



# Sounds as Data

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We identify two broad methodological strands: sonic ethnographies, which rely on both conventionally written and more-than-textual representations of sonic qualities; and soundscape studies, which encompass a wide range of methods, including field recording, sound mapping and sound walks. (Gallagher and Prior, 2014, p. 272)

## INTRODUCTION

Gallagher and Prior highlight two modes of researching the sonic, the first which has been dominant is the use of a variety of methods that, whilst focusing upon sound – use methods that other disciplines also use, such as qualitative interviewing, the use of historical documents and the like. The second research mode is one where sound is treated as ‘sound’ rather than being translated into another medium, such as text. This does not mean that ‘text’ is not used, merely that it is subordinated to ‘sound’ as in *soundwalks* and *sound mapping*. This chapter, written by a sociologist,

will focus primarily upon research that appears to have significantly developed our understanding of the role of sound in society. There are differing arguments as to how we ‘should’ study sound from sociologists, anthropologists and historians who approach the subject from their own disciplinary interests and methodologies. Some researchers wish to understand or create an urban aesthetic of sound, for example, and these writers tend to favor distinct sonic methodologies that will be discussed toward the end of this chapter (LaBelle, 2006). In response to the development of sound studies as a discipline in its own right and as a subject that crosses over into many other disciplines it is pertinent to ask the following questions:

- 1 What, if any, are the special characteristics of sound?
- 2 Given the sensory nature of sound, what relationship exists between the sonic and the other senses – what is the role of sound in the more general development of what is referred to as ‘sensory studies’?

- 3 Related to the above two points and in recognition that what counts as 'data' – sonic or otherwise – is inflected with a set of theoretical concerns. The Gallagher and Prior quote with which this chapter begins highlights what has become a pressing issue in Sound Studies – to what extent should our methods intrinsically involve sound as sound rather than the translation of the sonic into another medium, the medium with which you are reading this chapter at present – script?

### **BRIEF HISTORICAL CONTEXTUALIZATION OF THE RISE OF SOUND STUDIES**

The last fifteen years has seen the rapid development of the field of Sound Studies. Sound is increasingly referred to in the works of historians, literary critics, sociologists, anthropologists, geographers, musicologists and media scholars. The study of sound is inherently interdisciplinary, undertaken both by those who specialize in sound and by others who wish to include a sonic element in their research. The focus upon sound is partly the result of a reevaluation of cultural sensory experience, coupled with a move away from an unreflectively visually based epistemology of experience that has dominated academic discourse in the social sciences, arts and humanities until recently (Howes, 2003). This 'sensory turn' in the arts, humanities and social sciences was itself a consequence of an increased concern with 'embodiment' as a focus for research in the 1980s, which had attempted to overcome the traditional mind–body dualism inherent in Western thought (Csordas, 1990). The sensory turn in research furthered this theoretical project by investigating 'the sensuous interrelationship of body-mind-environment' (Howes, 2005, p. 7). Throughout the following pages we will discover just how researchers have integrated this contextualization of sound in particular and the senses more generally into their understanding of cultural experience.

We have, over the previous few years, seen a series of books published retracing the complex and often divisive histories of sounds (Cockayne, 2007; Birdsall, 2012; Picker, 2003; Rath, 2003; Smith, 2001); historical and philosophical accounts of sound (Erlmann, 2011; Grimshaw and Garner, 2015; Schwartz, 2011); the changing character and nature of the voice (Connor, 2000; Rée, 1999); new analyses of the nature of architectural and urban sounds (Bijsterveld, 2016; Blesser and Salter, 2007; Thompson, 2002); the history of technological sound (Sterne, 2003; Suisman and Strasser, 2009) as well as a plethora of work on sonically based technologies (Bull, 2000, 2007; Goggin, 2006; Henriques, 2011). In addition to this there has been work highlighting the violence of sound (Johnson and Cloonan, 2009; Daughtry, 2015; Gilman, 2016; Pieslak, 2009) and religious sounds (Hirschkind, 2006; Pieslak, 2015).

