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Hearing how it feels to listen: perception, embodiment and first-person field recording. Iain Findlay-Walsh

Abstract

This article explores recent theories of listening, perception and embodiment, including those by Mark Grimshaw and Tom Garner, Salomé Voegelin, and Eric Clarke, as well as consequences and possibilities arising from them in relation to field recording and soundscape art practice. These theories of listening propose auditory perception as an embodied process of engaging with and understanding lived environment. Such phenomenological listening is understood as a relational engagement with the world in motion, as movement and change, which grants access to the listener's emerging presence, agency and place in the world. Such ideas on listening have developed concurrently with new approaches to making and presenting field recordings, with a focus on developing phonographic methods for capturing and presenting the recordist's embodied auditory perspective. In the present study, 'first-person' field recording is defined as both method and culturally significant material whereby a single recordist carries, wears or remains present with a microphone, consciously and reflexively documenting their personal listening encounters. This article examines the practice of first-person field recording and considers its specific applications in a range of sound art and soundscape art examples, including work by Gabi Losoncy, Graham Lambkin, Christopher Delaurenti, and Klaysstarr (the author). In the examination of these methods and works, first-person field recording is considered as a means of capturing the proximate auditory space of the recordist as a mediated 'point of ear', which may be embodied, inhabited, and listened through by a subsequent listener. The article concludes with a brief summary of the discussion before some closing thoughts on recording, listening and the field, on field recording as practice-research, and on potential connections with other fields in which the production of virtual environments is a key focus.

1. INTRODUCTION

Recent years have seen an explosion of new theories on listening in sound studies and related fields, theories, which, while diverse and at times contradictory, emerge from a desire to develop new understandings of the connections between auditory experience and lived environment. These ideas can be characterised by a general tendency to question the legacies of Schaefferian *objets sonores* and reduced listening, in favour of Bergsonian and Deleuzian notions of perception as motion, relational flow, emergence, connectivity and intensity. Recent publications by Mark Grimshaw

and Tom Garner (2015), Salomé Voegelin (2014), Eric Clarke (2005), Angus Carlyle and Cathy Lane (eds. 2013) among others, develop alternative phenomenological perspectives on auditory experience, which propose sound and listening as embodied, relational, sensory and cognitive processes of producing environment, and as the active interplay between elements, subjects and contexts which may not be fully understood in isolation.

This renewed academic focus on listening considers sound's materiality, ephemerality and unlocatability as essential elements through which environment, change and perspective are perpetually grasped. For Grimshaw and Garner (2015), recognising sound's lack of location requires theories of auditory perception to turn focus away from the sound wave as synonymous with sound per se, and to develop a conception of sound as a process of 'emergent perception', which bridges brain, body and environment. For Voegelin (2014), listening grants access to an invisible and ephemeral world, orientating the listener within the continuum of their environment and its possibilities. Clarke (2005) frames listening as the interfacing of lived environment with the human need to grasp 'what is going on' around them, through engagement with sound's affordances, as primary indicators of space, motion and self-motion. Carlyle and Lane's (2013) edited collection, in bringing together writing from across a broad range of disciplines, explores listening as the accessing of 'a parallel reality' through which new kinds of awareness and agency are made possible. Many of the contributions in this volume explore listening in relation to other human senses, examining auditory perception as embodied, or multi-modal. Across these four publications are resonances with Marshall McLuhan's earlier notions of 'acoustic imagination' and 'acoustic space', two halves of a concept of 'ear culture' in which space is experienced by the listener as 'discontinuous and non-homogenous... with centres everywhere and boundaries nowhere' (McLuhan 2009: 71). McLuhan's emphasis on the cultural and political significance of modes of perception attunes us to the importance and potential impacts of new determinations of the embodied listener.

Such new determinations impact upon and frequently stem from sonic practice – they are insights made while recording, while composing, and while listening. Perhaps they too can be understood in terms of a relational flow of the auditory – perception flows through theory through practice and through perception again. They have particularly pertinent implications for field recording and phonographic practice, which since the mid-twentieth century have been actively developed as ways of critically engaging with listening relations. The current focus on perception and embodiment in the new discourse on listening resonates with some of the capacities of field recording as means for capturing and re-presenting experience, and for connecting recordist, listener and environment(s) in the 'hear and now' of sound (Grimshaw & Garner 2015:4). Accordingly, the recent proliferation of theories on listening accompanies new developments in field recording practice and presentation.

This article discusses the place of field recording within an evolving discourse on listening, perception and embodiment. It defines and examines the specific practice of 'first-person' field recording in sound art and soundscape art. While field recording is acknowledged here as a diverse set of methods, practices, technological approaches and presentational possibilities, first-person field recording is proposed as both method and material whereby a single recordist may carry, wear or remain present with a recording device, consciously and reflexively documenting their personal listening encounters. Approaches may involve the capture and foregrounding of sonic markers of recordist presence and agency, and may also include spoken first-person narrative commentary. Recordings are generally used to generate sonic *self-narratives*, and as such, the recording process and emerging works are developed in ways which allow the recordist's presence to be heard and felt, as a situated, active, if often fragmentary focus of sonic agency.

