

***(In)Habiting Film Sound:* Cinesomatic Narratives and Sonic Embodiments**

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Abstract

...our body is comparable to a work of art. It is a nexus of living meanings....

(Merleau-Ponty, 2012: 175)

This thesis proposes the concept of *cinesomatics* to theorise how embodiment is conceptually and materially central to cinema sound design. Moving beyond existing studies of audience immersion and textual analysis, this research draws out practitioner accounts of sound work to investigate the corporeal participation of sound professionals in cinematic storytelling. This study valorises lived experience as the grounds of research and philosophies of film sound, and firmly places the body of the practitioner in film sound theory. It demonstrates how these often ‘invisible’ and ‘inaudible’ bodies come to matter in the industrial and cultural frameworks that produce film work. This mitigates the tendency to minimise or obscure realities as subjectively lived by sound professionals.

Analysis is drawn from interviews with industry practitioners working in Australia, New Zealand, United Kingdom, United States and Brazil, as well as a survey administered anonymously through the Australian Screen Sound Guild. These practitioners work in a diversity of sound roles, including location recording, Foley, sound design, sfx and dialogue editing and mixing.

A key discovery of this research is how both past and present lived experiences of sound practitioners co-create and navigate sonic materials for film. The cinesomatic model of film sound demonstrates how practitioner embodied

knowledges and rich sensory experiences render sonic storytelling. Yet it has also found significant implications of how sound work can negatively impact embodiment of the practitioners, particularly regarding physical and mental health. This contributes to problematizing popular conceptions of these creative roles and practices, and also deepens the understandings of how professional sound work is not only technical work but also bodywork.

This research contributes to widening theoretical understandings of the way in which cinematic sonic meaning is constituted across, among, and within, senate bodies. It also facilitates a paradigmatic shift in discussions about film sound production, transposing technical discussions to embodied ones.

Statement of Originality

This work has not previously been submitted for a degree or diploma in any other university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

All research activities undertaken for this study were approved by the Macquarie University Human Research Ethics Committee (Reference #5201821054373, see Appendix F).

Signed:

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ALISON CLAIRE WALKER

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CHAPTER ONE: INTRODUCTION

...our body is comparable to a work of art. It is a nexus of living meanings....

(Merleau-Ponty, 2002: 175)

1.1 The Cinesomatic in Film Sound

This thesis proposes that the experience of film sound be theorised as *cinesomatic* experience, where the connections between bodies, objects, spaces and narratives are sonically rendered through and into lived experience. Such a neologism deliberately draws attention to the suturing of cinema studies and studies of embodiment within film scholarship. As the following chapter will demonstrate, it points to the legacy of those scholars of cinema who first sought to locate and theorise the bodies and experiences of film audiences. Further, while there is acknowledgement and engagement with some theorists of sound art, the term *cinesomatic* indicates the primary focus of a film production context. To conceptualise film *sound* experience as *cinesomatic* is to argue that it evokes multiple narratives, and sensory encounters, which the experiencer corporeally co-creates. These varied narratives and sensory connections overlap and evolve, diverge and regenerate, depending on who is participating in film sound, and in what capacity and context. This opening chapter advances the key research questions and aims central to this study, and situates these questions within the relevant theoretical and industrial contexts. Here I address the methodologies employed for this study, and establish how and why these chosen frameworks were used in assembling this research. I define the parameters of both the study, and of the central critical concepts mobilised throughout the

discussion. Lastly, I will outline the subsequent chapters of this thesis, providing a brief overview of the core questions and focus for each.

The materiality of encounters with film sound for audiences has been a concern emerging in film sound theory in recent years. Critically, accounts of embodiment and lived experience during the *production* of film sound have been so far largely omitted from academic discussions. In this study, the corporeal investments and participation of sound professionals are brought to the fore, building on existing studies of audience immersion, and moving beyond textual analyses of completed film sound works. A cinesomatic theory of embodied film sound practice mitigates the over-representation of audience-based analysis in scholarship, and demonstrates how professional sound work depends on the corporeal knowledge and somatic participation of sound practitioners.

Sound production for film is an endeavour that stretches across several phases, and involves a multitude of bodies, objects and contexts. ‘Sound production’ is understood here to denote any activity involved in the making of a film’s soundtrack elements of dialogue and/or effects. This activity pertains to all phases of a film’s creation, including production and postproduction. The appellation ‘cinesomatic’ points towards developing research into the relationship between cinema sound and bodies within film sound studies. This investigation in particular argues that the body – and the embodied experiences – of the sound practitioner must be explored and included in discussions of film sound. It is important to examine and acknowledge both how the living bodies in question co-create and navigate sonic materials for film, and how these often

‘invisible’ and ‘inaudible’ bodies come to matter in the industrial and cultural frameworks that produce film work.

The corporeal turn in academic theory has been critical for foregrounding embodiment, investigating the sensory and perceptual aspects of embodiment, as well as how ‘bodies’ are acted on by political and social forces. Within film studies, the corporeal approach was a direct challenge to the auteurist and psychoanalytic approaches to cinema that preceded it. It placed the body firmly and self-consciously into film scholarship, enabling film scholars to investigate lived, sensory experience within cinematic encounters. Drawing on differing philosophies and frameworks conceptualising embodiment, including Merleau-Pontian phenomenology, Spinozist/Deleuzian theories of affect and Foucaultian theories of power, film theorists were able to challenge inherited Cartesian divisions between mind and body. Legitimising the body in theory has therefore enabled film scholarship to investigate lived experience in relation to the cinematic encounter.

Concomitantly, within studies of film *sound*, there is a growing body of work interested in addressing and exploring embodiment. Some of these works provide the foundation of this present study. However, in much of these, the focus is overwhelmingly on the embodiment of a receptive audience, with a disproportionate lack of attention given to those involved in the production of sound. As Pamela Wojcik rightly pointed out over a decade ago, “the details of sound production are rarely made readily available except in anecdotal examples...” (2006: 80). In the time since she made this claim, some inroads have

been made, but it is imperative that film sound scholarship continue to address this oversight.

What this study aims to do is examine the embodiment of those responsible for the creation of this area film sound work – the sound practitioners. More specifically, this investigation asks: how is the embodiment of the practitioner engaged and affected through and within their work? To what extent is sound work contingent on the practitioner's embodiment? How does the practitioner understand, and perform, his or her own embodiment in relation to their professional practice? How might these accounts be theorised in light of the recent interdisciplinary work on embodiment? And additionally, what larger considerations and implications arise when considering the industrial pressures and working challenges that come to bear on those bodies working with sound professionally? In the following sections below I will explain the three central aims of this research.

Firstly, in line with the goals of those phenomenological film theorists cited above, accounts of embodied experience are further sutured into theoretical discussions of film sound. Doing so reinforces the argument that lived experience is significant for philosophies of film, as well as for film sound theory. This approach also extends the criticism towards Cartesian framings that impose a hierarchy of separated mind and body. It places the body of the *practitioner* in film sound theory, and contributes detailed insight into the lived experience of those bodies in production that are often obscured. Secondly, providing practitioner-based accounts of embodied experience in the context of film sound

production mitigates the dominant focus on audience experience. This is a necessary step for widening theoretical understandings of the way in which sonic meaning and narratives are constituted across, among, and within, perceiving bodies. Thirdly, this approach facilitates a paradigmatic shift in discussions about film sound production, one that has significant implications for both researchers and practitioners. Displacing the prevalent technical framings of sound inherited from industry discourse to embodied framings allows the re-valuing of sound work and sound 'workers'. Such a move is important for professional roles and practices that are overwhelmingly described in terms of technical rhetoric, and where it is evident that the dimensions of lived experience are minimised or obscured. Doing so also challenges professional hierarchies that position certain types of work, and workers, above others.

As the first research aim outlined above indicates, film sound theory, in tandem with other sound studies approaches within the humanities, lends itself to embodied approaches to theory. Embedded in the scholarly discussions about sound across many disciplines is the perspective that sound is innately less cognitive and more 'sensory' than visual input, therefore producing a more reflexive awareness and participation of the experiencing body. Such a perspective is summed up by phenomenologist Don Ihde's statement, "I hear with my whole body" (2007: 44). Such a perspective is useful, yet I argue that in film sound scholarship, discussions of embodiment have been specifically concerned with either audience or listener reception (Atkinson, 2011; Chion, 2013; Cook, 2015; Coulthard, 2016, 2017; Batcho, 2017; Grimshaw, 2017, Ward, 2016, Fahlenbrach, 2017; Huvenne 2013; Lovatt 2013, 2015; Grajeda, 2016).

These kinds of cinematic listening experiences are divorced from the process of active and unfolding sound production, and therefore limit the scope of a theory of embodied film sound. At the time of writing, there has been very little theoretical work done bridging philosophical theories of sonic experience with the practice of producing sound work, with some notable exceptions which will be discussed throughout this study (Hanson, 2007; Fife Donaldson, 2014, 2017; Delmotte, 2014, 2015; Wojcik, 2006; Ament, 2014; Lewis, 2015; Pauletto, 2017; Wright, 2014).

There is still much work to be done in understanding and theorising the embodied experiences of those who work with sound professionally. In elaborating on the second and third research aims raised above, I argue that 'bodies' and the embodied experience of these professionals are often obscured or erased by industry literature and some academic accounts. These sources tend to focus on technical pathways to achieving sonic works (Casanelles, 2016; Isaza, 2010a, 2010b; Klinge, 2015; Martin, 2012; *The Cargo Cult*, 2014) or celebrate the work of a select few high-profile professionals made famous for their contributions to certain iconic films (Costantini, 2010; Greene, 2011; Jarrett, 2000). In other words, those academic and industry sources that do discuss sound professionals are often framed in terms of technical knowledges and tools, where sonic achievements via technology are fetishised and valorised, rather than the bodies producing the work. Such an approach bypasses the rich lived complexities inherent in sound production, and also overlooks the potentially fraught issues inseparable from professional sound work, such as problematic industrial work practices or mental and physical health concerns.

Alternatively, they echo the auteurist approach by focusing on a select few sound collaborators of prominent filmmakers, and therefore perpetuate the cultural valuing of certain creative works – and workers - over others.

To counter these trends, this study therefore explicitly asks: to what extent can professional film sound practice such as sound recording, editing or mixing be framed in terms of theories of embodiment? Further, how can this be done whilst also acknowledging the industrial, political, cultural and social determinants of this work, and their implications? The key issues at stake here are inescapably complex, requiring an interdisciplinary approach that draws upon a wide variety of theoretical perspectives in order to negotiate some of the critical insights provided by this research. Therefore, as the second chapter in this thesis will outline, this discussion is underpinned by existing research drawn from philosophies of embodiment and objects, sound and listener theory, performance and dance theory, sociology of body and practice, healthism, cultural and creative industries, embodied cognition, as well as technical guides and existing practitioner accounts in order to draw together a theory of embodied film sound production.

In noting this interdisciplinarity, it is important to clarify how the concepts of ‘the body’ and ‘embodiment’ are understood for this particular study. These terms are hermeneutically elastic and elusive, and have been the source of much debate both across, and within, many disciplines. As Chris Shilling points out, ‘the body’ remains one of the most contested concepts... over which the respective claims of post-structuralism and post-modernism, phenomenology,

feminism, socio-biology, sociology and cultural studies have fought..." (2005: 6). Philosophical thought draws a distinction between 'korper' - the abstract objectified body, and 'leib' - the subjective body as it is lived. As Aho & Aho describe it, leib is "...my body in particular, my life here and now, what I am as a volitional, sensing person. It is what I see, think, and remember..." (2008: 1). It is the latter that matters immensely to phenomenology and scholars investigating lived experience.

However, to research lived experience is not to exclusively equate embodiment with the personal or individual. For this study, framings of embodiment and experience are not solely anchored within the framework of phenomenology, but also draw upon sociological thought about bodies and labor practices. While phenomenology is interested in the subjective experience of an individual, it is also important to acknowledge how 'bodies' and 'embodiment' operate within broader historical, cultural and political discourses. This is particularly so since the embodied experiences being investigated in this study are intrinsically tied to professional practice, which is also shaped and determined by existing industrial and economic structures. In other words, discursive framings of bodies and bodily practices are also significant because of their embodied effects. As will be discussed further in the following chapter, this challenges what some see as the problematic humanism implicit in phenomenology. This contextual approach also allows critical analysis of certain issues that, while drawn from individual accounts, are demonstrably significant on a larger scale. As a result, even wider implications for an industry of 'working bodies' become apparent in this study.

The use of these two lenses produces two dimensions of discussion within this study. The first level is the phenomenological account of sound practice, captured in the first-person words of interview and survey participants, as well as through autoethnographic self-reflection. In this level, subjective embodied experiences as explicitly articulated by participants provide some insight into how this professional work is corporeally lived. Yet these accounts are layered with tacit reflections and implications for embodied experience, and close reading of these accounts reveal how the political and cultural contexts of this work and industry also shape subjective experiences. Therefore, the second dimension apparent in this study is the rendering of experiential accounts through analysis. In other words, the voices of participants are placed within a structural analysis that frames professional sound practice amidst that of other practitioners, scholars and industry players. Implications of these practitioner reflections, as well as wider connections between practitioner accounts and theoretical ideas are drawn out through the researcher lens. As already stated, it is problematic to limit a discussion of embodied experience in isolation from a practitioner's participation of larger cultural, social and political frameworks, and therefore, while this study is theorising experience, these descriptions are also framed in the industrial context of professional sound work.

Bodily practices and tacit knowledges are key to accounts of embodiment in this study. 'Practice', as deployed by influential thinkers such as Marcel Mauss (1973), Michael Polanyi (1958, 1967) and Pierre Bourdieu (1977), is applied here to denote learned bodily technique or discipline. As this research will demonstrate, bodily practices are significant in that they help to constitute both

“collective and individual” (Mauss, 1973: 73) professional identities and behaviours. As Noble & Watkins (2003) point out, the logic of practice is “...embedded in the requirements of the field, practically mastered by its participants” (522). Further, the tools of embodiment, including bodily disciplines, as well as the nonhuman devices intrinsic to professional sound work perform what Nigel Thrift describes as the “radically extending” of embodiment (2004:126). These relationships become important for examining both the immediate and more long-term or sustained interactions and effects of professional sound work, as well as those strategies used by practitioners to metabolise and manage these lived experiences.

Concomitant with concepts of bodily practice are learned ‘skills’ that are realised through bodily practice. While this study does not closely track the ways in which skill is acquired to a professional capacity, the descriptions of professional practice present in this discussion do implicitly reveal the way in which professional expertise has been internalised in the bodies of the participants. Further, the difficulty in articulating and externalising ‘skill’ (Cross, 2006: 9) reiterates the degree to which these practices are corporeally, rather than cognitively, registered. Practices and tacit knowledges with ephemeral language such as ‘muscle memory’, ‘flow’ and ‘instinct’ (Turkle, 1984: 85) become recurring markers of this corporeal expertise. As Funk & Cockelbergh point out:

Implicit knowledge is a matter of meaningful human corporeality (“understanding physiognomies”), competent activities (“performance of skills”), successful sensory actions (“proper use of sensory organs”) and successful handling of instruments (“mastery of tools”)...”. (2013: 119)

Further, the acquisition and deployment of skills through bodily practice includes what Rachel Prentice describes as “...the development of perceptions, affects, judgments, and ethics that occurs through bodily practice...(2013: 6). While she is speaking to a medical context, this perspective is also useful for professional sound practice, an endeavour indelibly linked to culturally sanctioned aesthetics of taste and cultural capital (Caldwell & Henry, 2018: 54). In this way, ‘skills’ are not neutral, or neutrally acquired, but are bound up with these broader mechanisms of the creative industries.

1.2 The Industry: An Overview

It is relevant to preface this study with the industrial contexts within which the participants are situated. The film sound professionals work under the broader rubric of film and video production, as part of the creative industries. This research draws from participants working in Australia, New Zealand, Brazil, United Kingdom and United States industries. While each of these regions may be considered a ‘local industry’ with their own particular political and economic contexts and constraints, they are also connected in the global circulation of creative commodities. Further, the nature of the industry means work is increasingly considered borderless, where sites for the production of cultural goods are increasingly mobile. As Deuze, Martin and Allen identified in the structure of the gaming industry, there is now a global shift towards ‘flexible cultural labour, whereby “...skills, workers and sources of financing are distributed across national boundaries, both within and between firms or corporations” (2007: 342). Drawing on A. Aneesh (2006), these authors also characterise the creative industries as ‘transnational virtual spaces’, which

features the transfer of skills and labor abroad (Deuze, Martin & Allen, 2007: 342).

Yet despite the apparent flexibility and possibility offered by a trans-national model of creative industry employment, the reality of reliable, sustained and gainful occupation, particularly for those in smaller industries, reveals troubling trends that directly impact practitioners. For example, in Australia, according to the Australian Bureau of Statistics, as of 2016, 10,934 people worked in film and video production and postproduction services, with 9,968 of those people working in production, and 966 people working in postproduction (*Screen Australia*, accessed 13 July 2019). This represents a 15 per cent increase for employment in production, and a 20 per cent *decrease* in employment in postproduction since 1996. Further, Screen Australia showed that ‘involvement’ in film production was up 40 per cent between 2004-2007, yet paid work in film production was only up by 8 percent during this time. While Australian census sources do not specify detailed characteristics of this employment, it was found that in the United Kingdom, as much as 90 per cent of workers are freelancers (Davis & Scase, 2000; Skillset, 2008a, cited in Eikhof & Warhurst, 2013: 498). It would be reasonable to argue that this statistical trend in work type is comparable in other local industries, as well as reflecting global trends.