### **THREE QUESTIONS**

#### ***Question 1: What, if any, are the Special Characteristics of Sound?***

Sound is intrinsically and unignorably relational: it emanates, propagates, communicates, vibrates and agitates; it leaves a body and enters others; it binds and unbinds, harmonizes and traumatizes; it sends the body moving, the mind dreaming, the air oscillating. (LaBelle, 2010, p. 468)

Studying cultures of sound implies an interest in the oft taken-for-granted ways in which people give meaning to the sounds they are surrounded with, in how they routinely act upon and use those sounds, and in how that has changed over time. But how can we get access to what is taken for granted in past and contemporary society? (Bijsterveld, 2016, p. 100)

The distinctiveness of sound tends to lie in its *temporal* and spatial nature. Historically, sound is defined by its specificity and immediacy – this siren that I now hear in the street outside – and by its transitoriness – the person shouting in the street outside my office has

now walked away. The history of sonic experience has until the *age of mechanical reproduction* been one of the irretrievable disappearance of sounds. We can, for example, view a Michelangelo sculpture in Florence but we cannot hear the voice of Michelangelo although we can read his diaries.

With the advent of recording technologies such as the phonograph in the late nineteenth century up until the advent of digital technologies in the twenty-first century, sounds can now be increasingly captured for research purposes. Whilst we cannot hear the voice of Michelangelo we can now hear the voices of the famous and infamous; from the voices of the dead to the sounds of air-raid sirens in London in 1942. We can listen to the recorded music of Caruso and David Bowie as well as the voices of ordinary people embedded in radio programs from the 1920s onwards. The ability to store sonic data has expanded our ability to fix the sounds of the past and present within our research methodologies. However, this ability to abstract out the sonic from a broader sensory range of experience poses its own problems. These are problems of:

- Specificity
- Cultural contextualization
- Meaning

These three concerns will be highlighted throughout the following pages and are apparent in the following work by Brady (1999). The ability to fix, transpose and transport sound arose with the phonograph in the late nineteenth century, with its ability to document sound events. Erika Brady (1999) estimated that fourteen thousand cylinder recordings of North American Native Americans were made by ethnologists between 1890 and 1935 – these cylinders are now deposited in a wide range of museums and university departments, symbolizing the growing cultural value attached to collecting history. What could be better than archiving the dying sounds of a culture for future

reference and a clearer understanding of lost sonic worlds? This desire to record had, she argues, positivist motivations – the recordings as such were interpreted as being objectively true – an accurate representation of that which was being recorded. Brady argues that these cylinders were seen, ironically given the present methodological concerns mentioned above, as mechanical tools enabling the researcher to transcribe sonic material into written text. It is for this reason, she argues, that many researchers failed to mention how indeed their material was gathered. The process of recording was frequently not mentioned by ethnographers of the time and as such assumed an air of invisibility. Early critics of the use of the phonograph by ethnographers mentioned the transformation and impoverishment of the ethnographic encounter in which the ethnographer relied upon the recoding machine to do all of the work. Importantly, in its *'fetishization'* of the sonic as representing what we would now refer to as a *'false objectivity'*, the recording was blind to all forms of nonverbal contextualization embedded in and acting beyond the recorded sound – the physicality of the culture in its ritualistic and material form. Hidden from view was the asymmetrical power relations embodied in the use of the ethnographic encounter between the researcher and the Native American. This example demonstrates the way in which theoretical concerns are bound to methodological ones and to the dangers of extracting the sonic from an understanding of embodiment more generally and the cultural specificities within which sonic practices are enacted and understood.

The twentieth century has seen a dramatic change in the sonic environment through the development of a range of acoustic technologies such as telephones, microphones, loudspeakers, phonographs, radios, tape recorders, compact discs, cellular phones, MP3 players, digital voice mail and talking computers that have transformed what it means to study and understand sonic experience.

## **Question 2: Sound and its Relation to the Other Senses**

The objects we perceive in our surroundings – cities, villages, fields and woods – bear the mark of having been worked upon by man. It is not only in clothing and appearance, in outward form and emotional make up that men are the products of history. Even the way they see and hear is inseparable from the social life process, as it has evolved over the millennia. The facts, which our senses present to us, are socially pre-formed in two ways: through the historical character of the object perceived and through the historical character of the perceiving organ. (Horkheimer, 1972, p. 200)

Every sense delivers contributions characteristic of its individual nature to the construction of social existence; peculiarities of the social relationship correspond to the nuancing of its impressions; the prevalence of one or other of the senses in the contact of individuals often provides this contact with a sociological nuance that could otherwise not be produced. (Simmel, 1997, p. 78)