This article examines first-person field recording as an identifiable phonographic practice and considers its specific applications within a range of sound art and soundscape composition examples. Through the unfolding discussion, first-person field recording is explored as a means of capturing and mediating the emergent perceptions and embodied relations of a recordist-listener's (auditory) experience, and for presenting these for subsequent engagement by another listener. Given the focus of such work on representing and communicating experience, the specifics of recording strategies and technologies, playback technologies and reception contexts, are key to an understanding of the practice and its effects. By examining case studies that use recording technologies in varying ways, the aim is to clarify specific connections between field recording and the embodied, perceptive processes of auditory experience. In doing so, a further aim is to (re)examine current practices of first-person field recording, and consider future possibilities for field recording as a means for researching contemporary listening.

In the next section, theories of auditory perception by a range of authors are discussed in more detail, drawing out emerging themes in order to frame the later discussion of field recording practice. Thereafter, a definition of first-person field recording is proposed, with some initial consideration of recording and presentation methods. Following this, specific examples of pieces that use first-person field recording as a central method and material are examined. The discussion of examples is undertaken in the form of written commentaries, generated as my own responses to each piece while listening. The ideas emerging through this process connect with questions on the representation and communication of experience, on creative approaches to recording technology, and on possibilities and limitations arising from environmental sound recording. The article concludes with a brief summary of the discussion before some closing thoughts on recording, listening and the field, on field recording as practice-research, and on potential connections with other fields in which the production of virtual environments is a key focus.

2. LISTENING, PERCEPTION AND EMBODIMENT

This section examines recent writing on listening, perception and embodiment, finding common themes in publications by Mark Grimshaw and Tom Garner (2015), Salomé Voegelin (2014), Eric Clarke (2005), Angus Carlyle and Cathy Lane (eds. 2013). While these volumes address listening from a range of perspectives (philosophical, musicological, phenomenological, physiological) and engage with a diversity of example types (games audio, instrumental music, sound art, everyday soundworlds), there are clear emerging threads, which can be used to generate identifiable characteristics and key concepts. In general terms, each publication strives to explain or define sound and listening in relational terms, that is, as a knowable process through which constituent elements may be grasped in their interaction. In what follows, these shared insights are discussed in order to consider the nature of the listening process in relation to lived environment and to the body. This discussion is then used to develop questions around listening and environmental recording, thereby providing some context for the section on field recording practice which follows.

2.1 Mark Grimshaw and Tom Garner: 'sound as emergent perception'

'(W)e locate sound as a creative act within our mind', write Mark Grimshaw and Tom Garner (2015: 2). This provocative proposal underpins a theoretical framework that seeks to account for historical problems in explaining the positionality of sound. For the authors, previous theories of sound and listening fail in their attempts to ascribe location to sounds 'at source' or in the environment.

... sound is not in a place whose location is there to be discovered but... the locating of sound somewhere within the mind is a process of conscious or automatic active placement on the part of perception... the ability to do this comes from learning and experience, the necessity of doing this comes from the requirement to be and act within an ecology. (Ibid: 34)

For Grimshaw and Garner, this ecology is framed through a concept of the mind-as-field, comprising brain, body and environment as related elements distributed within an embodied system. If the mind is where sound takes place, then it can be located in the unfolding relations between these mutually constituting elements, and in the 'cognitive offloading' which happens as the listener applies what is heard to their multi-modal, embodied cognition of environment. This idea leads to an understanding of sound as 'emergent perception', as a phenomenological listening through which space, place and agency are perpetually made and remade. Furthermore, for the authors, sound is primarily a perception of motion, of movement and change, and thus simultaneously involves and constitutes the body. Grimshaw and Garner's *Sonic Virtuality* develops a concept of sound which transposes Brian Massumi's Bergsonian prioritisation of movement over position from the visual to the auditory, leading to an understanding of auditory perception as the perception-cognition of the body in motion: 'It moves as it feels, and it feels itself moving' (Massumi 2002: 1). Fundamentally, sound is proposed as meaningful; 'sound has meaning and sound waves are inherently meaningless' (Grimshaw & Garner 2015: 34), with such meaning emerging from a cloud of virtual elements, ideas and possibilities, which include memory, emotion, expectation, and the physical particularities of the individual listener's ears and body. The concept of sound developed by Grimshaw and Garner accounts for and incorporates the processes of relational, spatial production, meaning-making and imagination involved in auditory perception.

2.2 Eric Clarke: listening, environment, motion and self-motion

This conception of sound resonates with Eric Clarke's 'ecological approach' to understanding auditory perception. In his book *Ways of Listening* (2005), Clarke points to an organism's need to know 'what is going on' in the environment (ibid: 31) as key to explaining the listening process. For Clarke, as with Grimshaw and Garner, sound and listening help to 'specify movement by means of change' (ibid: 74), connecting the listener to spaces, objects and events. Clarke couches his ideas on listening within a similarly embodied system, through which auditory perception precipitates a listener's understanding, orientation and action in relation to their unfolding environment. Clarke considers auditory experience as part of a process of 'the constant orienting of the organism to its environment, and constant search to explore and to optimise the source of stimulation' (ibid: 31). In what can be understood as analogous with Grimshaw and Garner's cloud of virtual ideas and possibilities, Clarke invokes James Gibson's concept of 'affordances' to suggest how listening generates meaning. For Clarke, sounds carry affordances, arrays of possible meanings and characteristics which may correspond to specific needs, expectations, experiences, knowledge and abilities of an individual listener.