Further, the use of the term ‘film industry’ is in some ways problematically simplified, and does not adequately reveal the complexity inherent in a global business network, and professions that traverse geographical boundaries, or engage a wide range of creative commodities. Indeed, the impetus and ideology

behind work in the creative industries varies among regions, for as John Hartley pointed out, "...in the USA creativity is consumer- and market-driven, whereas in Europe it is caught up in traditions of national culture and cultural citizenship" (2005: 5). Further, for local industries described as "porous to both America and Europe", such as Australia and New Zealand, these two very different agendas produce tensions between "consumer and culture" and "market and citizenship" (ibid), a polarity which impacts industry structure.

A renewed critical interest in the creative and cultural industries is evident with recent studies that have examined the experiences of those who work in creative professions. These perspectives offer significant contextual framings to the study of embodiment that enrich the phenomenological accounts of personal experiences. Banks, Gill and Taylor (2013) note that after decades of being 'displaced' in media studies by a focus on texts and audiences, "...the labouring lives of people working in the cultural and creative industries are now firmly on the research agenda" (1). However, as will become apparent, detailed studies specifically investigating sound professionals within the film industry are scarce.

As will be discussed further in later chapters, employment in the creative industries is fraught with issues that directly and significantly impact the individual embodied experience of those professionals involved. As this research will also reveal, these issues described in phenomenological accounts, including problematic industrial work practices and their consequences for health and the work-life balance, demonstrate wider commonalities across industries in different countries, and point to the necessity of a renewed examination of work

in the film industry. While some industry sources offer statistical information on box office performance, numbers of productions completed, or budgets for productions (Screen Australia, 2018), there is considerably less information available that speaks to the lived experiences of those working in the industry. This research therefore attempts to address the lack of information available at an industry level, and ensure the more troubling accounts and aspects of professional sound work is rendered visible and audible.

1.3 Methodology

In assembling a theory of cinesomatic film sound experience, this study engages three methodological strands of qualitative data gathering, which I will unpack below. The first strand includes interviews conducted with currently working industry professionals, the second includes an anonymous survey conducted online, and the third includes an autoethnographic element where I as a researcher attempted to engage in some sound production practices as a learner.

In the first strand, the potential interview participants were approached via email and phone using contact details available on professional websites, professional search listing¹ or provided by other colleagues already interviewed. Interested participants were offered an option to have a face-to-face interview, either in person or via Skype, or alternatively, answer the interview questions sent in a document via email. The semi-structured interview as a research method was chosen because it enabled certain topics to be raised through designed questions, whilst also offering the space for responders to develop their

¹ 'The Production Book', see: *theproductionbook.com.au*

own themes, points and illustrative anecdotes (Bernard & Gravlee, 2015). Interview data remains a useful qualitative method of research for the way it enables the description of subjective experiences, and enables the comparison of cases to note commonalities and contrasts between these accounts (Flick, 2014: 5)

Qualitative interviews were chosen because of they allow the research to obtain “...precise, nuanced, and rich descriptions” (Kvale, 1994: 160) which facilitate analysis of the structures of experience in question, and the development of theoretical concepts. As Galetta indicates the semi-structured interview incorporates both open-ended and theoretically driven questions, “eliciting data grounded in the experience of the participant as well as data guided by existing constructs in the particular discipline within which one is conducting research” (2013: 45). Further, the qualitative interview is useful for researchers who are interested respondents’ own interpretations and expression of behaviours, motives, emotions and experience (Heyink & Tymstra, 1993: 300).

However, in using interviews as a primary source of research data and a key methodological practice, it’s important to acknowledge the limitations of this approach, as well as the limitations of data gathered. In studying professional sound practice, interviews are helpful in that they facilitate verbal descriptions of practice and experiences of embodiment that the practitioners are conscious and aware of using, and able to articulate. Further, interviews allow space for practitioners to reflect on their craft, and in this context, the way in which their work entails aspects of their embodiment. Yet the way that practitioners narrate

their experiences is admittedly not neutral, and their choice of what to focus on and disclose is decidedly significant. As Andrew Metcalfe pointed out, every “...presentation of a self involves anxious repression of a shadow self, of the difference between what the subject shows to and hides from the world” (2013: 46). Further, as Javinen argued, “When interviewees report on experience, they do so from different social positions and in greater or lesser agreement with recognizable cultural scripts” (2000: 386), and some of these ‘cultural scripts’ are analysed throughout this research. In this research context, the aspect of self-presentation in an interview scenario is pertinent in an economy and industry that relies on networking, personal relationships and word-of-mouth to gain further work. Therefore, practitioners may avoid fully and freely expressing themselves regarding controversial issues, areas of discontent or reflecting on negative experiences or circumstances with which they could be associated. They may feel obliged to present a ‘professional self’ in line with their understanding of what attitudes, opinions and ideas are appropriate and acceptable for a practitioner in their role. Further, the scope and details of the interview data also reflects the degree to which practitioners are comfortable sharing information with myself as a researcher, in a formal interview setting.

The data of interviews also may not directly reveal the underlying or unchallenged assumptions and expectations and that underpin sound work, particularly as regards to issues around health and wellness, sustainability of the work, equalities of access, ethnicity, class and gender, as well as what constitutes ‘good’ professional practice. Further, interviews do not necessarily explicitly reveal the habitual practices that operate beneath the practitioner’s awareness,

or which the practitioner may not think significant enough to articulate, which render further observation useful. They may not disclose the aspects of working life or experiences that interviewees feel ashamed or embarrassed about, or believe might be considered 'bad practice' within their community.

Kvale noted the necessity of researchers to draw from the 'directly expressed' descriptions and meanings, as well as drawing out 'implicit' meanings (1983: 175). Therefore, this analysis engages with interview materials to at times deliberately invoke and question implicit meanings, assumptions and framings offered by interviewees, as well as metaphors and languages used by participants. Reading interview materials in this constructionist way not only stresses a practitioner's conscious observations, but also enables critical insight into the social frameworks from which these observations are situated.

The other research method drawn on here, survey research, offers the opportunity of self-report with anonymity, which potentially removes or alleviates some of the constraints that may be present in an interview situation. In this way, participants are able to offer opinions about the structural aspects of the industry such as working conditions, without fear of professional repercussions. Further, as this survey was facilitated and accessed through a professional organisation, many responders may have seen this survey as an opportunity for digital activism. Arguably this affiliation with the Australian Screen Sound Guild (ASSG) (see Appendix C), which is an industry body, means that respondents may have been more willing to participate because it offered the possibility to amplify and lobby around particular concerns. A notable

constraint of this data is that it surveyed specifically Australian practitioners. These findings may indicate broader trends globally, but it must be recognised that as a local industry, the Australian context is going to have its own industry specificities that do not necessarily translate to other industries, or in the global sphere.

In total forty responders were interviewed for this research. However, four of those practitioners had worked primarily with video games and/or news production, and therefore the specific cultural practices and experiences they described were significantly different from those of other respondents. Because my focus is on a film and documentary production context rather than the games industry or news, these interviews were not used for this analysis. For a breakdown of the thirty-six participants who have been included in this discussion, (see Appendix A).

In terms of interview participants, there was a noticeably higher ratio of postproduction professionals who participated in the study. Of thirty-six included interview participants, twelve were location sound professionals, and only one location sound worker electing to answer questions via an emailed document. Of these twelve, ten identified as location recordists/mixers and two were boom operators. It should be noted, however, that this differentiation of roles is in some ways overly simplified, as some of the recordist/mixers interviewed had previous experience in boom operating, and depending on the size and scope of a production, perform both roles simultaneously.

In comparison, twenty-eight postproduction professionals were interviewed. These included seven Foley artists and/or mixers, one dialogue editor, two mixers, and eighteen sound designers/sound effects editors. Five participants elected to answer questions via an emailed document, however of these five, two participants also followed this up with a verbal interview. These interviews followed a semi-structured interview schedule, at times developing in other directions depending on how the interviewee responded. Questions were tailored to the participant's overall role – whether production or postproduction. Further, as the aim of the research was to gain insight into lived experience, the interview questions were deliberately constructed to avoid technical discussion (see Appendix B).

The second strand of research involved an anonymous survey that was open to Australian personnel affiliated with the industry body Australian Screen Sound Guild (ASSG) (see Appendix C). This survey was the direct result of an absence of available statistical data relevant to the industry. The ASSG was interested in facilitating the survey as they were hopeful to also gain insight into further ways they could assist the industry. The organisation was not involved in the creation of questions for the survey, however the ASSG board reviewed and approved the questions before the survey proceeded (see Appendix D). The survey was both qualitative and quantitative, with some questions open-ended to provide responders the opportunity to offer individual responses such as what things they would like to see change in their industry. Additionally, some questions were contained to a small 'range' of possible answers in order to gather a statistical snapshot of the responders, such as age bracket, years in profession

and gender. A short information blurb and survey link was emailed out to both production and postproduction professionals who were on the member mailing list. They also posted the advertisement and link to the survey on their Facebook page.

The third strand of research methodology used in this study was a response to the absence of scholarly literature on film sound that includes researcher participation and subjective reflection in its scope. It was also a response to the problematic limitations researchers face when investigating lived experience and embodiment, particularly associated with performance of a skill. Because it is a less common methodological approach to research than interviewing and surveying, it is worthwhile unpacking this below. A key argument of this thesis is that film sound production work engages the embodiment of the professional in rich and complex ways. The methodological implication here is that the researcher interprets the first-person observations gathered in the interviews and survey responses, and draws on these accounts in order to make theoretical assertions and wider connections. Yet there remains a gap between experiences made explicit through the words of interviewees, and the tacit dimensions of these experiences that may not be present in these verbal or written accounts. In other words, the limitations of gathering data via verbal or written interviews or surveys mean that I as the researcher am phenomenologically external to the descriptions of experience offered by interviewees.

By situating embodiment in film sound production as a key focus of this research, I deliberately sought to corporeally participate in the key professional

activities being discussed, albeit not as a professional. Johanna Uotinen argues that autoethnography is a useful method for discussing bodily knowledge (2011: 1309), yet as Jaana Parviainen has pointed out, when researching lived experience there is an epistemological challenge of textually or verbally articulating and translating bodily awareness and skill. Parviainen argues that 'living knowledge' is what is transmitted between bodies through the process of 'learning-by-doing' (2012: 22). This progression from being researcher and listener, to novice sound practitioner, was important for gaining a corporeally felt connection to some of the experiences described by interviewees. This approach consciously recognises the spectrum of experience and ability, and wherein my experience is clearly positioned as a 'beginner'. However, as Downey, Dalidowicz & Mason note, apprenticeship is not only ideal for learning a new skill, but also to learn about the skill itself, and the process of skill acquirement (2013: 3). Further, this becomes useful for a researcher, for apprenticeship hopes to achieve "...not mastery, but a more intimate knowledge of the paths that lead to mastery" (ibid).

Therefore, the inclusion of autoethnographic excerpts is strategically designed to place researcher embodiment within the fabric of this study, and to supplement professional reflections on practice captured in the interviews and surveys. The majority of the autoethnographic passages were written during studio visits with a selection of interview participants, with only one being undertaken as a solo field recording experiment. The aim of this apprenticed learning was to both observe and engage with some of the tools and spaces used by interview participants, and to attempt to begin to learn and inhabit some of the embodied

practices key to these roles. In participating in these sound production practices, questions emerged such as: 'how can I as a beginner further understand the spaces and practices of this work? How does it feel to create and work with sound and tools of sound production in these ways? How do I experience my own embodiment while in these situations? Four field trips were taken in total, one in Australia, and three in New Zealand. The first was taken with *Feet'n'Frames*, a Foley company owned by John Simpson, based in Quorn, South Australia, which took place over the course of one day. The second was with *POW Studios*, in Wellington, NZ, which took place over three days. The third was with *Park Road Post*, in Wellington, NZ, which took place over two days. The fourth was with *Bespoke Post*, in Auckland, NZ, which took place over the course of one day. The solo field recording experiment was performed in national park bushland in Sydney, Australia, and took place over one day. As this study did not include any fieldwork on a film set with location sound professionals, it was pertinent to create a recording situation that would employ some of the aspects of location sound work. Therefore, the bushland setting was chosen to imitate the process of going on a 'recce' to assess the soundscape of a potential filming location.

This autoethnographic aspect of this research expresses the critical imperative to be a participant, rather than an observer, to be embodied, rather than disembodied, in the process of thinking and writing about sound experience. In the words of Ellis & Adams, autoethnography is "...not simply a way of knowing about the world, but also a way of being in the world" (2014: 271). Similarly, Karen Barbour also argues that embodied engagement "...is crucial for creative

practice as research and for research in general” (2011: 86). As Holman Jones pointed out, the binding characteristic of all autoethnographies is using of personal experience to examine and/or critique cultural experience (2013: 22). Further, by physically observing and attempting some techniques of sound practice, it becomes apparent how when learning a new bodily skill “...we become more acutely aware of the manner in which our body functions or what it feels like” (Rouhiainen, 2008: 244). All of the interviewed professionals have spent many years working in their chosen field, and this study makes no claim to be able to gain equivalent lived insight into these experiences as experienced by a professional. However, by embracing the ‘beginner’ place of apprenticeship, the process of *acquiring* and practicing tacit knowledges are therefore rendered more visible.

By including this methodological data and using it to preface the relevant chapters, this research aims to create an experiential bridge for a reader, further facilitating an understanding of sonic practice as it is experienced. As Susanne Gannon notes, “There is no neutral space from which we write, or from which we read. As well as our past experiences, we bring our present locations, and the immanence of futures that are opaque and that offer multiplicitous possibilities” (2013: 229). Researching embodied experience via these three methodological strands does not posit the ‘ideal’ embodied experience, or argue that ‘embodied experience’ can be universally framed or accessed. Yet, this draws attention to the problem that is faced by researchers who are investigating lived experience. Therefore, the autoethnographic and ethnographic reflections that supplement this thesis are admittedly not directly comparable to the experiences of those

professionals, but are a “...continuous crafting of the self and of experience within particular historical and cultural conditions” (ibid: 232).

1.4 A Note on Audio Terminologies and Technologies

As with much research on creative work and sensory experience, there are issues with subjective and technical terminologies as well as industry vocabulary (see Appendix E), including those used by the practitioners themselves. Some sound practitioners such as Randy Thom (2007) identified a disjunction between scholarly terms used to discuss film sound and the way a practitioner frames the work. Others reveal through language the different ways that ‘sound’ is framed for a professional context, reinforcing the industry’s emphasis on technology as the mediator of experience. As Brian Shepard notes, “The word sound refers to the natural acoustic phenomenon of vibrations moving – usually through air – to our ears. Audio, by contrast, refers to the capture, storage, and reproduction of sound through electronic means” (2013: 5). Such a distinction points to a key tension between how ‘sound’ as an experiential force is framed, and how ‘audio’ comes to signify the technologisation of sound.

This current research deliberately avoids discussing specific equipment and software applications used by practitioners, except where direct explanation is necessary to understand the performance and parameters of the work. This follows on from interview questions that were constructed and worded in such a way to deliberately avoid a primarily technical framing of the work. However, interviews still remained open to these themes emerging if it was pertinent to the interviewee and/or the point they were making. The reason behind this, as

outlined earlier, is to mitigate the existing tendency to focus on the technological aspects of the work or gear, and to maintain focus on explicating lived experience as it emerges, either in conjunction with technology or without. This is not to assert that production of sound occurs *without* technology or that the use of technology is insignificant. It is instead to prioritise the focus on embodiment in such technical interactions.

1.5 Chapter Outline

Chapter One - Introduction launches this study and raises the key theoretical questions, concerns and contexts that will be examined. It addresses the methodologies employed for this study, and establishes how and why these chosen frameworks were used in assembling this research. It defines the parameters of the study, and outlines how the questions and findings of this work offer a timely contribution to film sound theory.

Chapter Two - Literary Auscultations: Scaffolding The Present Study reviews the terrain of interdisciplinary literature informing this research, tracing the development of key theoretical concepts and approaches that are significant for this study. These include the philosophies and investigations of embodiment and sensory experience that emerged out of the corporeal turn, and inform recent writings about cinema, embodiment, performance and sound. It also locates gaps and tensions in these literatures, pointing to how the present study will intervene and contribute to the further development of an embodied film sound theory.

