

Please cite the Published Version

Gallagher, M, Prior, J, Needham, M and Holmes, R (2017) Listening differently: a pedagogy for expanded listening. *British Educational Research Journal*, 43 (6). pp. 1246-1265. ISSN 0141-1926

DOI: <https://doi.org/10.1002/berj.3306>

Publisher: Wiley

Version: Accepted Version

Downloaded from: <https://e-space.mmu.ac.uk/619635/>

Usage rights: © In Copyright

Additional Information: This is an Author Accepted Manuscript of a paper accepted for publication in *British Educational Research Journal*, published by Wiley and copyright British Educational Research Association.

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

Listening differently: a pedagogy for expanded listening

Michael Gallagher, Jonathan Prior, Martin Needham and Rachel Holmes

Corresponding author:

Dr. Michael Gallagher

Reader in Education

School of Childhood, Youth and Education Studies

Manchester Metropolitan University

Birley Building

53 Bonsall Street

Manchester

M15 6GX

Email: m.gallagher@mmu.ac.uk

Web: www.michaelgallagher.co.uk

Phone: 0161 247 2102

The published, copy-edited version of this article is available at

<http://onlinelibrary.wiley.com/doi/10.1002/berj.3306/full>

If you wish to cite the article, please use the published version.

If you are unable to access it, please contact the author.

Abstract

Mainstream education promotes a narrow conception of listening, centred on the reception and comprehension of human meanings. As such it is ill-equipped to hear how sound propagates affects, generates atmospheres, shapes environments and enacts power. Yet these aspects of sound are vital to how education functions. We therefore argue that there is a need to expand listening in education, and suggest that listening walks could provide a pedagogy for this purpose. Using interview data in which early years practitioners reflect on a listening walk, we show how the method can: (i) produce heightened multisensory experiences of spaces; (ii) generate forms of difficulty and discomfort that produce new learning; and (iii) influence practice, particularly practitioners' ability to empathise with young children. Listening walks function by disrupting everyday sensory habits, provoking listeners to listen anew to their own listening, in an open-ended way that is not tied to predetermined learning outcomes. The method therefore has a broad pedagogic potential for rethinking education and childhood beyond rationality, representation and meaning.

Keywords

listening; walk; sound; pedagogy

Introduction

Listening is impoverished by mainstream education. Education and child care institutions promote a narrow understanding of listening as the conscious reception and comprehension of symbolic meanings encoded in spoken

language. Children are viewed either as in deficit with regard to listening (needing to learn to listen 'better') or as deserving to be listened to (competent to voice their views). In both cases, the focus is on human communication to the exclusion of other aspects of listening and sounding. Sounds that are outside institutional agendas tend to be heard only as noisy distractions (Gershon 2011a). Mainstream pedagogy is therefore ill-equipped to hear sound's affective and environmental dimensions, as vibrations that move all kinds of bodies in all kinds of ways (Doughty et al. 2016; Gershon 2013b; Kanngieser 2012).

Yet these aspects of sound are central to how education institutions function. Gershon (2011a, p.76) argues that soundscapes constitute educational systems, insofar as they "tell us about our environment, our relationship to others, and reveal as much about how we understand the world as they convey meanings to us as listeners." Sonic ambiances also contribute to affective atmospheres (e.g. Adey et al. 2013), with implications for learning (Pearce et al. 2014). Noise has been shown to have negative effects on academic performance for example (e.g. Dockrell & Shield 2006; Shield & Dockrell 2008), and schools regulate their sonic environments through architectural acoustics, sound field systems and classroom management strategies (Department for Education 2015; McSporran et al. 1997). Sound is used to exercise power over children's bodies through the use of bells, whistles, handclaps, shouts, announcements, rhymes, structured silences and processes of sonic surveillance (e.g. Burke & Grosvenor 2011; Gallagher 2011; Lees 2012).

The fields of sound studies and sound art offer resources for expanding what can be heard within education (Gershon 2011a), exploring the multiplicity of sound and listening practices beyond the narrow function of communicating human meanings. Sound studies writers have argued that sound is relational, forging links between different bodies (LaBelle 2010); that it operates affectively by vibrating bodies (Gallagher 2016; Goodman 2009; Kanngieser 2012; Thompson & Biddle 2013); that there are different modes of listening (Bennett et al. 2015; Chion 1994; Duffy & Waitt 2013; Nancy 2007; Voegelin 2014). Drawing on these ideas, we use the term expanded listening to refer to the responsiveness of bodies to sound – encompassing all kinds of response, all kinds of bodies and all kinds of sounds.

We suggest that listening walks could provide a pedagogy for expanded listening. The listening walk is a practice developed in acoustic ecology and experimental music, in which people walk through an environment paying close attention to whatever sounds are occurring along the way. The method has been used for artistic purposes (Drever 2009), and for research (Daza & Gershon 2015; Gallagher & Prior 2017), but it can also function pedagogically (Gershon 2011a). We argue that listening walks offer a method for what Springgay (2011, p.640) calls sensational pedagogy, in which movement and the senses combine to create “the possibility for individuals to interrogate their habitual responses to the world, to offer bodies the potentiality for recomposing their corporeal relations to each other, to their environment, and to the ways that we experience and create knowledge.” In framing listening walks as sensational pedagogy, the paper contributes to ongoing debates about the relations between listening and other

senses in education (see Gershon 2011a; b; 2013a), and raises the question of whether listening walks are best understood as a sonic or a multisensory method.

Drawing on interview data in which six early years practitioners reflect on a listening walk in Manchester, UK, we suggest that listening walks can: (i) produce heightened multisensory awareness; (ii) generate experiences of difficulty and discomfort that produce new learning; and can therefore (iii) affect practitioners' practice. Practitioners particularly remarked on an increased sense of empathy for young children facing the 'sensory overload' of early years settings. The research reported on here is exploratory, small scale and by no means comprehensive. Nevertheless, it demonstrates some of the pedagogic potentials of listening walks and expanded listening.

Our focus on practitioners warrants some explanation. While policies, curricula, inspection regimes and children's sensory habits all exert an influence on what counts as listening in education, practitioners play a decisive role. Giving practitioners opportunities to experiment with their own sensory habits is therefore one way in which to change educational practice. Our argument is not that practitioners need to be 'taught' to listen differently, since that would merely reproduce the normativity of dominant models of listening. Practitioners' listening skills are often finely tuned for the specific tasks required of them, and deserve to be acknowledged as such. The problem is that these tasks – shaped by curricula and assessments, the mechanics of classroom teaching, behaviour management, the demands of inspections and so on – set limits on what can be

heard. These limits may have a pragmatic value as part of everyday practice, but they close down the radical potential of sound to generate new relations and modes of being.

As pedagogy, the listening walk *invites listeners to listen to their own listening*. Participants' usual sensory routines are disrupted, provoking them to examine everyday habits of attention that are normally taken-for-granted. The listening walk does not subject practitioners to predetermined learning outcomes. Rather it opens a space for them to decide for themselves what listening differently might bring to their work. As such, it has potential applications in a wide range of learning contexts and for a wide range of groups, not limited to practitioners' professional development.

The paper begins with a discussion of listening, setting out our main arguments and the concept of expanded listening. We then turn to listening walks, briefly explaining their history and functions. The second half of the paper details the listening walk we carried out and the method used. Three substantive sections present the key themes from the interviews. In conclusion, we consider the broader relevance of the listening walk as a means of rethinking education and childhood beyond rationality, representation and the humanist subject.

