; music becomes a cultural commodity and cultural capital (du Gay et al. 1997). Music as cultural capital is not as Denisoff argues "a discretionary item, a product a consumer buys with leisure funds" (Denisoff quoted in Straw 2002). For older participants records/albums and music technologies were very expensive, and not easily acquired.

Instead "the link between familiarity with a musical text and the desire to repeat the experience of listening to it has shaped the commodity status of popular music in its recorded forms" (Straw 2002:9). This form of immaterial cultural capital was converted into a type of knowledge capital (Bourdieu 1993; Czerniewicz and Brown 2012), whereby the owner of music had access to lyrics and information, which they exchanged for other lyrics and band information. For this participant, having access to mobile technologies was very much dependent on his having an income from employment; to purchase a device such as a radio or record player required more money than his family could afford. Equally, for all of the older cohorts, space in their homes was at a premium, with large families living in two room flats; mobile devices allowed them create a space of their own. As one participant stated, being able to put on your own music in a home of nine or ten people gave him instant privacy.

Interviewer: when you got your record player that was yours

Interviewee: that was mine yes, that was a special thing to me like and I would sit for

hours listening to the music

Interviewer: and did you feel that was private for you even if people could hear it?

Interviewee: yes, yes

Interviewer: it was just yours

Interviewee: yes I'd say da are you putting on the radio and he'd say no so can I put on my record player and I'd sit there listening to the records like you know (2nd Male)

In this way his technology became almost sacred to him, "I used to polish it and look after it and kept a cloth over it and no one could touch it" (2nd Male). It held the potential for privacy in overcrowded, noisy, tenement blocks (Morrill, Snow, and White 2005). In this way the older people were able to shape their social and spatial experiences by domesticating mobile technologies (Berker et al. 2005b). They would eventually become part of the everyday routine of music listening and sharing. The younger cohort shares these types of mobile music practices; though some of the contexts are different the essential reshaping of space and technological use was the same. In this way the alteration of spatial experiences connects human agency and the intentionality of use (with a technology), to the end user (MacKenzie and Wajcman 1999). Thus "the user, the social aims and the social contexts denies any kind" (Lasen 2004:16) of technological determinism.

In contemporary society, the geographies of space and the social world are now merged with the social geographies of the technological world (Castells et al. 2009). Audio technologies provide this apparent control of space and place; the teenagers see their technologies as surrounding them in a "sound bubble created by headphones" (Livingstone 2007:1). This control of their soundscape is influenced by complex assessments of their environments which are driven by social, cultural and relational ties to space: "some spaces emphasize aural privacy or aggravate loneliness; others reinforce social cohesion" (Blesser and Salter 2009:11). The boundaries of walls, windows or structural controls are crossed or eliminated when one wishes to talk, share music or other media: "a girl could be outside the classroom, like outside, and you can send her stuff by Bluetooth cause we're near each other" (Group 10b: female). In school, for example, the young participants are often surrounded by audio technologies, which regulate their movement, behaviour and times. Texting, listening to music or sharing media, lessens this control, in much the same way that the sounds of vehicles (noisy engines on buses, traffic, and quiet spaces) can be tuned out when they engage in mobile audio listening.

6.5.1 Sound and security

For most of the young participants being contained within a soundscape, real or mediated, allows them feel a sense of security; mediated listening extends one's soundscape into the boundaries of silence.

Interviewer: Do you, aside from being with friends that are wearing music, do you put on your headphones and listen to music anywhere in particular outside? Group: (group response) if you're walking somewhere. When you're walking, (participant 1). I don't know it just gives you a sense of, you're not on your own or something (nervous laughter) (participant 2).

In this way consuming media is also tied to consuming a type of experience. One process is the management of daily lives; using mobile technologies such as iPods to disengage from a cold 'chilly' urban soundscape (Bull 2008). Another is to manage their sense of alienation from cities; cities, in which they do not actively participate in the construction of (CRIN 2008). Using music to mediate space is seen as a way to negotiate and shape the visual and structured world; in this way, listening can be shaped by social and physical structures. However, for the young participants, music listening has evolved into a more intimate part of their experience of space. Unlike the older participants who remember as teenagers, sharing the listening experience with friends, in groups and outdoors, the young participants listen to alleviate boredom, for example. This reflects the paradigm of disconnection the young participants have to public spaces. They are unable or unwilling to engage with certain spaces without media, spaces that are either dull or threatening. For most of the young participants there is little to do in Dublin city outside of consumption and education. Music listening or any other form of mediated interaction transforms the parts of their day where they have nothing to do.

Interviewer: and what about, do you, do you do anything, do you hang out in the city? the rest of you...

Group: (Participant 1) not really. (Participant 2) no it is a bit boring, now isn't it when you haven't, because what I find, I love being busy and doing something. (Participant 3) I love going shopping. (Participant 2) so if I went out with me friends and they weren't doing anything, they were just standing there, that would wreck my head, I have to go somewhere. (Group 11b: female)

Further interrogation of mobile mediation highlighted the visceral connection the young participants had to their technologies, particularly as it related to relieving boredom.

Interviewer: so if you got on a bus to go 4 hours to somewhere down the country, forgot your phone, forgot your iPod

Group: (Participant 1) oh my God. (Participant 2) That happened to me once. (Participant 3) Horrible, just on our own like yeah it would be, oh Jesus, I'd be so bored. (Participant 1) Because it helps you sleep, it helps me go asleep, at least before I go to bed. (Participant 4) It passes the time. (Group 4 d: male)

As Stald argues, the mobile device has become "indispensable or at least close to it" (2008:147) for these young participants. Paradoxically, for others if they do not have their technologies with them, they will choose to sleep rather than do anything else.

Group: (Participant 1) its something to do. (Participant 3) Makes the time go faster. (Participant 4) If you're sitting on a bus on your own and you can, you're going to get bored looking at the window for 6 hours

Interviewer: you'd read a book though, would you?

Group: (Participant 5) if I had one with me, if I was just going somewhere and I forgot my phone, if it was a long journey I'd probably go asleep, if I have nothing else. (Group 2c: male)

Sound and mobile audio technologies provide a measure of safety against the potential threats of engaging with space and time. For the young participants non-place is not just a type of space but any potential space.

6.5.2 Levelling off the soundscape – the creation of representational spaces mobile mediation

This connection to sound/noise as warmth, activity, safety and action, means that the young participants choose to move from the real world into the mediated to alter their emotional connection to space. This can also include inside spaces e.g. bedrooms, schools and public transport. As they walk through space or even sit in a place, they need to be surrounded by sound to create a 'warm' space (Bull 2008). Bull describes this as the "cognitive management of their experiences" (2011:527), whereby, mediated listening allows them manage their experiences of the world, including their emotional experiences. Lefebvre would argue that the problem with mediating space is that society is ignoring the increased bureaucratization (1974:52) of public spaces, rather than contesting, sometimes violently, the loss of social spaces. However, as

has been argued, teenagers are rarely given a voice in the production or shaping of space, thus mediatization is the only solution to the problem of spatial exclusion.

When observing the teenagers on the soundwalks, patterns of behaviour in space were quickly identified. When they were walking through the noisier parts of the shopping streets: Henry Street, Mary Street and Moore Street for example, they would fan out into pairs and singles. When they moved into the quieter areas of Market Area, Mary's Lane and Smithfield, they would walk in groups, chatting instead of observing their surroundings. This behaviour was identified on each soundwalk. It suggested a feeling of discomfort with quiet spaces. This was later clarified and discussed in the focus groups. They described this space as "on the edge" of the city; a place that they cannot give a specific meaning to, "(participant 1) it's not quiet. (Participant 2) It's not loud either... its threatening. (Participant 3) I think it's very quiet" (Group 9b: female).

In addition their behaviour with regards to documenting the environment changed; when they were away from loud sounds they acted like there was no sound to either observe or document, though there were sounds in the space. During the first soundwalks with the groups, the participants would often state that they thought Smithfield would be quieter. By listening with intent they were forced to hear the sounds of the area, which they stated they did not hear normally. This suggests that for a lot of the young participants, they have identified spaces of silence without having actually listened to them. It is this transition, from loud to quiet, that causes them to identify spaces such as Smithfield as empty of meaning and activity. They then put on their headphones to be surrounded by sounds, which matches or increases the volume levels of the busier parts of the city.

Interviewer: what do you think of Dublin city, do you think that it's noisy Group: yeah. Yeah it is noisy but I like it. (Participant 1) You get used to the noise, like you could be walking along and think it's real quiet but its not really, there's still noise in the background but you don't hear it. (Participant 2) (Group 1a: Male)

Urban teenagers surround themselves with sound when outside, being immersed or feeling immersed in sound, whether it is music or the soundscape of a busy urban space, sound makes them feel safe and comfortable. Their transition from real world

listening to mediated listening keeps them contained within this sound bubble and helps them transition through what they characterize as quiet, meaningless spaces.

This need for sound was demonstrated on the first silent soundwalk where several young participants found it difficult to listen in quiet spaces. They stated that their thoughts were a constant distraction. This cohort was used to constantly engaging in some sort of activity, mainly mediated but also social. The young participants have adapted to the presence of loud soundscapes of technological and manmade noises, both indoor and outside. They have become reliant on technology to provide an emotional stimulus in response to what they perceive to be non-stimulating spaces, where stimulus means a constant sonic distraction provided by mediated listening or the sounds of consumption. However, one of the results of this strategy is that their relationship to space diminishes, with areas around the city becoming non-places as a result of being defined as without sonic distraction. Mediated listening takes on a new meaning, that of levelling the soundscape, creating a similar physically immersive space. Mediated listening means that each space inhabited by the young participants, contains a similar level of sound stimulus. The participants do not move from quiet to loud spaces; rather, the mediate in between busy soundscapes both inside and outside the home.

The teenagers describe the city as distinct physical zones: neighbourhoods, parks, shopping districts and squares. When describing the soundscape of their neighbourhoods, most described general sounds include traffic, people, shouting etc., aside from the participants who live directly near the markets, most young participants did not define their spaces through their sounds. This was in direct contrast to the older participants who described the environment where they grew up (the same areas where most of the young participants live) - as alive with sounds, each sound connected to particular work and social practices. However, for the young people no distinctive economic activity occurs where they live, which produces a sound local to space. The only dominant sound within the space is the sounds made by the Luas tram. One could argue that for most of the young participants, the city's soundscapes are difficult to interpret; hence they choose to mediate away from them. It is the noisy sounds ascribed to the city (DCC 15:26:43) which they feel connected to, as discussed in chapter 5. Mediated listening is generally employed to move

towards these soundscapes. The young participants choose to engage in mediated listening on their own rather than engage with the intermediate spaces; once they reach their destinations i.e. city centre, school, shops, even home, they mediate differently, either social networking, music listening or online TV watching.

The participants have separated their experience of space from their experience of sound. This contradiction is profound when examining teenager's use of mobile media technologies; it indicates a relationship to sound, overall, which is about removing oneself from an interest in the physical properties of space. The young people mediate through uncomfortable non-socially referential soundscapes. This mediation allows them move through spaces they are uncomfortable in, but it also allows them experience a space differently i.e. music emplaced over a space can alter one's perception of that space; the space becomes active.

If young people feel disconnected from their city soundscapes this then raises questions around teenagers' connection to public and even private spaces on a social and psychosocial level (Erikson 1994). For some, using technology to disengage from space through media consumption, is connected to a disenchantment with the space (Bull 2000; Hagood 2011; Ito 2004). For others, using mobile communication dissolves geographic boundaries allowing teenagers to maintain social relations at distances, making them independent of real space (Cawley and Hynes 2010; Ito 2004). For some of the young participants in this study, choosing between watching, reading or sleeping instead of listening was obvious; they would rather turn off completely to their surroundings than do anything else. Listening to music, rather than the sounds that surround them, allow these teenagers to dissolve space and time. It also provides a defined stimulus, which they do not get from their environment.

6.6 Mediating the home-shaping spatial and technological experiences

The object, the content and the context with regards to listening are all important (Stald 2008). Courtois et al. (2012) argues that there are three *articulations* involved in the use of media by teenagers: first, is the media as object; (phone, gaming device, laptop); second, its information or text (music, game, video); third, the context; where and when it is used (bus, school, bedroom, street). These articulations describe the symbolic and material interplay and use of technologies within young peoples lives.

Courtois et al. argue that this triple articulation has yet to be empirically proven largely because of the divergence of media technology; they contend that it is becoming more difficult to separate context from object as new media technologies cross over platforms. However, for the young participants in this study, context was incredibly important with regards to engaging with their mobile devices, as well as with their music or other media despite "the fact that media content is increasingly device-independent" (Courtois et al. 2012:5). Equally important was the separation of different audible activities (ringing friends or listening to music) from different technologies. The teenagers knew their phones could play music, however most chose to listen to music on different technologies such as iPods or Mp3 players Similarly, when discussing using technologies at home, most referred to other devices such as gaming devices and computers for internet usage. Although the convergence of certain media took place on some devices, taking pictures for example, with their phones and going on to Facebook, most participants associated particular times, places and technologies with different types of media consumption. Each type of media allowed them to be removed in different ways from their environments. Thus the environment, the technology and the content are intimately linked. For the young participants the appropriation of many technologies seems as important as what they do with them. When asked what devices they use to listen to music most stated having access to iPods, mobile phones and other Mp3 devices. Furthermore, in their homes, what would dictate listening experiences i.e. headphone listening or loudspeakers, depended on the time of day, the presence of other family members, such as a parent or sibling, and their mood.

The potential for audio technologies to allow one to escape an environment is arguably down to its capacity to both remove and immerse the individual. Bull (2000) argues that audio technologies are perfect devices for this form of escapism. He argues that this occurs in public rather than private spaces, for example, on public transport, walking or cycling through streets. For the younger participants (both public and private school participants) audio devices allow them the ability to remove themselves from any space, public and private, in the home or outside:

Interviewer: and do you listen to your iPod at home as well in your bedroom or? Group: (Participant 1) not with the earphones, I'd have the speakers on. (Participant 3) yeah. (Participant 2) aw, I hate having earphones on at home (Participant 2) you'd listen to a few music videos or something. (Group 6d: male)

Group: (Participant 3) well I'm allowed play my music, yeah. (Participant 1) Yeah, I'm allowed do anything

Interviewer: where do you predominantly listen?