Chapter Three - Shaping Sonic Capture: The Embodied Techniques of Location Sound Practitioners explores the ways in which on-set sound production is realised in terms of the embodiment of the location practitioner. More specifically, the discussion traverses two roles in location sound – the location sound recordist/mixer, and the boom operator. In the cinesomatic configuration, ‘sound’, understood as both a result of collaborative production, and as a vibrational agent, becomes intrinsically bound to the embodied and lived experience of the location sound professional. This approach mitigates a paucity of scholarship on embodied sound practice, and offers an account of sound production that is not overtly concerned with the technical details of the work and equipment. By drawing on interviews conducted with location sound professionals, and applying those theoretical frameworks that resonate with accounts of lived experience, this chapter addresses the questions of how location recording can be understood in terms of embodiment.

The research discussed in Chapter Three reveals a complex experience of embodiment as detailed by those research participants, where subjectively felt experiences of relationality, intersubjectivity and plurality occurs as a result of location sound work. In discussing issues of on set-placement/displacement, capturing of dialogue, aural intimacies facilitated by technology and bodily techniques inherent in the physical activities of the role, this chapter contributes to existing literature by providing an embodied account of an under-discussed area of film production. By drawing together diverse literatures that have not previously been brought together including acoustic ecology, sound art, textbook guides, field recording, performance theory and phenomenology, this chapter

demonstrates that location sound work be reframed as profoundly embodied, and that film sound scholars need to include such accounts of production in order to provide a richer analysis of film sound.

Chapter Four - Acoustic Anatomies: Embodied Techniques of Postproduction Sound Practitioners moves analysis to postproduction sound work, and addresses the question of how the embodied knowledges and the lived experience of the postproduction sound professional becomes inextricably linked to the creation of film sound. It asks how the work produced during this phase is rendered with meaning, corporeal depth and richness by the sensate bodies behind it. It examines how the lived experience(s) of the practitioners enacts a mutually constitutive act of co-creation whereby sound work affects the corporeal orientations of the practitioner, and the lived experience of the practitioner affects the production of the sound work.

Chapter Four speaks to a diversity of embodied experience which demonstrates there is no 'singular' model for the corporeally engaged practitioner, however critically, discussing this work in embodied terms also mitigates the 'invisibility' of the bodies of sound professionals working in postproduction, as well as the fetishisation of technology in these roles. Instead, this chapter draws on theories of embodied practice, music, performance and dance, creativity as well as accounts provided by practitioners and industry experts to explore how postproduction sound work is achieved through bodily knowing and sensitivity. It examines the tacit knowledge utilised by Foley artists, and how the bodies of these performers acquire a sonic vocabulary through haptic knowledge.

Similarly, the chapter examines how the body of sound editors is located in the work, and how practitioners describe their embodied practices in terms of musical knowledge and creative flow. In this way, discussions and understandings of postproduction sound can be reframed and expanded.

Chapter Five - Sounding In To Characters and Audiences: The Empathic Corporeality of Postproduction Sound Practitioners furthers investigation of pathways of corporeal engagement between postproduction sound practitioners and their sound work, looking specifically at how these practitioners create empathic connections to narrative characters and imagined future audiences. It argues for a cinesomatic kinship between bodies (both real and imagined) that enables a continuation of sonic affect. This chapter examines how postproduction practitioners use their bodies and emotions to draw on empathic connections and as a reference guide to infuse their work with corporeal depth and emotional richness for characters and audiences. This perspective argues that the emotional becomes the compass for the technical aspects of the work.

Using philosophies of sound, practitioner accounts and performance theories to underpin this discussion, Chapter Five looks first at the way in which Foley is a production of corporeal intimacy, emotional connection and a process of characterisation through sound. This discussion of Foley probes further into the paradoxical placement of bodies, obscured yet present, silenced yet articulated, as well as object agency in Foley relationships. The chapter then moves to a discussion of sound editors, and questions how they physically and emotionally place themselves in the mix. The issues of sonic contagion, emotional

emplacement and kinaesthetic empathy become important in how the sound editor produces sound work for an imagined future audience, and transforms exhibition spaces into meaningful, charged narrative 'places'.

Chapter Six - Archival Resonances: Embodied Libraries and the Corporeal Lives of Sonic Effects examines the relationship between the postproduction sound practitioner and their library of sound files. The notable absence of phenomenological accounts of digital library use means there is opportunity for scholars to address this using theories of embodiment as well as existing understandings of archives in order to reframe understandings of the digital library. This reframing means that stored information is no longer conceived of as divorced from bodies of users; to persist in characterising the library archive in terms of abstract information without any consideration of embodiment is to miss the opportunity to further deconstruct abstract notions of technicity and data. This area of film sound production, most specifically for effects editing and design, provides a rich canvas with which to pursue a discussion of embodied libraries.

Chapter Six examines two aspects related to the idea of the sound library – the first is the recording and building of a library as a creative resource; the second is the actual use of the files as part of a project. This chapter therefore demonstrates the way in which sound files, as units of a larger library archive, live multiple sonic lives. The industrial implications of the library are also considered in terms of being part of the aesthetic brand and personal asset to the practitioner, whereby issues around recognisability and originality in terms of a

practitioner's work become pertinent. The role of location in rendering sound files as phenomenologically rich is also considered. Further, practices of library engagement, including auditioning and selection of sound, as well as metadata management are examined to understand how this becomes woven into the embodied experience and knowledge of the practitioner. In this way, the library becomes reconfigured as a sensory archive, and the sound file becomes the sensory kindling rich with personal meanings. These meanings are lived and re-lived, exchanged and reinvented with each new incarnation of a sound work.

Chapter Seven - The Sonic Imprint: The Impact of Sound Work on the Practitioner investigates how 'difficult' content – both in terms of sonic materials, as well as thematic and narrative content – impacts those practitioners who are required to produce work with or around these materials. This concept of 'impact' is understood here in terms of physiological, emotional and social affects. These affects may be short-lived and fleeting, and they may also be more enduring. Describing affects in this way is not to partition body from emotion, the body from the social. However, this chapter identifies these issues as having significant implications for all aspects of health as well as social relationships for the practitioner. Therefore, working practices as part of industry contexts become important to consider because of the ways in which they shape, influence and impact lived experience and corporeal realities.

Chapter Seven frames some postproduction sound work in terms of a sonic endurance test, drawing on existing discussions around haptic sound, and looks at how practitioners negotiate painful, distressing or unpleasant content. In

understanding sound in terms of a politics of vibration, impact is viewed in terms of physiological and emotional experiences that result from immersion in these sonic elements. Additionally, some of the longer-term impacts are examined, particularly practitioners reporting work content bleeding into real life experience, as well as the drawbacks of being a professional listener. Such a perspective mitigates the tendency to fetishise the creative work life or to sanction what Ross (2000) describes as the ‘cultural discount’ of creative labour, whereby personal gratification, rather than monetary rewards, is seen as compensation for labour. Also drawing on the discourses of healthism, this chapter provides an industry account of sound roles that has significant implications for health and wellness of sound practitioners.

Following on from some of the health issues raised in the discussion of impacts, *Chapter Eight - Corporeal Challenges: The Health and Wellness of Sound Practitioners* looks more specifically at the health and wellness issues facing sound practitioners, including location sound practitioners. Also drawing on some of the findings of health scholarship, the idea of embodiment here is shifted to include the wider sociocultural and political contexts that define the terms with which a body participates in a creative occupation. The conspicuous lack of attention given to physical and mental health in film sound speaks to broader assumptions about creative industries, as well as hesitancy among professionals to discuss problems in a public forum. The survey conducted for this research, as well as the interviews, reveal some of the more challenging experiences and expectations faced by practitioners. These findings speak to an industry-wide need to instigate discussions and put in place measures to preserve the health of

its employees, despite the predominance of contract-based work that offers little stability or protection.

Further, findings in this chapter suggest changes may be necessary for industry work practices in order to facilitate the health of those engaged in sound work. Specifically, Chapter Eight looks at the role of fitness and general health, as well as fatigue management in the face of particularly gruelling productions, or production schedules. This discussion challenges certain implicit assumptions about the responsibilities of the individual practitioner in terms of maintaining health for the duration of high intensity work periods. There are also gender implications, as findings suggest industry structures and expectations have led to a male dominated profession, with a long-hours culture that means professionals struggle to meet caring responsibilities. Accounts of occupational injuries and hazards raise question of the moral and political assumptions about responsibilities of individuals or employers to maintain physical and mental health. Therefore, Chapter Eight is interested in examining the demands of professional sound work and how these play out in and on the bodies of those involved.

Through the discussion outlined above, this thesis contributes to a developing theory of embodied film sound experience. By producing a study of embodied and lived experience of professional film sound practice, this research contributes to widening theoretical understandings of the way in which cinematic sonic meaning is constituted across, among, and within, bodies – what this study calls cinesomatic experience. This research also facilitates a

paradigmatic shift in discussions about film sound production, continuing to develop the scholarly agenda inherent in the corporeal turn. By providing practitioner accounts of lived experience, this thesis actively addresses the paucity in existing scholarship on film sound which bridging philosophical theories of sonic experience with sound practice through professional accounts. It also challenges existing industrial frameworks and assumptions that impact on the lived experience of these practitioners, rendering these bodies as visible and audible.

CHAPTER TWO

LITERARY AUSCULTATIONS: SCAFFOLDING THE PRESENT STUDY

2.1 Introduction

This chapter outlines the multitude of interdisciplinary theory that informs the current research into embodied film sound experience and practice. By locating gaps and tensions in these literatures, it becomes more apparent the ways in which the present study will intervene and contribute to the further development of an embodied film sound theory.

This discussion begins by introducing the theoretical work that underpins much of the early and current writing on cinema, sound and embodiment, tracing the shift from the linguistic and psychoanalytic frameworks to corporeal ones, and positioning these within broader critical moves to incorporate the body and embodiment in theory. In examining this shift, this discussion identifies the foundational thinkers who drew on philosophical thought in order to move beyond post-structuralism to develop a theory of embodied film spectatorship. Through this, it is possible to identify the limitations evident in these writings, including the prioritisation of audience experience, as well as the disproportionate focus on visuality in these theoretical discussions, an overemphasis that this study aims to address through its empirical research of film sound practitioners.

This chapter also examines some conflicting concepts of subjective sensory experience, as well as some differing framings of embodiment, in order to

contextualise the findings of this research that reveal cultural, social and political complexities inherent in professional film sound practice. Scholars from varied traditions draw on areas of research as diverse as neuroscience, sociology and anthropology to conceptualise embodiment and lived experience, and I argue that such a heterogeneous foundational literature is relevant for developing a robust theory of embodied film sound that resists producing an ahistorical, universal subject.

2.2 Ontology of the Sensible: The Phenomenological Turn

...my body is the pivot of the world...I am conscious of the world through the medium of my body.
(Merleau-Ponty, 2002: 94-95)

In establishing the theoretical context for a study of embodiment - particularly embodied sound - it is vital to begin with phenomenology, the philosophical approach that asks: what can perception reveal about consciousness? It is not overstatement to argue that phenomenology has experienced a renaissance in recent decades, which has had a profound impact on theoretical investigations across the disciplines. Dan Zahavi has shown that “...phenomenology counts as one of the dominant traditions in twentieth-century philosophy, and is still a force to be reckoned with” (2012: 1).

Leading phenomenologists such as Edmund Husserl, Max Scheler, Martin Heidegger, Jean-Paul Sartre, and Maurice Merleau-Ponty represent a philosophical legacy that is multifarious. While the specifics of interpretation and the fundamental details of methodology may vary considerably, it cannot be denied that phenomenology’s uptake in recent decades has been concomitant

with the scholarly movement towards the body across a wide range of disciplines. Indeed, as Zahavi has argued:

...by presenting a detailed account of human existence, where the subject is understood as an embodied and socially and culturally embedded being-in-the-world, phenomenology has also provided important inputs into a whole range of empirical disciplines, including psychiatry, nursing, sociology, literary studies, architecture, ethnology and developmental psychology. (2012: 3)

The far-reaching and diverse applications of phenomenology that Zahavi points out speak to its relevance still in current scholarship.

This thesis is situated amidst the branch of film and sound theory that explores sensory experience in the cinematic encounter. It is interested in examining the lived dimension of sound production and reception as elements of a 'cinesomatic' experience. Central to this territory is scholarship that owes a debt to phenomenology. As I will demonstrate later, many contemporary film and sound scholars have appropriated conceptual tools from phenomenology in order to theorise sensory experience of the medium. In particular, many of these prominent theorists have drawn upon the writings of existential phenomenologist Maurice Merleau-Ponty. Existential phenomenology marks a departure from the transcendental phenomenology (Kant, 2007; Husserl, 1969) that preceded it. Without intending to reduce complex theory to a 'singular' description here, a short summary of transcendental phenomenology posits that subjectivity *transcends* the body and is therefore beyond the subject's capacity to know.²

² Intentionality, in the context of Husserlian philosophy, refers to the quality or direction that conscious awareness takes. As David Cerbone (2006) has shown, the transcendental enterprise aims to articulate the conditions of the possibility of experience or intentionality.

In contrast to the transcendentalist conception that externalises subjectivity from a corporeal self, the existentialist phenomenologist places the framework for understanding firmly *within* the body itself. The writing of Merleau-Ponty signifies a departure from the frame of transcendentalism by focusing his philosophical enquiry on, and within, the body, rather than beyond it. Mary Rose Barral noted that the existentialist is not concerned with the *notion* of existence, but rather *with* the existent. She argues that, "...the existentialist is precisely the philosopher of the subjective, of the personal, of the engaged individual"(1965: 18). Merleau-Ponty in particular opposed the Kantian 'intellectualism' that equates 'perception' as judgement. For Merleau-Ponty, 'judgement' is secondary, as he writes, "Between the self which analyses perception and the self which perceives, there is always a distance. But in the concrete act of reflection, I abolish this distance, I prove by that very token that I am capable of knowing what I was perceiving" (2002: 49-50). Cerbone demonstrates how transcendental phenomenology was reductionist, conveniently bracketing out what it 'doesn't know' (2006: 131). In comparison, for Merleau-Ponty, such a reduction is impossible, and therefore perception is an act of interaction, the single most important relation to the world.

Merleau-Ponty's work, then, marks a significant theoretical move both within philosophy and phenomenology more specifically. His central approach, "the world is not what I think, but what I live through" (2002: xviii) meant that epistemological knowledge was now attributed to the embodied conscious subject. In doing so, subjectivity is no longer "transcendentally a priori", but is found "in the perceptual beginning of reflection, at the point where an individual

life begins to reflect on itself" (2002: 72). In his later work, Merleau-Ponty further developed an understanding of incarnate consciousness with his concept of 'flesh' (1968), which posits reciprocity between the subject and the world. For Merleau-Ponty, flesh is "the fabric into which all objects are woven" (235), and this means that the body is continually in a "process of unfinished incarnation" (209). A key feature of this idea is the erasure of barrier between subject and object, or as Merleau-Ponty asks: "Where are we to put the limit between the body and the world, since the world is flesh?" (138). In terms of the development of academic thought, this centrality of the perceptual from the embodied perspective gave unprecedented credence to the lived body.

Importantly, the 'centrality' of self in existential phenomenology is not without critics. Paul Rodaway (1994) has persuasively argued that a fault of this approach is an insidious anthropocentrism. Indeed many scholars unsatisfied with this humanistic bias explore questions of subjectivity and consciousness through other philosophical approaches including theories of posthumanism (Pepperell, 2003; Sullivan, 2012; Braidotti, 2013; Cecchetto, 2013; McAulay, 2008; Phillips, 2015), affect (Massumi, 2002, 2015; Deleuze, 1988; Thrift, 2004; Anderson, 2006, 2014; Brennan, 2004; Clough, 2010; Gregg & Seigworth, 2010; Hemmings, 2005; Koivunen, 2010; Liljeström & Paasonen, 2010; Wetherell, 2015) and/or object-oriented ontology (Bennett, 2010; Bennett, 2016). Furthermore, Cerbone articulates how the scepticism towards phenomenology "begins with questions concerning the accuracy of fidelity of descriptions of experience to the experience itself" (2012: 14). He counters this by pointing out that such scepticism assumes that a subject's experience of perceptual

subjectivity can be objectified and externally validated. He is quick to point out how, for Merleau-Ponty, perceptual experience can't be understood in terms of 'facts' at all. This indeterminacy of experience renders it elusive to knowledge, and is therefore deeply unsatisfactory for the sceptic (ibid: 19).

Despite these legitimate criticisms, many scholars across the humanities nonetheless found Merleau-Pontian phenomenology useful because of how it valorised lived experience, and gave the body an unprecedented role in the construction of subjectivity. For Zahavi (2012), phenomenology delivers a "targeted criticism of reductionism, objectivism, and scientism" (3). Elizabeth Grosz (1994) advanced a broad feminist critique of philosophy, which she convincingly argues was established as a form of rational knowledge achieved, "only through the disavowal of the body..." (4). For Grosz, Merleau-Ponty's challenge and deviation from dualist thought were radical, for,

[H]e links the question of experience not only to the privileged locus of consciousness, but demonstrates that experience is always necessarily embodied, corporeally constituted, located in and as the subject's incarnation. Experience can only be understood between mind and body (or across them), in their lived conjunction, rather than, as Cartesianism implies, in their logical disjunction. (1993: 41)

Many other influential feminist scholars also have seen phenomenology as circumvention of the mind/body dualisms pervading Western philosophy. This has become significant for those feminists who argued that the main site of disempowerment for women occurred at the bodily level (Young, 2005; Gatens, 1996; Bartky, 1990; Irigaray, 1985; Butler, 1988; Shildrick & Price, 1998; Bordo, 1998; Haraway, 1991; Weiss, 1999).