Listening, meaning and affect

Across education, early years and childhood studies, listening is commonly understood in two ways. The first is listening as the *auditory comprehension of speech*. The second centres on *listening to children's voices*. Whilst these

approaches have different political and pedagogic agendas, both share a common assumption that listening is about the reception of human meaning – an assumption that we want to call into question. We will examine each conception of listening in turn.

Auditory comprehension involves conscious attention directed at decoding the meanings of spoken language. As a magazine article aimed at early years practitioners puts it, when educators ask children to listen, what they usually mean is:

can you hear my voice; can you listen to the words I'm saying; can you look at me or the object; can you filter out background noise of other people talking or environmental sounds; can you clearly see the visual stimuli; can you break down my sentences and understand their meaning (Johnson no date, p.38)

This conception of listening as auditory comprehension is closely tied to language development and literacy (e.g. Goh & Aryadoust 2016; Hogan et al. 2014; Palmer & Bayley 2004; Riley et al. 2004). It is believed to be a specific skill that can be taught and measured through standardised tests (e.g. Devine 1978; Funk & Funk 1989; Kendeou et al. 2005). In UK policy, for example, the Early Years Foundation Stage curriculum lists listening and attention as one of its early learning goals (Department for Education 2014b). The accompanying guidance for practitioners subsumes listening within communication and language skills, sets out the listening abilities that children are expected to display at certain

ages, and suggests ways for practitioners to support developmental progress (Early Education 2012). There is an increasing emphasis on language as children get older. The recommendations for working with children up to 26 months old encourage the use of music, rhymes, singing, rhythm, repetition and the imitation of noises, along with the recognition of spoken words and phrases. From 22-36 months, the guidance still refers to extra-linguistic aspects of sound such as rhymes, rhythm and vocal tone, but introduces more elements of auditory comprehension, such as children listening to what adults are saying and learning people's names. By the time the guidance gets to the 30-40 and 50-60+ month age bands, attention to spoken language dominates. Songs, rhymes and environmental sounds are mentioned, but the emphasis is on developing conversational abilities, listening while others are speaking, following verbal instructions, focussing attention and extending concentration times. The developmental trajectory mapped out is one in which the ideal child territorializes sound into language, and sonic responsiveness into auditory comprehension.

This focus on auditory comprehension has become intensified by a generalised anxiety, often expressed by professionals and in the media, that listening skills are declining amongst young children, reducing their 'school readiness' (e.g. Basic Skills Agency 2002; National Literacy Trust 2005). This discourse positions children's listening as in deficit: they do not 'listen enough', or in the 'right' way; they therefore need to be taught how to listen 'properly' through a range of interventions (e.g. Garforth 2009). While some interventions make space for sonic difference – music, noise, environmental sounds and silence – the general

tendency is to focus on language. There appears to be little interest in exploring how children themselves listen. Early years education and primary schooling promote a narrow, normative model of the 'good listener' as a docile body that can be quiet, sit still, and pay attention to the words that adults are saying. As MacLure et al (2012, p.454) show, children whose behaviour strays outside such norms – those guilty of “‘calling out’ or not sitting ‘properly’ in whole-class sessions, and apparent failure to listen or concentrate” – become perceived as a problem. Thus auditory comprehension is not only a means of language education but also a mode of disciplinary regulation, which children may internalise and reproduce.

The second prominent conception of listening in early years and childhood centres on *paying attention to children's voices*, as promoted by discourses of children's rights and participation. These ideas invert the deficit model of childhood, instead emphasising children's competence in understanding their own lives, and the power that they can exercise through voice. Responsibility is placed on adults to find new ways of listening to children so that their voices can be heard, taken seriously, and given due regard within decision-making processes (Clark 2005; Franklin & Sloper 2006; Lansdown 2001; Soto & Swadener 2005; UNICEF 1989).

Voice, in this context, may refer to the articulation of meaning through speech, but the concept is not tied to sound or to language, instead functioning as a metaphor for the various ways in which children express their experiences, opinions, desires and preferences. It has been argued, for instance, that

children's drawings visualise their voices (Soto 2005). The Reggio Emilia approach to early education is particularly noted for its celebration of the 'hundred languages of children' (Edwards et al. 1998). This idea has inspired participatory methodologies such as the mosaic approach, which advocates 'listening on all channels' by combining methods such as photography, child-led tours, making maps, role play, drawing, making music, and other forms of creative expression (Clark & Moss 2011). Along similar lines, critical research in early years education and literacy has questioned the dominance of orality and language, arguing for more multimodal understandings of how children communicate (e.g. Flewitt 2005; Kress 1997; Lancaster 2001).

Despite these moves towards recognising the diversity of communicative modes, a focus on meaning persists. Photo elicitation exercises, for example, involve children verbally explaining *what photographs mean*, reducing the technological registration of light to the role of a semantic messenger. Researchers using such methods rarely make any reference to the rich history of critical thinking about photography as a medium (e.g. Barthes 1981; Benjamin 2008; Cubitt 2014; Sontag 1977). As for accounts of multimodality in children's learning, they do not so much critique the focus on meaning as push for a more expansive definition of it. While the concept of voice has been critiqued for its privileging of language, its overly rational, conscious, able-bodied model of subjectivity, and its inability to deal with vocal ambiguity, excess and embodied materiality (e.g. Komulainen 2007; MacLure 2009; Mazzei 2013; Schnoor 2012), again in some critiques of voice meaning is redefined in a more capacious way rather than being displaced as the central focus (Rosen 2014; Spyrou 2015).

We want to question the idea, common to both the models of listening outlined above, that listening is the reception of meanings communicated between humans. That focus is too narrow. It ignores the sheer variety of sound, as vibrations that move all kinds of bodies in all kinds of ways. The multiplicity of sound and listening has been explored in the fields of sound studies, sonic geographies, sound art and experimental music, all of which provide resources for listening differently. These developments, and their potential for education, are summarised by Gershon (2011a), but – again – with a focus on how environmental sound is meaningful, as a form of knowledge. What we wish to emphasise here is how listening is both socio-culturally constructed (Sterne 2003) and also activates physical-physiological couplings through which bodies are viscerally affected by vibration (Duffy & Waitt 2013; Gallagher 2014; 2016; Gershon 2013b; Waitt et al. 2014). Before sounds become meaningful in a conscious, rational sense, listening bodies find themselves caught up in sound, moving with its movements, dancing to its tune. Our paper is concerned with this potential for sound to ‘do things’ to bodies.

Of course, listening often does involve the interpretation of meanings, and any account of listening needs to make space for that. What we take issue with is the assumption promoted by mainstream education that *listening is primarily or only about meaning*. The affective dimensions of sound do not exclude meaning; these registers blend and blur into each other. The physical vibrations of sound often push through into the realm of significance to *become* humanly meaningful, in ways ranging from the vague to the more precise. In other words, sound may be

meaningful, but it is *not necessarily meaningful*, and it is *never only a vector of meaning*. Meaning is as much something we bring to sound as something that sound brings to us. Sound need not ‘mean’ anything at all and yet it can still have profound effects of power, as is evident in the use of sonic weapons and torture (Cusick 2008; Goodman 2009). Any conception of listening that starts and ends with meaning risks missing out on much of what sound does.