Sound Studies is part of a wider research perspective that has prioritized the importance of the senses in understanding the nature of the social world that we live in. Kathleen Geurts has articulated this concern as follows:

How one becomes socialized toward the meaning of sights, sounds, smell, tastes and so forth, represents a critical aspect of how one acquires a mode of being-in the world, or an 'individual system of experiencing and organizing the world'. (Geurts, 2002, p. 235)

How this sensory system is organized becomes a function of cultural, social, political and technological change in society. Walter Benjamin noted the significance of the technological in its widest sense in the 1930s when he argued that technologies had 'subjected the human sensorium to a complex kind of training' (Benjamin, 2002, p. 104). This for Benjamin extended from the complex type of sensory training involved in traversing the city with its traffic lights, sirens and automobiles to the watching of films, which magnified, speeded up and slowed down the visual to produce what he called the 'optical unconscious'.

Within the sensory, sound now has become a central concern for scholars and researchers. Kelman argues that 'scholars of sound are interested in understanding how sound circulates and how it contributes to the ways in which we understand the world around us' (Kelman, 2010, p. 215).

Theodor Adorno in fleshing out the cultural nature of sensory experience that Max Horkheimer so eloquently described above, points to both the particularity of experience and its cultural grounding. Adorno is describing the seemingly 'natural' sounds of rain as it falls on the roof above him:

We can tell whether we are happy by the sound of the wind. It warns the unhappy man of the fragility of his house, hounding him from shallow sleep and violent dreams. To the happy man it is the song of his protectedness: its furious howling concedes that it has power over him no longer. (Adorno, 1974, p. 49)

Adorno wrote these words whilst living in exile in Hollywood, having escaped from Nazi Germany before World War II. Adorno's response to the sounds of rain is a lament from one who experienced the fragility of his refugee home. The sound of the wind is the variable upon which Adorno's cultural specificity is written. Sensory experience is multifaceted, rich and often contradictory. The Greek anthropologist Seremetakis (1994) describes in detail the tasting of a peach in her homeland, noting that the taste and smell of the peach differed from those peaches that she had eaten in her youth before the advent of commercial farming in Greece. The experience might well be an exercise in sensory nostalgia but also might represent a critique of the homogenization of taste in a fully commodified consumer culture. Sensory experience comes to us doubly filtered as Horkheimer argued – they are not raw data. Returning troops from Iraq often described staying away from firework displays both in America and the UK, frequently feeling sick with fear at hearing the explosions (Daughtry, 2015) just as sudden sounds would affect

those troops who in World War I had suffered from shell-shock (Leese, 2014).

Equally, the sounds of police sirens in any industrial city might evoke feelings of security, salvation or fear, depending upon who you are, your social class, gender or ethnicity. Increasingly, our sensory environment is a mediated one as we stare and listen to our television, computer and smartphone screens. Our media emphasize the visual, the auditory and increasingly the tactile, whilst denying the senses of smell and taste.

### ***Question 3: Sonic Methods – Sonic Data***

It is inadequate to rely solely on personal experience for understanding how people everywhere perceive the world. While humans share the same basic sensory capacities, these are developed and understood in different ways. (Howes and Classen, 2014, p. 9)

We need to stress the preeminent importance of contextualizing the sounds that museum visitors hear. Rather than simply feeding sounds to ears, we need to help visitors understand the context in which those sounds were produced, and how their reproduction can tell us not only about the nature of the past, but also about our own intellectual preferences and prejudices. (Smith in Morat, 2014, p. 20)

The object of research and the questions that the researcher wishes to ask and explore determine the methods that they will choose. Beyond that, what counts, as ‘data’ to be used is partially a function of the disciplinary adherence of the researcher. Sounds, as we have noted, do not speak for themselves. Sounds ‘have meanings that can only be fully understood within their particular cultural context’ (Howes and Classen, 2014, p. 2). The relationship between the specificity of sonic experience and its more general patterns and cultural context remain central to research at least in the social sciences. Sound Studies is a broad church – a sociologist like myself prefers to study generalized

patterns and meanings that may well be embedded in specific forms of experience. Later in this chapter I will discuss my ethnographic study of Walkman users to demonstrate the changing role of the social embedded in the sonic meanings constructed by Walkman users as they move through their everyday life. However, many sound artists prefer to give prominence to the way in which sound itself mediates cultural experience aesthetically and otherwise. These researchers might use sound walks, sonic exhibitions and personal recollection and experiments to discuss the way in which a variety of sounds are interpreted – whether that be experiencing and remembering the sounds of Hanoi (Osterjo and Thuy, 2016), exploring the sounds of aircraft as they fly over a farm on the edge of Tokyo airport and so on (Carlyle and Cox, 2012).