Group: (Participant 3) In me bedroom. (Participant 2) Sitting room. (Participant 3) Or else the sitting room.

Interviewer: So, is it that it just gives you privacy or...?

Group: (group) Yes. (Participant 5) If I want to listen to CDs, I listen in my bedroom, but if it's the internet the sitting room, I usually listen to YouTube (Group 6d: male)

Group: (Participant 2) My mam and dad doesn't mind like if I go up to me own room and my radio is blaring, but they can higher the telly up as well so they wouldn't mind. (Participant 1) Well I have mine real loud so when it's too loud me dad goes mad.

Interviewer: what about the rest of you what about you, are you allowed have the sound up to what you want at home

Group: (Participant 4) Yeah when me mam is in the house she tells me to lower it down don't have it too high. (Participant 5) When its just me and my brothers in the house (mumbled) when me dad is at home you have to lower it a bit. (Participant 2) Cause my room is right beside the sitting room, my dad always sits in to watch the telly so the ceiling kind of vibrates (Group 10b: females)

Interviewer: And so are there are there lots of technologies in your home, radios, televisions, computers

Group: (group) Yes. (Participant 2) 3 tellies in a two-bedroom flat all over the place Interviewer: And what about the rest of you

Group: (Participant 3) I have 4 tellies a laptop and all. (Participant 1) I have a telly and that's it. (Participant 3) Because my mother's boyfriend does all stuff for technology he has everything like

While at home the younger participants are surrounded by the technological soundscape. They argue that something is always on in the home; this can be the sound of a kettle in the kitchen or the sound of the TV being turned on first thing in the morning. What was interesting to note was the difference between the younger participants experience of mornings and the older cohorts teenage memories of mornings. It had been expected that most families would put on some media device in the morning, like a radio or TV; however, this was not the case for most of the young participants. Most stated that the only media used in the morning was their mobile phone; they would check for messages, either text messages or their SNS sites for updates. The radio was rarely turned on. This contrasted with the older cohort who all stated that the radio was turned on first thing in the morning. In fact, for some young participants, before leaving for school their mornings seemed very quiet.

Interviewer: does anybody turn on the radio?

Group: (Participant 1) No. (Participant 2) No. Don't do anything like that. (Participant 3) Never turn on the radio. (Participant 2) You check your phone to see if you have any messages or something, the minute like the alarm clock goes off on your phone. (Participant 5) I listen to music on the way to school and that's it.

Most state that if a media technology is turned on in the morning it is usually by a parent. It is difficult to generalise with the technological soundscape of the home, as each participant lives with a family, and the type of family and where they live often dictates the soundscape of the home.

In contrast, the evenings in the young participants' homes are often filled with multiple mediated sounds. A number of participants stated that they had computers or media devices in their bedrooms, which they used to play music when they were alone. Most stated that a TV would be on in the living room (or TVs on in several rooms) and left on all through the evening. Morley argues that during the 1990s in the UK, there was a significant drop in "out-of-home leisure" (1992:156) as a result of "domestic mobility", (Lull 1989 quoted in Morley 1992). That is, a greater amount of physical space within the home allowed people the room to watch or engage with media without conflict. His research focused on increased access and ownership of TVs, stating that, depending on income and size of home, media consumption was available to multiple members of a family. What is significant in his findings and key to this research was the suggestion that working class family's media consumption, without parental control would become the norm and that media would be the "background noise" of the home. He also argued that children would need to compete against the sounds of the TV. Mobile audio consumption and wireless networking has transformed this notion of media consumption for social groups. Instead, young people have access to technologies, which allow them, no matter what background, to gain a level of privacy and autonomy in their social worlds that TV never offered.

Livingstone argues that "children and adults often wish to use media uninterrupted by family members" (2002a:122) and the young participants never mentioned shared media experiences, in fact most engaged in isolated mediation which was encouraged by their parents. For most of the young participants escaping the sounds of family members' media engagement, as well as the sounds of family members, was important. For example, a radio might be on in a kitchen, or someone, usually a

sibling, would be playing a gaming device in another room and the TV would be on in the living room, in order to escape these various sounds, most young people stayed in their bedrooms. In this way each room in a home contained its own mediated soundscape. When in their room the young participants would listen to music, watch TV programs or update their SNS pages. For some, listening to music was used to help them sleep, while for others it provided a distraction from exterior and interior sounds. This research found mobile mediation was essential in providing a sense of privacy and distance from other sounds. Most of the participants from the public schools lived in flat complexes with poor insulation, either from outside sounds or sounds from another room. The devices used, Mp3 players, mobile phones and other mobile technologies, allowed them this control of their sonic/social space (Castells et al. 2009). Courtois et al. (2012) argues that it is also the ability to choose one's media content which allows for this sense of control.

Interviewer: say for example if you got on the train and it was from Dublin to Galway, 3 hours ahead of you, you realise you forgot your phone, you forgot your music, you've no technology, what would that be like?

Group: (Participant 1) aw you would be gutted. (Participant 2) I'd play cards or something. (Participant 3) Yes I play cards or something, or solitaire.

Interviewer: Would you read something?

Group: (Participant 1) no. (Participant 4) If I had something. (Participant 3) Not a newspaper. (Participant 1) I'd read a newspaper. (Participant 5) When I go on holidays I always buy a magazine or something

Interviewer: yes

Group: (Participant 1) then I would have my iPod or my PSP. (Participant 2) And then they give you then little yokes when you're on a plane the little head that you can listen. (Participant 3) That only when you're going far. (Participant 4) Yeah, the American one.

Interviewer: do you listen to other things because you don't want to hear what's around you?

Group: (Participant 1) what's around, yes. (Participant 2) I don't know. (Participant 1) You don't want to hear what is around you... (Participant 3) It can be sort of too quiet. Yeah. (Participant 2) It's just for something to do. (Participant 5) Say if I was like, my head was wrecked my little sister is screaming her head off I can go into my bedroom and play PlayStation or listen to music or something (Group 1c: male)

Interviewer: can you hear neighbours through the walls or anything like that?

Group: yeah I can kinda hear what they're doing (participant 1)

Interviewer: right

Group: (participant 1) I can hear them. (Participant 2) like when they're coming down the stairs, but not much else.

Interviewer: that's it

Group: (participant 4) you can hear people like screaming, my next-door neighbour has two kids you can hear them screaming sometimes (Group 7d: male)

Interviewer: Do you live in quiet neighbourhoods or,

Group: (Participant 5) Noooo, I live where (Mary) lives. (Participant 1) Ooohh (group sound)

Interviewer: all right so,

Group: (participant 2) all I can hear is road works,

Interviewer: you can hear road works (18:48)

Group: (Participant 3) my friend lives where you live, it's a long (unintelligible) road

works, ambulance, police. Oh the police let me tell ye. (Group 8b: female)

Interviewer: Are your flats houses... is it noisy around where you live?

Group: (Participant 3) my apartments real quiet, but see when I'm living next door to (Paul), (Kerry) what can you hear? (Participant 1) It's just all them little kids screaming, just wrecking me head. I'm sure there getting killed an all. (Participant 2) aw, disgusting kids do my head in.

Interviewer: you can hear the kids from another block of flats?

Group: (participant 2) yeah cause the playground is so close to the apartments, so we can hear them all screaming. (Participant 1) Beause my apartments are there, other apartments there and other apartments there, (anger in her voice)... kids there, kids there, they all wreck my head. (Group 9b: female)

The areas where most of the young participants from the public schools live are often surrounded by sounds over which they have no control. Additionally, sound spill occurs through walls in their homes. Using media to manage their soundscape allows them the ability to create sound walls. Yet these sound walls are also blocking of potential discourse within the family. As Silverstone and Hirsch argue, it is the "complex and often contradictory nature of" the consumption of media and its apparent "homogenizing, alienating, or liberating our daily social and economic relationships" versus " the degrees of freedom accorded to the consumer" (1992:4). Most of the time, even when they are in the presence of family members, the young participants are listening to a music device. When asked if this caused problems they generally stated that apart from sometimes being told to turn their music down, as it was seen to deafen the participant, this was rarely remarked on by a family member. There is a sense that at home most young people live within an individualised technological sound bubble.

The contradiction here lies in notions of freedom of expression and autonomy connected to notions of liberalism, in which mediated and privatised listening practices give one ownership and control over our sensory experiences, against the eventual isolation of the self from society and an ignorance of the importance of real world sounds as tools of communication. Also, they (media users) become

intrinsically tied to these commercial tools, which have their limitations and costs, in order to obtain this sense of freedom (Castells et al. 2009). These technologies exist as a "consumer product, subject to the same market logic of competition, innovation, diffusion and appropriation" (Livingstone 2007:2).

For the young participants, the home is numerous soundscapes: the sounds of the living room TV in the evening as it is turned on by a parent, the kitchen soundscape of another TV or the sounds of a radio, and the soundscape from bedrooms as siblings engage in mediated listening as well as sounds from outside the home intruding. With all of these sounds in the home the young participants feel a need to remove themselves creating their own private mediated soundscapes. Mediated listening offers them some control over space or the creation of alternative spaces: having their own bedrooms for example, is not sufficient for most of the young participants, as they are not sound proofed. Paradoxically, for a lot of the female participants their bedroom is the only space where they hang out. The city is not safe or welcoming to them. Yet they feel confined in their home; wearing headphones or blasting loud music expands their sense of space. The consumption of media in the domestic space is not just the "incorporation of the consumed item into the personal and social identity of the consumer" (Gell in Hirsch and Silverstone 1992), for the young participants, it is also the transformation of spatial and temporal experiences. The mobile communication and music technologies designed for outdoor use are increasingly domesticated in response to what are seen as noisy spaces, both inside and outside their homes. As Berker et al. state, the technologies become "housetrained" but the "structure of the household plays a significant role in the domestication process" (2005b:2). Young people have become innovative in their use of technology, particularly in the home, where they cultivate relationships, consume music, share media and create privacy. They are not directly playing a part in the shaping of technology in these settings, rather they are accessing the technologies potential and beyond, to alter or shape, their social lives. As discussed in chapter 2, domestication operates in 4 stages; the teenagers define their use of media technologies as 'incorporated' into their everyday lives. It is not however taken for granted, predominantly because of the cost involved in maintaining them.

6.6.1 Representations of the self: using technology to create identity and individualism

As discussed in chapter 2, the relationship one has to technology and particularly to embodying technologies, is sometimes tied to flesh and blood needs or desires (Shilling 2004). Shilling presents this argument by exploring the historical development of certain technologies such as the ability to create fire and the design of prosthetics for the body. The need within a society to change its bodily relationship to space creates a desire to construct materials that allow this to occur. Further, one could argue that how the technology is subsequently used, or altered, is ultimately connected to a society's relationship to space. Different spaces require a different application of the technology. For Bijker and Law (1994), as mentioned in chapter two, the design of technologies is influenced or shaped by conflict, difference and resistance. But the use of technology within space and how it becomes embodied reflects group/social and individual needs.

The use of technologies, particularly portable technologies such as mobile phones and headphones, not only alter perceptions of space, it changes the user/wearer's appearance in public. One could argue for the cyborgian self of technology and the human within social life as a trope of post structuralism, but going down that particular route means exploring the post individuation of Haraway's cyborg and social life theories (1990). Instead, the research examined the process by which the participants reference themselves as user/wearers of technology, which in turn alters their appearance. This alteration is not an obvious or literal alteration of the self; rather, it sends a symbolic message about the user/wearer. To have a mobile phone or music technology, identifiable as a cultural artefact, such as an iPod or iPhone, Samsung or Nokia, had a specific meaning amongst the participants, particularly the girls, although the boys viewed their devices similarly as part of their lives and bodies.

Interviewer: do you use any other technologies to listen to music? Do you use iPods or anything like that?

Group: (group) yeah Interviewer: you do

Group: (Participant 1) I've an iPod yeah, and my computer

Interviewer: your computer, you don't and you don't, (meaning computer) cause you

have that (pointing at phone)

Group: (Participant 1) yeah I just use this (indicating phone)

Interviewer: and, if you, how important are these to you?

Group: (Participant 1) it's my life

Interviewer: your life

Group: (Participant 1) yeah like everything... (Group 7d: Male)

Interviewer: If you went outside, if you went outside say for example, without your mobile phone and you realised that when you were on a bus or when you are with your friends that you forgot your phone...

Group: (Participant 1) Miss, I would go back, I would go back to my house

Interviewer: you would go back, what about the rest of you?

Group: (Participant 2) If I forgot me phone?

Interviewer: yeah

Group: (Participant 2) ah yeah, I'd leggit back. (Participant 1) I'd be afraid that I'd

be missing out on too much information (Group 9b: Female)

Interviewer: so it's not to have a distraction like for listening to music it's just to have, to be able to contact people

Group: (Participant 4) ah no, it's just an addiction just to have it in your hand all the time (Group 10b: Female)

Interviewer: Okay do you all have phones, everyone here has a phone? Do you have them with you?

Group: (group) yes

Interviewer: I have a big girly pink thingy phone going on, where is my phone (Sounds of searching for phones) Samsung, how important is this to you, your phone?

Group: (Participant 1) very Interviewer: in your life

Group: (Participant 1) Yeah. (Participant 2) I could be lost without it

Interviewer: really

Group: (Participant 2) just for ringing your friends and all of that Interviewer: what about the rest of you would you be lost without it or

Group: (Participant 3) I'm all right like it's there, it's there.

Interviewer: yeah, what about you

Group: (Participant 4) I need my phone (Group 2c: Male)

Although mobile phones have been examined as aesthetic objects which become decorative items, particularly amongst females (Ito 2004; Lenhart 2010), they are predominantly described by the participants as entities of the self, a social prosthetic, something they cannot do without (Hjorth 2007). Silverstone argues for a double articulation (1994) in the examination of media technologies, one that includes an analysis of them as objects of consumption, and media symbols and texts "located within the flows of particular socio-cultural discourses" (Livingstone 2007:2). For these young participants, their technological objects are consumed in different ways, they must pay for the privilege of accessing media, but their consumption of this

media is connected to the shaping of spatial and social interactions. Their media allow them consume space differently, as an embodied experience. However, Silverstone does not go as far as McLuhan's determinist claim of the *medium as the message*, rather, that "media do have a particular claim on the technological culture of the modern world" (1994:82).