It should be noted that theories of the body – particularly those based on phenomenology - did not always receive the privileged place in theory they arguably now have. Film theory prior to the 1990s resisted incorporating Merleau-Pontian philosophy into discussions of film. Spencer Shaw identified how theories directly linking phenomenology and film were peculiarly uncommon (2008: 22). Robert Baird was critical of approaches that “...would deny our experience of film space and film objects any of the phenomenological depth we bring to reality.” (2000: 18). As I will discuss later, this is also largely due to the psychoanalytic tradition favoured in film studies in the 1970s and 1980s. Yet, as Jenny Chamarette argues, bringing phenomenology to film theory resituated the body within philosophical discourses on film (2015: 292). Its recent reinvigoration after the 1990s is symptomatic of a broader shift towards the body, embodiment and the sensory. As Sara Ahmed & Jackie Stacey³ identify:

...feminist and other critical work on embodiment has also emerged as a response to the ‘disembodying models of power and subjectivity brought centre-stage by the impact of dominant models of structuralism and poststructuralism, which placed language both literally and metonymically at the centre of theories of culture. (2001: 4)

Therefore, as Ahmed and Stacey have summarised, there was a theoretical impetus for those shifting perspectives that place the body and embodiment at the centre of academic enquiry.

While Merleau-Pontian phenomenology is a key underpinning of much of this study, some findings of this research also speak to the critique of anthropocentrism mentioned earlier. Indeed, this study also presents framings

³ In their own work, these authors tend to focus on affect theory, rather than phenomenology specifically.

of embodiment that are grounded in contexts that have cultural, social and political implications. Therefore important to emphasise that this present study is not a 'pure' phenomenological analysis, nor is it a specific application of Merleau-Pontian philosophy and concepts. Rather, it takes the primacy of embodiment as a starting point for understanding experience. Phenomenology offers the space to examine and discuss embodied experiences of sound at the level of the individual, and it has also become evident through this research how social, cultural and political forces and structures act upon and shape bodies and the experience of embodiment as identified by the participants. While the work of Pierre Bourdieu (1977) and Michel Foucault (1977, 1980) isn't deployed extensively in this study, it does inform the secondary literature around cultural industries and health respectively that frame these practitioner accounts of lived experience. As Kathy Davis (1997) points out, bodies are embedded in everyday experience, and theory must tackle "embodiment as experience or social practice in concrete social, cultural and historical contexts (15)." Indeed, for Bourdieu, lived experience is made up of "...histories sedimented in technologies, institutions, environments and embodied practices" (Lacey, 2017: 216).

It is important to acknowledge that philosophical and sociological accounts of embodiment are not mutually exclusive. As Iris Marion Young pointed out, phenomenology offers an approach that complements, but does not duplicate, the methods of Foucault and Bourdieu (2005: 8). Further, Katharine Young noted that the body is discursively shaped, where, and subjectivity "...materializes in a universe of practice. I carry the inscription of culture on my body as corporeal memory" (1997: 82). While this discussion does not have the space to draw out

all the key points of diversions and crossovers between these schools of thought⁴, it is important in acknowledging that the theoretical approach undertaken in this study draws from varied philosophical perspectives and disciplines in order to explore the embodiment of practitioners. Therefore, the following chapters will engage theories and perspectives that encompass both the lived experiences of practitioners, as well as acknowledging the cultural, social, political and technological contexts which frame, shape and influence these individual accounts of embodiment.

Since the corporeal turn, scholars beyond the humanities have also gone further in making a case for the salience of the body in theory, still drawing on the legacy of phenomenological philosophy. Further, embodiment and lived experience present a locus of cross-disciplinary potential whereby concepts and questions may be exchanged across disciplinary lines. Brian Massumi (2015) directly asks scholars to actively borrow from science in order to make new contributions to the humanities. Concomitantly, within cognitive science, theorists of embodied cognition (Di Paolo & De Jaegher, 2015; Eitan & Granot, 2006; Gallese, 2005; Slingerland, 2008; Meyer-Kalkus, 2007), or material engagement theory (Malafouris, 2013), while not necessarily entirely aligned with phenomenology, are also seeking to integrate scientific discipline with embodied philosophy. The perspective that echoes Merleau-Pontian philosophy is the role of the body in how meaning, reflection and comprehension for a sensate subject is constituted. Mark Johnson argues that the body determines this configuration:

⁴ Thomas Csordas (2011) has provided a comprehensive discussion of the key similarities and differences between Bourdieu, Foucault and Merleau-Ponty for theories of embodiment.

[A]ny adequate account of meaning and rationality must give a central place to embodied and imaginative structures of understanding by which we grasp our world...The centrality of human embodiment directly influences what and how things can be meaningful for us, the ways in which these meanings can be developed and articulated, the ways we are able to comprehend and reason about our experience and the actions we take. (1987: xiii-xix)

In other words, like Merleau-Ponty, Johnson not only negates the division of mind and body, but also highlights that the body is the means by which understanding is structured.

The embodied approach to knowledge is therefore shown to have reached far across the academy, producing science-humanities interdisciplinary crossovers. For example, concepts and research methodologies from cognitive science and neuroscience are now used to examine aspects of creative experience such as cinema (D'Aloia, 2012a, 2012b, 2015; D'Aloia & Eugeni, 2014; Ward, 2015; Coegnarts & Kravanja, 2015; Elliott, 2010; Praszkie, 2016; Gallese & Guerra, 2012, Sinnerbrink, 2016; Hasson, et al., 2008), art (Adams, 2012), videogames (Ash, 2013; Bender, 2014; Collins, 2011; Grimshaw, 2017), music (Cox, 2011; Leman, 2008; Cross, 2010) and dance/performance (Carlin-Metz, 2014; Cuykendall & Schiphorst, 2016; Myers, 2012; Warburton, 2011; Landay, 2012; Kozel, 2012; Seely, 2013; Brown, 2006). In all these examples, ideas around empathy also become mobilised, a connection that is relevant for this study and will be discussed further throughout the thesis. As Melba Cuddy-Keane asserts, psychologists, cognitive scientists and neuroscientists all offer “empirical evidence that the body thinks” (2012: 680).

As noted above, the scientific interest in embodied experience has resulted in studies that seek quantifiable data to describe and measure sensory experience and empathic connections. For example, Paul Elliott demonstrated how mirror neuron research supports the perspective of the cinema as an “immersive perceptual event”, one that creates ‘real’ measurable responses in viewers (2010: 12). However, I argue that in some ways, quantified scientific data that measures and ‘proves’ the embodied engagement of a viewer in some way only reinforces the objectivist view of the body. Accounts of personal experience are alienated from those authorities that seek to map and ‘measure’ sensory experience. Such a cognitive bias points to the theoretical dissonance in the way that ‘body’ and ‘embodiment’ is conceived among different disciplines.

This study argues that the phenomenological approach facilitates first person narratives and research methods that allow rich insights into the lived experience of certain phenomena. Cognitive scientists George Lakoff and Mark Johnson argued that what is now scientifically known about the mind is “radically at odds” with the classical philosophical idea of ‘what’ a person is, an acknowledgement that “there is no Cartesian dualistic person, with a mind separate and independent of the body...” (1999: 5). They have shown how cognitive science is now finding ways empirical ways to prove what philosophers have proposed through theory. And crucially, these scholars demonstrate how “...the very structure of reason itself comes from the details of our embodiment” (ibid: 4). In other words, embodiment is the condition of ontological knowledge. Indeed, Lakoff and Johnson go even further here, by stating that:

...philosophy is built up with the conceptual and inferential resources of a culture...These cognitive resources are not arbitrary or merely culturally constructed. They depend on the nature of our embodied existence, which includes both the constraints set by our bodily make up and those imposed by the environment we inhabit. (1999: 341)

It is evident that the study of embodiment has now become an enduring and prominent fixture of critical enquiry, one that provides a wide range of intellectual purchase for a diversity of perspectives and disciplines.

In looking specifically at the humanities, it is significant that phenomenology has provided useful tools for investigations into lived experiences of communicative and creative practice, including film, dance and musical performance. Most importantly, it has allowed analysis of creative work to shift towards the role of the embodied participant involved in the creation. As Banfield & Burgess note, "...the analysis of meaning in art has traditionally focused on the finished representation and not on the meaning for the artist of the active process of its creation" (2013: 67). These authors identify those key aspects of phenomenological analysis that facilitate insight into lived experience of artistic practice, including 'descriptive methods' that aim to remain close to verbalisations of participants – something which enables a scholar to draw out universal essences across their experiences of a phenomenon. It includes interpretative methods, drawing on theoretical constructs to contextualise their accounts (ibid, 66). Such a perspective is particularly relevant for this study, which aims to investigate the lived experience of professional sound work, and draws on extended descriptive passages taken from direct interviews. There is still considerable scope to expand investigations of embodied experience into the working and non-working lives of professional sound practitioners.

It is evident that in the last two decades, writing on embodied experience and the arts has flourished. Jennifer Barker has given a specific outline as to why phenomenology is so useful in theorising the experience of the cinema:

Existential phenomenology and its method...gives us a means of embodied analysis that respects the co-constitutive reciprocal relationship between the perceiver and the perceived. A phenomenological approach to the cinematic experience, then, focuses neither solely on the formal or narrative features of the film itself, nor solely on the spectator's psychic identification with characters or cognitive interpretation of the film. Instead, phenomenological film analysis approaches the film and the viewer as acting together, correlationally, along an axis that would itself constitute the object of study. (2009: 18)

Barker's diagram of the cinema experience is significant for the present study, however it reiterates a key limitation of much writing of embodied experiences of cinema. Specifically, and as this thesis will demonstrate, the majority of writing on cinema and embodiment is focused on audiences. Therefore, while the argument for the mutually-constitutive relationship between creative storytelling materials and a listener/viewer remains sound, it is one of the key objectives of this study to expand the parameters of such an enquiry to examine how such a configuration is relevant for practitioners.

Like Barker, this thesis argues for the inter-relationship of bodies and sonic materials in the cinema from a position of temporal multiplicity. However, it aims to address the shortcoming of this branch of scholarship that arguably places too much emphasis on audience reception, and – even more problematically, is constrained to a singular moment in time – the moment of perception. In response, this study seeks to expand the concept of embodied

cinematic experience such as outlined by Barker above to one that includes the production of sound. In this way, the embodied experiences of the craftspeople become valorised, and the bodies enacting the text as seen to be multiple. In doing so, I build on previous work done to develop a concept of the cinesomatic (Walker, 2018), which argues that the audience literally lives the cinema's sound design and narrative. Here, I push this concept further, seeking to explore and theorise how the bodies of the creatives behind the work, at work become entangled in a complex configuration of experience and narrative. In the following section, I will explore in closer detail the proliferation of the 'body' in academic theory and what current embodiment writing in film theory is still lacking.

2.3 Corporeal Agitations: The Body (Re)Awakened

As this chapter has established, the body and embodiment has become a central concern for scholarship across the academy. I will demonstrate below how the corporeal turn is an intentional challenge to poststructuralist theory that dominated approaches to film criticism. Following a historical trajectory from the 1970s and increasingly in the 1980s, Thomas Csordas noted how many disciplines, including feminist theory, literary criticism, history, comparative religion, philosophy, sociology and psychology were implicated in a theoretical move toward the body (1994: 1). Csordas was keen to integrate discussions of culture with embodiment, so as not to theorise a body or embodiment as isolated from culture, or vice versa but to see it as "...the existential ground of culture" (1990: 5). As noted earlier, for feminist theory, the shift towards embodied

theory was a political move to mitigate philosophy's "somatophobic" (Cataldi, 1993:127) limitations.

However, the breadth of inquiry into embodiment demonstrates a diverse trajectory of thought that sits uneasily under a single conceptual term such as 'embodiment'. The theoretical definitions, methodologies and figurations of both embodiment and experience are manifold. For Coegnarts and Kravanja, the 1980s in particular mark a 'second wave' of body literature, picking up the threads of the earlier thinkers such as Hugo Munsterberg, Rudolph Arnheim and Albert Michotte (2015: 17). In their thorough synthesis, however, while they do acknowledge 'significant theoretical variety' in the use of the term embodiment, they do not make a very clear distinction between phenomenology and affect theory. I argue that this obscures some of the pronounced diversions in thought that are reproduced in the writings about cinema and the embodiment. As I will discuss shortly, there are some critical differences between the phenomenological approach, and that of affect theory. These differences are not irreconcilable for the scholar seeking to examine embodiment, however they should not be arbitrarily conflated under the banner of 'embodiment' without consideration.

It is also worthwhile at this juncture to articulate more specifically the different channels within sensory theory, which are often placed under the umbrella of the 'sensory turn' or the 'corporeal turn'. Again, here can be seen a diverse trajectory of studies across the disciplines, taking on board considerably varied approaches to methodology and theory. Polysemic terminology becomes both a

benefit and a burden. Like embodiment, the use of certain words, such as affect or emotion do not necessarily align, and can in fact point to quite different philosophical leanings. Questions of how, and to what extent, the senses of the body mediate, define and constitute consciousness persist in research as divergent as neuroscience, psychology, anthropology, philosophy and sociology, with each discipline taking up these concerns with different vocabularies and research questions. Similarly, frameworks for concepts such as consciousness and experience vary considerably. Despite these challenges, interdisciplinary discussions have opened up between scientific disciplines and the humanities regarding these questions.

Since James Gibson's (1968) pivotal work in dismantling perceptual hierarchy, theorists addressed themselves to the task of understanding the human sensorium with new perspectives.⁵ Indeed, since Gibson, recent investigations into sense experience depict the senses as fluid and synesthetic. Importantly, as David Howes argues, "the multidirectional character of intersensoriality means that no one sensory model can tell the whole story" (2005: 12). Howes offers the anthropological term 'emplacement' which includes a focus on environment and location. This is particularly useful, as it does not discount the influence of physical surroundings and context when considering the sensory experience of the subject, and as will become apparent in this study, this is important for film sound.

⁵ See Levin (1993), Crary (1992), Ong (2002).

Articulating an individual's sensory experience is not to suggest that perceptual experiences and sensory input occurs in isolation from wider contexts. Critic Susan Stewart has shown that the senses themselves are shaped and modified by culture and experience, and that the body retains somatic memories of its encounters (2005: 61). This suggests shared embodied experiences that are culturally shaped, which allows analysis to move beyond a universalising or solipsistic framing of sensory experience. Such an insight becomes pertinent for this study as practitioners provide accounts of their embodied experiences. It is also useful in understanding how these experiences are influenced and framed by the social, cultural and industrial contexts. Further, by developing a concept of cinesomatic experience for sound practitioners, this study demonstrates how the experience of the cinema sound – especially during its creation - exploits sense memories and perceptual plasticity to create what Stewart describes as, “a synthesis of imagined and material experiences” (2005:64). Such a focus displaces purely textual readings of film, and is central to configuring a theory of the cinesomatic experience, in which sonic and cinematic narratives are embodied.

In discussing the role of perception in embodied experience, the participation of memory becomes intrinsically important. For Jeffrey Toth memory is a phenomenal awareness, which involves conscious and nonconscious remembering (2000: 246). It is beneficial to posit a model of memory in which perception itself is an act of co-creation, drawing on wells of both conscious and unconscious somatic archive. In this way, unconscious or conscious deployment of the senses speaks to understandings of both tacit and explicit embodied

experiences, which becomes pertinent when examining sound work practices in this study. Invoking Michael Polanyi, Jaana Parviainen argues that, “[p]erception and bodily awareness plays a central role in tacit knowing (1998: 51).” Similarly, Brian Massumi has shown the amalgam nature of sensory perception arguing, “Perception...is already composite. Studding each impression are shards of intentions and conscious memories...” (2002:74). For David Levin, “we do know from our own (phenomenological) experience that traces of memory are borne by our body’s unconsciousness, and that these traces can speak to us of our past through our retrieval and clarification...” (2002: 154). As Levin suggests, memories may sit beyond conscious awareness yet still inform present experience.

The relationship between memory and the body has been investigated by dance theorists who demonstrate how movement and memory is kinaesthetically loaded. Susanna Paasonen describes the body as a ‘somatic archive’. For Paasonen, however, the orientation of affective responses is individually shaped by historically layered skills and experiences (2013: 360-364).⁶ This becomes apparent throughout the case studies presented in this thesis, in which professional sound practice is demonstrably an exercise of expression drawn from a rich embodiment of accumulated memories, experiences and receptivity. As Clemens Wollner notes, experiences of sound and music are multimodal in that they evoke vivid associative connections to bodily and spatial representations and connections (2017: 2). Sonic perception and interpretation

⁶ Paasonen develops a theory of ‘resonance’ to describe affective connections between bodies. She uses this theory to propose a new screen theory, moving beyond ideas of ‘identification’ to ‘resonance’, which means that objects or agents do not need to be human, or similar to each other (2013: 358).

during the creation of sound work employs sensory knowledge drawn from the entirety of a practitioner's lived experience. As this thesis will show, such a concept is useful when examining the ways in which trained and sonically sensitised bodies engage with sound as part of their professional practice. In this way, the film sound professional experiences a corporeal telling and re-telling of multiple somatic narratives. Further, as this study will discuss in more detail later, by theorising professional sound work in this way, scholarship offers an alternative to the technical framings of expertise in which the embodiment of the practitioner is obscured and implicitly undervalued within the process of sound production.