Building on research by Neil P. Todd (1992), Clarke highlights listening as a process of perceiving both 'motion' and 'self-motion' (ibid: 75). As Clarke has it, 'sounds in the everyday world specify the motional characteristics of their sources', and this includes both external sources, and the listener as a source themselves. I hear my self move in relation to the movement and change of what is around me. Clarke writes that 'the relativity of motion ("am I moving relative to the surroundings, or are the surroundings moving relative to me?") means that there is always potentially an uncertainty' (ibid: 75). This insight has significant implications for how we might understand the relationship between a

listener and a recorded environment. If there is 'always potentially an uncertainty' between environmental motion and self-motion, it can be argued that there is also always the possibility of cognitive confusion leading to a perception of self-motion within a recorded space. Clarke's discussion generally focusses on the perception of motion/self-motion when listening to music, however he combines Gibson's ecological theory with theories of sound, recording and spatiality developed by Denis Smalley and Albert Bregman, generating insights that have considerable relevance to the study of listening to recorded sound. Notably, Clarke cites Bregman to make a useful distinction between the perception of 'real' and 'virtual' sound sources, with Bregman proposing that 'real sources tell a true story; virtual sources are fictional' (Bregman 1990: 460). These insights, and those of Grimshaw and Garner, have precedents in the theories of William Gaver, whose work is outlined in *Sonic Virtuality* (Grimshaw & Garner 2015: 24-26). Gaver also uses Gibson's ecological model to develop a theoretical framework for sound and listening, introducing a distinction between 'musical' and 'everyday' listening modes, with everyday listening proposed as 'the experience of listening to events rather than sounds' (Gaver 1993: 2). Gaver's work usefully identifies a gap in understanding which he argues has led to the spatial and relational aspects of auditory perception being neglected in listening theories. While they acknowledge and build upon Gaver's ideas, Grimshaw and Garner also note that his ecological framework does attempt to directly explain what is heard, or how meaning is produced, when a listener attends to recorded sounds.

2.3 Salomé Voegelin on phenomenological listening and actualising 'the work as world'.

Salomé Voegelin explores listening in relation to everyday soundworlds, sound art and music through a theoretically grounded creative writing practice, generating insights in response to her own listening experiences. For Voegelin, attending to the auditory allows access to an ephemeral, invisible world, which lies behind the seen and cannot be accessed through everyday ocularcentrism. Voegelin's writing seeks at once to embody and to activate the dynamic processes of listening as an encountering and generating of place, relationship and possibility. 'Listening generates place, the field of listening, continually from my hearing of myself within the dynamic relationship of all that sounds' (Voegelin 2014: 3). This notion of listening as an accessing of presence, not as a listener's fixed positionality within an environment as a 'pre-formed container' but in and as motion, connects with Grimshaw, Garner and Clarke's focus on sound as motional information. It also chimes with writing on listening by philosopher Don Ihde, who writes, 'Of both animate and inanimate beings, motion and sound, when paired, belong together... the verb is affirmed over the predicate' (Ihde 2012: 24). Resonating with Clarke's liminal motion/self-motion relationship, Voegelin identifies listening as a means of apprehending perspective within 'a timespace that does not present us with a vista, but grants us insight into the mobility of its own production' (Voegelin 2014: 10).

In the book *Sonic Possible Worlds*, Voegelin's writing explores the embodied processes of everyday auditory experience, before focussing specifically on an understanding of what is happening when a listener engages with environmental recordings, sound art and music. Each type of experience is proposed as an example of engagement with the continuum of sound, and sharp distinctions between these kinds of auditory encounter are avoided in favour of a focus on the interaction with sound waves, whether mediated or not. Just as Voegelin's listener generates, participates in and forms their environment in motion, their engagement with sound art and music is understood simply as engagement with another environment. 'Listening actualises the work as world' (ibid: 53). Resonating with Bregman's reference to virtual sound sources as 'fictional', for Voegelin, listening to recorded sound generates not actual, but fictional, possible worlds. By listening in to field recordings and soundscape art, we may inhabit the 'timespace place' of the work, travelling into 'its spatiotemporal expanse, the effective geography of its materiality... to understand the work and ourselves through inhabiting its invisible topography' (ibid: 82). A listener's engagement with the work lets them participate in a possible somewhere else – somewhere real yet fictional. This suggests a potential usefulness for field recording and sound art as an access point for embodying and inhabiting alternative spaces, experiences and perspectives.

2.4 Aural environment and 'listening as feeling'

Each of these publications, while approaching listening from a different disciplinary perspective, develops an understanding of auditory perception as a primary means of relating to and producing lived environment. These ideas build upon earlier research developed within the field of acoustic ecology, specifically in R. Murray Schafer's influential text *Soundscape: Our Sonic Environment and the Tuning of the World* (1994). Each also focusses on sound as manifestation of motion and change, and considers the listener's location and spatial relations as emerging through their attending to and participating in a continuum of motional information. While Clarke's approach maintains a clearer distinction between listener and environment, Grimshaw, Garner, and Voegelin build upon Maurice Merleau-Ponty's work to suggest an interdependency between these elements, which problematises understandings of them as distinct systems. Voegelin in particular writes of a liminality between listener and environment, collapsing them together, and resisting concrete theorising in order to perform the ontological entanglements of situated listening in the field.