## **RESEARCH AND SONIC DATA**

### ***Historical Sonic Data***

The historical exploration of sound is often referred to as a form of sonic archeology, yet this sonic history, as we will see, might equally span medieval European culture, nineteenth-century French culture, an investigation of the soundscapes of Nazi Germany between 1933 and 1945, to an understanding of the role of radio and the recording industry in the development of pop cultures in Western culture.

Given that the sounds of the distant past cannot literally be heard, then it might strike the reader as surprising that historians using traditional methodologies have undertaken some of the most impressive sonic research, which includes the use of a wide variety of written records both official and literary. Official historical documents are frequently written by the powerful and literate who define the world according to their own interests, prejudices and vision. For example, sensitivity to the supposedly oppressive nature of urban sounds is often class and culturally based. Cultures

with strong notions of ‘private space’, understood as a form of entitlement, are more prone to dislike or discriminate against the noise of others. Historically, the production of ‘noise’ was frequently perceived as uncivilized within a bourgeois Western and, specifically, Northern European ethic in which silence was considered ‘golden’. Creating an auditory space for oneself and one’s family was increasingly a prerogative and strategy of elites who felt that noise was no respecter of private urban space. It might be argued that sonically based historical accounts might fall prey to this fundamental limitation in documentary evidence. Yet historians of sound have found ways to listen more deeply to those historical sources. Historians such as John Picker have used a variety of written records to demonstrate this class sensitivity toward ‘noise’. From historical documentation we find that Charles Dickens, chronicler of the nineteenth-century industrial city, promoted government legislation to rid London of street musicians, for example.

There is no protection, we say, for the ear is the most hapless faculty we have. It is at once the weakest and the most wonderful, the most ethereal and most persecuted of the senses ... A sense that, deliberately constituted, we subject day and night to torture which is very nearly the equivalent to cutting off a malefactor’s eyelids and then crucifying him with his face to the sun. (*The Times* leader 1856, quoted in Picker, 2009, p. 66)

### ***Social Class Sensitivity Toward Noise in Nineteenth-Century London***

The use of historical documentation far preceded the industrial revolution, however. It is possible to listen in to much earlier forms of social life. The following account derives from official inquisitional records from the fourteenth century and represents a wonderful account of the sonic worlds of a distant past written by a scholar who would not consider himself to be a scholar of sound but

nevertheless investigates the lives of a whole community in order to better understand their collective lifeworld.

### ***Emmanuel Le Roy Ladurie, Montaillou. Cathars and the Catholics in a French Village 1294–1324***

The historian La Roy Ladurie focused upon Montaillou, a fourteenth-century French village, which had been accused by the church of following the Cathar heresy whose principal belief was that the whole world was in a fallen state and hence evil, thus all was possible. The Cathar heresy was essentially an amoral belief system. The village was managed by village ‘goodmen’ who supplanted the traditional role of the Catholic clergy in the village and surrounding area. The Cathars were subject to a brutal inquisition by the Catholic Church in its effort to reassert its ecclesiastical authority in the area. La Roy Ladurie drew a vivid account of the everyday life of the village from the testimony of the villagers themselves – as if we, the reader, are eavesdropping on the accounts of village life in Montaillou. We hear the villagers give accounts of their marriages, loves, affairs; their children, their work and social and cultural relations as well as their notions of fate, magic and salvation – all verbatim:

The basis for the story of Montaillou is the Inquisition Register of bishop Jacques Fournier ... What in the final analysis should we make of the resister’s account of Montaillou ... I will limit myself to invoking the term ‘tape recorder’ – for such is the impression created by the extraordinary quality of the stenographers whom Fournier employed in his episcopal seat at Pamiers to write down the words of the villagers who appeared before him ... The register of Jacques Fournier, Bishop of Pamiers in Ariege in the *Compte de Foix* from 1318 to 1325, is of such exceptional interest ... he supervised a rigorous Inquisition in his diocese and, what is more important, saw to it that the depositions made to the Inquisition courts were meticulously recorded. In the process of revealing their position

on official Catholicism, the peasants examined by Fournier's inquisition, many from the village of Montailou, have given an extraordinarily detailed and vivid picture of their everyday life. (La Roy Ladurie, 2005, p. xv)