It is useful to more specifically address the term affect, a word rendered problematic for its varied implication and use. 'Affect theory' belongs to a movement in thinking so pervasive in recent scholarship that it has been designated the 'affective turn'. However, such a broad label can mislead one into thinking of affect theory as a unified set of theoretical paradigms. Indeed, Melissa Gregg and Gregory Seigworth acknowledge that there is no 'single' theory of affect, but describe affect theory as a "methodological and conceptual freefall" (2010: 4). Nonetheless, its scholarly salience becomes apparent, for as Marianne Liljestrom and Susanna Paasonen show, theories of affect are sites for rethinking a wide range of 'body' concerns, from mind-body dualism, to critiques of identity politics and practices (2010: 1). Furthering this, Carolyn Pedwell and Anne Whitehead contended that the affective turn is bound to the wider debates around "ontology, embodiment and the neurosciences" (2012: 124). As a result, which Barbara Kennedy had pointed out, subjectivity has therefore been re-

theorised into “a more complex relationship between the concepts of *affect* and *sensation*...” (2000:29, italics in original), suggesting how lived experience is critically bound up in the politics of influence.

While affect theory is concerned with similar questions to phenomenology, there are important distinctions for the scope and frame of questioning of affect theory. Such a distinction is perhaps most concisely articulated by Atkinson and Richardson, who argue that affect is, “...concerned with what occurs in the currents and exchanges between bodies, not just what happens within them” (2013: 11). In this way, then, affect theory does not see embodiment and the body in the same way that phenomenology does. Phenomenology is focused specifically on the experience of the body, *from within the body*, whereas affect theory is as much a theory of *relations* and as such, does not necessarily favour a humanistic perspective. The affective perspective also gives rise to object-oriented ontologies, such as Jane Bennett’s theories of vibrant matter (2010), which valorises life worlds of non-human entities and forces, and circumvents the anthropocentric bias in much phenomenological analysis.

However, despite this fissure, I argue that scholars concerned with embodiment and experience benefit from drawing upon concepts and case studies used by both affect theorists and phenomenologists. While this study will be focused primarily on the embodied experience of sound professionals, learners and audiences, integrating a phenomenological focus of lived experience *as it is felt*, it also utilises descriptions of those affective relations between the practitioner and his or her tools and environments. This is because, as this study will

demonstrate, it is problematic and superficial to consider the embodiment of sound professionals and learners without examining how the spaces and instruments that feature as part of sonic practice and reception are integrated and incorporated into the practitioner's embodied experience. Further, in addressing the critique of the overtly individualist or humanist framing of experience by phenomenology, theories of affect offer insight into the relationship between lived experience and broader social and economic processes that significantly influence film sound professional practice.

Isobel Armstrong gives some useful insight into the qualities of affects, describing how "affects cross categories.... they belong to mind and soma, straddling conscious and unconsciousness just as they straddle mind and physiology..." (2000: 108). Concomitantly, Teresa Brennan presents a model of affect that dissolves boundaries between the individual and the environment. In her formulation, 'feeling' is profoundly communal, and she draws upon neuroscientific findings to support her theory. Brennan argues for the *direct* physical impact of visual images and auditory 'traces', however, she bases reception at a neurological and vibrational level (2004: 10). This argument was developed as part of a broader critique of Eurocentric thought, which assumes the 'emotionally contained subject' (ibid: 2). As this study will demonstrate, some of these key concepts of affect theory, including the problematizing of boundaries between subjects and objects, or subjects and spaces, prove particularly beneficial when examining the work of professional sound practitioners. Affect theory is therefore in itself a locus of cross-disciplinary engagements, and also facilitates research into lived experiences.

2.4 Material Projections: Embodiment In Film Theory

In film studies, the corporeal turn is often cited as a direct attempt to dismantle the structuralist canons of theory that preoccupied film criticism for decades. In words that echo Sue Cataldi, who claimed philosophy is somatophobic (1993: 127), Steven Shaviro argued that semiotic and psychoanalytic film theory is also a “phobic construct” (1994: 15). He critiques critics’ practice of abstract cinematic experience to the purely psychological, therefore resisting the “insidious seductions of film” (ibid, 10). More broadly, he asserts that postmodern Western culture is “...still more traditional, more Cartesian, than it is willing to admit; it is still frantically concerned to deny materiality, to keep thought separate from the exigencies of the flesh” (ibid, 15). Such a claim does ignore those feminist interventions that have explicitly set out to challenge this (Butler, 1988; Bordo, 1987; Jaggar & Bordo, 1989; Bartky, 1990; Lock, 1993; Weiss, 1999; Cataldi, 1993; Grosz, 1993; Scarry, 1985). Other theorists such as Shaviro directly appeal to film scholarship to expand a psychoanalytic model of cinema criticism, and rather re-engage with the body in ways that celebrate and embrace the carnal pleasures of film (1994: 256). In the decades since Shaviro’s criticism, some film scholars addressed this by producing analyses of film using various frameworks of embodiment theory.

It is significant to note, however, that contemporary embodied approaches to the cinema were not without precedent. Historically speaking, the earliest film theorists demonstrated an interest in cinema experience (Hansen, 2012). In giving context to a trajectory of film criticism, Torben Grodal has also shown how the early film theorists attempted to explore the embodied experience of cinema:

The linguistic turn has been especially problematic for film and media studies because it marginalized previous approaches such as those of Munsterberg, Eisenstein, Arnheim, and Mitry, which described audiovisual processes as having important perceptual, emotional, and embodied components. The linguistic turn also marginalized the influence of phenomenology, especially that of Merleau-Ponty.... (2009:15)

Similarly, Jenny Chamarette identified how new attention to the 'sensory qualities' of film and its 'affective impact' on bodies "...reflects in some ways a return to the sensorially absorbed cinema that Eisenstein, Kracauer, Artaud, Bazin and Daney first wrote about" (2012: 66). Therefore, writings from 1980s onwards can arguably be seen as a type of renaissance of embodied film theory, in ways that, as Grodal and Chamarette demonstrate, rekindles much earlier thought about the perceptual, embodied and emotional elements of the film experience.

Arguably one of the most influential thinkers to develop an embodied philosophical approach to filmic experience was Vivian Sobchack. Sobchack specifically sought to re-examine models of spectatorship in a way that encompasses the material, the lived and the enfleshed. Significantly, Sobchack's experience of cancer resulted in a reconfiguration of her body, and she identifies how this embodied experience of change engendered profound insights into how bodies constitute subjectivity (2006). Sobchack presented acute and persuasive analyses of how the cinematic encounter is primarily embodied. In line with Shaviro, Sobchack abnegated the linguistic, psychoanalytic and neo-Marxist theory that constituted film scholarship to this point. Indeed, for Sobchack both these modes of theory 'obscure' the dynamic lived-body situation of both spectator and film. She argues that:

...refusing psychoanalytic meaning, my 'perverse' turn away from *accepted analysis* and toward a thick and *radical description* of experience is a turn toward articulating not only another kind of bodily being, but also a healthy and adult polymorphousness, a freedom of becoming.... (1992: xv, italics in original)

Sobchack's theoretical move was considered, in her own words, as both 'perverse' and 'radical', and one which troubled dominant and accepted modes of cinematic enquiry at the time.

In choosing to appropriate a Merleau-Pontian approach, Sobchack also gives insight into why phenomenology was out of academic favour to that point. Other film critics are quick to point out their epistemological issue with phenomenology and affect theory. Eugenie Brinkema condemns what she sees as the overly individualist approach, which reinforces solipsism:

...[A] great deal of contemporary work on cinema and affect relies on an excessive use of 'I' expressions in relation to experienced emotions or personal narratives of sensorial disequilibrium...The turn to affect thus risks turning every film theorist into a phenomenologist.... (2014: 31-32)

The problem with such a complaint is that it assumes that theorists 'should' or even could be invisible to their research, and also re-displaces the role of the body. In other words, criticising the first-person narratives that emerge from phenomenology and affect theory misses the value in such accounts, and returns theory to textuality. For Brinkema, the affective turn in film theory "perhaps recovered the visceral, but only at the expense of reading" (ibid, 30). However, Sobchack had already forestalled such a complaint ten years prior when she argued in 2004 that:

[G]rounding broader social claims in autobiographical and anecdotal experience is not merely a fuzzy subjective substitute for rigorous and objective analysis but purposefully processual, expansive, and resonant

materialistic logic through which we, as subjects, can understand...what passes as our objective historical and cultural existence.... (6)

She notes how phenomenology was widely regarded as idealist, essentialist, and ahistorical, as well as “extremely naïve” (1992: xiv). She addresses these criticisms by reiterating that her objective is not to essentialise or prescribe experience – something that can be reiterated for the present study. Rather, using a phenomenological approach enables one to address what Sobchack describes as the ‘thickness’ of both incarnate being and its representation (1992:7).

Sobchack argued that her approach to phenomenology was not to foster essentialist thought, but “...to allow for my *existential* particularity in a world I engage and share with others” (1992: xv, italics in original). For Sobchack, cinema as an artistic medium is especially appropriate for such a critical enterprise, as its language uses “*modes of embodied existence* (seeing, hearing, physical and reflective movements)” and the “*structures of direct experience*” as the basis for the structures of its language (1992: 4-5, italics in original). Her neologism ‘cinesthetic’ (2000) captures this relationship, for the aesthetic language of cinema captures and transposes a sense of ‘direct experience’ for its audience, situated and occupied as ‘here’. The term ‘cinesomatic’ used in this study performs a similar role in capturing and pointing to a direct relationship between the cinema and somatic experience. However, in pushing back against the audience-focused tendency of much phenomenological film analysis, this term is here widened to include and validate those experiences of those bodies producing film works. Further, where ‘cinesthetic’ points to the predominant

role of vision and viscosity in Sobchack's account of cinematic corporeality, as part of the wider understandings of audience aesthetic experience, 'cinesomatic' is more in line with an account of sonic corporeality. Sobchack's thinking demonstrates how useful phenomenology is in (re)locating the body as a valid site for theorising the lived experience of cinema. Her perspective and insights inform this present study, being and expanded to include the lived experience of producers of cinema sound.

As mentioned earlier, phenomenology is critiqued on the grounds of its pervasive humanist perspective. For some philosophers, the problem of embodiment – or more specifically, the problem for philosophies of embodiment – is that because it is interested in subjective experience, there remains a persistent troubling anthropocentrism. Jane Bennett describes this as the philosophical project of naming where subjectivity begins and ends, which is “too often bound up with fantasies of human uniqueness in the eyes of God, of escape from materiality, or of mastery of nature....” (2010: ix). New materialist theorists such as Bennett have sought to expand discussions of lived experience to include the ways in which this is also an interaction with the world within which the subject sits, and to give due weight to “the active powers issuing from nonsubjects” (ibid). Elena del Rio argued that the phenomenological perspective blurs the metaphysical partition between subject and object, and articulates a shared materiality between the lived-body and the ‘objective’ world (1996: 103). In this sense, the study presented here is not ‘pure’ phenomenology, for it acknowledges and inspects the ways in which lived experience for sound practitioners becomes at times a negotiation of energies, spaces, objects and

sensations. As already noted, the subjective experiences described in this study are not necessarily contained or bound by the body of an individual, but are shaped and influenced by wider cultural, social and political contexts.

This study draws upon those theorists who present compelling evidence of the ways in which cinematic engagement is lived. The role of active perceptual construction is central to a theory of embodied cinema via sound. Documentary filmmaker and scholar David MacDougall argues,

Neuroscientists, art theorists and phenomenologists have all observed that we do not perceive objects in any complete or unitary way...we make inferences about them....This means that we actively construct objects in a manner that suggests they are as much projections of our own bodies as independent of them. (2006: 21)

MacDougall's claim here suggests that perception is both embodied and more significantly, *generative*, and this becomes apparent when this study investigates how practitioners engage with the objects of professional sound practice. Jennifer Barker goes further still, when she demonstrates how haptic, kinaesthetic and visceral responses are part of the encounter. She is speaking to cinematic audienceship specifically, arguing for a deep level of corporeal engagement, one where "muscles, tendons, and bones...reach toward and through cinematic space; and...heart, lungs, pulsing fluids, and firing synapses receive, respond to, and re-enact the rhythms of cinema" (2009: 3). For Barker, phenomenological analysis "affords us a glimpse at embodied, tactile structures that slide, bleed, vibrate, and circulate between film and viewer ..." (ibid, 160). Transposing this framework to sound practitioners, those objects of professional sound practice that render a similar corporeal engagement problematize the

assumption of a contained, stable and unitary human body 'receiving' sensory data through a perceptual encounter.

Brigitte Peucker makes an even bolder claim that spectatorial affect is 'real' even when produced by a film, and in this way, the emotional and bodily responses of the spectator "extend textuality into the real world" (2007: 1). In other words, the embodied responses to cinema such as described above by Barker, in fact suggest a model of the cinematic encounter that deepens our concept of what a cinematic – or cinesomatic - encounter is. This is a particularly pertinent point, and in hovering over it, I want to make an even bolder claim – that the embodied cinematic encounter is far more collaborative and manifold than these descriptions allow. This study argues that the embodied experience of film sound becomes considerably enriched by also considering the corporeal experience of the sound production professionals. In other words, understanding of the phenomenological richness of cinema sound becomes deeper when seeking to understand the embodied experience of those crafting the sounds. By expanding the concept of cinema sound beyond the narrow channel of audience reception, it is possible to theorise a far more collaborative, dynamic and complex picture of film sound than previously explored.

Recent film sound scholarship has been critical of the preoccupation with imagery and visuality in film theory. This thesis contributes to widening discussions of film sound by focusing on embodiment, and further, contributes to this developing area by examining practitioner embodiment specifically. By appropriating MacDougall's theory of 'projection' (itself limited by its visual

metaphor) and Peucker's model of extension cited above, this study contends that the experience of film sound can also be theorised as creative and constructive. Instead of perpetuating purely optical metaphors for this study, this study argues posits that in the *cinesomatic* experience of cinema sound, all aspects of physicality can, and are, invoked and engaged in the cinematic encounter. Like Peucker suggests, this speaks to an active production of narrative, in a sense, in excess of the filmic text. In other words, cinema sounds are produced by living, sentient bodies; they are received by living bodies, and the corporeal participation of all these bodies means that we can no longer afford to restrict discussions of film sound purely to the filmic 'text'. Instead, it is the aim of this thesis to consider film sound as a corporeally negotiated experience that weaves together multiple narratives, infinitely complex and rich.

2.5 A Felt Vibration: Placing Sound Studies and Film Sound Studies

A key argument for the film sound scholar has been that academic research on cinema and embodiment within film theory has either largely neglected or understated the significance of the aural experience. Such an observation has already been articulated by Steven Connor, who argued, "...film theory has done its best to bring to life a phenomenological film-body in which everything is commuted into the narrow channel of visual perception" (2013: 119). This study addresses this lack by specifically exploring the multitude of embodied encounters with film sound across the life of a production. The following discussion examines the existing theoretical contributions that support the theoretical framework underpinning this study. In doing so, this discussion aims

to demonstrate how this new vein of scholarship offers evolving ways of understanding the complex relations between sound, bodies and experience.

However, it is important to pause here in order to consider the theoretical field of 'sound studies'. This term vaguely defines areas of scholarship that encompass disparate methodologies and focuses. It does, however, bridge many disciplines and its "inter-disciplinary coupling to other fields" (Farnell, 2014: 94) is also what renders it fertile for new investigations. As Mera, Sadoff, & Winters have noted, researchers with different backgrounds, training and methodologies can contribute to exploring questions of screen music and sound (2017: 7). The use of the term 'sound studies' arguably entered academic discourse from the 1970s onwards, yet currently can address topics as diverse as acoustic ecology (Schafer, 1977; Truax, 2001; Blesser & Salter 2007; Cox, 2014; Oliveros, 2011), psychoacoustics (Tajadura-Jiménez, 2008; Atkinson, 2011; Sonnenschein, 2011), anthropology (Feld, 1996, 2005; Downey, Dalidowicz & Mason, 2015; Rice, 2003, 2013a, 2013b), gaming sound (Ash, 2013; Bender, 2014; Grimshaw, 2007, 2012, 2015, 2017; Grimshaw & Schott, 2007; Born, 2013), aural technologies (Greene & Porcello, 2005; Altman & Handzo, 1995; Bull, 2000, 2009; Milner, 2010), historical accounts of aurality (Sterne, 2003; Thompson, 2002; Richardson, Gorbman & Vernallis, 2013; Pinch & Bijsterveld, 2013), virtual reality (VR) and the art science interface (Adams, 2012; Helyer, 2004; Jones, 2006; Visell, Fontana, Giordano, Nordahl, Serafin & Bresin, 2009) and sound art (Ouzounian, 2006, 2013; Augoyard, 2005; Kahn, 1999, 2013; LaBelle, 2006; Polli, 2017, Lacey, 2017, Wong, 2017, Gibbs, 2007; Keylin, 2015). While this thesis is directly addressing film sound scholarship, it draws upon these wider sources in an

effort to enrich and deepen current understandings of film sound. Therefore, the chapters that follow will draw upon different branches of sound studies to construct a model of embodied film sound that is necessarily complex.