This conflation of environmental context and sonic subjectivity foregrounds listening as a 'whole body' experience, as a resonating with environment. Notions of auditory perception as embodied process recur repeatedly through Carlyle and Lane's recent collection of texts, *On Listening*. In numerous contributions to the volume (Cusack 2013, Brown 2013,

McCall 2013, Biswas 2013), listening is explored as embodied perception and as an extension of 'feeling'. In an examination of listening practices on sea trawlers, Penny McCall Howard writes that 'sounds were interpreted not so much by listening as by extended techniques for feeling with the whole body' (Howard 2013: 64), while in 'Listening as Feeling' Ansuman Biswas writes,

Situating myself within sound, it is the place itself which becomes conscious of itself. My body is merely an antenna, a sense organ grown by this place to hear. (Biswas 2013: 193)

Taken together, these publications combine to create a fruitful context for exploring the possibilities afforded by environmental recordings for granting access to the experiences, narratives, perspectives and worlds of other lives. If we accept an understanding of listening as feeling, and as perceiving one's self in unfolding relation with emerging environment, what does this mean for the experience of listening to environmental recordings, and specifically those that mediate the specific auditory perspective of another? How might we understand what happens when an environmental recording captured from one auditory perspective, is inhabited as the heard perspective of a subsequent listener? How might this augment our understandings of the communicational and relational capacities of recorded sound and immersive listening? What possible consequences may these questions have for understandings of contemporary listening in general?

3. FIRST-PERSON FIELD RECORDING

As has been noted previously (Drever 2004, 2017; Carlyle and Lane 2013; Anderson and Rennie 2016; Martin 2018; Findlay-Walsh 2018), the practice of field recording has the capacity to connect the auditory experiences of a recordist with those of a subsequent listener. While field recording might be broadly understood as a means of documenting and re-presenting environment, a range of phonographic methods and practices have been developed since the midtwentieth century as ways of exploring relationships between recorded sound, environment and listener. These methods can be understood to emerge from practices and strategies in early electroacoustic composition and radiophonic work (notably Ferrari 1970), as well as in oral history, performance art, ecology and anthropology. By practising specific field recording methods as the tracing of individual auditory perceptive processes in the field, these methods may plausibly enable critical engagement with and examination of everyday listening as embodied, felt-perception in relation to emerging environmental context.

First-person field recording is here defined as both method and material whereby environmental sound recordings are generated by a single recordist through their holding, wearing or 'being with' the microphone(s) in acts of conscious and reflexive self-documentation. In what can be understood as a departure from the standard and well-established environmental recording practice of capturing and presenting soundscapes from an anonymous, pseudo-objective perspective, first-person field recording foregrounds the presence of the recordist as an active and significant element in what can be heard. In a first-person field recording, the recordist is either an obvious agent in the recorded field, or at least detectable and recognisable as 'a silent participant who nonetheless provides some experiential authenticity.' (Carlyle & Lane 2013: 10). This may be achieved through the capturing and presenting of sonic markers of recordist presence and agency such as proximate body movements, close-at-hand operations, breath or handling noise. Some approaches may also involve the inclusion of explicit first-person narrative commentary or vocalised references to the situation and/or act of recording. The recordist's documented auditory perspective more or less acts as a mediated 'point of ear' through which subsequent listeners can attend to the recorded environment and events, similarly to the visual vantage point in a point-of-view (POV) video, or a 'selfie' (Findlay-Walsh 2018). Such recordings are generally presented as *self-narratives* – that is, with listener perspective, environment, movement and change providing much of the identifiable content of recordings and works, and with these aspects often being specifically highlighted through compositional and presentational approaches, as well as in piece or track titles. First-person field recording may involve a diverse range of recording approaches and technologies, which, to a lesser or greater extent, serve to either deemphasise or highlight the mediating role of the microphone(s), as well as to support the documentary, evocative and aesthetic priorities of the artist and project. Often recording devices fulfil a simultaneous dual role as recordist's ear(s) and silent witness.

The primary claim I am making in this article is that, because of the recordist's direct physical connection to or close proximity with the microphone, the recording goes beyond simply capturing a field with them in it, and can be understood rather to trace the field *as* the unfolding auditory perception and activity of the recordist, albeit via the mediating ear of the microphone. Listening back to such a recording, we gain an intimate perspective on what the recordist's body hears as '(i)t moves as it feels, and it feels itself moving' (Massumi 2002: 1). First-person field recordings are thus recognisable as environmental recordings that document human proximity and personal intimacy. They capture the field with a focus on what Denis Smalley has termed the 'most proximate space' (Smalley 2017: 36). The close, detailed and tactile sounds of clothing, belongings, intricate and intimate actions and encounters are the foreground from which the recordist-listener can be heard to continually reshape themselves in space. Such an approach to documenting and re-presenting embodied listening can be understood as analogous to the implicit (at times explicit) questioning of theories of acousmatic and reduced listening in the publications outlined in the previous section. While