### **Alain Corbin. *Village Bells. Sound and Meaning in the Nineteenth-Century French Countryside***

We see from the above account how text can illuminate the cultures of sound. Yet it is to the singular study of historical sound through the object of the 'village bell' that I now turn in order to discuss Alain Corbin's groundbreaking sonic text. Corbin based his account on a meticulously researched investigation of French local parish records from the nineteenth century. He used these accounts to construct an analysis of the cultural, and often contradictory, significance of the village bell.

Bells provided a sort of auditory certification, transmitted information about the major events of private life, and solemnized rites of passage. When natural disaster threatened, when bandits or enemies loomed, when a fire took hold, only the tocsin could sound the alarm. Possessing a peal of bells was a prerequisite of modernity in a society increasingly subject to haste but as yet without any other means of transmitting information instantaneously ... this book is thus devoted to an element in the history of the auditory landscape. However, this history constitutes a vast field of research, the surface of which has barely been scratched. The time has come to tackle it and thus address a mass of primary materials that have scarcely been touched. These materials affect reality to a pronounced degree because they were very often constructed in haste, because they are instantaneous in their effects and because they reconstitute the flavor of territories. A history of representations of space and of the social imagination can no longer afford to neglect materials pertaining to auditory perception. (Corbin, 1998, pp. xi–xii)

Corbin charted the changing meaning of the village bell throughout the nineteenth century, focusing both on the integrative cultural moments and those that increasingly represented conflicting views of noise, time and

regulation. As rural France became increasingly secularized, a traditional sonically unified system of management was replaced by a more urban, secular viewpoint that perceived bells as nuisance to be banned. The documentation that underpinned Corbin's work does not, however, furnish the reader with a total sonic account:

We cannot be certain how frequently and how loudly the bells were rung, nor can we be sure about the number of peals, the complexity of codes, or the diversity of episcopal regulations ... the objective measurement of the frequency, form, and intensity of auditory messages does not allow us to reconstitute their impact upon the individual who heard them. The reception of such messages is determined at once by the texture of the sensory environment, the modes of attention brought to bear on the environment, and the procedures of decipherment. (Corbin, 1998, p. 4)

### **Carolyn Birdsall. *Nazi Soundscapes. Sound, Technology and Urban Space in Germany, 1933–1945***

We now move to a more recent historical analysis of sound in Nazi Germany that was able to gather sonic and documentary evidence from living participants and radio archives. Birdsall interviewed a small group of people who were either children or young adults during the period between 1933 and 1945 in Germany, in order to understand their sonic memories. She referred to these individuals as EARWITNESSES. Birdsall then followed up these personal testimonies with radio and archive material from the period. Her aim was to highlight the varied role of sound in the everyday life of German citizens at the time – both private and public:

Despite their pervasiveness in many descriptions, these intense sound events remained ephemeral. The inability of these sounds to be captured by photography led to their absence in what has been termed the 'visual iconography' of warfare ... the overwhelming sensory experience of civilians has left few material traces, let alone recordings ...

My initial focus is thus primarily on how sound participated in expanding social practices of control during National Socialism. (Birdsall, 2012, p. 119)

## CONTEMPORARY SONIC RESEARCH

### *Researching Walkman and iPod Use*

My own work (Bull, 2000, 2007, 2013), as a sociologist, uses rather traditional research methodologies – qualitative interviews, diaries and questionnaires, although in the new edition of *The Auditory Culture Reader* (2016), which I have edited with Les Back (Bull and Back, 2016), we have included a supplementary website consisting of sonic material to be listened to whilst reading the text.

When I started out researching how ‘Walkmans’ were used in the 1990s there was a singular lack of empirical research into their use at that time. Given the difficulty of interviewing users whilst they are listening to music through headphones – which in effect signify ‘leave me alone!’ – I decided to employ a series of snowball samples of users. Each user was encouraged to bring along their Walkman and we would proceed with what they had listened to that day. For my subsequent iPod volume I wanted to look more closely at global meanings of use – so I employed a qualitative questionnaire to be filled out online. This resulted in over one thousand users globally filling out the questionnaire as against 80 interviews conducted for the Walkman book. I much preferred the qualitative interviews as I could respond directly to the interviewee’s responses and whilst with the online questionnaires we could to and fro over the Internet, I found it more difficult to get a comprehensive sense of each user.