Relevant to this discussion is Jean-Luc Nancy’s distinction between *entendre*, a type of auditory orientated towards understanding, and *écouter*, a more emergent mode of listening that follows how sounds sound and resound, “straining toward a possible meaning, and consequently one that is not immediately accessible.” (Nancy 2007, p.6). Auditory comprehension and listening to voice can both be understood as *entendre*. *Écouter*, by contrast, shifts “the emphasis away from the act of understanding, of grasping and affixing the world through intentional acts, toward the receptivity of the ear, and its tense and coiled acts of uncertain openness through listening.” (Kane 2012, p.442) Hearing the otherness of sound’s fleeting movements, *écouter* is a kind of listening that does not know what listening can do, remaining open to sound’s capacity to surprise. As Vogelín (2014, p.3) has argued, listening involves embodied encounters with the ephemeral, “the invisible mobility beneath the surface of a visual world...challeng[ing] its certain position, not to show a better world but to reveal what this world is made of, to question its singular actuality and to hear other possibilities”.

How might this kind of expanded listening be put to work more fully in education and child care? This paper offers the listening walk as a pedagogic method that works not through didactic instruction but by inviting participants to listen to their own listening practices, paying attention to responses beyond auditory comprehension. The following section explains the background of the method.

Listening walks: art, research and pedagogy

The listening walk has a long history but its formative period was the mid-1960s, in the activities of two North American groups: (i) the World Soundscape Project, a set of Canadian composer-researchers studying environmental sound, which they termed acoustic ecology. They used the term 'soundwalk' to refer to "an exploration of a soundscape of a given area" (Schafer 1994, p.213) by making an "excursion whose main purpose is listening to the environment" (Westerkamp 2007, p.49); and (ii) experimental musicians and artists in New York, loosely grouped around John Cage, whose sensibility for hearing ambient sound as music was taken beyond the confines of the concert hall in works such as Philip Corner's *I Can Walk Through The World As Music*, and Max Neuhaus' *LISTEN* series, which invited audiences to listen attentively to the sounds of the city (Drever 2009).

In the present day, listening walks continue to be used for a variety of functions. Musicians and artists such as Aki Onda and John Drever use them to encourage aesthetic appreciation of soundscapes. Researchers use them as a method for investigating sound environments, collecting data about participants' judgments

and perceptions (e.g. Adams 2009; Berglund & Nilsson 2006). Our focus in this paper, however, is on how listening walks can be used as pedagogy. The learning function of listening walks was recognised by Max Neuhaus, whose aim was to provoke participants to listen to their own listening, opening up the possibility of listening differently (Drever 2009).

Our primary concern is with *listening*, but listening walks are of course also practices of *walking*. For writers such as Rebecca Solnit, Iain Sinclair, Will Self and Robert MacFarlane, walking has almost magical powers to bring people and places into dynamic relations. Its rituals incite itinerant thinking through interactions between humans and environment. De Certeau (1988) argued that walking produces space from below, through the improvisations of everyday life, in contrast to the distantly elevated, objectivising ‘god’s eye’ view of urban planning. Along similar lines, Ingold (2011) theorises walking as an anti-modern practice, in which the body is brought into contact with the earth through the feet. Walking, he suggests, lends itself not to travelling between known points but to wayfaring, in which knowledge arises in process, by encountering the terrain, forging a path through it, and making place via the act of moving.

Exploring these ideas in education, Hackett (2014; 2016) suggests that young children’s walking and running are communicative acts through which they learn embodied knowledge. Similarly, Springgay (2011) argues that walking can be a form of sensational pedagogy, in which learning happens not only through the conscious organisation of perceptions, but also through more primal affective intensities of bodily sensation. Springgay and Truman (2016) take this

argument beyond the human, showing how walking can engage the inhuman animacy of the earth, as a way to learn *with* rather than *about* non-humans. The enthusiasm for walking has been critiqued for its fetishisation of mobility over stillness, and its exclusion of bodies that are less mobile due to ill health, age or disability (e.g. Wright 2014). Nevertheless, walking continues to attract educators, artists and researchers, both as method (Bates & Rhys-Taylor 2017; Springgay & Truman 2017) and as metaphor for ways of knowing (Pirrie & Macleod 2010).

There is a growing literature on technologically mediated sound walks, using portable MP3 players, mobile phones, or live transduction of sounds. Such walks have pedagogic functions, such as engaging people in place-based oral histories (Butler 2007), performing counter-narratives of places (Saunders & Moles 2016), or probing bodily, affective and gendered labour (Springgay & Truman Forthcoming). Our focus, however, is on walks that involve listening to the environment without the mediation of electronic technologies, hence the term listening walk rather than sound walk. The simplicity of the listening walk has practical appeal, making it easy to use in a variety of education settings, without requiring audio technologies or production skills.

The remainder of the paper presents a listening walk carried out with early years practitioners in Manchester, UK, as an example of a pedagogy for expanded listening. We begin by setting out the background to the project and the details of the walk, followed by excerpts from interviews in which the practitioners reflected on their experiences of the walk. The paper concludes by returning to

the wider issue of expanded listening, and its contribution to rethinking education beyond rationality and representation.

An experiment in professional development

The listening walk reported on here was part of a project called *2-Curious*, which experimented with new forms of professional development for early years practitioners working within the UK's 'disadvantaged two year olds' agenda (Gibb et al. 2011). It was run as a pilot project at Manchester Metropolitan University, with internal funding from the Faculty of Education, and led by one of the authors of this paper, Rachel Holmes. It involved seven sessions with 13 practitioners from across four early years settings in Greater Manchester, and seven early years teaching staff from the university. Sessions took place during 2015, followed by an evaluation phase in 2016. Settings were selected based on contacts established through previous projects. Project staff worked for six months with the managers and leads for two-year-old provision in these settings, developing ideas about what training was needed in this area. The managers and leads were then asked to suggest practitioners who might like to be involved, or those with direct responsibility for two-year-old provision. Participation was voluntary and a few practitioners opted out after the first session.

The wider context of the project was a growing emphasis in UK policy on early intervention (e.g. Allen 2011). One consequence of this agenda has been the provision of free childcare for two-year-olds deemed to be 'disadvantaged', with the aim of improving their "social and cognitive outcomes so that by the age of five they are as ready as their more advantaged peers to start and fully benefit

from school.” (Gibb et al. 2011) By 2014, 40% of two-year-olds in England were each entitled to 570 hours per year of free childcare from a state-approved provider, normally taken as 15 hours per week for the 38 weeks of the school year (Department for Education 2014a). A child is eligible if he or she meets one of several criteria designed to indicate disadvantage, such as parents or guardians receiving welfare benefits, or if the child is in the care of the state, has special needs or disabilities. The policy has created an influx to early years settings of two-year-olds from varied backgrounds, with fixed and limited amounts of funding attached, raising new challenges and training needs for practitioners.