Pierre Schaeffer's Treatise on Musical Objects pursues 'a deliberate placing-in-condition of the subject' (Schaeffer 2009: 77) and frequently foregrounds the listener's own perceptive processes as sites of meaning-making, the text's emphasis on apprehending 'the sound object' can be understood as indicative of a tendency towards the use of visual analogies and descriptions - 'gradually brings the sonorous object to the fore as a perception worthy of being observed for itself ... like a magnifying glass in relation to the temporal structure of sound' (Schaeffer 2009: 78-80), which may place limits on understandings of the always-immersive, 'gyroscopic' (McLuhan 2009) world of sound. Schaeffer's concepts of acousmatic and reduced listening, and the sound object, are presented - and later extrapolated by Michel Chion - as tools for isolating sound from contextual considerations. While yielding new insights in the use and analysis of recorded sound, these calls to examine 'the sound itself' from an objective distance may also prevent a grasp of sound's essence and meaning as embodied, relational processes. Francisco Lopez' revision of Schaeffer's terms 'reduced listening' and 'sound object' - as 'profound listening' and 'sound matter' (Lopez 2009) - emphasise the usefulness of Schaeffer's concepts as tools for practising degrees of listening *intensity*, while opening up definitions of sound to additional relational and processual possibilities. As a creative practice, first-person field recording attempts to document and present environmental sound(s) not as 'formal raw materials in themselves' (Chion 1994: 31), but as dynamic, motional information, which, through processes of perception and cognition, might intimately connect the sonic-spatial experiences of one listener with those of another. Such an exchange can be understood to function as a critically engaged enactment of the contingent production of auditory 'reality', through technologically mediated processes of auditory engagement.

3.1 Reception of first-person field recordings

The making of intimate connections between the auditory experiences of recordist and listener relies on sufficient clarity and consistency in recording and compositional methods, on appropriate playback technologies and reception situations, and on the concentrated engagement of a listener. It is acknowledged that listeners may not always be wholly sensitive or attentive to spatial cues in environmental sound recordings, and that such attentiveness may be refined through time spent investigating relevant recordings and works. It is also noted however that such work is presented within a cultural context that includes widely-known first-person audio and audio-visual examples in the fields of popular music, film and video gaming (Bjork 2007, Burial 2006, Myrick & Sánchez 1999, Bethesda Softworks 2016), as well as the long-standing and increasingly prevalent use of personal audio technologies (i.e. mobile phones) through which listeners regularly engage with proximate sound recordings and handling noise. Therefore it is proposed that through a combination of prior learning (cultural experience) and a degree of quality and consistency in the presentation of environmental recordings in specific pieces, most adult listeners with experience of listening to recorded sound will

be given to considering such key questions as 'where is this?', 'what is happening?', and even 'who is listening?', when encountering pieces using loudspeakers or headphones. Furthermore, with the appropriate degree of engagement and concentration, they will be capable of experiencing intimate connections between recordist's listening encounter and their own, granting access not only to the soundworld the recordist hears, but to the embodied sense of acting upon and within it.

While first-person field recordings are often captured using relatively simple recording technologies such as portable stereo (XY) recorders, paired omni-directional 'binaural' microphones or indeed mono smartphones, they may also be reproduced on a wide variety of audio playback systems, including multichannel systems of varying complexity, using a wide range of approaches to spatialisation. It is acknowledged that each approach to spatialisation and each distinct playback system and/or context will to an extent determine the immersive effect of source recordings in the listening encounter. For example, the playback of an XY stereo field recording through a stereo loudspeaker system will present the listener with an externalised environment, emanating from the front of the listener (assuming they face the loudspeakers), while the same recording reproduced via headphones may be characterised by a sense of 'in-the-head locatedness' (IHL), with sounds appearing to 'exist entirely within or at the edge of the head, instead of externalised outside the listener' (Wenzel et al 2018: 28). Stereo loudspeaker reproduction will also involve a degree of 'crosstalk' between left and right signals, while headphone reproduction will not. Such variances in playback system and reception situation may have significant consequences for the listener's sense of embodiment, space and perspective, however these differences may be mitigated to an extent through compositional and mixing strategies. In the case of externalised (loudspeaker) versus in-the-head (headphone) reproduction, interventions such as the use of 'accent' microphone signals, cross-talk cancellation, and the introduction of additional spatial cues i.e. reverberation may be used to limit perceived variances in spatial fidelity across different systems. For the creative practitioner, it is important to maintain awareness of the tendencies of specific playback systems as regards spatial reproduction, and to incorporate this knowledge into spatial mixing considerations while composing. However, while some first-person pieces may be more impactful in one listening context than another, exact spatial fidelity across different systems is not necessary for pieces to communicate a sense of embodied listener immersion or first-person identification. At an appropriate monitoring level, both stereo loudspeaker systems and headphones are capable of achieving listener immersion, and of enveloping the listener in the proximate soundworld captured by the recordist's microphone. Thus, through a listener's own embodied auditory perception of such recordings and works in a range of immersive reception situations, they can 'hear how it feels to listen' in the recordist's environment.

This raises pertinent questions around the representational and communicational possibilities of field recording and

soundscape art: What kinds of identification and understanding are made possible when a listener inhabits the recorded, proximate, personal spaces of the recordist? What happens when a listener projects their own imagination and agency into the recordist's documented, embodied, emergent perceptions as possible worlds? What significance and what possibilities can be attached to particular recording technologies, microphone techniques, playback technologies and listening contexts? What connections can be made between these documentary and presentational methods in sonic practice and methods and practices in other fields, which focus on producing and presenting virtual environments?