For most of the participants the phone is as much a part of their lives as a limb. For some of the young participants, when asked how important their mobile technologies were they responded that they would be lost without them, dead, isolated and out of touch; these comments are directly connected to the body and the view of technology existing in symbiosis; without the technology the body is in isolation and has to deal with space without the possibility of mediating out of it. If the participants forgot their devices they would feel lost, unable to participate in daily life, out of the loop. McLuhan argues that "the effects of technology do not occur at the level of opinions or concepts, but alter sense ratios or patterns of perception steadily and without any resistance" (1969:18). There is an element of truth in this very deterministic statement, however, this disregards other forces such as family life, education, peers, class and gender (Bijker and Law 1994; Hirsch and Silverstone 1992; Livingstone 2002a).

For the self, in public and private, a mobile device is not just a physical object that sends a message about the user, or a cultural artefact that represents status (Bull 2008). When the young participants describe the process of uploading and downloading media, listening to music or engaging in texting, they define these as part of the process of engaging with their peers. Being able to access and be online is seen as being part of the network, which in turn means being part of the social group. The group does not have to be in a different space, though in some cases they are. This is a key finding, as one would assume that being mobile is connected to overcoming geographical distances. However, this research suggests that a mobile device acts as a second level of social engagement. The young participants often text, share music and pictures when they are in the same space, combining face-to-face interaction with mediated interaction (Thompson 2004). These mediations operate to insert the group into other spaces, other networks, while they are in one particular space. In this way the teenagers did not use their mobile media technologies to

engage with groups at a distance, instead they connected to people and groups over short distances. Additionally, what they uploaded to SNS sites was shared with friends they saw daily. They act to create absent presences defined by Gergen as a "diverted or divided consciousness" (2002:227), this in a sense is no different to Ong's (1982) examination of the cultural changes brought about by the development of the printing press, whereby readers became absent presences in the real social world. However, social media spaces, unlike the use of mobile phones explored by Gergen (2002) as tools for two-way communication, have become intertwined with the real world. As individuals or in groups, the young participants regard mobile technologies as an important part of their social identity and integral to maintaining an online presence. It allows them to establish their presence geographically, enabling and structuring private discussions in public situations. This allows for the creation of a third or representational space (Lefebvre 1974; Soja 1996) or a networked space (Castells et al. 2009). Mobile technologies with their predominantly audio features enhance their experiences of the real world through sound and act as extensions of their bodies in space (Ihde 2007; McLuhan 1969).

6.6.2 Technological embodiment: mediated listening or how do I look in my technology

Mobile phones and identity have been extensively explored in the literature (Cawley and Hynes 2010; Håkansson et al. 2007; Ito 2004; Skog 2002). This study explored how mobile devices worked as sounding objects rather than visual objects. Often research into mobile technologies, particularly mobile phones, concentrate on the technology as an object for communication and an enhancement of social life. This project wished to examine its audible impact on the young participants; given that it is a technology for listening and talking. This listening and talking, for mobile users, is its key impact in transforming the use and meaning of place and time as well as space.

As previously mentioned, most of the young participants usually had at least two devices, a mobile phone and either an iPod or an Mp3 player. Even though these were all multi-media devices participants adopted different approaches to consuming them. This may be connected to status; during each focus group the teenagers were asked to take out their phones if they had them (most of the schools do not allow

teenagers have phones in class). Often this would be accompanied by self-deprecation from one or two participants who would state how bad or cheap their phone looked. However, having a separate technology such as an iPod seemed to make up for owning a cheap phone. Status and technology amongst teenagers is significant; for most teenagers their mobile technologies are representations of themselves. For the young female participants, how the phone looked was almost as important as what it did. For the male participants the mobile phone is an obvious status symbol; amongst two groups most participants owned an iPhone, a very expensive device with obvious status.

A number of the young participants stated that the use of a mobile audible technology allowed them a sense of privacy and a separate space away from the real world. For example, most of the participants argued that the experience of public transport was unpleasant, for a variety of reasons, the journey was too long and therefore boring, too quiet, too noisy, uncomfortable, distracting, or that there was the potential for someone to try engage them in conversation. This last part was most interesting and a point only raised by the female participants. They were intimidated by the idea of an older person trying to engage them in conversation on public transport. Putting a set of headphones into your ears acts not only as a barrier to sound it sends a message that the person wearing them is engaged elsewhere. It also informs those around them of these characteristics of the technology, allowing the symbolism of mediated interaction to express a message of containment, activity and removal (Hagood 2011).

Group: (Participant 1) I daydream when I listen to music, I go into my own little world. (Participant 5) Things go through your mind

Interviewer: do you feel like you're less close to people, does the bus feel less big?

Group: (Participant 4) If there is loads of people on the bus, especially an older person. I hate when you have to sit next to an older person, uurrgh. (Participant 3) Or a stranger. (Participant 4) Or a man.

Interviewer: if you put on your headphones and you're sitting beside people, does that change what it feels like to sit beside somebody?

Group: (Participant 4) yes because they're are not going to bug you, they'll say nothing to you.

Interviewer: do you expect people to say something to you?

Group: (Participant 3) some of them will. (Participant 1) People trying to be friendly and chatting to you. (Participant 4) Some do. (Participant 2) Older people.

Interviewer: and you don't want to do that?

Group: (participant 4) no. (Participant 1) you feel like you have to talk to them you have to be polite, you look at them and say hello or something. (Group 12a: female)

The young participants describe being in the presence of strangers, in spaces where they are forced into close proximity, as uncomfortable. The mobile technology allows them manage both the space and their presence in space. They fear having to engage in conversation. For the young participants having to talk to strangers in a city seems wrong. They want the anonymity of the urban dweller rather than the closeness of a village community. In this way the mobile device is not just a "ubiquitous accessory" (Ling and Yttri 2005). The mobile technology communicates on multiple levels.

Table 5 Representations of mediated engagement

Mode	Use	Representation/experience
Inner	Creating an inner space which acts to alter ones perception of time and space	Social removal from surrounding sounds
Outer	Presents a clear signal; stay away this person is occupied	A metaphorical/symbolic message of engagement

As in table 5, there are two modes of listening using mobile audio technology, which either project information or embody. In each case the listener is sending a message about the self. It is the rationale of removal, which is important in the case of the young participants. The female participants see their audio technologies as a safety bubble in which they are contained and which isolates them from broader society.

The older participants, when reflecting on media use in their youth, referred to the group experience of media use; the family sitting around the radio or TV, bringing a stereo player outside to share music with friends and passers-by, placing the radio on a window sill so the neighbours could hear the music one was listening to. However, contemporary mediated listening appears to isolate young people from broader social community. Livingstone (2002b) argues that traditionally (in the last 70 years) media would be passed down generationally from parent to child. In this way, there was a common understanding of media use. However, with mobile technologies and the ownership and use of these devices being very much embodied, a technological device becomes a personalised object, part of one's everyday life and a projection of

identities and interests. It allows the young participants gain a sense of autonomy, simultaneously allowing them "exclusive individualised access" to peers and media, emancipating them from the types of social codes and structures, seen as adult, which surround them. But this also creates an inability to connect with people outside of their immediate social circle. In this way, the young participants are presenting themselves in public as isolationists. Bull argues that "this represents a shutting off of the senses from their physical environment so as to 'drift off' within their own hermetically sealed space" (2000:52).

Goffman (1959) argues that it is usually the 'witness' within a conversation who has the advantage, being able to read both the body and the words when someone is communicating. One could argue that a mobile user is engaging in a form of physical and interpersonal communication with anyone who is in their sphere; they are sending a deliberate type of communication when they wear/use audio technologies. The young participants state that this engagement with sound sets them apart from physical space, without actually moving them into another space. Blesser and Salter (2009) describe sonic architecture as spaces or social groups, which emanate sound that other groups hear and interpret in specific ways. Although headphones have some sound spill, there is awareness that the listener is surrounded and contained within a sound barrier, which to breach would be breaking cultural codes of behaviour.

The boys within the research groups did not offer similar concerns with public contact. For them there is no expectation of privacy for example, on public transport. Although they do regard the sounds as "annoying sounds" they argue, "if you're on a public bus you can't really be worried about privacy" (participant 1: group 1a). The young male participants instead, talked about other technological sounds invading their space. They regarded people who wear headphones and play their music too loud as rude; those people are infringing on their public space:

Interviewer: okay, do you know when you're on a bus and you hear people listening on their headphones

Group: (Participant 1) oh yes. (Participant 2) That's annoying

Interviewer: That's annoying

Group: (Participant 2) if you don't have one in Interviewer: do you think that it's too loud?

Group: (Participant 3) yes. (Participant 1) Yes. (Participant 4) I always just have it loud enough so it blocks out the other sounds, but not loud enough that it's hurting

your ears. (Participant 2) Yeah, happened the other day when I was on the bus, some fella was sitting there with his earphones on, he must have had them up like full volume like, and it was just so loud, so annoying for the duration of the journey home, just sitting there you're trying to talk to your mates, stupid songs in the background. (Group 4d: Male)

In this way someone wearing headphones and producing loud sounds is seen as impolite because they are not considering other people's listening spaces. Wearing technology such as headphones represents an expression of sensory engagement and even aggression. The male participants view it from the outside; to provide distraction, while the female participants spoke as mediated listeners; listening is used to create distance.

6.7 Knowing technology and managing the social sphere: the social shaping of mobile technology

McLuhan (1969) argues that with the adoption of mass media technologies such as the TV, one's cognition and social world were permanently altered. technologically determinist argument reflected the transmission of most media during the 1960s through to the early 1980s, and its global reach. A wireless mobile technology challenges this approach. Rather than the medium being the message it has become as Castell's (2006) argues, the network as the message. He argues against the notion of a liberated freedom accompanying the networks of socialization, stating that it has become instead, a "business multimedia system controlling an increasingly inclusive hypertext, and of an explosion of horizontal networks of autonomous local/global communication" (2006:13). However, this is just one aspect of multimedia technologies, and this examination is restricted in its focus on communication as text and/or visually based. It ignores the audible aspect of mobile technologies. Sound is a key component of mobile technologies, it allows users shape space, because it is not a one-way transmission, it is managed and thus space is transformed through its management.

The landscape of teenage social worlds is mediated through sound; they are either listening to music in public and private or tuning into the increasingly mediated technological world. They are making decisions on a daily basis about what they

want to hear and when. The phone and mobile music device are used to shape the young participants' everyday lives. They use them to schedule their socialising, manage travelling and going places, and act as a deterrent to silences and noises. Mobile technologies, particularly multi media devices, "contributes to a host of social consequences, including new representations of the self, new forms of social connection, and private use of public space" (Campbell and Park 2008:2). The young people are creative users of their own technologies, using them to shape their needs, which goes beyond the technologies basic functionality. The girls in the research group often described unique ways of using their devices to create social situations. For example, one group argued that with a certain mobile phone company they had figured out a way to create a group conversation with friends who had no phone credit. For example, if two people had no credit and wished to chat, a group call would be arranged and then all but the two would hang up. This was one of several tactics used to overcome financial, software and hardware obstacles. Having phone credit is key for the young participants, especially for those who use mobile phones for a lot of their social and media interactions: telephone, internet, SNS and music listening. Having internet access at home is also important as it allows them update the media on their mobile devices. The young female participants have overcome what they feel are the limitations of their technologies by exploring ways to beat the system. For example, when asked about music listening and downloading music for playback, most participants stated that there was no reason to buy music if you have a device that goes online. Instead, one can watch music videos on YouTube for free. Sharing music is also not seen as necessary as everyone can access the same media on the internet.

Interviewer: do you share music with each other with your friends?

Group: (Participant 1) yes you can send it by Bluetooth. (Participant 2) I can't.

Interviewer: no you can't

Group: (Participant 2) a lot of people don't really do it. (Participant 3) Bluetooth is so old. (Participant 2) Because you can get it on your phone now. (Participant 1) It's infrared.

Interviewer: all right so, nobody, you don't really need to share

Group: (Participant 1) no, because you can just get it yourself. (Participant 2) Yes, you can just download it (Group 1c: male)

In this way the structure of commercial phone plans from mobile companies plays a large part in the young participants social life (Castells et al. 2009). If the young

participants have a pay as you go phone (where you top up when you have run out of credit) they have to find ways to have access to their social lives even if they have no credit. As phones are used to access information, the importance of owning a second device begins to make sense. The Mp3 player or other mobile audio device allows them to consume a different and often times, free media, particularly music, which is stored on their devices. This means they can alternate between being able to constantly access new information (listening to and watching music videos with friends on YouTube) and listen to downloaded and stored music.

The design of mobile technologies has developed so fast in the past ten years that they now operate on multiple levels. They are an important part of managing one's experience of space and overcoming the limits of physical space. They use their audio technologies to manage their experience of the sensual world, not arguing that it is one particular sense experience that is problematic, such as noise, but rather that any unwanted sense experience can be altered. The participants reinterpret their devices and re-imagine uses for them in the real world.

Spaces are not democratically designed (Hagood 2011:578). As teenagers feel more and more displaced within the urban, the young participants' mobile listening technologies help them to transcend the limitations of space producing new spaces (Lefebvre 1974). While listening in public, they alter their experience and appearance in space. Mobile listening gives meaning to certain spaces, such as Smithfield, to streets they walk through, going from school to home, and to public transport systems. Historically, audio technologies have allowed people to transgress the limitations of class and spatial boundaries (Sterne 2003). Listening practices have also been influenced by "industry, bureaucracy, science, (and) rationalism"; it is the "techniques of listening" which allow for "a range of social possibilities" (Sterne 2003:93). For the young research participants in this study, audio technologies allow them transform their spaces, outside of the control of adults and larger social structures such as schools or public ordinances in streets, squares and parks (Bowden 2006). Paradoxically, this happens as a result of them seeing the possibilities technologies offer for the production of space. It means a constant engagement

between them as user and their technology and content, in order to explore the possibilities of altering social and spatial realities and boundaries.