The methodological debates within sound studies have to a certain extent informed the way in which this interdisciplinary study has been assembled. Sound studies theorists harbour disagreements over the discipline's situation within wider scholarship, and some see a lack of methodological unity as problematic. Some such as David Toop (2004) argue that sound studies is marginalised, whereas others such as Jim Drobnick (2004) point to the saturation of sound studies in academia, and argues that now any discipline could develop a sub-discipline to the study of sound. Sound historian Jonathan Sterne originally bemoaned the conceptual fragmentation of sound studies, noting how its proponents share no 'overarching sensibility' (2003: 4). However, almost ten years after first making this complaint, Sterne was moved to shift his perspective, seeing this fragmentation as a feature of the theory, rather than a limitation. He acknowledges that there is no deductive methodology for sound studies, but sees how methodology should arise from the questions asked and the knowledge fields engaged, instead of a prescriptive approach (2012:6). This study employs this inherited interdisciplinarity in order to examine how the sound professional is corporeally engaged with their work.

In addition to concerns about conceptual fragmentation, sound studies theory has also been accused of overly humanist assumptions. In a similar vein to the criticisms of phenomenology noted earlier, Jonathan Sterne also pointed out that

sound studies has a “creeping *normalism* to it – that is, an epistemological and political bias toward an idealized, normal, non-disabled hearing subject...” (2015:73). Such a criticism is also applicable to film sound studies, which not only tends to assume an ideal listener, but also ideal listening circumstances. Indeed, much discussion of aesthetic practices in Hollywood filmmaking, as well as the industry practices themselves, posit a exemplary listener who is implicitly white, male, able-bodied, and economically well positioned to participate in the consumption of cultural goods. It also raises questions about the aesthetics of sound ‘quality’, in which definitions of ‘good’ or desirable sound – as well as sonic practices – can be reinforced.⁷

However, instead of reinforcing an assumed universal subject, I contend that empirical scholarship on embodied sound demonstrates the multiplicity of sonic experience, and actively pushes against such assumptions. In other words, by attending to the individual sonic experience as articulated by different practitioners, what becomes apparent is that there is no normal or idealized encounter for practitioner or audience, although these practitioners may still posit an assumed listener or an ideal sound quality in their work. The investigation into embodied stories and practice becomes a researcher’s work to mitigate such assumptions and counter any tendency to essentialise sonic experience. Further, empirical work also contextualises the embodied experience of film sound practitioners within the industrial, cultural and social contexts that frame and influence these experiences.

⁷ The issue of sound quality and what constitutes a ‘good’ sound and/or recording has been challenged by some practitioners. UK sound recordist Chris Watson shared how he has “radically altered” his recording techniques in a move to regard all environmental sounds as equally valued sound, rather than ‘noise’ (2009: 284).

A range of methods and theoretical frameworks can legitimately be used to examine film sound experience. Film sound studies, as a subdivision of 'sound studies' is a discipline that is informed by a wide range of interdisciplinary perspectives. Many of film sound's influential theorists, such as Christian Metz (1980)⁸ Michel Chion (1994, 1999, 2009, 2013, 2016), Mary Ann Doane (1980), Rick Altman (1992; 1995, 2004, 2012), Philip Brophy (1998; 1999; 2002), Elisabeth Weis and John Belton (1985) and Kaja Silverman (1988) were from diverse scholarly backgrounds such as philosophy, composition, psychoanalysis, anthropology, English and musicology, as well as film studies. This translated to a medley of interpretations and methodologies that informed this burgeoning area of scholarship, and this heterogeneous character continues to define film sound studies.

While this study focuses on what it terms 'film sound', it is important to note the problem with suggesting a clear delineation between 'sound' and 'music'. Such distinctions have already been widely problematized and challenged through both theory and art, however it is important to articulate its current issue for scholarship. While musicology is a well-established discipline, some 'sound' theorists (not defined in the musicological sense) cite the 'ocularcentrism' of Western culture as major impetus for their critical interventions. In other words, these sound theorists saw the need to write about sound due to the

⁸ Interestingly, Christian Metz had an ambivalent relationship to phenomenology. As his writings on sound were at the height of the poststructuralist movement, Metz is often placed among other film scholars who were hostile to phenomenology. Indeed, Torben Grodal (2009) noted how Metz surrendered his 'phenomenological interests' in the "hard-core linguistic cultural climate" (15). Despite this, Metz eventually argues that there is merit in admitting that "...we are all, at some time, phenomenologists", which means "admitting to a kind of relationship to the world, which is not the only possible relationship, nor the only desirable one, but one which exists in everybody, even if it is hidden or unknown (1980: 159).

overwhelming focus on visual culture. The persistent critical separation ‘sound’ and ‘music’ speaks to the wider debates about ‘high art’ and the canonisation of particular works and artists.

With regard to film in particular, the early writings on film sound produced musicological analyses of film scores, and there remains a disciplinary – as well as an industrial – separation between film music and other soundtrack sounds. Gianluca Sergi (2004) argued that this was in part due to the perception of composer as auteur, and of music, in particular classical music, being a culturally sanctioned art form. This therefore meant that it was more ‘worthy’ of critical attention. Further, Greene & Kulezic-Wilson note that “lack of musical education and possibly terminology” meaning non-music specialists lacked confidence to address musical aspects of film, whilst some film music scholars resisted including sound in their field of research, exposing “surprising signs of territorialism in a field which prides itself in being multidisciplinary” (2016: 2). For Greene & Kulezic-Wilson, the increasing use of blurred boundaries between scoring and sound design in cinema requires changes in how film sound scholars approach analysis of certain works (ibid). I argue that it also reinforces the importance of investigating the role of both the composer and the sound professionals. While this study has limited its scope to a small selection of film sound roles, it is acknowledged that there is still much room to investigate and theorise the lived experience of all involved in the creation of a film’s soundtrack, and that new models of sonic storytelling where these distinctions are blurred in

fact problematizes and complicates traditional conceptions of both sound roles and soundtracks.⁹

Amidst the climate of psychoanalytic and linguistic theory in early film studies, early film sound theory focused on studies of voice (Doane, 1980, Silverman, 1988). This points to another critical issue, for as Mark Kerins (2011) has noted, film sound scholarship still often collates a definition of ‘soundtrack’ as synonymous with score and/or dialogue. It is only in relatively recent years that film sound scholarship has sought to explore all elements of a film’s soundtrack, including sound effects. To discuss sound effects on a critical level is to acknowledge their function and characteristics within their aesthetic and historical contexts, something that Barbara Flueckiger (2009), William Whittington (2013, 2014) and Benjamin Wright (2013) have examined. Gianluca Sergi (2005) argued that definitions of ‘sound effects’ are in themselves problematic, and critiques the assumptions that posit sound effects as ‘vulgar’ and therefore lowest in the film sound hierarchy. In part because of its lowly status both as an object of study within academia, and arguably as seen within the industry, Liz Greene identifies as a demarcation in industrial practices “...in who does what and how they are credited for that work” as well as “conceptual demarcations” that impact on how prestige and value operates within the industry (2016: 19)¹⁰. This is captured in the words of practitioner-turned-academic Andy Farnell, who echoes a commonly heard truism of the industry:

⁹ It is also worth noting that definitions of ‘sound design’ and ‘sound designer’ are also not straightforward, and point to culturally and historically specific trajectories, see (Beck, 2016; Wright, 2011; Hanson, 2007; Farnell, 2010; Whittington, 2013).

¹⁰ Greene points out how quite often sound teams do not know what the composer will bring to the mix, and vice versa (2016: 19).

“Good sound designers know that one’s work is at its best when invisible” (2014: 95). It is here that this thesis most particularly seeks to intervene. By choosing to focus largely on those practitioners that create and place sound effects, the bodies of those workers are no longer silenced or obscured, and the art and craft of sound effects is hopefully valorised to the same level as composition. This corrective emphasis deliberately challenges these hierarchical value systems that position and listen to certain types of sound work – and workers - above others.

In line with the film theorists discussed earlier, philosopher Don Ihde was influential in the shift from semiotics toward phenomenology in sound theory. In using phenomenological language and method, Ihde was one of the first to articulate the embodied and physical nature of sound experience, present in what he describes as ‘auditory aura’:

[T]he auditory dimension from the outset begins to display itself as a pervasive characteristic of bodily experience...My ears are at best the focal organs of hearing. (2007:44)

More recently, critics such as Salome Voegelin have directly challenged Metz by arguing that sound actually *mediates* phenomenology and semiotics. For Voegelin, sound is “the solitary edge of the relationship between phenomenology and semiotics, which are presumed to meet each other in the quarrel over meaning” (2010: 27). In other words, sound occupies a privileged space where text and experience coalesce. In a similar vein, anthropologist Veit Erlmann offers the term of ‘resonance’ to articulate the shift away from the Cartesian legacy of dualism, “...where reason requires separation and autonomy, resonance

entails adjacency, sympathy, and the collapse of the boundary between perceiver and perceived”(2010: 10).

An important result of this move away from semiotic to sensory framings of sonic experience is the new emphasis on sound as a generator of meanings that are felt and located at the level of the listener. Indeed, for Voegelin, the sensory event between sound and listener is an event of “reciprocal inventive production” (2010: 5). In such a configuration, framings of sound as the ‘poor cousin’ to cinematography are displaced, and sound is valued as an inventive agent. Such a shift is significant for film sound theorists who have long lamented the dominance of visual culture, and therefore, Voegelin therefore offers a model of aural sensory experience that does not fix meaning in visual, or in textual hermeneutics, but which emphasises the role of the body in establishing sonic meaning. She develops this theory in her later book *Sonic Possible Worlds*, where she writes, “Listening, we do not observe but generate, and we are always part of the soundscape we are listening to.” (2014: 3) In other words, for Voegelin, sonic fiction is phenomenological, what she calls a ‘generative fiction’ (ibid, 51). While her discussion focuses on sound art, her ideas are pertinent for the present discussion of cinema sound.

For Helmi Jarviluoma and Noora Vikman (2013) the core of sound studies’ contribution to knowledge is its ability to engage materiality and the multisensory. As argued earlier, a phenomenological examination of film sound specifically is relatively under-developed. For Rick Altman (2012) this reflects a tendency toward abstraction and prescription that pervades in film sound

theory. Indeed, for Altman, there are severe limitations to abstract philosophical reflections of sound:

If we are fully to restore a sense of sound's role in creating our sense of the body, we must depend on historically grounded claims and close analyses of particular films rather than on ontological speculations that presume to cover all possible practices. (2012: 228)

This is arguably why phenomenological accounts can be of such use to film sound scholarship. Brian Kane (2014) also addresses this issue, writing that in phenomenologist of sound, the 'knowledges and assumptions' imported from sciences, such as acoustics, are in fact, suspended. The understanding of sound as a type of data gives way to something embodied. In this way, "...the immanent structure of sound *as experienced* can be described. Thus, for the phenomenologist, the acoustical relation of sonic source, cause and effect cannot simply be presupposed" (2014: 134). In a similar vein, Grimshaw & Garner have critiqued acoustic definitions of sound, which "leaves aside the question of precisely what it is to experience sound (2015: 22). This is a powerful perspective for creating a complex understanding of the experience of film sound and which will inform the present study. Salome Voegelin articulates this as phenomenological immersion, writing, "Sound forms an extensive and mobile vicinity...We are in sound and simultaneously sound ourselves..." (2014: 9). However, her words speak to a concept of embodied sonic experience (and production) that goes beyond mere 'description'. Her words articulate an experience of sound that is multi-local and enacted by the listener who inhabits the sound.

The notion of a plurality of sonic experiences is particularly important for this study, which seeks to examine the narratives and nuances that emerge when

both sound practitioners engage with sound for cinema. Particularly enticing is Voegelin's ultimate thesis, which is that sound enables a multiplicity of narratives. She writes, "...I want to engage, through sound, in a fictionality that transforms our view of the real and makes us rethink the singularity of one actual world" (2014: 46). Encounters with cinema reflect such a complexity, and this thesis aims to explore and demonstrate how the multiplicity of sound is played out through bodies – the bodies that produce sound to be heard, and produce sound through the act of hearing. Cinema is a medium that works with narratives, and portions of this narrative are given to (embodied) artists to construct with artistic material. The complexity and richness of such an assembly is important if we are to do justice to the task of examining embodied experiences of cinema sound. By applying these concepts it becomes even more interesting to consider how both audiences and sound practitioners inhabit cinema sound. Therefore, it is clear to see that exploring the embodied experience of the sonic in cinema is well aligned with a phenomenological approach to experience and knowledge.

2.6 Inhabiting Sound: Hapticity and Living Sound's Materiality

Investigations into the physical nature of sound have raised questions about how the experiencing subject finds themselves moved – physically and emotionally. In this arena is found the most fertile ground for phenomenological discussions of sound, which attempt to capture and translate into words what is a profoundly physical response. For theorist and sound artist Yvon Bonenfant, the experience of sound creates a conscious or unconscious 'flurry' of membranous material, interstitial fluid and muscle tissue. Crucially for Bonenfant, experience

of sound can both resemble, and arguably *be*, an emotional state (2008: 9). He purposefully does not draw a clear distinction between what is a physical and what is an emotional state, nor what is conscious or unconscious.¹¹ Such ambiguity may serve as a useful aid when considering the way a cinesomatic process works across practitioners. In other words, sonic experience encourages and facilitates a blurring of distinction between what is a physical or emotional felt sense.

The physicality of sound and the conceptualisation of skin as membrane led some scholars to assemble a theory of sonic hapticity. For Anne Cranny-Francis, it is the “...intimate relationship between sound and touch that makes sound such a powerful means of expression and communication” (2008: 1). Others go further, pushing past tactile surfaces to link sonic affect and inner viscera. Steve Goodman describes sound’s “seductive power to caress the skin, to immerse, to soothe, to beckon, to heal, to modulate brain waves and massage the release of certain hormones within the body” (2010: 10).

Sound and music scholars have elevated sonic experience within the perceptual gestalt of the human sensorium. In other words, sound and listening are apt to engage the whole body. Steven Connor argues that of all the senses, hearing is more likely to produce what he terms “synesthetic exchanges” (2013: 117). Indeed, for Judy Lochhead in a synaesthetic model for sound and the body, all sensory experience is woven together in the totality of lived experience. In this

¹¹ Questions over the directionality of the body’s responses is something that continues to be debated in neuroscience.

way, sonic meaning is informed by sight, as well as other senses (2012: 67). Such a viewpoint is also articulated by Francis Dyson (2009) who argues that hearing is not a 'discrete sense' but rather part of a somatic whole.

The implications of the above model of sound and listening are a rich self-awareness emerging from lived experience. In other words, phenomenological investigations into sonic experience demonstrate how sound produces a listening subject that is contextually placed. Greg Corness summarises such understandings into an even more comprehensive model of subjectivity:

Through the perception of the sensation, we build knowledge about the lived experience, which includes physical acoustics but also includes a self-awareness. Incorporated in the self-awareness is the act of hearing, encompassing the physical, cultural and personal context of our self. (2008: 22)

In taking a phenomenological approach to sound, it is possible to see potentially rich insight into how sound creates lived experience. These formulations have implications for those bodies professionally engaged in the production of sound for film. To argue for the cinesomatic experience is to draw a connection between sound and body, and identify how these listening and performing bodies incorporate and resonate the filmic narrative as well as personal lived narratives.

Conclusion

This chapter has charted the breadth of interdisciplinary theory necessary for this study to propose a cinesomatic model of film sound via professional sound work. It identified key issues and absences in these literatures, including the need for film sound scholarship to draw on the legacy of embodiment theory in

the humanities to continue to develop studies of embodied film sound experience, and the need to include practitioner experience in this emerging research. In this way, this study contributes to the scholarship of film sound whereby the bodies and experiences of embodiment that are obscured and devalued by industrial, cultural and political practices are located, recognised, articulated and valorised.

The chapter opened with a discussion of the philosophies of the body that developed in the humanities and has now extended into scientific disciplines. It went on to explore major theories of the body as taken up by key thinkers of different disciplines. It placed embodiment theory within film theory, and noted the limitations of linguistic, textual and psychoanalytic frameworks for taking account of embodied experience in film. It identified the limiting tendency of film theory to focus on audience experience, as well as the over emphasis on visual engagement over sonic engagement. The discussion also suggested how new thinking around embodiment and ontologies of object agency can address the limitations of phenomenology. This chapter also placed film sound studies within the wider field of 'sound studies', and drew out debates and issues relevant to phenomenologies of sound. In reaching for these differing frames of embodiment, this chapter contextualises the cultural, social and political complexities inherent in professional film sound practice.