At the time of researching *Sounding Out the City* there was no comprehensive account of the auditory nature of everyday experience. Indeed, I had been brought up intellectually

within this tradition. By focusing upon the auditory and the technologized nature of the everyday experience of personal stereo users, I attempted to explain their attempts at creating manageable sites of habitation and charted the multifaceted ways in which their experience was transformed and constructed through habitual use of a sonic technology – the Walkman. Through a close analysis of the interview material I demonstrated the ways in which personal stereos became a critical tool for users in their management of space and time, in their construction of boundaries around the self, and as a site of fantasy and memory... Sound, the audible, was thus put back onto the cognitive map of urban experience; sound as opposed to vision became the site for the critical investigation of urban life. The research proposed a reevaluation of the significance of the auditory in everyday experience, together with a re-assessment of the role and relation of the senses within urban experience. It also demonstrated how qualitative sonic empirical material (case studies/thick description) could be used to formulate new theoretical frameworks and explanations of urban behavior. Examples of the rich sonic descriptions given by users are given below:

I think it creates a sense of kind of aura. Sort of like. Even though it’s directly in your ears you feel like it’s all around your head because you’re coming. Because you’re really aware it’s just you. Only you can hear it. I’m really aware of my personal space. My own space anyway ... I find it quite weird watching things that you normally associate certain sounds with. Like the sounds of walking up and down the stairs or tubes coming in and out. All those things that you hear, like when you’ve got a Walkman on you don’t hear any of those. You’ve got your own soundtrack. You see them and it looks like they’re moving differently because you’ve got a rhythm in your head. The way that they walk, they flow past you more. (Bull, 1999, p. 22)

I use it on the beach. I feel that I’d be listening to my music. I have the sea, I have the sand. I have the warmth but I don’t have all the crap around me. I can eliminate that and I can get much more out of what the ocean has to offer me. I can enjoy. I feel

that listening to my music, I can really pull those sun's rays. Not being disturbed by screaming kids and all that shouting which is not why I went there. I have my harmony with the sea and the sun ... The plane journey, flying out and back and you listen to different music, but it just helps me to still my mind and to center myself and I feel that by taking this tape with me I'm carrying that all day and I feel that I'm able to take more from the day and give more to the day. Whether that's right or wrong I don't know but that's how I feel. (Bull, 1999, pp. 36–7)

Most of the music I chose was very evocative of something and I associated it with a particular part of my journey. It became a way of describing that this part of the journey is bearable. You can get through this part. I remember there was a big escalator change at Green Park and I thought 'Right! If I don't have that particular music for that, then I'll fast forward it to get to that and then I can go up.' Like that it made it easier not to let work encroach onto non-work time. It was a way of not allowing thoughts like I've got that deadline and a meeting with so and so. Because the journey to work was so uniform and intrusive. (Bull, 1999, p. 63)

It's like looking through a one-way mirror. I'm looking at them but they can't see me. (Bull, 1999, p. 77)

These examples helped in the formulation and construction of an auditory epistemology of everyday urban life constructed around the concept of control: cognitively, interpersonally and aesthetically (control over one's moods, other people and the spaces of the city moved through). *Sound Moves, iPod Culture and Urban Experience* (Bull, 2007) followed this research agenda, updating it for the digital era – a world in which the user, through miniaturization, could hold their whole digital world in their hand as one user commented:

I now listen to music any time I can. Walking to and from work, at work, on vacation, on a train or airplane, even at home when I don't want to disturb my partner. I have any song I want to listen to at my fingertips at any particular moment. That amazes me. It truly is my own personal jukebox, and puts the soundtrack to my life in my pocket and at my fingertips. (Bull, 2007, p. 74)

