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‘Sonifying Memory: Creative approaches to representing socially constructed soundscapes’

Abstract

This chapter examines an artist residency at the Leitrim Sculpture Centre in Ireland which culminated in the construction of a solo exhibition in 2014. The work was an attempt to represent artistically the soundscape memories of a collection of five older adults who had lived in or near the Smithfield area of Dublin from the 1940s, and sonic data collected by 84 teenagers age 15-16 living in or around Smithfield today. These participants were part of a large PhD research project, which was examining the co-construction of an urban soundscape. The study was interrogating the potential of sound to shape communities' perception of place. Further the research found that the users of space 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, through the deployment of their own sounds. This research was never intended for installation; instead, the focus was on an examination of the sound as a social construct. However, in reimagining the findings as a work of art, new ideas and questions emerged about how one can represent sensory knowledge through creative practice. This paper will look at both the collection and some of the findings from the research, and how this was translated into a sound installation.

Sonic sensory divides

While living in Chicago in 2009 I was confronted with a space both racially and sonically divided. The city, which includes a large African American population, is divided by a motorway, which splits the north from the south side of the city. On first moving to Chicago I lived on the south, predominantly black, side, and after several months I moved

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to the north side. The difference in urban design, housing, paths and roadways, parks and businesses, was quite startling. Large parts of the north side contained small streets with artisanal shops, bakeries, wholefood stores and street cafes. While the south side consisted of large roadways, block built stores and workspaces, large tracts of abandoned land, where presumably a construction project had died, with poorly built housing complexes. While recording the soundscape of Chicago what emerged was how much spatial design and architecture shaped the production of community sounds. Not only did the architecture alter the sounds of a space, it shaped how people sounded - as in produced sound - in public spaces. While this type of sonic segregation was very visible and audible, it was while attending another event in the city that I was struck by less obvious forms of sonic segregation. The annual Chicago American Indian powwow is held at the United Centre in Chicago, a sports stadium. This event is a response to the Indian relocation act of the 1950s, a concerted effort by governments to terminate tribal status in America and thus vacate people from their lands. The powwow allows the first peoples to have a common social and cultural ground where they can celebrate their history. This event consists of a series of processional events, which are accompanied by the sounds of a number of large drums played by various community groups (see figure 1). The sounds surrounded and vibrated through the space, they were both harmonic and disharmonic as each drum group shifted between rhythms. All of these sounds were contained within the dome of this vast sports centre. From the outside you could not hear any of the dances, drum beats or voices of song taking place within. This socio-cultural sonic celebration was enclosed and removed from the Chicago community.

On returning to Ireland I began to interrogate the idea of sound as an important socio-cultural experience, exploring spaces within Dublin city that were in the process or had already lost their traditional soundscape as a result of urban planning and design. That

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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. The methods involved extending the reach of the discipline by using an interdisciplinary approach. It required integrating ideas from the fields of sound art, acoustic ecology, psychoacoustics as well as traditional social science methods. 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.

Embodying the soundscape

The experience of listening to one's environment though common is not often acknowledged in conversation. One walks through space seeing and hearing, smelling, tasting and touching. Yet the predominant discourse of our spatial experiences is situated within the visible domain. To talk about other sensory connections means reflecting on the body and the body's awareness of space (Ihde 2007; Merleau-Ponty 1948), a sensual experience which seems private, not for public discussion. Our connections and ties to place rely on an overall embodiment and recognition of the sensory: we hear the cries of children, traffic, people shouting, birds and air, the sounds of familiar productive practices; we smell the bakers, butcher, fish markets, body odours, engine fumes; we brush against people, walls, pillars and posts; we taste the variety of food available in our culture. All of this happens simultaneously, we are contained within and embody the sensory, yet vision,

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the great remover and objectifier of space, is where many fields and disciplines situate the human experience (de Certeau 1988; Synnott 1992). The atomising of the senses is a process of isolating “one sense from the others” (Ihde 2007:43) so that we may 'build up' or 'synthesize an object out of 'sense data' or some other form of 'sensory atom'. These beliefs lie deeply imbedded in recent times with the “sense atomism” (Ihde 2007) that infects even the sciences at their metaphysical level.