Autoethnography #1

Location: Ku-ring-gai Chase National Park, NSW, Australia

Project: Self-guided location recording expedition

I am following a trail overgrown with shrubs and bushes, listening intensely. It is late afternoon, and the heat of the day is fading. I am looking for the perfect location for my ambiance recording experiment. I can hear the sound of native birds - rainbow lorikeets having feisty arguments, cockatoos communicating to flock members across the valley, and somewhere nearby, and the sharp, distinctive whip of a lyrebird. Why do I feel like these sounds carry the scent of eucalyptus?

My footsteps are crunching over leaf litter and fallen twigs. There are high-pitched snaps and the muted thudding. I deliberately walk out of rhythm, trying to concentrate on the sound. I feel pleased with this soundscape, and I pause on the middle of the trail to get my recording gear out of my backpack. Putting the headphones on, turning on my handheld recorder, I adjust the levels and suddenly feel a sense of shifting.

The sounds all around me are somehow intensified, more defined and crisp. The surrounding space has somehow become denser, more concentrated. The microphone is picking up certain sounds over others, almost like it is unblending the sounds, polishing them out and turning them up. I feel strangely present, and yet I feel my own presence somehow intensified.

The cockatoos tear by and their piercing shriek makes me wince. I experiment with where I am pointing the microphone, but I can also hear my own shoes slightly

shifting on the dirt. I try and keep more still. I point the microphone in the direction of the walking track, then shift it upwards towards the trees, experimenting with how the soundscape changes each time.

For whole minutes, I am consumed by this beautiful native soundscape. Then I hear it. The muted roar of a leaf-blower, bouncing all around the rocky outcrops nearby. It is some distance away, but its irritating invasiveness cannot be ignored. It smothers the delicate nuances of birdsong I was so fixated on. It swallows up all other sounds, and I cannot focus on anything else for a moment. I pause, waiting for it to stop. Finally it cuts out, and I resume recording. I speak into the microphone, verbally marking the track, and then I hear a dog barking. I stop the recording. I hope I got enough to use.

CHAPTER THREE

SHAPING SONIC CAPTURE: THE EMBODIED TECHNIQUES OF LOCATION SOUND PRACTITIONERS

There is something profound that recording in the field releases in us. Listening through headphones...is an intense experience...Focused listening is akin to meditation....

(Street, 2015: 101)

3.1 An Introduction to Location Film Sound

This chapter argues that professional location sound work for film demonstrates a cinesomatic model of embodiment. This study begins on set, where location sound professionals capture the relevant sonic materials of a live performance. The subjective accounts of experiences presented in this chapter are drawn from interviews with working location recordists/mixers and boom operators. These accounts are investigated in order to understand the corporeal dimensions of professional sound work, and to offer a conceptual framing of embodied experience for film sound theory. This chapter charts a course through an initial overview of the key literature of interest here, and places location sound work as a professional practice and the research informants in an industrial context that to a large extent frames current conceptualisations of location sound roles. It then draws together an analysis of different aspects of location sound work, conceptualising practitioner embodiment in terms of on-set distances and dynamics, dialogue and performance capture.

I argue that the tendency of professional discourse in industry sources and audio communities to focus solely on the technical details of location sound work in fact obscures and devalues the bodies of these practitioners, which in turn

shrinks the space within which insights, concerns and criticisms from the practitioners themselves are heard. It also reinforces hierarchies of value attached to filmmaking crafts and filmmaking personnel. An oft-heard complaint among sound professionals is the lack of regard and respect for sound exhibited by collaborators. These complaints are often about the inability of collaborators to understand the importance of good sound capture (Viers, 2012). However, as the accounts discussed in this chapter reveal, this lack of understanding and appreciation arguably also translates to hierarchy of value in which location practitioners struggle against competing production priorities.

Countering such a tendency, this study offers an alternative framing of location sound work, in which the corporeal participation and presence of the location professional are shown as deeply interwoven with sonic capture. More specifically, by approaching location sound work with a phenomenological focus, the key site of investigation becomes lived experience in tandem with the tools of technological capture. Centring the cinesomatic approach demonstrated how location sound for film is realised *through* the embodied engagements of the practitioner. In this configuration, technology plays its part in what phenomenologist Edward Casey describes as the body's "quasi-technicality", where "the lived body lends itself to cultural enactments of the most varied sorts, all of which are themselves dependent on particular corporeal techniques for their own realization" (1998: 213). Therefore, while acknowledging the role of technology, the interest here lays in the ways that aspects of embodiment and embodied experience facilitates and shapes the professional practices inherent in location sound work.

This study bypasses technological specificity in order to investigate the dynamics of embodied relations between the location sound practitioner, unfolding performances, and the other participants in location production. Placing new emphasis on the corporeal aspects of this area of sound work as articulated by practitioners themselves validates the work and lived experiences of these below-the-line professionals and contributes to developing a theory of embodied film sound. Further, investigating direct practitioner accounts are useful in creating a dialogue between the professional and the academic community, bridging conceptual framings with practical ones.

Very little has been written about film location recording with a focus on embodiment. 'Sound recording' has been written about extensively and broadly, with some works focusing on philosophical and artistic impetus behind recordings, while others focusing on the historical changes, developments and technical science of recording. The literature on 'sound recording' encompasses field recording and acoustic ecology (Schafer, 1993; Enns, 2008), sound art (LaBelle, 2006, 2017; Voegelin, 2010; Kahn, 1999; Lonstrup, 2013), archives and history (Street, 2015; Hooper, 2011; Thorburn & Jenkins, 2004) as well as technical guides and textbooks (Viers, 2011; Alten, 2014; Bartlett, 2005; Huber & Runstein, 2009; Miles, 2014;). In a film studies context, scholars have given particular attention to the history of sound recording, particularly in the Hollywood studio system, through the developments of sound technologies of the 20th century, and the transition from silent film to sound film (Altman & Handzo, 1995; Bottomore, 1999; Taylor, Katz & Grajeda, 2012; Macpherson, 2011). As will be demonstrated in later chapters, scholars have begun to

examine postproduction film sound roles through the lens of embodiment theory. However, comparatively, location sound in a film production context remains absent from these types of investigations.

It is significant that many practitioners themselves tend to articulate their role and experiences in terms of the technology that forms part of their professional kit. Arguably, one key reason for this is that location recording for film is largely perceived and discussed as a 'technical' rather than 'creative' discipline. Some practitioners articulate conflicting and hierarchical perspectives of technicality and creativity, in which the 'creative' element of the work is distinguished from and valued above the 'technical' element. In his widely read professional guidebook, Ric Viers explicitly advises learners that "Sound recording is highly technical, but great sound recording is highly creative" (2011: 113), yet later in the same publication, notes that "Recording is very technical and more science than art" (ibid, 196). This perspective is also reflected in the bulk of industry publications, textbooks and forums that give primary focus to the technical tools and audio gear utilised. These literatures, often directed towards other practitioners, learners or audiophile hobbyists, tend to be structured as interviews with key personnel giving detailed discussions of their equipment, and how this was used to record a particular project (Giardina, 2015; Crockett, 2002; Crawford, 2013; Holder, 2015; Klinge, 2015, Tham, 2018; Crowley, 2015; Michael Helms, *MichaelTheSoundGuy*).

It also becomes apparent that in terms of technical gear there are questions of professionalism and self-marketing at stake for the practitioner, pointing to a

complex web of audio branding and cultural value. This is articulated by location professional Lellan Thomas, who in an interview noted:

People don't understand audio at all, but they'll recognize a brand. I've gotten a lot of gigs because I may not have the gear [sic] in the world, but when I say I'm running Sennheisers, people know that name and think you're 'more professional'. Their ears perk up. (Edward, 2017: NP)

Such an insight demonstrates how technology, and discourses of technology, are fundamental to the way in which location sound work is framed and valued within the industry. For the practitioner, this is evidently also tied into professional identity and the acquisition of future work.

Despite this evident technical bias, there are some important exceptions where location sound professionals identify and articulate their role in more 'creative' and abstract terms. This is shown through certain publications where established practitioners explicitly set out to challenge this binary between technical and creative. This is also shown through an analysis of interview materials, where questions facilitated a breakdown of the focus on technology, and responses reveal the implicit understanding of the embodied nature of the work. Given the overwhelming focus on the technical aspects of location sound recording, these examples are important as they mark a shift in discourses about film production roles for sound personnel. This point here is not to draw a binary between technical and creative, but rather to emphasise differences in the way that certain aspects of filmmaking practice – and therefore the bodies practicing them – are valued. As David Wright noted, the workers in cultural industries are perceived as the most important part in a circuit of culture (2005: 112). Invoking Bourdieu, he reminds us that the value of culture – and of

constructing cultural goods as valuable - is begun by those involved in their production (ibid, 107).

In an extended interview-format book publication, Australian James Currie presents location sound work in a way that consciously and deliberately exceeds a technical framing. In Currie's account, location sound work becomes paralleled with the artistic value given to other 'creative' roles such as acting, directing and cinematography. Further, the non-technical focus of this example aligns with the empirical research of this particular study. Drawing on interviews conducted with sound professionals Ben Osmo, Mark Lavery, Mark van Kool and Martin Cox from Australia, Jono Cary from the United Kingdom, Jan McLaughlin and David Williams from the United States and Greco Nogueira from Brazil, this chapter investigates how location sound work creates and facilitates cinesomatic embodiments through the process of producing sound for film.

Contextualising location sound work can be challenging, for as Louise Ingersoll noted, in an Australian context there is little published on employment systems, structures and industry bodies in the film industry (2014: 50). According to the Australian Bureau of Statistics, in 2006 'sound technicians' accounted for only 1.9% of the people employed in film and video industries (ABS, 2010: 121). More detailed labour statistics are available in international industries, such as through the 'Occupational Outlook Handbook' provided by the United States' Bureau of Labor Statistics online resource centre. This resource includes

information about median pay, prior training and levels of education attained by employees in these roles (Bureau of Labor Statistics).¹²

Like many roles in the creative industries, employment in location sound is defined by 'atypical' structure that is highly individualized, non-permanent and contingent (Deuze & Lewis, 2013: 164). Concomitantly, location sound work is predominantly performed by freelance employees, and on a contractual basis. In the survey conducted for this study through the Australian Screen Sound Guild (ASSG) membership base, 84% of all responders identified as freelance, with only 15% identified as working in a permanent ongoing role, and 1% unsure. Some of the challenges that result from this type of industry structure unsurprisingly include unpredictable income levels, the negotiation of complex networks of industry players, and the constant movement between being employed or unemployed as projects are completed (Deuze, 2007: 173).

For this study, thirteen individuals from around the world who work in location sound were interviewed. This chapter draws on these specific accounts as well as other industry interviews sourced from previous publications that form part of the wider existing literature around location sound. The participants interviewed for this research work across a range of local, and international, productions, of varying genre, profile, and budget. Their countries of origin span Brazil, United States, United Kingdom, and Australia. While this geographical diversity has a significant impact on the types and contexts of productions being made, these practitioners are demonstrably participants in what Haas (1992)

¹² See <https://www.bls.gov/ooh/media-and-communication/broadcast-and-sound-engineering-technicians.htm>, last accessed 18 May, 2019.

has described as an ‘epistemic community’ with shared practices and values that translate across borders as part of a global film industry. The point here is not to elide critical or nuanced differences between local or national film industries; nor is it to argue for a ‘universal’ code of practices or values as embodied by sound practitioners. There is scope for further study by taking a specifically trans-national investigation into the cultural, social, political and industrial conditions that underpin lived experiences of sound work in different national or local film industries. This would be especially useful when seen against the backdrop of an increasingly globalised mediasphere that requires “flexible cultural labor” and “where skills, workers and sources of financing are distributed across national boundaries, both within and between firms or corporations” (Deuze, Martin & Allen, 2007: 342). However, the commonality of importance for this study is the way that interviewees detail their corporeal experiences within the work itself. These insights contribute to the reframing of technical knowledge and the perception of technical work by emphasising the phenomenological experience that constitutes this work. In this way, the bodies – and bodily experiences – of technical practitioners are reclaimed and validated.

In recognising this diversity of region among the participants, it is worth noting that industry terminologies also differ. To clarify, in the US, UK and Brazilian industries, the title ‘location mixer’ refers to the person responsible for managing all location recordings occurring on set. In an Australian/New Zealand context, this role is often called the ‘location recordist’. This role is usually performed from the sound cart, which is a mobile unit designed to hold and transport the equipment used for the recording. Other names used for this role

include production sound mixer or location sound engineer, and interestingly, all these terminologies suggest a technical rather than a creative framing. In this study, the terms recordist/mixer are used interchangeably, depending on how the interviewee uses the term, and their particular industry context. It should also be noted that there is some crossover between what location recordists and boom operators describe as part of their work requirements. This is because it can be a dual role, depending on certain factors. If a production is large enough or has the funds to increase the sound crew, boom operators will work as part of the location recordist/mixer's sound team. Booming will be discussed later in the chapter. However, in some cases, especially on smaller productions, the location sound recordist also performs the boom operating.

For the location sound practitioner, techniques and technologies of recording are bound up with time, space and performance. This chapter will discuss how the embodied presence and participation of the location sound professional becomes interwoven with the other bodies present at the site of live production, the narrative world being created, and the performance being captured. There are temporal, logistical and technical constraints and challenges facing the location sound practitioner. However, this chapter argues for a conceptual framing of location sound work primarily in terms of embodiment. Indeed, as the findings of this chapter will demonstrate, amidst the collective on a film production set, the location sound professional experiences a multifarious and extended embodiment – a *cinesomatic* embodiment. This supports this thesis' key argument that cinema sound is corporeal, experiential and exceeds the temporal and spatial parameters of any given 'film sound' experience, be it during

production or reception of a film work. As part of the embodied skills being performed during the on-set capture, what occurs is an experience of extra-corporeality that exceeds the time and location in which it is initialised. This insight further enriches our understanding of how the cinema's sounds, bodies, and narratives connect across time and space.

3.2 The Dilemma of Distance: (Dis)Placed Bodies On Set

The configurations of bodies on set for a location shoot are significant for a model of embodied cinesomatic capture during the film production process. It is on location that challenges may present themselves for person(s) tasked with recording the performances. As sound mixer Matthew Hughes pointed out in an interview for *Premium Beat*, filming may occur in custom-designed sets in specialist studios, but it often occurs in external locations where many other elements that are largely beyond the mixer/recordist's control potentially impact approaches to sound capture (McGregor, 2017: NP). Depending on a number of factors, location sound crew may or may not be included in preproduction recces where locations are assessed for their suitability for filming. These factors include the budget and timescale for preproduction, as well as his or her relationship with the director and producer. As all interviewees articulated, being included on a recce is important and highly valued, because it enables one to assess the location for potential sound problems, and also make decisions in advance about how to mitigate these. It also enables the practitioner to physically understand the space in which filming will occur, and plan how to best cover recording of the action. In lieu of preproduction recces, location sound people may at times find themselves having to make these assessments and

decisions on set. And in all such scenarios, as this research will show, the embodiment of the location sound practitioner becomes central to how the scene is then sonically captured.

In large-scale productions, communication and capture across distances can become a negotiation of space, sound and bodies for practitioners. The location sound person must be aurally present to the performance being filmed, and to other key crewmembers, especially the main ‘creatives’ such as the Director and the Director of Photography (DOP)¹³. The complexity arises in that location sound recordists/mixers often are physically removed from the performance space, watching the performance through a visual monitor and hearing it through headphones. Performing this role therefore requires the practitioner to wrangle their technical equipment, listen to the progress and quality of a take, and communicate to others. In this situation, the practitioner is simultaneously present and displaced, an aural and corporeal presence to the capture, yet often physically (dis)located from the action.

Large-scale productions provide a useful case study for seeing how this complex dynamic functions. In discussing his experiences working on *Mad Max: Fury Road*, Australian location recordist/mixer Ben Osmo recalls how he recorded the vehicle pursuit scenes that are iconic to the franchise:¹⁴

Because the distances that we moved while we were shooting, from turnover to cut, we might have driven 7 km, and this was past all the relay stations for walkie talkies. I was in a little van that we called the

¹³ Also referred to as the cinematographer. The term ‘creatives’ has also been deliberately put in parentheses to demonstrate how industry terminology frames certain roles as ‘creative’.

¹⁴ Osmo was recognised at an industry level for his work *Mad Max: Fury Road*, winning the Academy Award for Best Sound Mixing in 2016 and the BAFTA Award for Best Sound in 2015.

Osmotron. Because I was in the vicinity [of the filmed action], between 500m to 1km away, I was able to be within range with my equipment, which we had to design. I gave John Seale [DOP] and George Miller [Director] a radio mic and headphones, so they had coms [communications] like we traditionally have. I was able to get them to talk to each other, and the camera crew also needed to be in the loop and hear. So I was taking care of all that communication as well as recording the actors and then having sfx of the vehicles at the same time.