3.2 Notes on case studies

First-person field recordings have been significant materials in a wide range of sonic practices and works in recent years, with examples ranging across sound art, soundscape art, phonography, acoustic ecology, sound anthropology and pop production. Examples include work by Hildegard Westerkamp (1996), Janet Cardiff & George Bures Miller (2012), Mazen Kerbaj (2013), Steven Feld (2010), Christopher DeLaurenti (2008), Klaysstarr (my own work - 2018), Marc Baron (2014), Burial (2006), Smerz (2017), The Fall (1985), Bjork (1993), Imogen Heap (2014) and Equiknoxx (2016). While perhaps the most obviously identifiable examples of first-person field recording practice may involve the use of spoken 'self-reflexive narrative' of the type discussed and practised by Anderson and Rennie (2016, 2015), as well as Westerkamp (1996), for the purposes of this article I have chosen to focus on work which presents the proximate sounds of the situated recordist operating in the field, without their vocalised self-identification or coherent reflection. This allows a focus on the environmental recording and work as trace of the recordist's embodied auditory experience, and on the discussion of sonic-spatial relations between recordist and listener. The pieces examined in the following section prioritise the presentation of first-person recordings, either as unedited documentary materials in which the recordist's presence can be heard (felt), or as such materials transformed through relatively transparent phonographic strategies of layering, juxtaposition or re-contextualisation. This is in distinction from practices and pieces which focus on more abstract processes of compositional intervention, such as significant spectromorphological transformation, granulation, or distortion of the spatial and timbral characteristics of the source recordings

Similarly, while a great deal of soundscape work, including some first-person soundscape pieces, may be presented via specific spatial audio systems, e.g. multi-speaker arrays or bespoke installation settings, the pieces discussed in the following section take the form of stereo or mono audio tracks. This conscious restriction of the discussion is intended to help to maintain a focus on the consideration of the recordings as documents of auditory perceptive processes and their role and effect as elements within each piece. While this may seem to limit the study to work which is, in a sense, radiophonic, and omits the discussion of significant spatial audio paradigms such as ambisonics, a discussion of first-

person immersivity across a wide range of surround sound systems is beyond the scope of this article. In what follows, consideration will be given to differences between mono, stereo and binaural recordings, and between stereo loudspeaker reception in a small room, and headphone reception.

The work considered in the next section, while demonstrating distinct compositional approaches, can be understood as being critically engaged in the creative presentation and contextualisation of first-person field recordings. What follows is a brief critical commentary on one mono piece and three stereo pieces, which present first-person field recordings in various ways. These are examples of work by Gabi Losoncy, Graham Lambkin, Christopher DeLaurenti, and Klaysstarr (myself) respectively. The function of the next section is to consider the role and effect of first-person field recordings in each work as I listen to it. Particular attention is paid to issues of proximity and perspective, aural environment, embodiment, narrative, motion and self-motion, playback technology and reception context.

4. CASE STUDIES

4.1 Gabi Losoncy: Dry by Morning (Kye)

Dry By Morning is sound artist Gabi Losoncy's contribution to *Nice Weather for War* – a compilation of tracks by six artists released in 2015 on the Kye record label. Much of Losoncy's work takes the form of minimally edited mono recordings made using a mobile phone, which document the everyday experiences of the recordist. In this piece two such recordings are presented consecutively, introducing a narrative continuity and inferred chronology between them. Rather than directing my attention to specifically impactful 'events', the piece is sustained by its mundanity and consistency, inviting the listener to engage with the detail of the scene. The track progresses as I listen intently on headphones and I am afforded clues as to environment, as well as to the location and behaviour of the recordist.

As with much of Losoncy's solo work, the mono recordings were likely made using a mobile phone. Despite the limitations of this format in terms of spatial representation (there is no stereo image), the recordings focus listener attention on auditory space. While, as William Snow has remarked, a monophonic system may sound as if 'sound (is) coming through a hole in a wall' (Snow 1953: 44), headphone listening enables detailed engagement with the ambience of the mono recordings, which capture a busy public space in the café/restaurant section of the track, and the tactile isolation of domestic space in the later section. The track is at once noisy and extremely clear. For just under six minutes I hear the distant, jarring sounds of plates and cups clattering, constant but not overbearing recorded music resounding in the ambient background, and conversations between people distributed across what sounds like a large

café, restaurant or food court space. My attention is at times drawn to the detail of conversations, to what is being said and the different speaking registers used as people address friends, performing anecdotes, recollections and observations. Social context is vividly captured – the air of the space is crowded by overlapping communications and functions – I am overhearing public life. I hear what I assume is the recordist addressing a member of waiting staff, implicitly affirming their position nearest to the microphone, and their mode of participation within the environment, as solitary bystander. My tuning in to the location of the recording device as a point of ear in relation to the environment allows me to listen from the recordist's place, or rather, I am listening both with and for them, through the quiet of their sonic subjectivity as it is traced by the microphone.