This distancing of the body's senses, the sensual, is part of the western obsession with the visible as an objective view of the world, a concept, which is documented as emerging during the Enlightenment, but is not restricted to that period (Schwartz 2011). 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 (Sterne 2003). 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. This paper does not argue for an elevation of one sense over another but rather a consideration of a more holistic approach to sensing, or representing spatialities.

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). Sounds "are first experienced as sounds of things" (Ihde 2007:60); cars equals traffic sounds, factories produce the sounds of production. Experiential listening, for example, is rarely taken into consideration in the construction of objects, for

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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). It is our ability to discern minute details within the listening experience that 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” (Ihde 2007:60).

Ihde suggests that when we first encounter sounds, we listen naively, the sound is heard on the surface, identified with a cause or a source and then meaning is applied. On next hearing that sound, even without sourcing the cause we now have the ability to identify the sound. But Ihde goes further; within the location of sounding experiences the phenomenon of listening is paired with spatial awareness, a possible awareness of the *shape* of a sound, though this is significantly different to the visual seeing of shapes. Ihde proposes an extensive revision of how hearing occurs as a sensory and phenomenological event, highlighting as other authors have (Thibaud 1998), the limited understanding of the link between our auditory and visual perception of the world.

Creative methods of researching sound and the senses

The methods adopted for the collection of sonic data, and the design and construction of the art installation, placed the body at the centre of spatio-sensory experience. The sounds within the exhibition were designed to explore themes, which had emerged during the methodological stage of my research. But they were positioned and placed in ways to transform the audience’s engagement with the gallery space.

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The qualitative methods were designed to engage a group of participants (84 teenagers age 15-16, 5 older adults aged 55-70) in a sensory and sonic mapping of public spaces within Dublin city between 2010 and 2013. The key space at the centre of the research was the Smithfield Square and environs, a former market area with private and public housing projects. This space has experienced significant urban regeneration projects since the mid nineteen nineties (Peillon and Corcoran 2004). The methods included a series of sound walks, deep listening workshops, sound mapping and pyramid mapping (see figure 2). These methods required an integration of ideas from the fields of sound art, acoustic ecology, psychoacoustics as well as traditional social science methods, focus groups and interviews. The older adults were interviewed about their memories of the Dublin city soundscape during their teenage years as well as exploring how the city soundscape has changed over the past fifty years.

During this same period I began to bring people on silent sound walks through Dublin, and in 2013 co-founded the Dublin Phonographers Union. This process was part of a global phenomenon of collecting soundscapes, generated by the growing field of acoustic ecology.

However, my study did not exclude other forms of sensory engagement with space. Sound should not be collected or studied in isolation to other sensory experiences, but be emplaced within the study of the senses and the urban environment. In examining sound as a social construct I was seeking to challenge long-standing notions that sound is ephemeral and therefore not open to interpretation "despite the fact they are made, heard, imagined, and thought by humans" (Kahn 2001:4). It was this data including the autoethnographic walks, which shaped the proposed project at the Limerick Sculpture Centre.

Methodology for creating a sonic installation

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The beginning of this residency was difficult, as the task of reconceptualising data, which had been collected for a particular sociological purpose, seemed initially problematic. Most of this data was in the form of recorded interviews and focus groups, sound maps and sound pyramids, photographs of sound emitting objects or spaces and audio recordings of the Smithfield area and the broader area of the North side of Dublin city, collected by myself and the teenage participants. However, it was the interviews with the older adults, which generated the most impressive sensory and sonic descriptions of a particular place in its historic context. Their memories of the Smithfield area from the 1940s to today, its sounds, smells, and activities - social and economic - shaped how the installation evolved. During the interviews the older people talked about significant events or moments in their teenage lives, which were connected to certain sounds: daily experiences of work routines, such as the market soundscape at four in the morning; cultural or social rituals; the sounds of religious parades through the community streets; new or older technologies; the sounds of transistor radios or record players coming from flats, or the sounds of pop music playing from a transistor amidst group of teenagers on a street corner. Sounds were described as either centripetal or centrifugal, that is, sounds that draw people towards them or push people away. In some circumstances, certain sounds were both, for example, the sounds of the delivery trucks and horse and carts bringing fresh fruit and vegetables to the markets in the morning would be defined as centripetal; “it attracts and unifies the community in a social sense” (Schafer 1977:54). These sounds were a familiar part of the everyday; it allowed people identify themselves to a unique work practice within Dublin city (Twomey 2005).