2-Curious was designed to address these issues from a critical perspective that understands early intervention as a form of biopower in the Foucaultian sense: an attempt to govern the health and wellbeing of the population, in a way that is orchestrated by the state but also extends through societal institutions to individuals (Rabinow & Rose 2006). The discourse of early intervention fuses bold truth claims from neuroscience, implicitly class-laden, ethnocentric notions of disadvantage and development, and the politics of austerity, to argue that “early intervention, in the very first years of life, provides an effective and relatively cheap technical fix for both social and economic failings” (Moss 2015, p.227). Where two-year-olds are deemed to be outside of normalised social, economic and cognitive parameters, free childcare is supposed to compensate for these perceived failings, offering a form of ‘cultural catch-up’ to make children ‘school ready’, with the aim of redressing inequality and reducing future public expenditure. Yet such interventions privilege particular abilities and

dispositions, such as the auditory comprehension described above, and pathologise as 'other' those children who are less able to display these skills, positioning them as lacking intellectually, socially, emotionally and linguistically (Burman 2008; Cannella 1997; Heydon & Iannacci 2008; Walkerdine 1988).

The *2-Curious* project explored whether, amidst the lockdown of these discursive practices, space could be poached or pried open for a greater play of difference, both by affirming the otherness of humans and by staging post-human encounters between matter and the senses, nature and artifact, organic and inorganic life. Whereas most professional development is orientated towards pre-determined learning goals and outcomes, *2-Curious* instead involved setting up open-ended situations designed to give practitioners novel or provocative experiences, with deliberate uncertainty about how these experiences might affect the participants' practice.

The decision to organise a listening walk reflected this approach. Its aims were conceived only loosely: to (gently) disrupt practitioners' usual sensory habits and movements, and thereby call into question the normative, human-centred, meaning-centred conventions of listening that dominate early years and education. Environmental listening has the potential to produce more relational understandings of the world, as a place of messy entanglements between different kinds of beings, materials and forces (Kanngieser 2015; LaBelle 2010). We wanted to hear whether a listening walk might provoke practitioners to relate differently both to children and to themselves, perhaps prompting changes in their practice.

Method: a listening walk with early years practitioners

The walk followed a method that Michael and Jonathan, two of the authors of this paper, had used previously with other groups (see Gallagher & Prior 2017). We recount the details here both to clarify what took place, and as guidance for those wishing to organise their own listening walks. We refer to the authors by their first names to make it clear for readers what involvement each of us had in the process.

Michael led the walk. Several days beforehand, he planned an approximate route on a Google map print out, starting and ending at the university. The route was designed to last an hour – enough for immersion without becoming too tiring. It took in a variety of spaces and acoustic ambiences: interior areas of the university, a multistorey car park, main roads and quieter residential streets, a pedestrian underpass and a park. The route was trialled, timed and refined.

The walk took place on an Autumn evening in the regular scheduled slot for the course, chosen to fit around the practitioners' working days. Participants were told about the walk beforehand and asked to come prepared for walking outdoors in any weather. Six early years practitioners took part, all female, three from a nursery school and three from a nursery school and children's centre, both in urban locations. The practitioners included two deputy headteachers, a headteacher, a nursery practitioner, an early years practitioner, and a lead early years teacher. Six staff from the university, all of whom teach and research in

early years and childhood studies, also attended the walk, including a further two of the authors, Martin and Rachel.

The group convened in the university, where Michael introduced himself and the walk. He instructed participants as follows:

- listen to whatever sounds can be heard whilst walking
- please do not talk
- turn off all electronic devices
- walk spaced a little way apart from each other, so that what you hear isn't dominated by the sounds of the other walkers footsteps, clothing etc.
- try to listen to your own listening – noticing the different ways in which you are listening, and the different things you are listening out for.

These rules may seem prescriptive, but based on previous experience they help to make listening walks a distinctive sensory exercise. Participants often comment afterwards on how walking in this way produces particular affective states such as meditative calm, a sense of being unsettled or provoked, or a heightened awareness of their surroundings or their own bodies. Without these rules, people tend to walk alongside each other chatting casually, like an ordinary ramble. There is nothing wrong with such activities, but they do not sufficiently disrupt participants' usual habits of walking and sensing to produce expanded listening. Safety was also briefly discussed before the walk commenced, noting potential hazards such as busy roads and the pedestrian underpass.

Michael then set off around the route, with the participants following behind. He walked at a steady pace, to allow people to focus on listening rather than trying to keep up. It was agreed that Rachel, as the *2-Curious* project leader, would walk at the back to ensure no one was left behind and document the walk using a handheld video camera. Consent for video recording was negotiated before the walk began. After the walk, the group gathered in a quiet communal area of the university to debrief and discuss what had been experienced. The discussion was also video recorded.

Eight months later, as part of the evaluation of *2-Curious*, two group interviews were carried out with the six practitioners who had attended the walk.

Interviews were carried out by Martin, who had participated in all of the *2-Curious* sessions and thus had an established rapport with the practitioners. One interview took place at each of the two early years settings. Each interview involved three practitioners who had taken part in the listening walk.

Practitioners were asked for their reflections on the various sessions run as part of *2-Curious*; this paper focusses solely on the data pertaining to the listening walk. The practitioners were initially asked what they had 'taken away' from the workshop. They were then shown a four minute edited version of video footage from the walk, overlaid with the recordings of the post-walk debrief, to hear what further memories or insights this might trigger. The use of video elicitation in interviews was influenced by Tobin and Hsueh (2007). The video's editing and the pattern of questioning in the interviews explored participants' responses to the listening walk through 'emotional', 'functional' or 'purposive', 'control' and

'cultural' aspects of affordance (Gibson 1979), and their perceptions of how this might be relevant to their nursery practice (Rogoff 1990).

The following three sections of the paper present key findings from the interviews, grouped according to prominent themes in the data: heightened sensory awareness; experiences of difficulty and discomfort; and effects on practice. We are aware that there is a disjunction between the affective, multisensory, embodied aspects of the walk in which we are interested, and the language-based, conscious, reflective transcripts that we use here as evidence. This ironic methodological bind, of trying to use discourse to register things that exceed discursive capture, is difficult to avoid in a conventional journal article. However, as a disruption or augmentation of our textual data, we have made the edited video of the listening walk available to view at <https://youtu.be/XXQwfKnDZc> Whilst also a representation of sorts, it relays more of the affective, sensory and extra-discursive dimensions of the method.

Tuning the senses

Practitioners remarked on how the walk had led them to listen differently compared with their everyday habits – unsurprisingly, given how the walk was set up and framed. Several said that the walk had made them realise how much of the sonic ambience they normally 'tune out'. Cox (2009) argues that this attention to background noise is what makes sound art distinctive as a field of practice. Sound art amplifies the jumbled mass of unorganised sounds that are normally ignored or suppressed, and listening walks are one way to do this:

Practitioner 1: when you work in a busy and sort of noisy and chatty environment...sometimes I think you lose some of that awareness of the sound around you because you're just used to that in terms of everyday working experiences...then yes going outside, walking to and fro, and yes you are more conscious of noise around you and different noises.

Practitioner 2: Yeah, because it wasn't totally silent was it anywhere that we went, even when we were in very quiet places, there's some sort of something, buzz maybe that you could hear, made me more aware of things like that.

However, the practitioners also said that this attentiveness spilled over into other senses and registers:

Practitioner 3: I think it wanted to sharpen up your mind to actually identify sounds, and if you didn't recognise it you wanted to know the answer to what's that sound, and where's it coming from, is it dangerous, is it something that I know?...it sort of fine-tuned your senses around you, the sense of smell, people's dinners cooking, quiet small spaces, and light and dark.

Practitioner 2: Yeah, cause it was dark wasn't it?