An abrupt change introduces a new recording, and the microphone enters a quiet, enclosed space, in which the barely perceptible sounds of distant music and traffic can be heard - the pensive quiet of the environment makes their distance clear. In the minutes that follow I hear the recordist operating alone within an enclosed domestic setting, possibly their own home. The microphone remains extremely close to the recordist (perhaps worn or held) and listens with/for them as they organise their belongings and the objects around them. This recording again emphasises the social relations at play, but in striking contrast to the first. I am now intimately involved in the vivid quiet of the recordist's being alone. I fluctuate between behaviours of identification and attention – between Delalande's 'figurative' listening behaviour, a search for 'the living being' amongst 'other configurations which may have a contextual function' (Delalande 1998: 47), and 'immersed listening' through which sound is experienced as 'a surrounding milieu, a sensorial bath... in contact with the body, via the skin, via the other senses' (Delalande 1998: 62). These behaviours are practised not merely as listening modes, but as subject-positions, ways of exploring, relating to and cross-referencing auditory experience as ambivalent interplay between first and second-person perspectives. A striking aspect of this track is the simplicity of the process. A phone records two mundane scenes: so what? But in listening to these, directing my perception, attention, imagination into them, I become a ghost spectator, listening with and through the implied presence of another listener. The proximity of the microphone to the recordist's body enables this access, and affords these recordings their power. I inhabit the emergent perception of the recordist as world. In this encounter, 'listening is never separate from the social relationships that build the fleeting circumstance of my hearing... the hearing of myself in the social context of my room, my soundscape, my position and its consequence' (Voegelin 2014: 1).

4.2 Graham Lambkin: Amateur Doubles (Kye)

On the 2011 release *Amateur Doubles*, Graham Lambkin presents two stereo tracks of similar length (each around 20 mins), both of which consist of long samples of found instrumental music, layered with first-person field recordings

'recorded in a Honda Civic' car by Lambkin while driving (Goldstein 2011). While on *Dry By Morning* the recordings present a texture that conveys detailed layers of sociality, the field recordings on both tracks on *Amateur Doubles* saturate the scene and throw 'what is happening' into obscurity and intrigue. In this case I listen back via stereo nearfield monitors in a small office space in my home. Dominated by the broadband noise of the car engine and the near-at-hand fumbling sounds of driving activity, these field recordings present a kind of mundane, saturated space inside which the added recorded music samples move in and out of focus. The self-contained recording environment of the car translates well over speakers in my small room, simulating the envelopment felt while recording. What transpires is caught between the long-form fantasy of a road-trip and the queasy claustrophobia of car travel. I hear children's voices within the closed space of the car. At times the field recorded and found sources are warped or folded together, reminding the listener of the virtuality and malleability of each element. At others the music stops and I am jolted into the tightly packed car space, with the close sounds of clothing and seating fabric brushing against one another, and fragments of conversations denoting familiar, perhaps familial, relationships.

The effect on listening back has similarities to that of Gabi Losoncy's piece (also released on Lambkin's now-defunct Kye label) - the familiarity of the proximate sounds (car motor, driving actions, clothing and seating fabrics rubbing) creates a simulated, personal vantage point from which to perceive relationships between the aural environments, behaviour, events and music. However, compared to Dry by Morning, Amateur Doubles is immersive and enveloping, and the overbearing in-car motor noise as recorded environment blurs and merges with the found music recordings. In this blurring the piece fluctuates between fantasy and reality space. On both tracks on Amateur Doubles, first-person field recordings are used to provide a simulated, intimate and proximate point of ear from which I can encounter the recorded music. Lambkin describes this practice simply as one of 'placing one piece of music inside another' (WFMU 2012). Listening to Amateur Doubles I can simultaneously participate in and critically reflect upon the process of music reception and perception, from a personal perspective yet from a critical distance. Again, rather than experiencing a fixed perspective, I am able to navigated a range of subject-positions in relation to recorded sounds and their combination. The effect is both otherworldly and extremely familiar - the push and pull between fictional/musical soundworld and the mundane immersivity of personal auditory space uniquely captures the experience of everyday music reception. As I listen back in front of loudspeakers I can choose to study or to inhabit the scene. By sonically rendering the churning cocoon-like capsule of the car in motion, and placing the music 'in' it, the track envelops my body in the fullness of the car environment as a listening space. I embody the driver as they rumble through time and space.

4.3 Christopher DeLaurenti: Walking Through the Park (Public Record)

In contrast to the first two examples, in *Walking Through the Park*, from DeLaurenti's release, *Wallingford Food Bank* (2008), we hear the recordist's entire body in constant motion – purposefully walking somewhere. During this process they are holding the microphone, moving with it, speaking to it. The microphone is both an extension of the body, and a companion. While the previous two examples use relatively continuous and chronologically arranged recordings, here DeLaurenti presents us with audio diary fragments, registered with spoken dates. These combine to suggest numerous repeated journeys, motivated and purposeful, yet draining and arduous.

As I listen back on nearfield stereo loudspeakers I can hear the pace of the recordist in the microphones (stereo) as they move briskly and quietly towards their destination. Although my experience of the recorded space is unaffected by my head's own movements, this does not lead to a sense of disembodiment, but rather leaves me to imagine and explore the unseen movements of the recordist as if they were my own. Wind noise and handling noise act as familiar, proximate markers - tactile vibrations through which I perceive the embodied sensation of walking. I hear the recorded sounds of moving against the resistance of wind. The microphone is carried through the wind, across what at times sound like deserted urban areas, towards a place of sustenance (the food bank). The microphone persists. Similarly to the previous examples, I can shift my imagination between two principle modes of identification. I can experience the narrative from a close distance, or I can inhabit the environment as narrative, embodying the walking recordist. As Salomé Voegelin has it, I 'hear the soundscape as a phenomenological possible world... actualised through my inhabiting in listening, recentring myself in their sound... (this) has consequences for my sense of self and my understanding of truth, reality and knowledge.' (2014: 32) In perceiving and embodying this fragmentary narrative of daily journeys, I am party to the recordist's actions and agency in context, accessing the recordist's experience, and perhaps their pain. In these field recordings an exposure and vulnerability is captured. Sounds of breath in the wind, walking, and birdsong – these are journeys through an exposed and open space towards temporary refuge. Short audio clips are swept across the stereo image through explicit compositional interventions. These suggest to me a perpetual passing. Later I hear the sounds of the busy park, but from the proximate space of the walking recordist. Sounds of clothing fabric and the body in motion fix me in the first-person perspective of the recordist's embodied perception as they walk.