The soundscape of this space was also a reminder of the poverty and deprivation that most of the community experienced in tenement housing in Dublin at this time, a centrifugal soundscape that pushed people away from the space. From the 1960s on there

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was a series of mass economic emigrations from this and most other parts of Dublin city.

In designing the installation a key goal was to explore these centrifugal and centripetal sounds, as the community understood them. It was also important to interrogate how sound was defined as, ephemeral, permanent, historical and modern.

Most of my art practice has involved a re-conceptualisation or reimagining of a sonic event. Previous works have included interactive and immersive installations that allow the listener to experience an interpretation of other places, memories or moments in time. In 2007 the Amersfoort city council commissioned a public art installation to create a work that celebrated the 500th anniversary of the town of Amersfoort in Holland. Three months were spent documenting the sounds and history of the town. This involved recording the street sounds, interviewing various people, visits to archaeological sites and museums, in an effort to try and extract the sonic past of this urban space. This also included examining how one could understand the sonic history of a space through an examination of the changes in architecture, cultural practices as well as the influences of different periods throughout history, from the renaissance to modernity. Schafer (1993), Schwarz (2011) and Smith (1999, 2004, 2011) suggest that one can understand the soundscape of place through historical archives as well as through shifts in cultural and architectural design. The materials of construction, how the landscape was used and creative activities such as theatre, music and the arts in general, leave remnants of information that can be sonically informative. In reading a city's past we can infer a type of sonic culture. Through this process of archaeological digging it was possible to conceptualise and map a type of sonic geography. The role of the artist within the Amersfoort project was to find a way in to represent the sonic history of this space and locate this within the contemporary soundscape. The link between the historical

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soundscape and the contemporary was further united by the art installation being constructed within a particular public space, which connected these histories (see figure 3). However, the installation constructed for the Leitrim Gallery space was removed from the original soundscape study. This was the white cube; a space often defined as a blank canvas, more suited to the visual than the audible, primarily because they are rarely constructed to deal with proper acoustic propagation.

Practice after research: Notes on standing at the precipice of a new body of work

Standing in the centre of the installation I am confronted by the dichotomy of sounds, sonic experiences, soundscapes, sound memories and abstracted audio, which have emerged from the 6-week residency at the Leitrim Sculpture centre¹. This work represents 4 years of research in which a small part of Dublin city was methodologically and ethnographically examined. This interrogation of a soundscape was shaped by sociological theory, guided by writings on sound studies in all their varied forms from perception to ecology, and the mediatization of the urban (Couldry 2008). What emerged from that research highlighted key processes involved in the shaping of urban spaces, which continue to ignore the significance of sound in the experience of place (O'Keeffe 2014; O'Keeffe 2015). Translating those findings into an immersive sonic installation required a rethinking of what constitutes representation. For example, how can one narrate a soundscape memory, in what way can a gallery space represent the social shaping of community sounds, and how can a work of art reflect the loss of what is already an ephemeral experience?

Though elements of the methods incorporated techniques developed within sound art practice and acoustic ecology such as soundwalking (Westerkamp 2007), Deep

¹ For a virtual tour of the installation please go to this link <https://vimeo.com/123495287>.

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Listening (Oliveros 2005) and sound mapping (Alarcón 2013), the transdisciplinary approach involved incorporating these methods into traditional sociological methodological enquiry. Transforming these findings into an installation required a rethinking of the model of research as art practice. Often practice based or led research involves developing a research strategy whose end goal is the construction of some artifact (Rust, Mottram, and Till 2007). The process of engaging with theory and methods is often merged with creative processes. However, this art project involved the translation of theoretical findings into a three dimensional or immersive experience. One of the key issues when working on this project was how to represent the sonic experience of the researcher and the research participants. A CD of sounds accompanied the thesis, but it was not considered necessary to understanding the text or the methods. Instead, the study had to use language as a way to describe and define the subjective and embodied experience of sound, both the internal and external, the felt and the imagined, the remembered and the lost. The installation was a way in which to engage the audience with sonic memory or psychogeography (Coverley 2010), but also a retelling through the researcher's interpretation, cuts and edits of others remembered sound stories.