Practitioner 1: I think that's another aspect, it would have been a different experience if it had been when it's light and bright right up [i.e. summer], but actually it wasn't, it was dark, and that makes it even more of a sensory experience really.

Practitioner 2: You were aware of the senses, because you we were walking but I kind of wanted to look in the flats.

The video (<https://youtu.be/XXQwfKnDZc>) conveys this sensory jumble, of bright lights in darkness, a multiplicity of surfaces, objects and materials, and layers of shifting noise. It calls to mind Ingold's (2007, p.10) insistence that the different senses "cooperate so closely, and with such overlap of function, that their respective contributions are impossible to tease apart." As Howes (2010, p.8) notes, theories and methods that focus on one sense risk creating a "sensory exclusionism" that misses the relationality of the senses. There is a tension, then, between the basis of listening walks in sound art and sound studies, as described above, and their potential as a multisensory method that might be better situated within the wider field of sensory studies (see Gershon 2011b). We suggest that the method acts as a kind of hinge between these fields, using expanded listening as a 'way in' to provoke multisensory responses. As pedagogy, the listening walk does not so much fetishize the auditory as use it to unsettle wider habits of perception and movement.

Discomfort and difficulty

Watching the edited video, the darkness of the city spaces, and the strangeness of the group walking without talking in public space, are readily apparent. Several practitioners spoke about feelings of discomfort produced by such aspects of the walk. The pedestrian underpass through which the route passed, which had graffiti, dim lighting and an atmosphere of urban decay, was noted as a particular source of unease:

Practitioner 4: I was, you know slightly concerned at some points in it, because of the dark, and the subway [pedestrian underpass] and, so maybe there's an emotional attachment...feeling slightly uncomfortable with it, as a, you know not excessively so

Practitioner 3: I remember feeling scared under that underpass thing, and how dark it was, and you felt we were underneath the ground, but then feeling a bit fearful of that place. But there was nothing fearful in it to make you afraid, but it just felt, we shouldn't be in there, it didn't feel right...it was so dark it felt dangerous almost.

Practitioner 2: we had quite an impact on people out in the community, so they were, 'well what are they doing?' and that interest isn't it, sort of questioning what's this group doing walking around quietly and not really speaking to each other...so that was a slight unease maybe, of just being conscious of what other people were thinking we were doing.

Some practitioners said that they had found the walk difficult, challenging their usual habits of attention and interaction. The instruction not to talk, in particular, proved challenging:

Practitioner 5: working with children, you're just constantly talking, they're always trying to chat to you and ask you stuff, and you know

that was really hard for me, to be quiet after a full day at work of talking all the time, to then be like, 'right, completely stop', like I didn't know what to do with myself, like my lips were sealed and I was thinking 'oh no', you know. I found that really tricky.

The pedagogic potential of disrupting, unsettling and challenging familiar habits and perceptions has been remarked on by others. Elwick (2015) used cameras mounted on young children to productively disrupt the adult gaze and its ways of knowing, while Holmes and Jones (2013) harnessed film and transgressive images as provocations for rethinking childhood. Walking has been particularly noted for its ability to defamiliarize the body and the senses in generative ways (Truman & Springgay 2016).

Such disruptions rub against the grain of the neoliberalisation of education and child care, with its constant push towards smooth, comfortable experiences: 'clients' reporting 'satisfaction' with services; children developing to their 'fullest potential'; training ensuring practitioners are 'competent' in predetermined skills. Under these conditions, practitioners might understandably be wary of training without fixed objectives that clearly map onto specific competencies, procedures or key performance indicators; yet there is also an acute need for professional development that provides safe spaces for practitioners to feel difficulty and discomfort, not as an obstacle to be overcome through technocratic solutions but as part of the everyday reality of education practice. Discomfort is unavoidable in a policy context characterised by what Moore and Clarke (2016), drawing on Berlant (2011), call cruel optimism: the aspiration towards

seemingly laudable goals that are actually unachievable due to the competitive nature of neoliberal capitalism – goals such as ‘no child left behind’, ‘getting it right for every child’ or ensuring that all children are ‘school ready’. Against this background, the listening walk is valuable as a pedagogy because it brings practitioners into contact with discomfort, failure and precarity, in ways that are challenging but without tipping over into being offputting or alienating:

Practitioner 4: it’s quite a good way of challenging your thinking without doing anything that at first feels that, you know when you go in and you know that you’re going on a sound walk, you don’t think, ‘oh I don’t want to do that’. But when you do it you sort of think, ‘crikey this is actually quite hard’

Compared to other sonic arts-based disruptions – a sound art gallery installation or an experimental music concert, for example – listening walks have a simplicity and an immediate appeal that draws people in, yet behind that accessibility lies the potential for shifting ingrained habits of perception and movement. The next and final section of our analysis explores the implications of these shifts for practice.

Effects on professional practice

The interviews invited practitioners to reflect on how the walk might have influenced their work with children. Several said that heightened awareness of sound had given them a new understanding of how children might experience early years settings:

Practitioner 4: that struck me, how quickly actually you start to filter out the things that are familiar and you just notice the different, and perhaps then for some of the two year olds, how the noisier spaces can be a bit of an overload, which I think is something we're always aware of, that it can feel quite busy, and when children are new to it...it's quite an uncomfortable space for them at first until they get used to it, and then, they need a lot, the two year olds probably need more support at the beginning that the three and four year olds...when they start, you sense that they're much more aware of the busyness.

Again, the sense articulated here, of an experience that reveals taken-for-granted habitual 'filtering out' of noise, is typical of how sound art amplifies background noise to produce new intensities (Cox 2009; LaBelle 2006). One practitioner suggested that becoming more aware of this filtering enabled her to empathise more with children who find it hard to 'tune in' to instructions amidst the noise:

Practitioner 1: it just felt very cluttered with noise and light, and all the sensory things, and I'm just thinking gosh it's no wonder that sometimes they do find it hard to tune in when we're asking them to listen to a story, or listening to some instructions, when they're so used to filtering a lot, and not always tuning in very acutely to what's going on around them, because there is so much there.

For this practitioner, expanded listening recontextualised the focus of education on children's auditory comprehension of adult voices. The practitioner was able to hear auditory comprehension as just one kind of listening amongst others, and teachers' voices as just one kind of sound amongst others.

Practitioner 4 also remarked on how the walk had given her a renewed sense of empathy, and linked this specifically to the discomfort she had experienced:

Practitioner 4: being put in a position where you feel a little bit uncomfortable makes you realise that, you know, we know we're all lovely and the nursery is a lovely place to be, and the children will all settle and be fine, but actually that two year old doesn't know that, and they're having those feelings of 'oh, I'm not quite sure about this', like we had, but we're adults, and we know it's going to be okay... I think feeling uncomfortable is good for us, cause you know if we don't, we don't have that kind of empathy do we?

This practitioner also spoke about how the difficulty she had experienced in trying to follow the rules of the walk had again contributed to her empathy for the children she works with, who are also routinely subjected to such rules:

Practitioner 4: it was strange not being able to speak, it was an odd experience...I kind of realised how hard it is to think about something you're being asked to think about, not what you want to think about. You know because if you're being asked to listen to something, how, if

actually what you want to think about is like, 'oh I could do with telling [name of person] about that that happened at work', actually how hard it is to think to order, and I think we ask children to do that quite a lot, you know, 'we're now going to think about this', and they want to tell you about their day out with their mum at the weekend.