4.4 Klaysstarr: Proximity is Dreaming (Entr'acte)

This track combines first-person field recordings (including some made as I listen to recorded music), with found recorded music samples, and other field recordings which capture the process of my editing the emerging track. The track takes the form of a collage of different environmental recordings which capture personal listening encounters.

Multiple first-person perspectives are layered and occur simultaneously. As with *Amateur Doubles*, field-recorded content is also layered with found music, while other field recordings capture recorded music playing in the distance. By layering and abruptly editing between these different sources, music reception is framed and reframed as the collaging of the recordist's point of ear. As with *Dry by Morning*, the field recordings often capture quiet, solitary and/or domestic spaces.

On listening back on headphones, I hear the recording device being handled and operated, bringing it explicitly into the frame of the piece, demonstrating the role of the technology in the emerging environment. As in each of the previous examples, the recording device is physically connected to the recordist – it extends from me, it resonates with me, it moves with me. I also hear some stereo (XY) recordings as occurring at the edge of or in my own head (IHL), while other XY stereo and binaural recordings are locatable just beyond these. This simultaneous perception of in-the-head locatedness and very close (proximate) recordings introduces a claustrophobic layering, which feels invasive and unsettling, and points towards the variances in spatial fidelity of XY stereo recordings heard through headphones as creative-artistic potentials. This track re-presents my own emergent perception in motion as I traverse personal listening spaces, private spaces, and solitary, emotional spaces. Recorded music can be heard as an element that expands the horizons of my private soundworld, functioning as sonorous fantasy space, at once a possible world and a mirage/void. As I listen back to this track I am moved as I move through the emotionally ambivalent, solitary spaces of everyday music reception.

5. HEARING HOW IT FEELS TO LISTEN: SUMMARY AND CONCLUDING THOUGHTS

In summary of the discussion above, new theories of listening propose auditory perception as an embodied, relational process of understanding and producing environment, and of generating an emerging perspective and/or subjectivity in relation to it. Building upon insights in the fields of phenomenology, ecology, acoustic ecology and sound studies, listening can be understood as an engagement with sound as motional and locational information, with the listener perceiving the world's motion in relation to their own body's self-motion within the world. This process of embodied, emergent auditory perception is instantaneous and can be a means of accessing presence, orientation and agency in the given moment. Such access also opens up an awareness of an ephemeral, invisible, possible world of hidden relations, accessible only in passing, as virtual, or parallel reality. Engagement with the fleeting soundworld can be thought of as an extension of or mode of feeling – the body resonates with and through the environment.

These understandings of listening point to specific communicational possibilities for field recording and phonographic practice. First-person field recordings, those made when a single recordist carries, wears and remains with the microphone, afford the possibility of communicating the auditory encounters and spatial experiences of one listener to another. The recordist's direct physical connection to or close proximity with the microphone generates an environmental recording that captures the sounds of their proximate, personal space as a point of ear through which the recorded environment may be (re-)encountered, inhabited or embodied by a listener, as mediated by the microphone(s), playback system and reception context. Such recordings may be used as key elements in sound art and soundscape art pieces, and listeners may, through their engagement with such work, directly relate to or inhabit the virtual, fictional recorded soundworld as their own experience.

In the essay 'Field Recording as Sonic Journalism', Peter Cusack discusses the field recording Starry Night by Mazen Kerbaj. Cusack writes,

... field recordings convey far more than basic facts. Spectacular or not, they also transmit a powerful sense of spatiality, atmosphere and timing. This applies even when the technology is poor. These factors are key to our perception of place and movement and so add substantially to our understanding of events and issues. They give a compelling impression what it might actually be like to be there. Sound is our prime sense of all-round spatiality and listening gives us an all-round point of ear. It enables us to judge how far we are from events and to ask how we might feel and react in such circumstances. Certainly, with recordings and broadcasts we know we are not there, but even at this level there is a subjective engagement and an intuitive understanding that, in my view, are field recordings' special strength. (Cusack in Carlyle & Lane 2013: 26)

This article proposes first-person field recording as a practice which extends the communicational and relational possibilities of field recording towards direct personal experience and identification. By exploring the presentation of the proximate, intimate and familiar sounds of personal auditory encounters, new narrative forms and intensities of auditory engagement may be developed. In a recent interview on the subject of virtual reality, computing scientist and virtual reality technology developer Jaron Lanier states,

... virtual reality is a future trajectory where people get better and better at communicating... The canvas of VR cannot be the external world — it has to be your body. An example of this is when you create out-of-body sensations of touch and feel. When you're really changing yourself, that's so much more interesting than watching something in the external world — and it really improves your sensation of reality. (Lanier quoted in

I will conclude by proposing the usefulness of developing first-person field recording within the wider context of virtual reality theory and practice, and by encouraging further practice-research in this area. Such developments may lead to an expansion of future possibilities for field recording in particular and sonic practice in general, in a culture increasingly influenced by everyday immersive technologies.

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