When examining how the research could inform an installation I had to reflect on some of the key theoretical findings, firstly, sound, as an embodied experience, has the power to shape and reconstruct space and second, sound according to both the older and younger participants, was site specific. It embodied and informed us about a place's purpose or even purposelessness. History, community, media technologies, music and community informed the participant's definition of certain sonic experiences. In order to take these elements and transform them into a work of art all of these things had to be considered, including how to create an immersive experience for the listener/viewer in the

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gallery, which allowed them to experience and embody the soundscape memories of others. Listening back to the interviews and looking at the maps created by the teenagers offered “new insights” when thinking about embodied auditory experiences (Rust et al. 2007:12). Experimenting with the sounds and text from the research lead to an interrogation of how one could represent sonic memories, what were the possible ethical implications of using the same data in an exhibition, and how literal or explicative should the work be? In other words, should it try to represent the findings or say something different about sonic memories? The space of the gallery would inform the placement and engagement with the sound works created for this show.

Residency

The residency allowed me the time to interrogate materials, sounds and space in which to explore what could be represented as an embodied moment of sound that someone could walk, sit and stand within. The first stage of investigation was based on a statement made by one of the older participants. During the interview he talked about how he and a group of friends would run outside and place a transistor radio against a metal street light pole. This would act as an antenna, picking up radio signals from other countries, particularly music stations from the UK. The teenagers would stand around these poles accessing music, news, and other mediated information not broadcast or controlled by Irish media, which during the 1950s-1970s was heavily controlled by the church and state. For a moment these spaces would become autonomous soundscapes, or as Blesser and Salter (2009) called them, acoustic bubbles. Another interviewee remembered placing his transistor radio 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” (2nd male).

This image of teenagers 'extending the signal' was very important as a concept as it highlighted the possibilities of sound as something that both transformed and liberated space. This capturing of sound allowed them a sense of autonomy over their listening spaces; it also created what Lefebvre (1974) calls a representational space. Representational space is the space that "imagination seeks to change and appropriate" (1974:39). It is representational and symbolic space, which is necessary for the cohesion and continuity of space. 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). This image of the lamppost became part of a symbolic representation of imagined soundscapes. The installation therefore began with a search for a lamppost that could site the stories in a particular historical framework, and during the residency such a lamppost was found (see figure 4).

It was this piece which became the central focus of the installation because it led to an analysis of how the sounds within the gallery could be spaced differently, creating symbolic places within the exhibition. Sound by its very nature leaks and spreads, diffuses and crosses over. As a sensory experience it rarely happens in isolation to other sensory events, and I did not want to create an exhibition that was arguing for the supremacy of the auditory experience. Rather than sound was embodied, physical, tangible and intangible, it created as much as it diffused through space, but more importantly it was part of the overall experience of the gallery space, the wall, arches, walkways and objects placed within were as much a part of the experience as the sonic.

A residency is in part a period of experimentation, particularly as a lot of

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installations become site specific, they tend to reference the place you are within and the space you exhibit within. This particular residency offered a very different acoustic environment to the original research area, yet there were similarities to how space was defined by both participant groups. Each described this particular city space (Smithfield) as one falling into silence. Silence did not mean no sound, but rather the absence of significant or meaningful sounds. This notion of what was considered positive and negative sound started to emerge as a key point during the residency. I began exploring how during the interviews the older participants and some of the younger participants would describe sounds heard through vocalising a sound type or even singing sounds. Some of the younger participants often defined sound as evoking movement or music.

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 growling sound). (Participant 1) Yeah it's quiet (The Luas). Like a ballet. (Group 14a: Female)

Whilst the older participants remembered the songs sung in public spaces, the rhythm of space its fluctuations throughout the day, connected to work and social practices.

“singing, singing was a big part of it, because of a Sunday morning, Sunday around noon, you had the street singers coming around oh yes, they came through the streets, ... 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 (2nd male aged 63).