More recently I have interviewed users of smartphones to investigate the use of mobile

technologies that engage users audio-visually. The affordances created through smartphone use have complicated and extended the auditory and audio-visual strategies encompassed by traditional iPod use. Georgia, a twenty-two year old wakes up to her alarm on her smartphone; she often sleeps through the alarm, as she's grown accustomed to it. She wakes up and answers two text messages, gets up and goes for a shower, bringing her phone along to choose the same playlist as not only are the songs some of her favorites but also 'good morning songs like "Sunday Morning" by the Velvet Underground and Nico is very mellow and happy, and "People Have the Power" by Patti Smith is very energetic and inspiring leaving me ready for the day ahead' (Bull, 2013, p. 12). She takes her phone downstairs still listening to music and makes breakfast whilst reading the paper. She checks the train times on her phone app and goes out where she meets her friend Frankie on the train to work:

despite being sat next to my friend who I spent most of the morning arranging to meet, now I am with her I am once again on my phone, preferring to play a game than make conversation. She is also playing a game, which means that neither of us make any effort to communicate. (Bull, 2013, p. 14)

Georgia's response to the urban is similar to traditional mobile phone and iPod users. The technology merely allows her to engage in a wider range of mediating activities: 'Whenever I'm walking on my own, even for a short amount of time – like walking from my home to the bus stop – I have to either call someone on the phone or listen to my music. I hate being alone' (Georgia).

Equally, Michelle describes her three-hour train journey from London to Norwich to visit her boyfriend, 'I check my phone and make sure it is fully charged, it is necessary for me to have my phone fully charged so it will be able to handle the text messages, phone calls, the Internet and play music through my music playlist to last me the whole journey' (Bull, 2013, p. 16). Whilst waiting for the train Michelle waits at the station.

I go on my phone to keep myself busy. When I'm bored and out in public I look to my phone in order to cope with the boredom. I text, call, go on Facebook and whatever. Time goes quicker when I am doing something, and not just waiting around doing nothing. (Bull, 2013, p. 16)

Urban users of these technologies are simultaneously transported to the global spaces of culture and yet are also embedded in the locations that they traverse – guided by their mobile multi-sensory technologies.

### **MIXING TRADITIONAL METHODS WITH INNOVATIVE METHODS**

Waldock (2016) in this innovative study demonstrates how a researcher can capture the way in which an urban sonic environment changes over time. In order to do so Waldock studied an inner-city redevelopment scheme in Liverpool, called the 'Pathfinder Scheme', initiated by the then Labour government in the UK. The aim of the scheme was to demolish the old housing stock lived in primarily by working-class inhabitants and replace it with 'homes that meet the needs of modern living' (Waldock, 2016, p. 152). Many of the local residents were unwilling to move, especially as they were not to be rehoused in the same locale, but rather the area was meant to act as a magnet for the middle classes to return to the city center. The scheme saw more and more residents evicted and their homes boarded up. Waldock wished to study the sonic dimensions of this urban change, which involved a good deal of social conflict between the working-class residents who were being forcibly moved and council officials.

My desire to understand these changes sonically and work with the residents rather than become another dominating power led me to create a community centric, Trinitarian methodology. The methodology aimed not only to capture the sounds of the area, but also people's connection to the sounds. I incorporated the roles of field recording/composer with that of anthropologist/ethnographer, as others have done before me, to utilize

soundscape composition as a tool to encapsulate, analyze and represent change. The difference in my methodology is that I saw residents and myself in three roles, artist, activist and academic. (Waldock, 2016, p. 152)

Waldock correctly understood that people's experience of sounds, both domestic and public, differed from one person to the next. The residents were given crash courses in listening and how to use their sound recording equipment:

As artists, they recorded and controlled their own soundscape compositions over a period ranging from six to nine months. As academics they could produce a critical commentary on their work. In order to produce sound catalogues, sound montages or compositions, each resident had the opportunity to listen to their own recordings and edit their work. The editing process acted as a critical listening period, allowing them to reflect upon their connection to the sound, both emotional and aesthetic. (Waldock, 2016, p. 155)

One of the residents who recorded her sounds was moved by the council during the project:

When we played the recording of her front door closing and locking, she commented on how familiar and safe the sound was, how the door of her new home didn't have the same latch and she was anxious because she couldn't always tell if it was locked. She also recorded the police helicopter circling over neighboring empty homes, and commented on the familiarity and reassurance of knowing that the police were there. (Waldock, 2016, p. 158)

### **METHODS THAT STRESS SOUND AND VOICE**

Helen Wilson is a social geographer, so her take on the importance of soundwalks comes from a largely social science perspective, rather than an arts-based perspective. Wilson (2016) argues that it has become important for geographers to listen to the spaces and places that they study. We have seen this with the Waldock example given above.