Thus despite the absence of learning objectives and explicit attempts to spell out 'practice relevance', the practitioners were able to draw out the implications of the walk for their own work in early years settings:

Practitioner 5: giving them a chance to talk instead of us sort of prompting a lot of things...take a back seat and let them you know have time to talk, cause sometimes it takes them a longer time to process what they're trying to tell us, and don't rush them.

Practitioner 2: It made me think, because we teach active listening don't we, through the whole letters and sounds approach, which just made me think about how much we directed them in that with our questions and sometimes we don't let them just experience things.

These quotes point towards the potential of expanded listening to generate open-ended, non-didactic approaches to learning in early years institutions. The teacher 'taking a back seat' could make space for learning by providing an open structure that is not dedicated to teaching specific, pre-determined skills but instead allows the unexpected to emerge. Working with practitioners to develop

expanded listening initiatives for children was beyond the scope of the training reported on here, but there are some precedents, in projects such as Sonic Postcards (<http://www.soundandmusic.org/projects/sonic-postcards>) and Minute of Listening (<https://www.minuteoflistening.org/>), run in UK primary schools by arts charity Sound and Music. One way to build on the research reported on here would be develop listening walks with children as participants and as co-producers. It would be interesting, for example, to invite children to create and lead a walk for teachers or school managers, as a way to 'speak back' to institutional listening agendas.

Conclusion

This paper has argued that mainstream education promotes impoverished practices of listening, focussed on the reception of human meaning as conveyed through spoken language. These practices tune out the radically open-ended potential of sound to move bodies, forge new relations and generate unexpected insights. They stifle forms of listening that are not centred on language, ignore sound's affective, environmental and more-than-representational dimensions, and turn a deaf ear to the role sound plays in the exercise of power. In this context, there is a need for pedagogies that promote expanded listening, going beyond communication and meaning to hear what else sound can do.

Expanded listening cannot be fostered simply by inculcating 'better' skills in listeners deemed to be in deficit. That would work against difference, reproducing the idea that there is a 'right' way to listen. Our interest is rather in

open-ended pedagogies that incite people to listen differently to their own listening. We have argued that the listening walk provides one such method.

The walk we organised productively disrupted the sensory habits of practitioners, giving them a new awareness of environmental sound and their everyday habits of perception. It spilled over into multisensory experiences, sparking off more-than-sonic affects, associations and insights. In particular, it helped practitioners to develop greater empathy for the children they work with. Sound and listening functioned not as ends in themselves, but rather as provocations for a variety of responses, some of which could not have been envisaged at the outset. The listening walk has an open quality that makes space for the unexpected to emerge.

Our walk was part of professional development training for early years practitioners, but the method could be used for many other educational purposes. It invites learners of all ages to hear beyond accepted labels and categories, with the potential for generating new observations, interpretations, affects and emotions in any given context. The method could be used with children, to explore the environment of a school or university, for instance, enabling staff to get a better sense of how pupils or students experience these spaces. Equally the method could be used as a field method to investigate a particular site or environment, in local neighbourhoods, forest schools or field trips for example. Listening walks can be one-off events, or carried out repeatedly to hear change over time. The simplicity of the method makes it endlessly adaptable for different purposes and contexts.

The expanded listening fostered by listening walks also contributes to wider movements rethinking education and childhood beyond rationality, representation and the humanist subject (e.g. Blaise 2016; Jones et al. 2016; Kraftl 2015; MacLure 2013; Prout 2005). The dominant models of listening in education imply that what matters is meaning, making it harder to hear how the world also consists of materials and energies, flows of affect, forms of difference, all of which need not ‘mean’ anything and yet which nonetheless shape life in significant ways. These forms of difference exceed the capacity of representation to know and to communicate. The voice, for instance, listened to as communication, is forced to make sense; if it cannot be comprehended, it is disregarded as noise. Yet children’s voices constantly express themselves extralinguistically, through cries, shouts, screams, laughter, babble, silence (MacLure et al. 2010; Rosen 2014) – the significance of the non-semantic. With young children what is often so fascinating is how language emerges from these unruly flows and then dissolves back into them, in a to-and-fro movement. Expanded listening, in inviting us to follow such movements without the obligation to find meaning in them, could make a valuable contribution to critical work on literacy for instance.

We have also argued that the listening walk is a sensational pedagogy, intensifying affects in a way that generates new learning. Following Springgay’s (2011) definition, sensational pedagogies are critical, unsettling the self. Listening walks provoke participants to examine their own habits and ways of knowing, and thus to recompose their relations with other bodies and

environments, albeit in ways that might be difficult to articulate. Minimalist drone musician Catherine Christer Hennix (2015, unpaginated) suggests that we can “consider the listener as a dynamical soft condensed matter system far from equilibrium and whose internal signal path and transmission systems can be tuned by exposure to external sound sources”. This paper has explored how listening walks can contribute to that tuning.

Funding

The work reported on here was funded internally, by the Faculty of Education, Manchester Metropolitan University.

Acknowledgments

The authors wish to thank the practitioners and our colleagues for taking part and sharing their experiences with us; Leanne Clark for her assistance with data collection and transcription; Abi Hackett for helpful comments on an earlier draft of the paper; and the Faculty for funding and supporting the project.

References

Adams, M. (2009) Hearing the city: reflections on soundwalking, *Qualitative Researcher*, 10, 6-9.

Adey, P., Brayer, L., Masson, D., Murphy, P., Simpson, P. & Tixier, N. (2013) ‘Pour votre tranquillité’: Ambiance, atmosphere, and surveillance, *Geoforum*, 49, 299-309.

- Allen, G. (2011) *Early Intervention: The Next Steps*, (London, Cabinet Office).
- Barthes, R. (1981) *Camera lucida : reflections on photography* (London, Flamingo, 1984).
- Basic Skills Agency (2002) *Survey into Young Children's Skill on Entry to Education*, (London, Basic Skills Agency).
- Bates, C. & Rhys-Taylor, A. (Eds) (2017) *Walking Through Social Research* (New York and London, Routledge).
- Benjamin, W. (2008) *The work of art in the age of mechanical reproduction* (London, Penguin).
- Bennett, K., Cochrane, A., Mohan, G. & Neal, S. (2015) Listening, *Emotion, Space and Society*, 17, 7-14.
- Berglund, B. & Nilsson, M. E. (2006) On a tool for measuring soundscape quality in urban residential areas, *Acta Acustica United with Acustica*, 92(6), 938-944.
- Berlant, L. G. (2011) *Cruel optimism* (Duke University Press).
- Blaise, M. (2016) Fabricated childhoods: uncanny encounters with the more-than-human, *Discourse: Studies in the Cultural Politics of Education*, 37(5), 617-626.
- Burke, C. & Grosvenor, I. (2011) The Hearing School: an exploration of sound and listening in the modern school, *Paedagogica Historica*, 47(3), 323-340.
- Burman, E. (2008) *Deconstructing developmental psychology* (London, Routledge).

Butler, T. (2007) Memoryscape: how audio walks can deepen our sense of place by integrating art, oral history and cultural geography, *Geography Compass*, 1(3), 360-372.

Cannella, G. S. (1997) *Deconstructing early childhood education : social justice and revolution* (New York, P. Lang).

Chion, M. (1994) *Audio-vision : sound on screen* (New York ; Chichester, Columbia University Press).