6.8 Conclusion

Thompson (1995) argues that media allows individuals to socialise with those "who are remote in space, in time, or in both. Mediated interaction is stretched across space and time" (1995:83); young people can engage in this remote socialisation while being mobile. However, what this research project advances is that the young participants engage in mediated interaction with people in close proximity to each other, as well as operationalizing media in order to enhance their co-presence in space i.e. documenting shared experiences, sharing media and texting. This new mobility and the ability to go online, transformed sociability "in the networked society" (Castells et al. 2009:143). This sociability includes face-to-face interaction (Thompson 1995), the internet and mobile phones as "networked publics" (Boyd 2007; Stald 2008). Media use is now interactive, it is a collaborative process of sharing, such as posting videos on YouTube and information/pictures on Facebook, and then engaging in feedback (discussions that appear beneath these posts), downloading data and re-sharing. However, using audio technologies to mediate space is not a new phenomenon (Sterne 2003). The older cohort's experience of an industrial city highlights a key fact of early mobile mediation; young people from poor working class backgrounds, responded to urban environments by reshaping space, when they had access to mobile music devices. Thus, there is a history of the social shaping of the experience of technological/urban soundscapes.

The young participants from the public school use mobile technologies extensively to altering their perceptual experience of the urban. The reasons, while different to the older participants cross similar spatial boundaries. They too feel a sense of exclusion from public space, the constant presence of sounds entering their private spheres, and the increased presence of non-places and exclusionary spaces, shape their mediating practices. Unlike the older cohort whose mobile music experiences were a shared social event, the young participants listen to music in isolation; to create a sense of being occupied; to be immersed and to be removed.

The technological soundscape is both a positive and negative influence on mediatization. They have adapted to the presence of technological sounds in the city, arguing that these sounds, predominantly the sounds of consumption or traffic, are the urban. Nevertheless, mediated listening has become a tactic to continue this sense of being surrounded by the 'buzz' of the urban soundscape. The young participants are living in an oversaturated technological soundscape. When they wish to create their own space in this environment they use media to create them. In so doing they create new symbolic or representational spaces. These spaces as argued by Lefebvre are mobile, and this is important, because it allows teenagers the flexibility to constantly reshape new spatial experiences.

The young participants described Smithfield as a space under constant construction; it has become a space to which they felt no connection as it offers few social or economic cues. This space has not been designed for their use or participation. This does not necessarily mean that the young people are kept out of these spaces, rather, mediation allows them a kind of access to these spaces through the reproduction of their soundscape, which in turn alters their perception of space (Truax 2000). By placing one's own soundscape over space, one temporarily creates place (Lefebvre 1974); this is the advantage of the personal soundscape. The disadvantage for the young participants is in the complete dislocation between the visible urban landscape and its soundscape. The city becomes spaces of fixed objects with no meanings attached to them. The resistance to this is the grouping of teenagers in space to create their own representational, symbolic spaces, by devising new spatial practices, separate to dominant structural social controls, values and norms.

For Lefebvre, space is defined as having meaning through use; bodies within a space give space this meaning. The habitual presence of bodies within a space "shift from things in space to the actual production of space" (Lefebvre 1974:37). In other words, the presence of people, communities etc., the "moments" at which they occupy a space, constantly challenge spatial predispositions and notions of temporality.

For teenagers, or adolescents, space comes packed with all of these ideas and Lefebvre argues that they must battle to define their own meaning against "the dominant systems' imperious architecture or its deployment of signs"; they must 'revolt' if they wish to have "any prospect of recovering the world of differences – the natural, the sensory/sensual, sexuality and pleasure" (1974:50). Often the sounds of the city are accepted as a matter of fact, things that cannot, and for some, should not, be changed. These sounds are seen as solid objects in much the same way that architecture is seen as immoveable. However, public space as in the space between buildings and objects is open to the introduction of new forms of sound or sonic architecture. These sonic gaps are places to be filled in by teenagers. Even though it is argued that public spaces such as parks are the appropriate spaces for the introduction of the sounds of people, they are restrictive spaces especially for teenagers. In the same way that architecture and buildings have particular purposes, parks have codes and rules of behaviour, which teenagers feel they do not want to fit or behave within. Within Dublin city the architecture is both new and old. There is a history of use and meaning, and a more modern branding/design/goal of a modern city of business, banking, consumption and entertainment. Young people must fight for "the right to difference, to be different, against the increasing forces of homogenization, fragmentation, and hierarchically organised power" (Soja 1996:35). Perhaps it is through mediated spatial practices that teenagers reclaim ownership to public and private space (Soja 1996).

Conclusion

Introduction

When you take your ears for a soundwalk, you are both audience and performer in a concert of sound that occurs continually around you. By walking you are able to enter into a conversation with the landscape. ²⁸

This research project has examined the role of sound in society through the ears of two participant groups, an older group of five participants and teenagers with a mean average age of approximately 15 years. The groups were selected because of their relationship and knowledge of a particular part of Dublin city and their relegation, in part, to that of a vulnerable group and for the youth, possible outsider group. This vulnerability often appears in their limited access to and lack of consideration in, the design of urban spaces (Bowden 2006; Matthews et al. 1998). Both groups were asked to explore their changing urban soundscape. The first group, the older cohort, described a vivid soundscape from their youth, and as adults were able to situate these sounds within the social and economic contexts of their time.

The younger participants, who experienced the soundscape under discussion on a daily basis, offered a unique analysis of the sounds produced in their space. This project asked two questions, what part does sound play in the social life of the city? How does one engage with or add to these sounds? The engagement with the soundscape focused primarily on technological mediation i.e. how young people utilize audio media to engage or disengage from their surroundings. Although the research focused on the urban space of North Dublin, this was not limited to an exterior examination. The urban is a concept; there is an urban state of mind, urban social practices and an urban milieu (de Certeau 1988; Harvey 2008, 2011; Simmel 1903), it "is manifestly a complicated thing" (Harvey 2009a:22). This means that the urban is both inside and outside, public and private, real and metaphysical. Public

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²⁸ "A Vancouver Soundwalk" in the Vancouver Soundscape, World Soundscape Project, Document 5, Vancouver 1973, pg. 71

spaces within the urban, are spaces open to contestation and interpretation (Akkar 2005; Harvey 2006; Holland et al. 2007; Mitchell 1995); they are also spaces created, over time, through symbolic representation or, are newly designed spaces catering for a type of public (Degen 2008; Lefebvre 1974).

The research was also designed to examine the evolving framework of policy, which examines the urban soundscape under the rubric of noise. Although, as discussed in chapter 1, noise and the city are symbiotic, the designation of noisy spaces or the management of noisy cities by policy makers are not in response to subjective qualitative analysis or the experience of urban dwellers.

Finally, this research proposed a trans-disciplinary methodology, absorbing and transforming methods from various fields. The purpose of which, was to create an opportunity to assemble enough data to create a three-dimensional understanding of the soundscape of an urban space. Translating that assemblage into text creates its own problems, as one is flattening out the holistic experience of the urban and limiting one's description of sonic phenomenon to textual descriptions. In response to this it was necessary to reflect on how text could allow a reader to understand the urban soundscape as a set of typologies and experiences in much the same way as image based research does. So attached to this dissertation is a CD, which contains example field recordings of the autoethnographic soundwalks, a sample of one groups soundwalk recordings and a sample of older cohorts soundscape descriptions. Chiefly, the object of this research was to identify how sounds alter one's experience of place, whilst focusing on a particular space. The purpose was to highlight how, in the redesign of urban spaces, one must consider the importance of the sonic, not as a temporal, ambiguous phenomenon, but as a critical constant in spatial awareness and social cohesion.

Structured soundscapes and symbolic soundscapes

This thesis has concentrated on sound within the urban and the various ways in which one's experience of the soundscape shapes their experience of space. It builds upon Lefebvre's (1974) tri-partite model as a starting point in which to examine how space shapes and is shaped by movement, experience and participation. It included sound in

this analysis arguing that one cannot analyse space, interior or exterior, imagined or real without accepting the importance of sound in society. Lefebvre asks that one consider space as multi-dimensional and constantly operationalized, he also argues that one should consider the histories of space. The young participants were able to define sounds as either modern or historical. A sound could become, over time, part of the sensory memories of place, but they also argued that historical sounds could be recreated. For example, the placing of cobblestones on streets was identified as producing a sound embedded in Dublin's history.

It is important to highlight what Lefebvre means by the use of the word 'space' as opposed to 'place'. He argues that we must explore space as created from above and below. For Lefebvre place was bounded space, whereas his explication of space was of something that does not already exist, but is instead produced; this is relational space, where production is something represented in a particular culture. For example, his examination of the natural world highlighted how natural space is revealed, only when it is politicized through the parcelling of land for production. Only then do we become aware of natural space. This is different again to his theory of representational spaces which are limited to "works, images and memories" (Lefebvre 1974:50). Lefebvre recognized the connections between production and the natural world as part of the process of reproducing space, though not in the same global corporate monopolizing of space currently in vogue. Rather, there is "always the possibility of reconfiguring the ways in which we interact within a particular space" (Lutterbie 2001:124).

It is however Lefebvre's understanding of space, that the emergent properties of 'being spatial' and 'becoming spatialised' involve the 'practico-sensory' realm, which is a key theory to this research. For Lefebvre, the ear and hearing space was as important, if not more important in some ways than sight; "space is listened for, in fact, as much as seen, and heard before it comes into view" (1974:200). He argued that the designs of contemporary urban spaces were becoming homogenous, and that this homogeneity was extended to the sounds of space. This argument is important for this thesis which focused on one particular space, which reflected the western global design of gentrified cities, tall buildings, hardscapes, fluid communities and similar economic practices (shops, galleries, art house cinema, cafes, restaurants etc.).

The young participants described Smithfield as a space for adults, the shops, restaurants bars and art-house cinema, were not spaces they could or would enter. There were no fixed points of reference, no spaces to sit or hang out. When walking and recording the space, as discussed in chapter 4, they would wander aimlessly, in part because there were no soundmarks in the space.

As this research argued, the gentrification of this urban space has resulted in the condition of a non-place, where "signifier and signified, marks and markers, are added after the fact - as decorations, so to speak" (Lefebvre 1974:200). One could add the Schaferian prefix of *sound* to these words. This research acknowledges what Highmore calls the "the dynamic interplay of forces, of which the city gives us the most complex exemplar" (2005:141). It recognised the importance of productive rhythms and practices as essential in the shaping and experience of space. However, this research adds that these practices, the communal experiences of space, is a 'sounding' one. The relationship people have to abstract space, spaces that are inbetween work practices and home life, the space of the everyday, is based on the sounds which one hears before seeing a space. The younger and older research participants use sound as a descriptor of the ephemeral, something that passes and changes by the moment, yet it shapes every moment of their day in different ways. As discussed in the chapters 4, 5 and 6, sound creates a sense of the importance of space, it can be a problem sound, a noise, or mediated sounds (music).

Sounds are also socially constructed, both from above as well as below. Often this shaping is unknown and even a side effect of other structures, such as physical structures (buildings, vehicles, the use of materials etc.). However, sound can also be designated meanings and inferences, it can be classed, segregated and categorised as noise (e.g. street sellers and the horse fair) (Schwartz 2011; Thompson 2004). This can result in the removal or management of certain sound types (Bijsterveld 2003, 2008; Braun 2012). Space without sound is the "space of blank sheets of paper, drawing-boards, plans, sections, elevations, scale models, geometrical projections" (Lefebvre 1974:200). It is the responsibility of the listener to respond to space, to orientate themselves within space, and unlike the gaze, listening requires time, one must invest in space in order to listen to it (Derrida 2005; Donald 1999; Massey 2005). Listening and walking through the urban soundscape "remind(s) us of our

listening capacities, of everything we miss when we forget to listen and of our role as soundmakers in the soundscape" (Westerkamp 2012:55).

Mediating sound and mediating the city

The busy streets of a city are increasingly mediated by technologies. This research placed the 'body' within this technological soundscape exploring how we mediate through or around it. Chapter 2 and 6 argued for the examination of the urban technological soundscape and the remediation of this space as something, which is socially shaped (MacKenzie and Wajcman 1987, 1999). We live in modern worlds which are increasingly defined as technologically driven; technologies as life altering, and technologies that transform our everyday experiences (Ellul 1980, 1990). Ellul argues that "the technological phenomenon shapes the total way of life" (1980:171), we bend to the will of technologies we own and technologies we feel we must own.

The technologically deterministic manifesto of companies and governments, intent on rebranding their citizens as technologically savvy, overtly suggests that the individual has no say or choice in an increasingly mediated and technological landscape. However, this agenda ignores the actual social processes, which shape technological use and integration. This study highlighted how sounds within the everyday both natural and technological for example, shape our use of media technologies. These sounds are part of the construct of modern city. Young people moving through the urban soundscape have adopted strategies and tactics that shape their aural experience and they use their audio technologies to transform the sensory of space. That is not to say that technology is ambivalent to these uses. Instead, we adopt a soft deterministic approach (Wyatt 2008), arguing that the technological and mechanical sounds of the everyday impact on one's relationship to space. Thus mediating through abstract soundscapes helps young people ignore or remove themselves from these abstractions. Hagood (2011) argues that listening and the power to control one's hearing is relegated to a form of elite mediation of one's space, related to social status. This then largely confines mediating space and the domestication of audio technologies to certain classes and users. For example, the private school participants stated that they rarely played music in their homes because their listening spaces (bedrooms, sitting rooms etc.) were mostly quiet. They admitted to owning good headphones and Mp3 players or iPods, and instead, used these to travel to and from school. However, most of the public school participants also owned expensive

headphones/mobile audio technologies. Their use was not limited to travel. Mediated listening was used as a defence against the intrusion of outside sounds in their homes, and as a device to protect them from silent spaces in the city and dangerous or intimidating sounds.

The female participants stated that their phones were incredibly important accessories and tools of communication. Because they were expected to be quiet in school situations, they used their phones to challenge this suppression, sending text messages, Bluetooth'ing music and other media files. Mobile audio technologies allowed them to have a voice and reshape their social spaces.