A geographical interest in soundwalks has emerged out of collaborative relations between geographers and artists, where embodied and experimental accounts of space and landscape have been prioritized. A distinction might be made between a 'listening walk' – as a walk where there is a concentration on listening – and soundwalk, where there is some form of score. However, the distinction has been largely blurred by the growing practice of guided walks, whereby participants are guided around a pre-planned route that has been designed to encourage 'active listening', often through a combination of narration and sonic recomposition. An interest in promoting active listening can be seen in artistic explorations of urban space, which have encouraged walkers and participants to reflect anew on otherwise mundane spaces. (Wilson, 2016, pp. 165–6)

Researchers using soundwalks, for example, might encourage walkers to reflect on what they hear, or narrate their memories if they have any as they walk through a specific site. In this instance the sonic nature of the experience takes precedence over the textual – the writing of spaces. So minute sonic experiences, such as the everyday mundane sounds of the environment that might have special or personal meaning for the walker are articulated in their own right: 'When taken together, the recordings of soundscapes, people and oral narratives demonstrate what is to be gained from phonographic research' (Wilson, 2016, p. 168).

Karis Petty's (2016) work is based around an investigation as to how the visually impaired experience the countryside and is an excellent example as to how the use of a combination of traditional and innovative methods enables us to understand more fully how sound contributes to the make up of everyday experience. It also teaches us not to abstract the sonic from the other senses. Petty, a trained accompanist for the blind, looked at specific geographical locales and walks that her sample was both comfortable with and knowledgeable about. She accompanied them on all of their walks both individually and in groups:

My principal methodology was to walk one-to-one as their sites companion through changing weath-

ers, seasons and environments of the park over two years. During these walks we collaboratively experimented with techniques to investigate and represent sensory experience, including writing descriptive walk diaries, filming, inclusive photography, auto-ethnography, conversational interviews and reflection. We used a field recorder to record the sound of these walks. When we listened back to these together in the interviews, it caught our attention that these recordings – this technological ear – did not capture the sounds, as we had perceived them in the woodlands. The recordings captured many sounds we had heard, such as the vibrant song of birds or playful cries of children, but did not capture other sounds, such as those heard in the practice of 'echolocation'. It was on a bright spring morning when Elen announced, 'blind people need to teach sighted people how to listen', that I started to consider: what can my companions hear? What are they listening to? But also, how are they listening? (Petty, 2016, p. 174)

Petty's acute observation leads her to explore the way in which the partially sighted feel sound through a process of 'echolocation'. She uses John Hull's observation that for him, 'perception is no longer specialized or located in a specific part of the body, but the whole body becomes an organ of perception. When I realized this, I no longer thought of myself as being blind, but a whole body seer...' (in Petty, 2016, p. 181).

## CONCLUSION

Petty's work, as does the other examples referred to in this chapter, demonstrates that even for those interested in undertaking sonic research that it is nevertheless necessary for the researchers to 'learn how to listen' as one path toward understanding the complex nature of the sonic, and more importantly the nature of embodied knowledge itself. It also brings us back full circle to the contention mapped out at the beginning of this chapter, that sound studies represents an embodiment of the sensory turn in the academy – one which investigates the sensorial arrangement of the body situated historically, socially and spatially.

## FURTHER READING

- Bull, Michael and Black, Les (eds.) (2016) *The Auditory Culture Reader*. London: Bloomsbury Press.
- Gilman, Lisa (2016) *My Music, My War. The Listening Habits of U.S. Troops in Iraq and Afghanistan*. Middletown: Wesleyan University Press.
- Howes, David and Classen, Constance (2014) *Ways of Sensing. Understanding the Senses in Society*. London: Routledge.
- Pinch, Trevor and Bisterveld, Karin (eds.) (2012) *The Oxford Handbook of Sound Studies*. Oxford: Oxford University Press.
- Sterne, Jonathan (ed.) (2012) *The Sound Studies Reader*. Oxford: Routledge.
- For those interested in the way in which soundwalks, sound mapping and field recording might be used in research, the following issue of the *Journal of Sonic Studies* 12 (2016) – *Encounters With Southeast Asia Through Sound* contains a range of articles that use these methods with great imagination. The first issue of *Sound Studies. An Interdisciplinary Journal* (2016) has a selection of articles that discuss the full range of interdisciplinary issues surrounding Sound Studies.

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