Clark, A. (2005) Listening to and involving young children: A review of research and practice, *Early Child Development and Care*, 175(6), 489-505.

Clark, A. & Moss, P. (2011) *Listening to young children : the mosaic approach* (London, National Children's Bureau).

Cox, C. (2009) Sound Art and the Sonic Unconscious, *Organised Sound*, 14(01), 19-26.

Cubitt, S. (2014) *The practice of light : a genealogy of visual technologies from prints to pixels* (Cambridge, MA, The MIT Press).

Cusick, S. G. (2008) "You are in a place that is out of the world. . .": Music in the Detention Camps of the "Global War on Terror", *Journal of the Society for American Music*, 2(1), 1-26.

Daza, S. & Gershon, W. S. (2015) Beyond Ocular Inquiry, *Qualitative Inquiry*, 21(7), 639-644.

De Certeau, M. (1988) *The practice of everyday life* (Berkeley, Calif. ; London, University of California Press).

Department for Education (2014a) Early education and childcare. Statutory guidance for local authorities, (London, Department for Education).

Department for Education (2014b) Statutory framework for the early years foundation stage. Setting the standards for learning, development and care for children from birth to five, (London, Department for Education).

Department for Education (2015) Acoustic design of schools: performance standards. Building bulletin 93., (London, Department for Education).

Devine, T. G. (1978) Listening: What Do We Know after Fifty Years of Research and Theorizing?, *Journal of Reading*, 21(4), 296-304.

Dockrell, J. E. & Shield, B. M. (2006) Acoustical barriers in classrooms: the impact of noise on performance in the classroom, *British Educational Research Journal*, 32(3), 509-525.

Doughty, K., Duffy, M. & Harada, T. (2016) Practices of emotional and affective geographies of sound, *Emotion, Space and Society*, 20, 39-41.

Drever, J. L. (2009) Soundwalking: Aural Excursions into the Everyday, in: J. Saunders (Ed) *The Ashgate Research Companion to Experimental Music* (Aldershot, Ashgate), 163-192.

Duffy, M. & Waitt, G. (2013) Home sounds: experiential practices and performativities of hearing and listening, *Social & Cultural Geography*, 14(4), 466-481.

Early Education (2012) Development Matters in the Early Years Foundation Stage (EYFS), (London, Early Education).

Edwards, C. P., Gandini, L. & Forman, G. E. (1998) *The hundred languages of children : the Reggio Emilia approach--advanced reflections* (Greenwich, Conn. ; London, Ablex).

Elwick, S. (2015) 'Baby-cam' and researching with infants: Viewer, image and (not) knowing, *Contemporary Issues in Early Childhood*, 16(4), 322-338.

Flewitt, R. (2005) Is every child's voice heard? Researching the different ways 3 - year - old children communicate and make meaning at home and in a pre - school playgroup, *Early Years*, 25(3), 207-222.

Franklin, A. & Sloper, P. (2006) Listening and Responding? Children's Participation in Health Care within England, *Children's Health and Children's Rights* (Brill), 11-30.

Funk, H. D. & Funk, G. D. (1989) Guidelines for Developing Listening Skills, *The Reading Teacher*, 42(9), 660-663.

Gallagher, M. (2011) Sound, space and power in a primary school, *Social & Cultural Geography*, 12(1), 47-61.

Gallagher, M. (2014) Sounding ruins: reflections on the production of an 'audio drift', *Cultural Geographies*.

Gallagher, M. (2016) Sound as affect: Difference, power and spatiality, *Emotion, Space and Society*, 20, 42-48.

Gallagher, M. & Prior, J. (2017) Listening walks: a method of multiplicity, in: C. Bates & A. Rhys-Taylor (Eds) *Walking Through Social Research* (New York and London, Routledge), 162-177.

Garforth, S. (2009) *Attention and listening in the early years* (London, Jessica Kingsley Pub.).

Gershon, W. S. (2011a) Embodied knowledge: Sounds as educational systems, *Journal of Curriculum Theorizing*, 27(2), 66-81.

Gershon, W. S. (2011b) Introduction: Towards a sensual curriculum, *Journal of Curriculum Theorizing*, 27(2).

Gershon, W. S. (2013a) Sonic cartography: Mapping space, place, race, and identity in an urban middle school, *Taboo*, 13(1), 21.

Gershon, W. S. (2013b) Vibrational Affect, *Cultural Studies ↔ Critical Methodologies*, 13(4), 257-262.

Gibb, J., Jellicic, H., La Valle, I., Gowland, S., Kinsella, R., Jessiman, P. & Ormston, R. (2011) Rolling out free early education for disadvantaged two year olds: an implementation study for local authorities and providers, (London, Department for Education).

Gibson, J. J. (1979) *The ecological approach to visual perception* (Dallas ; London, Houghton Mifflin).

Goh, C. C. M. & Aryadoust, V. (2016) Learner Listening: New Insights and Directions from Empirical Studies, *International Journal of Listening*, 30(1-2), 1-7.

Goodman, S. (2009) *Sonic warfare : sound, affect, and the ecology of fear* (Cambridge, Mass., MIT Press).

Hackett, A. (2014) Zigging and zooming all over the place: Young children's meaning making and movement in the museum, *Journal of Early Childhood Literacy*, 14(1), 5-27.

Hackett, A. (2016) Young Children as Wayfarers: Learning about Place by Moving Through It, *Children & Society*, 30(3), 169-179.

Hennix, C. C. (2015) On ritual and omsahatranamam, *Sound American*, 11, unpaginated.

Heydon, R. & Iannacci, L. (2008) *Early childhood curricula and the de-pathologizing of childhood* (Toronto, Buffalo and London, University of Toronto Press).

Hogan, T. P., Adlof, S. M. & Alonzo, C. (2014) On the importance of listening comprehension, *International journal of speech-language pathology*, 16(3), 199-207.

Holmes, R. & Jones, L. (2013) Limitless provocations of the 'safe', 'secure' and 'healthy' child, *International Journal of Qualitative Studies in Education*, 26(1), 75-99.

Howes, D. (2010) *Sensual relations: Engaging the senses in culture and social theory* (Ann Arbor, University of Michigan Press).

Ingold, T. (2007) Against Soundscape, in: A. Carlyle (Ed) *Autumn Leaves: Sound and the Environment in Artistic Practice* (Paris, Double Entendre), 10-13.

Ingold, T. (2011) *Being alive : essays on movement, knowledge and description* (London, Routledge).

Johnson, E. (no date) *Is everybody listening?* Available online at:

<http://www.teachearlyyears.com/images/uploads/article/learning-to-listen.pdf>

(accessed 1.2.2017).

Jones, L., Osgood, J., Holmes, R. & Urban, M. (2016) Reimagining quality in early childhood, *Contemporary Issues in Early Childhood*, 17(1), 3-7.

Kane, B. (2012) Jean-Luc Nancy and the Listening Subject, *Contemporary Music Review*, 31(5-6), 439-447.

Kanngieser, A. (2012) A sonic geography of voice: Towards an affective politics, *Progress in Human Geography*, 36(3), 336-353.

Kanngieser, A. (2015) Geopolitics and the Anthropocene: Five Propositions for Sound, *GeoHumanities*, 1(1), 80-85.