However this research concludes that mediated listening is contextual and is not limited to the homogeneity of urban soundscapes, though for the young participants blank/silent soundscapes are increasingly one of the reasons they mediate. This thesis argued for mediation as an approach adopted by teenagers to embody spaces in distinct ways. Mediated sound allowed for a different kind of immersion in space, it is a tactic of listening, which allows space to become *other* than it is. Mediated listening also allows young people control over their time in space, i.e. mediated listening is a form of time/space control and management. Mediated listening creates autonomous group spaces, and most importantly it allows for Lefebvre's third part of the tri-partite of space, symbolical representational space to develop.

Methodological innovation: soundwalking as an analytical tool

One of the primary goals of a soundwalk "is to reveal the nature of the structural, ecological relationships" (EHA 2010:27) among participants in the soundscape. Asking people to listen to the soundscape foregrounds attentive listening as a way to know our environment better. When a person is asked to listen to the sounds of a space, it allows them open an "inner space for *noticing* (emphasis in original) (Westerkamp 2012:56)". Public spaces in a city "are defined by the placement and height of buildings, the textures of surfaces, colors and light" (Billstrom and Atienza 2012:73). However, asking people to listen in a world increasingly identified as visual is problematic.

On first meeting the young participants they expressed ambivalence towards discussing the topic of sound. This initial reaction then proceeded to one of annoyance, which was surprising as it was thought that the subject matter would have been simple to discuss. They felt that separating sound from its source was not possible, and that by doing this one was objectifying sound, making it distinctive to practices, space and production. For these participants sound was part of the space, as embedded in place as physical structures. It took some time to understand that this was how they interpreted the soundscape. Additionally, asking someone to remember a sound distinctive to a place, raised objections, they asked how could one separate the phenomenological from events, experiences and space. These topics were allowed to become part of the discussion. Thus, the soundwalks played a key role in this development; stimulating a discussion that made the young people aware of how sound increased or decreased their relationship to space. Soundwalking as an empirical tool, as well as a methodology, connects the experience of the everyday engagement with space to the phenomenological. The soundwalks underwent some adjustments; the first was changing the silent soundwalk to an attentive listening soundwalk. This allowed them to still chat with each other, but they also paid attention to the sounds on the walk. The trajectory that was mapped brought them from noisy to quiet spaces or visa versa depending on the positioning of the young participants school. There were challenges in their use of cameras to document the soundscape and there were sometimes problems with their use of digital recorders (they argued that the soundscape was to busy to document a single sound). The soundwalks would feed into the discussions of the focus groups, as they would remember, in detail, the sounds, sound types and sound differences within each space.

The sound pyramids used during the 40-minute focus groups also underwent revisions as a result of earlier versions failing to generate a discussion on their interpretations of sounds. The earlier maps were too vague; they asked nothing specific of the participants. The sound pyramids created a focus, something they could disagree or agree over. Remapping the experience through abstract conceptualizations such as pyramid mapping, removed trajectories, pathways and fixed nodes in space. This allowed for the walking of 'sonic trajectories'. It encouraged the young participants to follow and remember sonic trajectories at home, in school, Smithfield and in the city, and as a result, linked sound to both time and space. The maps, combined with

the focus groups generated significant data on teenage perceptions of urban soundscapes. It allowed them, as a group, form opinions about urban and technological sounds. It also highlighted social constructs of listening; differences between male and female listening and sounding practices and sound as a class experiences.

Using technologies to record and document the soundscape altered their relationship to urban sounds; it helped focus their listening. Additionally, recorded listening brings to the foreground audible sounds that we do not hear or pay attention to in everyday situations. In part this is because of the affordances of the technological hardware. There is the possibility of making listening a sterile experience by asking the listener to document particular sounding events. Instead, they were asked to use the microphone/digital recorder as if it was an extension of the ear (McLuhan 1969), focusing in on sounding events. This is in opposition to their everyday mediated listening, where the sounds of the natural/real world are replaced with music or other sounds.

Soundwalking allowed the young participants create their own subjective experiences and evaluations of the soundscape. Each person's "perception of the soundscape is inherently personal" (Cain et al. 2008:3262); the soundwalk reframes the daily experience of listening into a focused event.

The Smithfield soundscape

Smithfield, which was the focus of this project, is a very particular urban and public space. It has an historical connection to the wider city, traditional economic practices and an established community. Its transformation into a gentrified space under the Historic Area Rejuvenation Project, HARP, has meant that its meaning has been altered, similar to urban regeneration projects within Dublin city over the past twenty years (Drudy and Punch 2000; Peillon and Corcoran 2004; Punch et al. 2004). Both cohorts were asked to respond to this space in different methodological ways and then

situate it within the wider city. They were asked to listen to the space, listen to the city and reflect on the sounds they hear in their everyday lives.

Working with young people involves examining the concepts of the experience of youth, what it means to be a teenager in a western city, their daily lives, the impact of technology on their social worlds, and where they are placed in the social order. As discussed in chapter 4 and according to a representative of DCC, the regeneration of Smithfield Square did not include an examination of either children or teenager's needs. This is telling, as it suggests in Dublin at least, one does not consider the voice of a teenager in urban regeneration projects. However, as a group that exist on the fringes and whose social worlds are usually outdoors, their experience of Smithfield and the city soundscape was vital to this research.

The Smithfield Square has evolved from a space whose original soundscape would alter radically throughout the course of the day/week/year, to that of a quiet segregated housing area, with a designed event/non-event space. Traditionally, this space catered for the agricultural trade, whereby farmers would bring goods, livestock into the city to sell in the markets, it also operated as a social and play space for locals and children. Today, it has been designated as an event space, with a small-designated play space for children²⁹ and part of the tourist matrix of the Smithfield quarter. The planned design of Smithfield chose not to take into account the existing communities and its traditional activities. That is, the connection between work and social practices, which evolved over time and within space, creating, in turn, unique social and spatial soundscapes. Instead, the space is part of the hegemonic process of global capitalism, it is a space of intended practices now seen as western, universal and connected to consumerism. Harvey argues that those "who fail to recognize that the way space is fashioned can have a profound effect upon social processes-hence the numerous examples of beautiful but unliveable designs in modern living" (2009a:24). This creates a distinct lack of social cohesion within newly designed and beautiful architectural areas, such as Smithfield Square. It is then that one must look through the lens of Augé's (2009) theory of non-place, a place removed from its cultural and

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²⁹ At the beginning of 2013 a new playground was placed at one end of the square. It is noteworthy that the playground incorporates an element of sounding objects in its design.

social ambiguities. Space and event spaces are part of a city's cultural capital, no longer designated as part of a particular community, but instead, having the potential to create a type of cultural consumption not linked to locality, historicity or local community/social groups. Osborne argues that "the temporal differential of the modern is no longer primarily derived from historically fixed or enduring socially coded spatial differences" (2001:184). Instead, spaces are constructed to contain differences, and to exclude some from inhabiting and using these spaces (Degen 2008).

The right that one has to public space in the city is contested; this contestation, whereby, hegemonies of power dominate the shaping of public space inevitably leads to spaces that no longer contain a specific meaning or codes of practice, as it has become lost in pluralistic design. Smithfield was once a flourishing heterotopia of spaces, however modern urban planning, designed in response to decimated economic practices and physical conditions, have ignored the various spaces within the urban, which function as social/symbolic spaces (Harvey 2013; Lefebvre 1974). That is because these spaces are largely ephemeral and invisible to hegemonic powers. Additionally, these symbolic/invisible spaces are often constructed by the disenfranchised within society, such as teenagers and older people. The soundscape as a completely invisible, yet constant presence is overlooked in the reshaping of space. The result of which are, the appearance of "unwanted sounds and sound levels" (Adams et al. 2008:3). Instead, developers need to evaluate the acoustic environment and the responses to it by the people living there.

The sounds of consumption

The young participants response to spaces shorn of their polysemy is to move through and to, the soundscapes of capitalist consumption, which has led to the 'Disneyfication' (Bridge and Watson 2010) of urban soundscapes spawned within hegemonic spaces. The space of the city as described by the young participants is somewhat sonically heterogeneous. They describe the sounds of consumption as a process, a soundscape, which defines not just the act of consumption of things and materials, but also of consuming an atmosphere of consumption. One walks through the urban soundscape to be surrounded by the sounds of activity, which in turn is

defined as a large-scale community. Each person adds to this soundscape, creating what the young participants see as a positive space. One could argue that in their lifetime, consumption has been defined politically as a positive experience, part of contemporary culture (Soper 2013). The globalised capitalist ideal of mass consumerism extends to the globalised soundscape of mass consumption.

In contrast, the sounds of their communities are heterogeneous and varied, particularly for the participants who live in the social housing, where the sounds from their immediate external environment occupy their internal living space. These sounds differ to the positive consumerist soundscapes of the city. They are a reminder that where they live contains the keynote sounds of poverty, crime and social inequalities. Their housing is usually within small, congested spaces, close to main roadways, emergency services and periodically the sounds of construction. They hear the children playing within their complexes, and they do not regard these sounds as positive community sounds. Conversely, their description of these sounds, often defined as a kind of noise, is also referred to as a passive soundscape, in that it exists in the background, it is a constant part of where they live and they have learned to adapt to these sounds or use technology to create a distance from them. Different spaces are connoted as particular types of soundscapes, which they argue are dependent upon numerous activities or practices contained within these spaces. They understand the part that sound plays in defining a space and giving it meaning, either positive or negative. For the young participants the sounds of consumption, the city centre soundscape, is a meaningful soundscape. Whereas Smithfield Square and its surrounds, with its quiet non-consumerist soundscape, has no meaning, no particular purpose for them.

The sound of a non-place: the Smithfield Square

Smithfield, because of its hardscape design its vacant shops and its proximity to criminal judicial buildings, is described as having a very particular soundscape that is reflective of these surrounds and activities. This soundscape is often quiet. It is only through the introduction of temporary events within Smithfield Square that one creates what seems like a busy urban soundscape. The young participants recognise that these events transform its soundscape. This transformation is not just the

appearance of new sounds, but types of sounds that create a positive experience: laughter, groups chatting, music, the sounds of consumption and even production. These sounds (e.g. the horse fair, Christmas fair and ice rink) transform Smithfield into a 'central' rather than 'edge' space in the city.

DCC's approach to the Smithfield Square is top down urban planning i.e. introducing events into the square to cater for this newly gentrified space. These events: Christmas fairs, market festivals, cultural events, etc., had all the configurations of the sounds of community: the presence of children; the sounds of consumption; play and music. They were to occur yearly, monthly or weekly, suggesting a pattern of continuity and stability. In this way, the locals, whether they are the transitory inhabitants of the apartment complexes, or those who live more permanently in the surrounding older social housing areas, would eventually consider the sounds of these events as community sounds. Ultimately, this process has not been successful. There is no one single reason for this, but this research has revealed two particular causes; firstly, a lack of engagement with the young community and an assumption that this was not necessary and secondly, the constant reconfiguring of the space. In the three years that this researcher walked through Smithfield, it underwent several phases of construction, each meant to solve particular problems with spatial use. The impact of this was the cancellation of events, which the young people usually planned to participate in, such as the Christmas fair, the ice rink and the Chinese New Year fair. Furthermore, these events were categorised as types of events, suitable for particular social groups, as opposed to events belonging to the area. The use of the spectacle within urban regenerated areas can be a tactic for "promoting collective, commercialized forms of enjoyment" (Degen 2008:32). For the young participants, the sounds of events, the hub and "buzz" which surrounded them, succeeded in removing, temporarily, the emptiness that is Smithfield in general. according to the DCC interviewee, for local residents close to the square during these events, they only highlighted the discrepancy between the noise of the events and the quiet they have become accustomed to. Lefebvre argues that spaces, which are unique, are not planned in advance, they are "built by collective will and collective thought on the one hand, and the productive forces of the period on the other"

(1974:76). The urban planning of Smithfield ignored the slow pace in which change occurs and in which change needs to be adapted to.

Teenagers, silence and noise

Teenagers have been defined as a community, which lives or socialises on the fringes of space (Curtin and Linehan 2002; Matthews et al. 1998; Travlou 2003). Often they define space through processes of active symbolisation. One approach is the production of temporary soundscapes: this occurs as a result of being loud when grouped in large numbers, creating what Blesser and Salter call territorial sound bubbles. These "territorial bubbles appear as if by magic around a group of individuals if they begin to interact, and the group quickly acquires rights to the arena" (2009:34) thus creating a temporal space. Public space and spaces for the public are often contested spaces, contested for the right of access and use, which the term public is supposed to define (Houlstan-Hasaerts et al. 2012). To teenagers, all sites independent of a structure are a public space; they see the potential for socialising outside of the typical spaces that they are traditionally confined. However, within designated public spaces they are invisible, in what Matthews, Limb and Taylor (1999) cited in Travlou (2003) call the "fourth environment" places teenagers inhabit beyond schools, home and playgrounds.

Teenagers also respond to spaces; this response is often based on the sounds or lack thereof, in space. For some of the young participants it is the silence of a space, which can act as a social deterrent. Conversely, if they are in quiet spaces they will become louder as a reaction to the quiet, making their soundmark a stronger presence within the silence. The same is not required of them in the city centre, where numerous sounds create an atmosphere within which they are immersed; the sounds in these spaces shape their activities. The sounds of a city, defined as positive by the young participants, are the sounds of consumption. However, consumption is not just a physical process or a description of behaviour, it is an atmosphere designed, sometimes by shops and restaurants, to create spaces of sound.

Within contemporary cities there are few quiet spaces. MacLeod (1979) cited in Bijsterveld (2008), suggests that it is the fear of silence which has created music immersed shopping districts, malls and most indoor public spaces. Bijsterveld argues that this counteracts one's "right to silence" (2008:11). However, this research

contests that for urban youth, particularly those raised in less affluent areas and within social housing, there are distinct differences in the interpretation of 'noise' and 'silence' to those used by academics and policy makers. Silence is not the absence of sounds; it is instead, a space defined as absent of activities. These activities are often defined as connected to community, production, consumption, or events, which produce what they would argue, are positive soundscapes.