This led to experimenting with sonic descriptions and their voices to create music like sounds which would float through the space, including the sounds of radio (clips of radio shows from the 1930s-70s were played within the space), as well as dips into near silence, where the discreet sounds of voices floated into the main space from the next room. This time of experimentation allowed me to play with sound as a cyclical event; using stories,

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music, noise and silence to separate the space into different timed events of acoustic moments.

The space

Within the gallery the space was divided into 3 areas, a main central space, and two smaller spaces (see figure 4). It was decided to treat each space as distinctive soundscapes, where one became immersed in ways significant to the research participants. 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. Holding onto this concept meant deciding that the sounds in the space could not be closed off from other sounds, for example all sounds restricted to headphone listening. Instead, sound would filter through each of the spaces but only one sound would be continuous.

In the second smaller space, a rectangular room, two sound showers² were hung at opposite corners to each other. Each speaker faced into the corner of the wall meaning that the sound reflected off that surface and moved out in to the space. The listener would have to walk around the space to find the position that produced the clearest sound. The levels were quite low so one had to listen with intent to hear what was being said. These sounds were clips taken from the interviews with the older participants. Clips which stated in some way how places were transformed through the introduction of sounds, such as a radio, animals brought in to the Smithfield Square during markets days, the trucks, horses or lorries appearing in the very early hours of the morning to deliver goods. Each description

² A sound shower speaker is a directional speaker; it plays sound in a narrow frequency band, so vocal sounds work best.

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was of a temporal soundscape; a soundscape that only a local would understand.

The main space had at the centre a live audio piece, which was a selection of old radio recordings from Radio Eireann³ as well as audio recordings from radio programs from the UK dating back to the early 1940s through to the late 1960s. These clips would play for a period of time then drop to silence for approximately two minutes. Three small transistor radios were placed within the old radios that were situated around the base of the light pole. They were set to play (at a very low volume undetected until the radio sounds went off) white noise or cosmic static; this would change over time with the influence of disturbances in the atmosphere or with the other radios crossing over of signals. This would allow a listener in the next space hear the details of the vocal recordings undisturbed, which would be disrupted when the radio sounds came back on.

There were two headphone pieces also situated within the centre light pole work, each work played a sound piece, which was a mix of voices and sounds which looped around a central theme, an important sound remembered and described by two participants. The final piece was placed in the corner of the main space and consisted of an old record player with a headphone work. This work stemmed from the interviews and workshops with the teenagers. Making this piece required thinking a lot about the ethics of using the sounds of children and the ownership they have over their stories. The end work is a distortion of their voices, but this was not a direct response to ethics. Instead, the work was concerned with the overall experience of childhood in the 20th and 21st century which has not dramatically changed since the emergence of media technologies.

Conclusion

³ This was the national broadcasting station of Ireland.

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This residency allowed for the abstracting and reconceptualising of sonic and other sensory data as a way to explore the memories of space. It also raised questions about how to work within the white cube and all its acoustic issues. New media artists often have to engage with this traditional space, accommodating and sometimes altering the work to facilitate an appropriate engagement with non-visual based works. The research had examined how one engages with the sonic within open and public spaces. The artwork intended to recreate this engagement through a filtered and altered representation of that experience. However, when examining the large interior spaces of the gallery it was clear that the original sonic ideas would have to be altered. The transformation, which took place in response to the galleries architecture did in fact allow for an in-depth engagement with elements off the sound previously ignored or not considered. This included: the adjustment of the amplification of certain signals or frequency ranges; the placing of certain sounds in headphones rather than in loudspeakers; the difference in the design of these sounds that would be either intimate or shared; analysing whether a sound would be a whole body experience engaging most of the senses or an private one. This meant returning to the meaning and contexts of materials collected and considering what should or should not be amplified within all of the space. Because language played a key role in shaping sonic memories, there was a return to a deeper listening of the work and a real consideration as to what should be concealed and revealed. Each auditory description given by the interviewees defined larger social and cultural as well as spatial moments in time. In contrast, some memories triggered connections and meanings, which they had not expected, one sound descriptor defining other sounds. Some of these sensory memories were private, explicated moments of terror or exclusion, others were public and involved a sensory description of a space in its entirety, smells, tastes and touch as well as sound. The installation was designed to reflect the more specific and personal elements of sensory sonic memories and how these sensory moments can trigger vast reflective memories.