- Kendeou, P., Lynch, J. S., van den Broek, P., Espin, C. A., White, M. J. & Kremer, K. E. (2005) Developing Successful Readers: Building Early Comprehension Skills through Television Viewing and Listening, *Early Childhood Education Journal*, 33(2), 91-98.
- Komulainen, S. (2007) The ambiguity of the child's 'voice' in social research, *Childhood-a Global Journal of Child Research*, 14(1), 11-28.
- Kraftl, P. (2015) Alter-Childhoods: Biopolitics and Childhoods in Alternative Education Spaces, *Annals of the Association of American Geographers*, 105(1), 219-237.
- Kress, G. R. (1997) *Before writing : rethinking the paths to literacy* (London, Routledge).
- LaBelle, B. (2006) *Background noise : perspectives on sound art* (London, Continuum).
- LaBelle, B. (2010) *Acoustic territories : sound culture and everyday life* (London, Continuum).
- Lancaster, L. (2001) Staring at the Page: The Functions of Gaze in a Young Child's Interpretation of Symbolic Forms, *Journal of Early Childhood Literacy*, 1(2), 131-152.
- Lansdown, G. (2001) Promoting children's participation in democratic decision-making, (Florence, Italy, UNICEF Innocenti Research Centre).
- Lees, H. E. (2012) *Silence in schools* (Stoke-on-Trent, Trentham).

MacLure, M. (2009) Broken voices, dirty words: On the productive insufficiency of voice, in: A. Jackson & L. Mazzei (Eds) *Voice in qualitative inquiry: Challenging conventional, interpretive, and critical conceptions in qualitative research* (London, Routledge), 97–113.

MacLure, M. (2013) Researching without representation? Language and materiality in post-qualitative methodology, *International Journal of Qualitative Studies in Education*, 26(6), 658-667.

MacLure, M., Holmes, R., Jones, L. & MacRae, C. (2010) Silence as Resistance to Analysis: Or, on Not Opening One's Mouth Properly, *Qualitative Inquiry*, 16(6), 492-500.

MacLure, M., Jones, L., Holmes, R. & MacRae, C. (2012) Becoming a problem: Behaviour and reputation in the early years classroom, *British Educational Research Journal*, 38(3), 447-471.

Mazzei, L. A. (2013) A voice without organs: interviewing in posthumanist research, *International Journal of Qualitative Studies in Education*, 26(6), 732-740.

McSporran, E., Butterworth, Y. & Rowson, V. J. (1997) Sound Field Amplification and Listening Behaviour in the Classroom, *British Educational Research Journal*, 23(1), 81-96.

Moore, A. & Clarke, M. (2016) 'Cruel optimism': teacher attachment to professionalism in an era of performativity, *Journal of Education Policy*, 31(5), 666-677.

Moss, P. (2015) There are alternatives! Contestation and hope in early childhood education, *Global Studies of Childhood*, 5(3), 226-238.

Nancy, J.-L. (2007) *Listening* (New York, Fordham University Press).

National Literacy Trust (2005) Why do many young children lack basic language skills? A discussion paper prepared by the National Literacy Trust's Talk To Your Baby campaign, (London, National Literacy Trust,).

Palmer, S. & Bayley, R. (2004) *Foundations of literacy : a balanced approach to language, listening and literacy skills in the early years* (Stafford, Network Educational Press).

Pearce, C., Patterson, R. & Rushton, I. (2014) Re: Silences— The Sensing of Sound, *Qualitative Inquiry*, 20(5), 690-698.

Pirrie, A. & Macleod, G. (2010) Tripping, slipping and losing the way: Moving beyond methodological difficulties in social research, *British Educational Research Journal*, 36(3), 367-378.

Prout, A. (2005) *The future of childhood : towards the interdisciplinary study of children* (London, RoutledgeFalmer).

Rabinow, P. & Rose, N. (2006) Biopower today, *BioSocieties*, 1(2), 195-217.

Riley, J., Burrell, A. & McCallum, B. (2004) Developing the Spoken Language Skills of Reception Class Children in Two Multicultural, Inner-City Primary Schools, *British Educational Research Journal*, 30(5), 657-672.

Rogoff, B. (1990) *Apprenticeship in thinking : cognitive development in social context* (New York ; Oxford, Oxford University Press).

Rosen, R. (2014) 'The scream': Meanings and excesses in early childhood settings, *Childhood-a Global Journal of Child Research*, 22(1), 39-52.

Saunders, A. & Moles, K. (2016) Following or forging a way through the world: Audio walks and the making of place, *Emotion, Space and Society*, 20, 68-74.

Schafer, R. M. (1994) *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester, Destiny Books).

Schnoor, O. (2012) Early childhood studies as vocal studies: Examining the social practices of 'giving voice to children's voices' in a crèche, *Childhood-a Global Journal of Child Research*, 20(4), 458-471.

Shield, B. M. & Dockrell, J. E. (2008) The effects of environmental and classroom noise on the academic attainments of primary school children, *The Journal of the Acoustical Society of America*, 123(1), 133-144.

Sontag, S. (1977) *On photography* (New York, Farrar, Straus and Giroux).

Soto, L. D. (2005) Children make the best theorists, in: L. D. Soto & B. B. Swadener (Eds) *Power and voice in research with children* (New York, Peter Lang), 9-19.

Soto, L. D. & Swadener, B. B. (2005) *Power and voice in research with children* (New York ; Oxford, Peter Lang).

Springgay, S. (2011) "The Chinatown Foray" as Sensational Pedagogy, *Curriculum Inquiry*, 41(5), 636-656.

Springgay, S. & Truman, S. E. (2016) Stone Walks: inhuman animacies and queer archives of feeling, *Discourse: Studies in the Cultural Politics of Education*, 1-13.

Springgay, S. & Truman, S. E. (2017) On the Need for Methods Beyond Proceduralism: Speculative Middles, (In)Tensions, and Response-Ability in Research, *Qualitative Inquiry*.

Springgay, S. & Truman, S. E. (Forthcoming) *Walking and the more-than-human: WalkingLab* (London, Routledge).

Spyrou, S. (2015) Researching children's silences: Exploring the fullness of voice in childhood research, *Childhood-a Global Journal of Child Research*, 23(1), 7-21.

Sterne, J. (2003) *The audible past : cultural origins of sound reproduction* (Durham, N.C. ; London, Duke University Press).

Thompson, M. & Biddle, I. D. (2013) *Sound, music, affect : theorizing sonic experience* (New York, Bloomsbury Academic).

Tobin, J. & Hsueh, Y. (2007) The Poetics and Pleasures of Video Ethnography of Education, in: R. Goldman (Ed) *Video Research in the Learning Sciences* (New York, Lawrence Erlbaum Associates).

Truman, S. E. & Springgay, S. (2016) Propositions for walking research, in: K. Powell, P. Bernard & L. Mackinley (Eds) *International handbook for intercultural arts* (New York, Routledge), 259-267.

UNICEF (1989) United Nations Convention on the Rights of the Child, (London, UNICEF).

Voegelin, S. (2014) *Sonic possible worlds: Hearing the continuum of sound* (Bloomsbury Publishing USA).

Waite, G., Ryan, E. & Farbotko, C. (2014) A Visceral Politics of Sound, *Antipode*, 46(1), 283-300.

Walkerdine, V. (1988) *The mastery of reason : cognitive development and the production of rationality* (London, Routledge).

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

Wright, M. P. (2014) Still Listening?, *Interference: a journal of audio cultures*(4), 1-7.