Quiet and silence are repeatedly defined as necessary for a positive contemporary urban experience, with increasing pressure, from, for example, EU policy, for local authorities and governments to police the quiet or monitor noise. As Billstrom and Atienza argue "noise reduction is a constant work in progress that is adjusted to accommodate financial and logistical interests" (2012:73). The shaping of space and the management of quiet ignores the processes that created the sounds in space. The focus is typically on traffic and traffic management, with a secondary focus, whether intentional or not, on working class areas, which tend to be the louder spaces within the city. The construction of Smithfield Square and its surrounds has inevitably led to the creation of a quiet space, which for noise policy is a positive, but for social governance and urban society/communities, is a negative. The quiet can be as repressive and negative for a community as noise (Harvey 2001).

This research has found that the many definitions and historical associations assigned to the term noise, ignores the subjective social meaning sound acquires over time. One could argue that it is a lack of education that is responsible for people's inability to understand noise as a concept and thus as a social problem, that they do not understand the empirical evidence of noise as dangerous or bad for one's health (McManus 2004). But this assumes that being loud, by definition is always a negative experience. This thesis argues that it is the ontology of noise, which needs to be examined. Noise, like silence, cannot be objectively assessed. As Cleophas and Bijsterveld argued, discussed in chapter 2, there are no universal standards or definitions for sound. Equally, Schafer (1974), Feld (2004) and Fischer (2004) highlighted, that listening can be culturally specific. Schafer's research, which attempted to quantify the soundscape, extrapolated that it was impossible to do so. Additionally, like Lefebvre, he argued that sound develops its cultural and social meanings over time; sound can be part of the history of a space.

The construction of noisy spaces comes from the top-down, i.e. the building of motorways, crowded pedestrian shopping districts and densely packed urban housing areas. From the bottom-up, those who live within, move through, or participate in these noisescapes, create their own meanings as to what these sounds are, it is they who give noise and silence its social significance. The young participants argued that noise is sound and it is the sound of vibrancy, movement, happenings and gatherings. Noise to these young participants was also danger, foreign accents, bursts of sounds and sounds at inappropriate times. For the older participants noise was sound absent of social and local meaning, whereas, silence was the loss of the social and economic processes in space.

This research argues that in creating gentrified spaces within working class areas such as Smithfield, the noise of the working classes is eliminated in order to create a silence for the middle classes. This silence is not an actual absence of types of sound, but a negation of a class soundscape. However, the result of the gentrification of Smithfield did not create a corpus of urban middle class sounds, it created a void, which was previously filled by those who live on the edge of society. It also created a non-place; the design focus was to create a space of consumption, which due to the economic and property collapse failed to materialise. The private part of the public private plan process failed to deliver as capital had flown. Harvey argues that the "the sociological imagination enables us to grasp history and biography and the relations between the two in society" (2009a:23), this is essential when examining the rights to the city and particular spaces therein. However, "capital is not in itself tied to any territorial principle" thus in producing spaces of consumption or event spaces, within the surrounds of older urban communities, urban planners create space of "ambiguous identities and contradictory experiences of abstraction" (Osborne 2001:185). In this reclamation of the space of Smithfield, DCC created a space unsuitable or inaccessible to types of communities, particularly youth. Typically, how "space is organised is deeply invested with cultural values" (Matthews et al. 1999:1724), where rules of behaviour, engagement, interaction and shaping occur because of underlying social norms. A teenager's presence in particular spaces is often controlled by "socially constructed" forces (Matthews et al. 1999; Matthews 1995). This policing of their presence occurs within communities already at the edge of society.

However, in non-places such as Smithfield Square, the design of a space becomes a significant indicator of the types of people expected to use a space. By creating a cultural space, giving it a title and name, 'Cultural Quarter', former 'Market Square', event space, etc., one takes away it's meaning and in turn creates a non-place. Additionally, a person or organisation who distributes names, titles and meanings to a space "does not necessarily know much about the places" they re-designate (Augé 2009:85) 30. Further, the young participants interpret the phenomenological, particularly sound, when examining whether they want to inhabit a space; the quiet of Smithfield acts as a physical and acoustical barrier (Blesser and Salter 2009), which discourages participation. The lack of sounds, its designation as a cultural space, its ambivalent connection to community, define it as a non-place.

Macro and micro audio mediation

Couldry argues that mediatization is "the spreading of media forms to spaces of contemporary life that are required to be re-presented through media forms" (2008:376). However, mediatization is not just the use of media technologies by young people but the proliferation of media technologies embedded within particular spaces. Examples are music-mediated environments, the extensive presence of tannoy and video camera surveillance systems within various spaces, to monitor and control spaces, particularly the spaces of youth. It is the transforming potential of media which is key within this study, but we do not argue that media is then deterministic in this process. Rather, young people co-create their media spaces, selecting the types of sounds, which will shape their experience of space, they then use mobile technologies to "reconceptualize new forms of spatial arrangements under the new technological paradigm(s)" (Castells 2010:46) countering the traditional notions of space as passive and unnecessary within the technological city.

The power to control what one hears is critical to this research, where we have argued that sound is an extremely important part of one's interpretation of space. Bull (2000) has argued that mediated music for example, plays a significant role in altering or

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³⁰ The Smithfield area in now divided into the Smithfield Square and Market Area, two distinct spaces, where there had once been one.

shaping one's emotions and moods. However, the mediation of space is increasingly widespread, involving;

- exterior sounds, sounds from above i.e. building materials-stone, glass etc., and architectural design, shape the urban soundscape.
- interior sounds e.g. sounds in the home, in schools, in shops, bars, etc.

Research within psychoacoustics and phenomenology studies have already extensively proven that sound shapes one's emotional experiences (Frost School Of Music Miami 2012; Howard and Angus 2009; Husserl 1977; Ihde 2007; Palmer et al. 2010). This research study has concretely defined, particularly through its empirical study with the older participants, that sound is significant in the experience of place and community. It is not just music that impacts on one's emotions, and it is not just emotions that are shaped when listening. Sound is a structural part of community; when the sound is mediated, this alters the social relationship to space. This study does not argue that this alteration is necessarily negative; rather, it changes spatial relationships. This is partially because of the diffusive nature of sound through space, its connections to a source and its ability to be disconnected from source and associated with experience. For example, the young participants description of the city as a positive ambient soundscape, was based on the kinds of sounds created by the gathering of large groups of people.

Mediating through space is an attempt to counteract one's responses to an environment and its sounds. The young people have created mediated tactics to deal with negative soundscapes this also incorporates what they defined as 'silent spaces'. Hjarvard (2007), cited in Couldry (2008) argues that one's mediatization activities occurs through the interaction with a medium, therefore, "the symbolic content and the structure of the social and cultural activities are influenced by media environments which they gradually become more dependent upon" (Hjarvard 2007:3). This statement veers towards the deterministic, however, this research counters that although there is a significant dependence by young people on their media technologies when using space, it is not the technology that determines their behaviour or use of media, rather they are responding to the sonic environment with mediated sounds and mediated listening. The content of their listening, the way they listen - with noise cancelling headphones for example - or making a phone call, has become a strategy used to reshape space and spatial experiences. The young

participants are the users of space, users play a part in the co-construction of space, not in an actual physical re-design but in the re-imagining of spatial use and meaning (Lefebvre 1974). They use audio technologies in this process of re-shaping; in this way we argue that the social shaping of technologies is not just the impact on technological design of heterogeneous social processes (Bijker and Law 1994; Van Oost 2003), it is the use in which technologies take, after design (Hagood 2011; Sterne 1997, 2003). Technologies for example, such as Smartphones, have become domesticated in their appropriation into the everyday lives of teenagers (Silverstone 2005). Jansson argues, that the Smartphone has altered spatial and social conditions, however, he argues that these changes only occur because of "pre-existing sociospatial arrangements" (2013:280), which are connected to cultural, historical and social values.

Sonic memories and interpretations of Smithfield

For the older participants, their connection to place, community and the urban experience, as teenagers, was as much about mediatization as it is to the contemporary young participants. They used radios, record players and the TV to transform their sociospatial conditions. Technology allowed them the freedom of media access and acoustic privacy. It also changed how they would use public spaces i.e. the use of metal light poles as receivers of international broadcasts (discussed in chapter 6); thus, they were able to create symbolic music soundscapes.

Their experience of the changing shape of Smithfield allowed them to see a transformation in the sonic. They did not immediately identify the loss of sounds from their childhood as an issue, however, when asked what was missing in Smithfield today most identified a sound type from their past. Degen and Rose argue that "sensory experiences are intimately intertwined with perceptual memories that mediate the present moment of experience in various ways" (2012:3271). These sound types were connected to community: neighbours, children and music; specific archetypal sounds like the sounds of production; and liminal sounds, which suggested borders and transitional points.

In focusing on a regenerated space like the Smithfield area and Square, one must ask, beyond physical transformations in space, what impact does the phenomenological,

particularly sound, have on the inhabitants and users of space? If a space was once part of a traditional community or a traditional work practice, then this question becomes more significant, because the memories of a space play a role in how that space was and is interpreted. Therefore, any changes to a space impacts on peoples connection to its past. The HARP project and the numerous regeneration projects within Dublin city during the 1990s and the early 2000s failed to address the importance of sound within the urban context, because no one identified it as important in the production of place. Highmore argues that one must follow Barthes' advice when examining the city, "to multiply the readings of the city" (Barthes cited in Highmore 2005:157) and, according to Highmore "pluralize the situations of knowledge" (Highmore 2005:157).

There is also a need to clarify the types of discourse available, which will allow us to consider sounds within the urban. As argued in chapter 6, there is a need to develop a language in which to include sound within urban policy. This means bringing research into sound and the social beyond objective, numeric measurements, which as stated in chapter 5, link historically to class and gendered definitions of sound. It is also necessary to develop a vernacular of sound studies to use within sociological theory. This will allow for a wider discourse on the shaping and use of urban space. The younger participants argued that one couldn't separate the everyday experiences from the sounds one hears. Sound is part of society, it is invisible, yet constantly there, it is only when a sound or soundscape is dramatically altered that a space takes on a very different meaning.

Sounds can distinguish a space; this was identified during the Smithfield horse fair, discussed in chapter 4. Although this event is aimed at particular audiences of horse traders, older men and even tourists and as a "perpetual resort to the economy of the spectacle" (Harvey 2013:14), there was a significant presence of young teenagers. The boys would gather in one area and the girls in others, (see figure 37). In this way the space takes on new potentialities as a result of the presence of people, sounds and activities, as this allows the teenagers view the possibilities of spatial use. They also remove the focus from them, within the space, and transfer it to others. The space is no longer a large fishbowl with a view from every angle; instead it has become a busy vibrant soundscape. When the teenagers made loud sounds, took over particular

spaces in ways not managed or planned, no one noticed. In this way the teenagers were allowed to "to change and reinvent the city more after our hearts' desire" (Harvey 2013:4).



Figure 37 Teenage girls at the Smithfield horse fair. Picture by Rebecca O Keeffe

However, while the event created a unique soundscape, it is not the argument of this research that Smithfield needs constant events to create a usable public space. Instead, young people should feel comfortable in the use of public space, in general. Public events are extreme occasions where their presence and sounds are allowed, ignored or part of the general ambience. This is not to say that there are no ambient sounds in the whole of the Smithfield area and its environs. While conducting the autoethnographic soundwalks, it was found that Smithfield contained unique sound markers, one of which was the voices of children coming from the roof of a school (there was no available space in the area for a playground at ground level).

These are small pockets of sound that make the area unique. The absence of sounds in large parts of the area, and the impact this has on teenage spatial participation are as a result of the gentrification of the space. In ignoring the possibility of developing the small community which still lived in Smithfield during the 1990s, and focusing instead on creating a commoditised tourist event space, the councils have created a disparate and ambivalent soundscape. Because of the global recession of the 2000s the space never quite fulfilled its role as a gentrified space. As financing dried up spaces such as old factory sites and derelict buildings, empty before the boom, remain so to this day. This has created streets and spaces of silence (see figure 38 and 39).

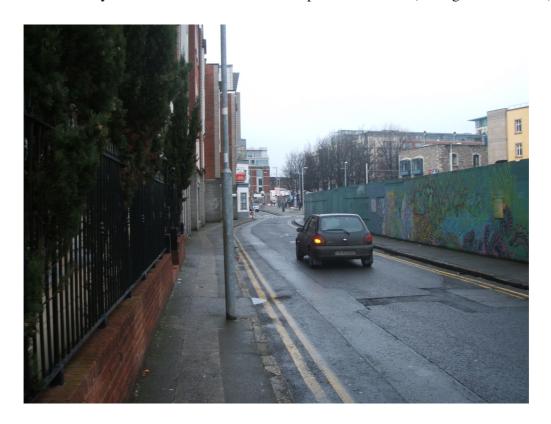


Figure 38 Street in Smithfield area. Image by researcher



Figure 39 Market Area. Image by researcher

In the process of gentrifying this space the area was divided into disparate social groups; working class communities in blocks of social housing and those employed in the service sector or creative industries in the apartment blocks and business units. There was no gesture towards the local working class population in the establishment of shops, markets, restaurants or social spaces; rather the design catered for middle class service workers or tourists. In the bust of 2008 most of these businesses closed down, including the restaurant and art house cinema (though this has opened again under new management). The result of a space so unevenly divided with a lack of cohesion, is the construction of a disparate soundscape. In most places within Smithfield there is a perpetual kind of silence in the empty streets and no central meeting space. Clearly there is a community of families in this space, one that lives within and around Smithfield, as evidenced at the horse fair. There are also numerous teenagers living in and around the area. However, they are isolated within their housing units/complexes, removed from public spaces and generally identified as threatening. In response to this the young participants have chosen to socialise on their mobile technologies within social media sites, in small groups and away from

public spaces. They mediate away from physical public spaces into networked publics.