Sound is not experienced in isolation to other sensory information, though it is often ignored or peripherally engaged with within urban studies. 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. The exhibition was designed to focus the audience's attention to the sonic; each space constructed to engage them in a sensory event removed from visible information. The objects that were placed in the space were direct responses to sounding memories, and were directly linked to the production or shaping of sonic moments and memories.

Bibliography

- Alarcon, X. (2013). Creating Sounding Underground. *Digital Creativity*, 24(3), pp.252-258.
- Blessner, B. and Salter, L. (2009). *Spaces speak, are you listening?*. Cambridge, Mass. [u.a.]: MIT Press.
- Certeau, M., Giard, L., Mayol, P. and Tomasik, T. (1998). *The practice of everyday life*. Minneapolis: University of Minnesota Press.
- Corcoran, M. and Peillon, M. (2004). *Place and Non-place: The Reconfiguration of Ireland*. Dublin: Institute of Public Administration.
- Couldry, N. (2008). Mediatization or mediation? Alternative understandings of the emergent space of digital storytelling. *New Media & Society*, 10(3), pp.373-391.
- Coverley, M. (2010). *Psychogeography*. Harpenden, Herts: Pocket Essentials.
- Degen, M. (2008). *Sensing cities*. London: Routledge.
- Harvey, D. (2001). *Spaces of capital*. New York: Routledge.
- Harvey, D. (2011). Contested Cities: Social Process and Spatial Form. In: R. LeGates and F. Stout, ed., *The City Reader*, 5th ed. United Kingdom: Routledge, pp.230-237.

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Howes, D. (2006). Charting the Sensorial Revolution. *The Senses and Society*, 1(1), pp.113-128.

Ihde, D. (2007). *Listening and voice*. Albany: State University of New York Press.

Kahn, D. (1999). *Noise, water, meat*. Cambridge, Mass.: MIT Press.

Lefebvre, H. (1991). *The production of space*. Oxford, OX, UK: Blackwell.

Merleau-Ponty, M. (2004). *The world of perception*. London: Routledge.

O Keeffe, L. (2014). (Sound)Walking Through Smithfield Square in Dublin. [Blog] *Sounding Out!*. Available at: <http://soundstudiesblog.com/2014/02/10/soundwalking-through-smithfield-square-in-dublin/> [Accessed 9 Dec. 2015].

O Keeffe, L. (2015). Thinking Through New Methodologies. *Sounding Out the City With Teenagers*. *Qualitative Sociological Review*, 11(1), pp.6-32.

Oliveros, P. (2005). *Deep listening*. New York: iUniverse, Inc.

Rust, C., Mottram, J. and Till, J. (2007). *AHRC research review*. [Bristol]: Arts and Humanities Research Council.

Schafer, R. (1993). *The soundscape*. Rochester, Vt.: Destiny Books.

Schwartz, H. (2011). *Making noise*. Brooklyn, NY: Zone Books.

Smith, B. (1999). *The acoustic world of early modern England*. Chicago: University of Chicago Press.

Smith, B. (2004). In: L. Back and M. Bull, ed., *The Auditory Culture Reader*, 1st ed. Oxford: Berg Publishers, pp.127-136.

Smoth, M. (2011). The Garden in the Machine: Listening to Early American Industrialization. In: K. Bijsterveld and T. Pinch, ed., *The Oxford Handbook of Sound Studies*, 1st ed. USA: Oxford University Press, pp.39-57.

Sterne, J. (2003). *The audible past*. Durham: Duke University Press.

Synnott, A. (1992). The eye and I: A sociology of sight. *Int J Polit Cult Soc*, 5(4), pp.617-636.

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Thibaud, J. (1998). The Acoustic Embodiment of Social Practice Towards A Praxiology of Sound Environment. In: *Hey Listen*. Stockholm: The Royal Swedish Academy of Music, pp.17-22.

Twomey, B. (2005). *Smithfield and the parish of St Paul, Dublin, 1698-1750*. Dublin, Ireland: Four Courts Press.

Westerkamp, H. (2007). Soundwalking. In: A. Carlyle, ed., *Autumn Leaves, Sound and the Environment in Artistic Practice*, 1st ed. Paris: Double Entendre, p.49.