Further study

The impact of sounds on teenagers from urban communities is integral to their relationship to space; it shapes their everyday connections to different social practices, productive or otherwise. The increased use of audio technologies to mediate these new urban soundscapes, suggest the fragmented relationships developing between youth and numerous sites within Dublin city. In focusing on one particular area, Smithfield, the research was able to generate rich data, which, though specific to this space, can be compared to other regenerated areas where local communities have regarded themselves as disenfranchised. Further research is needed to identify how regeneration and the soundscape are impacting on other communities. Key studies within Europe have evidenced the impact of urban design on the experience of sounds within space, particularly in the field of architecture and design (Billstrom and Atienza 2012; Cain et al. 2008; Degen and Rose 2012; EHA 2010). Additionally, research within anthropology has emphasized the importance of sound as a cultural and social signifier within communities (Feld 1993, 2004; Kreutzfeld 2006; Kreutzfeldt 2012). They have highlighted the significance of sound as critical to engaging with urban spaces on a 'practico-sensory' level. However, these studies, while important, have remained as academic studies, and have yet to be adopted within large urban planning projects in most western cities. Critically, there is little research within the sociology of the urban, which include the soundscape as part of the cultural and social structures of urban processes. This is a significant gap, particularly in view of the rapid technological and population changes within western cities in the past century.

This research project found no evidence of an examination of the sensory or soundscape in the design process for the Smithfield regeneration project. The "Your City Your Space" (YCYS) strategic plan for Dublin city, created by DCC in 2012, seeks to develop the public spaces of Dublin city. The focus however, still appears to be on the physical and visual aspects of public spaces. It's emphasis on the historical

as important in developing the city is grounded in "protecting, the city's historic street landscape" (DCC 2012:17). This negates the importance of the archetypal sounds (Schafer 1977) which evolved alongside architectural design (Blesser and Salter 2009). This is significant, as the soundscape influences the processes by which a community shapes itself within and around the physicality of a space. The 'sounds of place' are conducive to phenomenological experiences beyond the abstractions of lines and drawings, of streets and maps. It is the rhythms of a city (Highmore 2005; Lefebvre 1992), created by groups who live, work and play within the urban that fundamentally shape it's spatial use and perception.

Finally, if one wishes to assess a space, particularly its success as a public space, one must cooperate with those who access public space the most. This research argued that a teenager's domain is the public space, yet it seems that they are increasingly excluded from accessing it. Their voices are the one's missing in the discussion of urban design. The YCYS strategy does state that one of its goals is to consult with what they describe as 'interest groups', such as youth and the elderly, however there is no discussion as to how this will be undertaken, i.e. prior to, or post implementation of any development strategies. Within Smithfield it is evident that no discussion took place with regard to how youth would participate in the public realm of the area. Additionally, teenagers themselves feel powerless when it came to suggesting changes having had no experience within the consultation process of urban design.

A teenager's world is one of sound and music largely heard within the public space. Both 'real' and 'mediated' listening environments overlap, shape and are shaped by context. During the research participants' soundwalks of Smithfield, the revelations and conclusions drawn by them, about Smithfield Square, highlighted key insights into how public spaces could be designed to be positive spaces, and why some spaces failed to achieve this. They found that sound was an intrinsic part of both those processes. Asking young people about their social worlds, the public space, urban design and the soundscape, requires one to think about methodologies in new ways. It means giving voice to, and control over data collection, and even analysis, to a group often excluded from decisions, which affect their lives. Though the research undertaken included a relatively small group of teenagers, (84 participants), and focused on the specific area of Smithfield, the approach adopted could be

implemented on a larger scale, examining spaces undergoing similar reconstruction. This would encourage teenagers to consider public spaces and the sounds within them as places that are welcoming and which they have played a part in the design of. This could result in the engendering of civic responsibility to their environment and more social cohesiveness in public spaces.

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Transcription:

01c Male students

Interviewer: Response

Interviewer: The reason I got you to take photographs was to look at objects that make

sound

Group: Did you see our photographs?

Interviewer: I haven't printed them yet

Group: Who pays for them you?

Interviewer: Yes

Group: Why don't get a digital camera between the lot

Interviewer: Because I like to give each a camera so that you can take pictures yourselves Group: You should even ask them to do it on their phones that would save money, it would but then I wouldn't have them immediately

Interviewer: So one of the first questions that I want to ask you is can you all tell me what you think the definition of sound is?

Group: Something that makes a sound. Something that makes a noise. A form of energy, can be transformed that can be formed into sound. Yeah that's exactly what the definition is. It is. That's the scientific definition.

Interviewer: Well look there's not a right or wrong answer

Group: It travels by means of waves. That's how sound travels. That's energy.

Interviewer: Do you have any other definition of what sound is?

Group: It's a form of energy

Interviewer: Can you tell me what your definition of, now just remember everything I ask you, this is not a

Group: Is it classed as light? No light is much quicker than sound. It is. Oh yeah did you see the waves we're hearing now.

Interviewer: Any of the stuff we talk about today, there's no such thing as a right or wrong answer it's just, I actually just want your opinions. Can you tell me what you think noise is?

Group: A loud sound. Something that you hear. It's not even loud. Something that we can hear. AH yeah but you wouldn't say I'm listening to that new noise that's out, about a new song like. Listening to a new sound.

Interviewer: So what would say then is the difference between noise and sound

Group: Not really. There is (group). Noise is annoying. They both travel in waves don't they? Will you stop making that noise?

Interviewer: So do you think that everything that is noise is annoying?

Group: Yes. No. No. It can't be, but there is, but mostly it is

Interviewer: Do you have any examples?

Group: did Linda tell you to draw on that sheet? No she didn't. She put that there for a reason not to draw on.

Interviewer: what do you think, do you have something in your everyday life where you can say that's a noise I hear everyday and I don't like it

Group: alarm. No me phone ringing. Yeah

Interviewer: your phone that's noise, anybody else

Group: bell in school

Interviewer: is that noise yeah,

Group: the teachers

Interviewer: what about you, there's no sound that you hear that it's like that's noise. Are you all from Dublin city?

Group: yeah, that's where I live see right there (refers to map) Interviewer: I think you are over here that's the north side

Group: that's where I live the biggest gaff in town. Let me mark my gaff.

Interviewer: so you all live on the north side?

Group: yeah. Well Luke doesn't

Interviewer: where do you live?

Group: Oliver Bond

Interviewer: and have you lived in the city your whole lives

Group: yeah. I lived in Kildare for a year

Interviewer: Are your parents from the city as well?

Group: yeah. Yeah. No my ma's from New York. My dad was born in France,

Interviewer: your dad

Group: he was born in France but he doesn't live there

Interviewer: most of your parents

Group: no my dads from Pakistan. No don't mind him (some boys make racial derogatory

and racial remarks)

Interviewer: come on guys. Watch the racist language

Group: where is Greek street there, St Michans house flats, that where you live Interviewer: what do you think of Dublin city, do you think that it's noisy

Group: yeah. Yeah it is noisy but I like it. You get used to the noise, like you could be walking along and think it's real quiet but it's not really but there's still noise in the background but you don't hear it. You wouldn't be able to walk up the street like that in Spain or anything that's why, that's why I like it.

Interviewer: In the housing estates or flat complexes or wherever you live is it noisy or quiet?

Group: it's noisy. Mine is quiet enough like, but then it can be noisy

Interviewer: do you think the noise is coming from where you live or from sounds outside of where you live?

Group: sounds outside. Like the Luas and all be outside his house. And traffic. Yeah straight out his window. And Guinness's. Remember we walked through the markets the noise of that Interviewer: you hear that, what time do hear that from in the morning

Group: About 6 O clocks that's what time they open at about 4 o clock

Interviewer: does anybody else live near the market, you live near the market and do you hear it first thing in the morning

Group: he lives in the market. I live near. You just hear all like police cars and all because the Bridewell is just around the corner

Interviewer: really so you actually hear Gardaí cars

Group: and ambulance

Interviewer: I always though that if the cars

Group: and the cars get reversing (makes a beep beep sound)

Interviewer: you hear that as well, how long does that go on for I mean obviously most of you

Group: all day. Well you get used to it.

Interviewer: well you just get used to it. You just don't hear it

Group: and after around twelve o clock like straight outside my window you'd hear like a truck, you couldn't hear like the way it goes on, you just hear like do you know like, vibration (mmmmmmm)

Interviewer: what if they took away, would you like if they took away the market, would you like if they got rid of it

Group: no. No. I'd like if they got rid of the fish market. You're used to growing up with places like that beside yeah and ye just get used to it.

Interviewer: and do any of your family work in the market

Group: no they don't

Interviewer: any of them aunts uncles

Group: no I know people that work in there I know loads of people that work in there. Jason works in there. Ross's uncle works in there, and my cousin.

Interviewer: are they market sellers or what are they

Group: just working there

Interviewer: did any of your grandparents work there?

Group: me da did. Me nanny's ma used to work in Moore street

Interviewer: do you remember, do you know the way Smithfield has that square now

Group: yeah (group response)

Interviewer: do you remember before that square?

Group: yeah. No I don't.

Interviewer: you don't remember, because it's been going on for years that they keep

changing the square, keep digging it up and doing something else

Group: why, it's a waste of time

Interviewer: I don't know what they want to do I think they want to make it useful in some

way

Group: I walk up through there, and eh there's a paddy power, and then there's the light house and the pizza shop and that's the only, and the rest of them are all for sale, that's all. And subway. There's loads of the. It's gone now.

Interviewer: then when you were there, do you remember when we walked through it, could you hear anything?

Group: The Luas

Interviewer: That's it

Group: Yeah

Interviewer: So would you consider that like quiet?

Group: Like that's all you'd notice

Interviewer: Is the Luas

Group: No the building site. The building site is there but you just don't like acknowledge Interviewer: Do you remember when we walked all the way up to Moore Street on the photographic walk, did you notice how the sounds changed, did you notice a big difference Group: I'm used to listening to that sound everyday so,

Interviewer: You don't notice it

Group: It's essential

Interviewer: It's essential?

Group: Like I actually recognise that but I don't know what it is, I know the sounds but I wouldn't be able to say aw that's a because I'm so used to listening to it you know what I mean

Interviewer: If you were looking at this map here would you be able to say, look at this area is really quiet this area is really loud can any of you point out

Group: Well it would be quiet here where I live. No it wouldn't. Yes it would be. Where I work is loud.

Interviewer: Why would you think it, who thinks it's loud?

Group: From here compared to Henry Street, It's very quiet and the Jervis centre, from this street here like that little distance there would be a big difference in sound just there

Interviewer: So we're looking at Mary Street, Henry Street all of those are louder. Town is loud

Group: You think town is loud, is town loud?

Interviewer: No it's not. It depends though because when you go on a Saturday morning or Saturday at about 12 o'clock there'd be loads of people. About 3 o'clock on a Saturday

Group: But would you like town to be quieter?

Interviewer: No. Yes. It would be dead if it was quieter Group: So you think that sound means likes and quiet means

Interviewer: Dead. This school is very quiet

Group: You think

Interviewer: Yeah it is, because it's so small.

Group: You think it's loud and you think it's quiet why do you think is quiet?

Interviewer: It's just like because it's small so there's not many people to make noise

Group: Can you tell me what is the building across from the school?

Interviewer: What's it called that thing; it used to be a court. The Richmond. It used to be a hospital. If the court. It gets us off school once in awhile. It's only for small things. No it's

not. It is. There used to be bomb scares and everything. It's only for small, car things and all I think

Group: I was just walking by and it looked kind of like empty

Interviewer: Is closed now it's moved the hospital.

Group: You know in this city all the sounds that you hear are they human made or not

human made

Interviewer: Not. Both. Both.

Group: Which would you say is the producer of the biggest?

Interviewer: Everything is

Group: What you think everything is?

Interviewer: Yes because humans. Not human. Think about it humans made the machines

Group: Yes that's true, but the actual sounds that they produce, who is

Interviewer: When you walk down the street, music.

Group: Music

Interviewer: And outside Arnott's there's like speakers that are loud. Yes. Yes.

Group: Should they be on or off?

Interviewer: Off. On. But it depends where you are if you were at Henry Street again the sound would be much more human made, if you were back down at the markets or on the keys then it would be much more machine made. Yeah but if you are thinking about town Henry Street is different than Grafton Street, Henry Street would make more alike, the noise over in Henry Street, like noise in Henry Street is probably more like people like it's probably more machine as well and people, but the minute you go to Grafton Street It's all different, like you can just hear people walking like footsteps no one talks they just walk

Group: So it's a totally different soundscape

Interviewer: You're not allowed to talk on Grafton Street they're signs up all over

Group: No

Interviewer: Of course people talk on Grafton Street. Yeah but you don't hear, in Henry Street. You do see people singing. You hear people singing and all but up. There is more of that on Grafton Street

Group: Yes well I mean when you go to Grafton Street it definitely seems to be a street that you see people walking through, And on Henry Street you see a lot more people standing around. Are there any spaces, like the Ilac centre or Jervis Or any of those where you kind of feel that the sounds that you make are not welcome, like teenagers

Interviewer: The securo tearing you out for no reason. I'm not being racist are anything but when you walk down Moore Street there are a lot of black down there. So. They make their own sounds. (One of the students mimics the sound, but it is clearly derogatory)

Group: So you think that they have a distinctive sound

Interviewer: That they have a higher pitched voice

Group: (Some more racist commentary)

Interviewer: Guys stop it stop it. You have to be colourful

Group: Guys stop being racist honestly it's not funny. Yeah man

Interviewer: So you're saying they have a distinctive sound that they produce

Group: You can hear them before you see them

Interviewer: Yes, Moore Street then if you think about it, Moore Street is a market, essentially the job of the market is to shout to get your attention

Group: Yes well you can't understand theirs. You clearly can understand them.

Interviewer: Guys come on watch the racism it's not good, it's not good. And another thing as well you all have phones, everybody here has a phone, how long have you had a phone for?

Group: Four and half years.

Interviewer: What age were you when you got a phone?

Group: Since my communion. (About 7 years of age) Since I was about 5. Since I was around 4. Around 7. Around 6 or 7

Interviewer: So basically you were all quite young when you got a phone

Group: Yes. I got my 1st phone when I was about 8

Interviewer: What would you do without your phones?

Group: Kill myself. Actually really don't know. Do us all a favour. You wouldn't get a rope to go around your neck.

Interviewer: Guys, c'mon that's not good to talk. So you all have phones to use them a lot?

Group: Yes. All of the time. Yes. Like even don't tell me. But even in school as well

Interviewer: Look, everything that you say to me is in confidence

Group: Confidential. So you're not even recording then

Interviewer: I am recording but this is just for me and all of you are anonymised in my recordings you will never be mentioned by name. So let's get back to the phones how often do you use them, you're saying you use them even in school

Group: Every day you'd spend at least 2 hours on Facebook everyday. No. Yes you would. And the rest

Interviewer: what do you put on your phone isn't just for making calls

Group: No. No. Texting. You can go on the Internet and all. I just text all the time

Interviewer: what about you calling or texting

Group: go on Facebook and play games and all, play temple ruin. Yes on my phone I play craft man

Interviewer: which do you do you text or phone when you want to talk to people?

Group: text. (Group response) It depends on what you want to say. Free text. Yes it does depend on what you want to say. Yes it does depend on what you say. I'd probably want to ring people. If it's like somebody that you know. If it was my Mot I'd probably text them.

Interviewer: did I hear if it was your mot? Is that still a word oh my dad used that I didn't know that people still called girlfriends motts

Group: Everyone does

Interviewer: everybody does

Group: Aaron just rings his girlfriend she's afraid of texts

Interviewer: if you want to get information really quickly you ring and if you just want to have a

Group: conversation. Convo

Interviewer: Do you have a conversation phoning or texting?

Group: texting. (Group response) if I was saying "Aaron are you coming out later I'd text him. E-mail. If I was saying where are you and I needed him then I bring him. I sent him e-mail or a Hotmail

Interviewer: and do you. What kind of cover do you get do you get the 10euro free talk and calls

Group: no €20 free calls and texts. Mine is bill pay now but it used to be. Is it? I used to get fiver free texts.

Interviewer: do you think it's expensive?

Group: No. Is Bill pay expenses? Not really expenses.

Interviewer: what other. Do you take photographs with it do you record stuff?

Group: I take loads of photographs

Interviewer: you take photographs, everybody else, video

Group: video sometimes. I don't take loads of photographs. It depends on what it is though. If I something moving you take a video. If I seen Ferrari just stop there I take a picture of it Interviewer: and then what do you do with them do you upload them or do you put them

on your computers or what?

Group: no No Just up load them onto

Group: no. No. Just up load them onto Facebook if it was pictures of me and my mates I'd put them on Facebook or something funny I'd put them on Facebook

Interviewer: so basically you use your phone to do a lot of stuff

Group: I don't record on my phone I have a camera that records, and I put stuff on YouTube

Interviewer: do you put music on your phones?

Group: yes. (Group response) bit of one direction

Interviewer: do you share music with each other with your friends?

Group: yes you can send it by Bluetooth, I can't

Interviewer: no you cant

Group: a lot of people don't really do it. Bluetooth is so old. Because you can get it on your phone now. It's infrared.

Interviewer: all right so nobody you don't really need to share

Group: no because you can just get it yourself. Yes you can just download it

Interviewer: and do you listen to the music a lot

Group: yes (Group response) Interviewer: where?

Group: say if you are lying down in your bed around 12:30 or something you'd listen to your iPod or something. No I wouldn't. Yes you would go asleep and all. Gives you a headache Interviewer: you don't listen to music

Group: I fall asleep listening to music. When I'm walking alone to school I listen to music. But it wouldn't be something

Interviewer: Just something relaxing. What about you, you listen to music

Group: never. If I'm going somewhere on me own or something. If I was going training or something

Interviewer: so do you mostly listen to music when you're by yourselves?

Group: yes. Say if he was in town like say he told me he was in O'Connell Street I was walking from my house I could listen to music until I got to him

Interviewer: why?

Group: Just something to amuse you were doing a good humour I think

Interviewer: what about you why would you listen to music? Group: if I was in bed and I wanted to go asleep I'd listen to music

Interviewer: you listen to music for travelling like going on long Journeys

Group: yes (Group response)

Interviewer: why

Group: it passes time (group yes) and it puts you asleep it depends on what music you are listening to. It's easier to put you asleep

Interviewer: safe for example if you got on the train and it was from Dublin to Galway, 3 hours ahead you realise you forgot your phone you forgot your music you've no technology what would that be like?

Group: aw you would be gutted. I'd play cards or something. Yes I play cards or something or solitaire.

Interviewer: Would you read something?

Group: no. If I had something. Not a newspaper. I'd read a newspaper. When I go on holidays I always buy a magazine or something

Interviewer: yes

Group: then I would have my iPod or my PSP. And then they give you then little yokes when you're on a plane the little head that you can listen. That only when you're going far. Yeah the American one

Interviewer: so do you think that, do you listen to other things because you don't want to hear what's around you?

Group: what around yes. I don't know. You don't want to hear what is around you it's just what. It can be sort of too quiet. Yeah. It's just for something to do. Say if I was like my head was wrecked my little sister is screaming her head off I can go into my bedroom and play PlayStation or listen to music or something

Interviewer: Do you come from big families and if you? Group: No. Yes. I have 30 cousins. Like Ma and dad and sister

Interviewer: No well I mean in your homes, in your own home is do you happy families

Group: I have 3 sisters and one brother Interviewer: And what about you.

Group: stop you have none. There is 5 in mine

Interviewer: in your house

Group: yes, And what about your house

Interviewer: there is 6. Group: in your house

Interviewer: yes even I know that, and how many is in your house?

Group: there's 6 in my gaff. There's 3 in mine Interviewer: so like you an only child? Group: Know my sister lives with my nanny

Interviewer: All right okay. And so Are there are there lots of technologies in your home

radios, televisions, computers

Group: Yes (group response) 3 tellies in a two-bedroom flat All over the place

Interviewer: And what about the rest of you

Group: I have 4 tellies a laptop and all. I have a telly and that's it. Because my mother's

boyfriend does all stuff for technology he has everything like

Interviewer: so 1st thing in the morning what gets turned on?

Group: the telly. I don't turn my telly on in the morning me ma does me ma leaves before 8 o clock, so then she turns the off I don't look at the telly in the morning

Interviewer: does anybody turn on the radio?

Group: No. No. Don't do anything like that. Never turn on the radio. You check your phone to see if you have any messages or something, the minute like the alarm clock goes off on your phone. I listen to music on the way to school and that's it

Interviewer: And that's it and what about when you come home in the evening what goes

Group: when I come home in the evening I turned the PlayStation on. The telly is on Is on in my house from when you get up at 8 o'clock in the morning because my sister does be watching the telly in the morning, then it might go of them for a while until she comes home at 1:30, and then it will be then, if she goes out then about 5 o'clock the news will be on something then, Coronation Street and all that will come on, then Emmerdale.

Interviewer: so basically

Group: from about 8 in the morning and then it's off for about an hour or 2 hours during the day, that's it then.

Interviewer: so you have like a background Soundscape all day basically of telly sounds Group: yes, Like when we walk into our house you expect to hear the telly, that's the same in me and me nannies, but in my house I wouldn't expect to hear anything

Interviewer: no

Group: Only because my ma would be in work like, and when I'm in the house on my own the two tellies do be off, so it's up to me whether I look at a telly or not

Interviewer: yeah. And you're a big family so what goes on

Group: like I have a big family bought, my brother doesn't live with me and my other sister doesn't live with me, but eh, like the 1st thing I'd hear is, heya doing are you back for lunch or something, then me ma would go in, and then I'd see my sister, but like after-school I just like 1st thing I do is check my YouTube channel then I just play PlayStation.

Interviewer: you just go onto something

Group: like YouTube. What are you on about? YouTube channel. You can create a channel Interviewer: And your houses, can you tell me you live in flats or houses or partners

Group: I live in a house

Interviewer: you live in a house

Group: He lives in our one level apartment flat, he has an upstairs.

Interviewer: you have an apartment?

Group: what, no. It's like our big flat. It's like one house on top of another

Interviewer: I know those ones

Group: is called a duplex

Interviewer: yes I know that I know them. And you live in a flat

Group: yes I live in a flat

Interviewer: and you live in a flat

Group: no he lives in a house don't you. Yes yes

Interviewer: do you hear a lot of the sound from outside coming in? Group: No. But next door, yeah next door. Do you know Bolton street tech,

Interviewer: Yes

Group: my flat is just there so I don't really hear anything; my flats are just there, so I don't

really anything

Interviewer: you don't hear anything, that's kind of quiet

Group: You live Rialto. Yes

Interviewer: and what about you can you hear outside? Group: eh yeah me Neighbours because they have kids

Interviewer: do you know, I often ask this and some People don't know the difference, do

you know that you have double glazed windows?

Group: yeah. I haven't got a clue. Yes I have I think.

Interviewer: do you know if you have?

Group: I think the Corporation put them in for everybody

Interviewer: all right, and do you notice a difference when you open them if it gets louder or like when you close them

Group: you notice when you have the heating on say and you open the window that it gets cold like

Interviewer: so it's definitely keeping in stuff

Group: Yes yes

Interviewer: but when you open the windows does that sound like you hear a lot more?

Group: Yes yes. It does get louder. Yeah it does

Interviewer: and at home do you keep the windows open or closed?

Group: closed. Well it depends. Yeah well it all depends what time of the year it is

Interviewer: what do you ever close it to close out sound?

Group: no. Yes. Yes. It depends on like say it with Halloween and the bangers are all going off like. Yes. Or if there is work being done on the road or something like

Interviewer: tell me about it, All right yeah

Group: oh yeah I hate when that happens. The fella behind us that lives like the row of houses here, but the fella is right at the back of was is doing his whole house up, so it's the drilling from 8 o'clock in the morning. But I like in the summer like when all the windows are open, you can play music loud and all

Interviewer: does the city sounds different during the summer?

Group: Yes. (Group response) it sounds more, there's more people around, like you'd hear birds and all. And everyone is like you get up early and all. And bees and that.

Interviewer: so you hear nature

Group: yes you can hear that it's more. It's deadly it is

Interviewer: it's funny because some people don't associate the city with nature, they kind of assumed that buildings and cars and that's it

Group: you would in the summer. You see loads of birds and cats and dogs yet you still see a lot of the birds (group laughter)

Interviewer: guys birds and mots okay, you do realise that both of those things are creatures yes

Group: yeah. They are creatures they're all rotten

Interviewer: do any of you live near a park or any green spaces?

Group: yes. Yes. He lives right next door to a park. I live besides a little one. You know the Temple

Interviewer: yes

Group: I live just besides there. I live right beside a playground so. It's very small and there's like a pitch there but no one plays in it

Interviewer: would you, If you were looking at this map here right, to me it just seems, when you look at the city from above you just building, there are some parks, I mean there's this Stephen's Green that's a park

Group: that's the Ilac centre

Interviewer: is that the Ilac Centre, me thinking it's a Park, that great, would you add more green spaces to the city?

Group: There is a park their right beside the McDonald's. Yes loads more. No I wouldn't

Interviewer: where?

Group: I don't know, Like places do you know where the Jervis Street is do you ever see Mary Street park there with the big bull in it, I like green in there like

Interviewer: that was a green, do you know that was green, a couple of years ago that was a park

Group: All the junkies, there's loads of junkie there. They should change stuff like that and then they should put more grass, there's parts like the ball alley down where we walk past and Kevin Berry and all.

Interviewer: do you think it changes something about the city?

Group: yes, it's just, it's nicer or something like. They should change gussies in the big park, gussies is just trees.

Interviewer: Would it change the sounds of the city?

Group: yes there would be more animals in it then

Interviewer: you think this city needs more animals?

Group: Yes. There is a place where I live and right next door to it it's just like, is like a dump isn't it. It's gussies.

Interviewer: where is that, is that the park?

Group: No it's a dump centre, it's horrible, and it's rotten. I'd say there is loads of rats in it

Interviewer: not the kind of nature you'd want to hear

Group: I hate rats I'm terrified of rats

Interviewer: really, so I want to get to this thing here so everybody needs to actually probably get to this side of the table, unfortunately

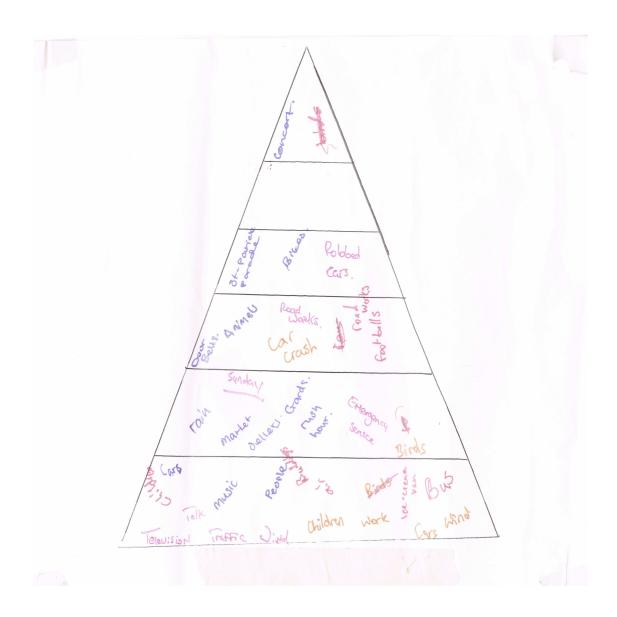
Group: okay

Interviewer: sorry, maybe someone can take this chair, because it's really high, Ridiculously tall sitting on it. I'll sit over here does everybody have a pen

Group: yes. Yes

Interviewer: see this pyramid, right, what I'm looking for in relation to this pyramid is, if we were to make a pyramid of sound and we were to say at the very bottom of the sounds that we hear continuously all of the time all day, generally speaking in the city, right up to the sounds that we hear the least, that we do here them, but we hear them hardly at all, can you write down here all of you what you think you hear continuously in the city pretty much all the time. And don't look at anybody else's to say oh he's written that, I won't write because he's written that, just what do you hear. Just think about what you hear all of the time in the background. No it doesn't matter you can duplicate, so what do you see that you always hear in the background in the city.

Pyramid for this transcript



Soundwalk photos: images by students