Here in Osmo's described methodology is revealed a complex web of communications across narrative and production spaces, in which the location recordist/mixer becomes the embodied pivot. The challenges of the *Mad Max* production were demonstrably compounded due to the scale of the scenes and narrative world. As head of location sound, Osmo was required to manage and coordinate sounds on set, demanding his physical participation as he drove in tandem with the filming. Yet it also occurred electronically, as Osmo became audio trafficker for performers and key crew. In such a configuration, the connection of bodies, placements, performances, and captured sound is demonstrably navigated via the location recordist/mixer, who is situated in the unique position of being multitudinously present, regardless of where he or she is physically located. Importantly, the role of embodiment depicted here is in contrast to other post-*Mad Max* interviews with Osmo that emerged in online trade publications and audio-community websites. These sources exhaustively discuss and detail the technical aspects of Osmo's work, provide a full inventory of his gear and base discussion around the performance of the gear under the conditions on set (Holder, 2015; Klinge, 2015; <https://www.sounddevices.com/ben-osmo-and-oliver-machin/>), reinforcing the framing of location sound work in terms of gear and technical performance.

3.3 Hearing Voices: Tracking Dialogue

The phenomenological dimensions of location sound work become apparent when identifying how technical jobs become corporeally realised. The management of sonic spaces is also bound up with dialogue capture, further deepening the embodied connection the location professional has to the work. As well as tracking the recording across physical spaces, the location recordist is also required to listen to the performances as they are being recorded via headphones and the mixing console. The larger the production, the more apparent it becomes that even with technological tools, this process is also corporeally managed and metabolised. Depending on the cast numbers of a particular scene, this means practitioners may be monitoring several tracks of dialogue at once. Here the corporeal placement of the practitioner becomes critically enmeshed in a virtual network of sound and audio. Ben Osmo describes his own methodology for such a situation, one that intriguingly points back to his own embodiment and experience of binaural hearing:

I try and split [the sound channels] into different ears. When I do dialogue, I like to have the person on the left of screen in my left ear and the person on the right of screen in my right ear. Even though I'm mixing them in two tracks, they're all in individual tracks as well. That way I can have a spatial memory of where the microphones are. And also, if there is a problem with either mic, I can instantly see where they're going. Sometimes I will have 8 or 10 mics. I did a film recently where there was a cast of 16 people. Trying to keep track of who's where, and what the problems are – that's when I come up with this joke that 'I hear voices'.

What is interesting here is how this model of sound practice is defined and described in terms of a positioned embodiment. Osmo demonstrates how he manages recordings by also maintaining a sense of embodied space to the performance he is hearing. This becomes configured in relation to both the microphone placement (actor's body) and track-to-ear placement (practitioner's

body). Osmo also bases this placement on the visual reference of actor placement on his monitor screen, deliberately creating an aural simulation of the narrative space. Such a configuration renders his embodiment again as pivot point amidst sonic capture.

In recognising that the location practitioner's embodied self becomes the aural pivot point on a film set, he or she demonstrably becomes a participant in a multiplicity of recorded voices. UK-based sound recordist Jono Cary describes the way in which particular genres such as reality programming and documentary necessitates listening to many conversations simultaneously. In his interview, Cary articulated his own learned ability to negotiate embodied placement in the midst of what could be described in some cases as an input overload:

[T]he thinking on set stuff is really tricky...because there are so many things going on at once. I play the drums - it's the same as trying to learn a new rhythm on drums. Your head is in about 6 different places at once with it. And quite often, I'm listening to two different conversations. I pan them left and right, so one in the left ear with two people talking, and another on the right ear with two people talking. I also have a walkie [talkie], then I've got a producer taking in this ear. I've can have eight conversations going on at once. It's not uncommon for that to be quite a normal part of a 12-hour day.

Similarly to Osmo, Cary is specific about microphone placement in terms of his own hearing and body. Like many other interviewees, Cary links his sound work to playing instruments, reinforcing the argument that these roles are also a learned embodied practice rather than simply using a series of technical devices. In location sound, the key issue of coordination becomes important in how the capture of sonic content is corporeally managed.

3.4 Tuned In and Present: The Audible Community On Set

A cinesomatic model of location film production posits that the location sound professional is sonic mediator and aural witness to the production as it unfolds. The term ‘production’ here is meant to include both the live capture process of recording performance, as well as in the meta sense of a living collaboration and negotiation of all bodies involved in the production. In this way, the location sound practitioner is critically positioned for an experience of both dynamic intimacy and collective presence. Theorist Alison Richards describes embodied performance for *actors* as thus: “Performance practice is not only mediated through the body, it is transacted and its codes transmitted through body-to-body co-presence. It employs a variety of communicative channels, including, crucially, the extra-linguistic” (2004: 54). I argue that transposing this perspective to the work of location recordists accurately demonstrates the corporeal co-presence which is facilitated by sound work, but also foregrounds the embodied presence of these professionals to be on par with actors. Recognising the location practitioner’s embodied participation in capturing live performance challenges a hierarchical approach to production personnel that would value and valorise only selected bodies – and embodiments – involved in film production.

Accounts provided by practitioners interviewed for this research demonstrate the ways in which location recording is a cinesomatic co-production, creating and incorporating many listening bodies. Sound theorist Brandon LaBelle defines acoustic experience “as one of animation and cohabitation that extends and therefore complicates embodied presence” (2017: 275-276). Recognising

how acoustic experience posits an extended embodiment facilitates a deeper understanding of how location professionals navigate and negotiate sonic materials in terms of production space. During his interview, US-based location professional David Williams identifies a sense of emotional connection – both interpersonal and firmly embodied – that is facilitated through a film shoot. His words here depicts a living, unfolding audible community:

[The productions] that I really like are the ones where the whole crew is holding their breath because they're hearing something that they can't believe that this person is saying or performing. And you're praying, 'I hope this doesn't roll out, I hope I pressed record'. I can't move. You're just thinking, I hope this works, I hope this works. Because it's magnificent - there's some sort of aura and atmosphere and something that's really clicking...I find myself breathing along with the performer. It's how you work with someone else. So there is an embodiment, especially if there's that thing of pure communication that's going on.

Williams' description portrays the bodies on a film set as a collective that is united in unspoken awareness during capture. The aural community is demonstrated through the shared awareness and presence that is communal as well as personal. Williams also depicts a sonic intimacy between the location recordist and the talent, demonstrating how sonic capture becomes an embodied 'tuning in' to the bodies being recorded.

This research argues that sound capture on set is an experience of aural cohesion, facilitated by the focused process of recording performance. David Williams goes into further detail about corporeal and sonic positioning in relation to the performing bodies of the actors, particularly while operating the boom microphone:

On a [large] movie set, there's easily 100-150 people... all focused towards one thing happening, which is getting a decent

performance...You're going to get done 4 or 5 pages of dialogue...for that day if you're lucky. So what an incredible privilege, to hear the directors talk to the actor. The lighting person has set their lights...the props people have done this, the set people have done this, the costumer has done their final fussing, the hair person and make up....Then - everyone leaves. Everyone's gone. The director's not even there. The director is sitting behind a monitor 20 feet away – if not 100 feet away. So who's there? The boom operator, the actor and the camera-person....They're it. Focused on receiving...this person, who is charged with communicating, and who is responsible for this \$200,000 they're spending that day, if not more. It all comes to that moment and you're an immediate part of it. If you're talking about physical embodiment, you have just the boom pole and the mic - you're in constant motion. Even if it's just a little bit, you're adjusting your weight, you're looking out for shadows. So your awareness is all over, you're aware of everything that's going on. It's a total extension of your fluid body.

Such a depiction of the embodied state of the location sound practitioner reflects the cohesive force of acoustic phenomena articulated by LaBelle whereby the “...*relationality* intrinsic to sound provides an explicit platform for exchanges across distances...” (2017: 275). This model of sonic experience translates to the location sound capture on set. In this way, the presence and participation of the location sound recordist positions them as centre of the aural and audible community of a film set.

Practitioner accounts reveal that the location sound professional embodies a corporeal presence that connects and creates a co-presence with the actors during a performance. As David Williams described earlier, the experience of being ‘in sync’ with the talent may manifest in a distinctly corporeal way, such as breathing in unison with the other person. Arguably, such a connection can be activated by physical proximity between bodies, and/or listening to the performer’s microphone through headphones. The ability of the microphone to facilitate an unnatural intimacy has been articulated by other recordists such as

Hildegard Westerkamp, who describes the mic as a “...seductive tool: it can offer a fresh ear to both recordist and listener; it can give us access to a foreign place as well as open our ears to the all-too familiar...(2013: 238). While Westerkamp is speaking more specifically to field recordings and acoustic ecologies, what is important here is the idea of ‘tuning in’, enabling the location professional to establish a corporeal resonance with what is being listened to.

Without ascribing a disproportionate agency to microphone technology, it demonstrably plays a role in facilitating a concentrated embodiment that extends and connects key people on set. In his interview, Australian sound professional James Currie explores this idea further:

Your focus is on the actors. You’ve got to sit still and your whole concentration, which is your physical, mental, vocal and visual concentration, is all on the actors. I’m aware of the levels of all the sounds that I’m hearing, and if it’s to do with performance, then I’m aware of where they’re going, what they’re doing. You’ve got to be in tune with that. And a part of you is also looking at the script. Usually after about the first rehearsal I’ve memorised what they’re saying. You’ve got to have a good memory, and...know what the dialogue is...You read the script so much that you actually know what’s going to happen with this scene. And [you need] to be conscious of how the actors are operating....not only operating between director and actor, but between actor to actor; actors to DOP [Director of Photography].

As Currie demonstrates in this passage, focused awareness is hinged on an embodied discipline. The meta-sensitivity of the practitioner and the sense of relationality between bodies on set is unarguably facilitated by those audio tools that enable heightened hearing. However, instead of stopping at the role of technology in this equation, the point here is to move further to emphasise the corporeal presence involved in sonic capture. Indeed, as Don Ihde pointed out, intentional human experience can embody a technology (2011: 111). In this way,

a phenomenology of professional sound work does not eschew the presence and participation of technology, for the capturing of sonic performance is enacted by the practitioners in tandem with their technological tools. However, in contrast to framings that ascribe central agency to the technology involved in this process, it is important to recognise how these professional practices are profoundly embodied.

On a film set, the communication on behalf of the location practitioner arguably enacts a dance of sonic awareness and non-verbal transmission between bodies. One of the responsibilities of the location professional is to make assessments about the usability of a particular take in terms of the sound captured. They are also required to communicate potential sound issues with other key persons without necessarily 'breaking' a take in progress. Interestingly, some practitioner accounts portray this process as extra-corporeal, revealing the degree to which information is transmitted between bodies. This is articulated by David Williams, whose interview revealed the intimate mechanics of this process:

Your responsibility is to communicate. To know what you're hearing, and to objectively be able to say I know they'll never use that. Or to have a structure of communication with your producer so you can look at them, you can wave and they'll say don't worry about it, or ok, Dave heard something. A lot of it is silent, non-verbal communication. In some ways you have to forget the gear, you have to be able to move and do the job, and at the same time balance it with also always being aware of it.

Williams' description demonstrates an interesting paradox in that while the technical gear is playing its part in capturing the sound, the practitioner's relationship to it requires a balanced awareness that is both micro and macro focused. The gear must be incorporated into what Merleau-Ponty

described as the *body schema* (1962:98), enabling the practitioner to be more present to the macro communications occurring between bodies on set. Communication in this way means that the practitioner shifts his or her awareness between the gear, the performance and other bodies on set, in a constantly shifting dynamic. This insight also foregrounds the role of the body, rather than the gear itself, in performing a successful sonic capture.

3.5 Multiple Bodies and the Unfolding Performance

I have argued that the embodiment of the location sound professional is a complex experience of unfolding performances, internalised and externalised communication and focused presence. What these interviews reveal is that the lived experience of location sound work exhibits an under-examined interplay of embodied awareness and empathic connections. The understanding of empathy in this context is one that has been drawn from cognitive science and applied to performance modes such as dance. Theorists such as Warburton deploy empathy in a way that identifies different modalities including sensorimotor, cognitive and emotional. For Warburton, motor empathy is realised through the automatic mimicking and synchronising movements of one's movements with those of another person; cognitive empathy involves connecting to the internal mental states of others, and emotional empathy involves responding to the emotional displays of others (2011: 73).

Accounts of professional sound work that emphasise technical parameters do not do justice to the bodies performing the work. Location sound professionals describe how they engage with the performers in profoundly corporeal ways

that far exceed a framing of technical capture. This is articulated by New York-based sound mixer Jan McLaughlin, who describes in her interview the way she becomes aware of her own embodiment as well as the performers' embodiment during her work:

When I see a rehearsal, I'm looking for the physicality that they display. I look at a rehearsal, I look where they are standing....I'm going to have to wire¹⁵ that person because they're standing through a glass door, they have to come in and they're talking on the far side...Now I'm really going to watch their physicality. So when I'm watching that I'm actually gleaning what they're going to do with their bodies, so that I can adjust where I may put the microphone later. And honestly, if it's a very compelling, emotional scene, I'll be standing rather than sitting, and I find myself going with them sometimes [gesturing with body movements]. Because of the hand-ear-eye coordination.

McLaughlin's words demonstrate all of the three aspects of empathic connection identified by Warburton, and depict the cinesomatic embodiment of the location practitioner. This description also reveals two key aspects of the way her embodiment is engaged with the work, which I will discuss below.

The first aspect of corporeal engagement is demonstrated in McLaughlin's awareness of the actors' movements and physicality, a consciousness that is critical for decisions made about how to record or 'cover' a scene. McLaughlin reads and internalises the bodily movements of the actors before then translating this information into her own technical movements and decisions. Further, the focus clearly became so intensive that McLaughlin noticed her own empathic movements in sync with the performers. This insight is particularly relevant for theories of kinaesthetic empathy, what Ryszard Praszkiar describes as a process where the observer "essentially 'internally simulates' the observed

¹⁵ Wire is a colloquial term for the use of a lavalier microphone.

movements and, without actually moving, feels his own body configuration change in response” (2016: 2). While cognitive science theories of empathy and studies of mirror neurons have been applied to cinema audiences as a way of examining the degree to which film spectators are materially engaged with a film, they have not been applied to the production phase. Further, those scholars that take up theories of empathy and apply them to creative experiences have not focused specifically on those bodies that are present yet discounted in hierarchies of value around filmmaking. This speaks to assumptions and biases in research that favour studies of reception and audiences, or directors and actors over other roles.

The second aspect of corporeal engagement is demonstrated in how Jan McLaughlin highlights the importance of muscle memory in performing her role:

So I’m watching them in a monitor, and I’m simultaneously watching the levels and feeling the faders in my hand. To me [the mixing cart] is not only an instrument but it’s a cockpit for me. The visual positioning of all these feedback loops of LEDs and lights and monitors with what’s going on camera, is really important to that instrument. Like a pilot has to be able to reach for that button, that knob, without thinking. In the same way, if the lights go out, I still have to be able to work....it’s completely like playing an instrument...

It is significant that McLaughlin likens the work to a musical instrument or cockpit. In this way, technology becomes one factor in the web of embodied knowledge integral to the performance of the role. Drawing on Don Ihde’s postphenomenology of technology, Robert Crease noted that, “Technology simultaneously extends and transforms perception and bodily praxes...it is absorbed and incorporated into bodily experience of the world...” (1997: 215). The participation of below-conscious movements and ‘knowing’ such as muscle

memory enables McLaughlin to transcend a singular sense of embodiment. As will become increasingly apparent throughout this study, the musical instrument analogy is common across many practitioners in different roles. McLaughlin's depiction of location sound work reinforces what Crease has argued, whereby "...performance in this sense is not merely a praxis – an application of a skill, technique, or practice that simply produces what it does – but a poesis; a bringing forth of a phenomenon, of something of a presence in the world..." (1997: 214). In this it is possible to see how the location sound mixer is corporeally engaged with performance and the gear in a way that includes and exceeds conscious awareness. Such a configuration necessitates that location sound recording be reframed as a performance of corporeal presence via the audio tools.

A model of a cinesomatic embodiment for location professionals posits a sensory, intuitive relationship to all the participants in the recording situation on set. These fellow participants include the gear, other professionals as well as the performers being recorded. In his interview, Brazilian location professional Greco Nogueira explicitly describes his relationship to the gear in terms of intuition and embodiment:

Sometimes I feel that I know how the equipment is going to behave. I know how it's going to work, and sometimes that's natural for me - it works like an extension of my body. Sometimes I'm not looking at it but I know what I have to correct, some adjustment and this kind of thing. You just go without looking, to turn up and down to get better. And that happens constantly, especially with my [own] equipment.

Like McLaughlin, Nogueira's description reveals how muscle memory is a relevant knowing and internalised skill that is activated and performed in

relation to the technology. Further, Nogueria's articulation of 'knowing' how his gear ascribes agency to the technology, however demonstrates how a practitioner's relationship to gear is not satisfactorily defined in terms of technical aptitude. Rather, the words of the practitioners demonstrate how the relationship is constituted in terms of technological incorporation *into* the embodiment of the individual.

In a similar vein to Nogueria's point above, David Williams also describes a 'knowing' that is facilitated by the gear itself, but which extends to more nuanced awareness of physical positions, relations and atmospheres on set, as well as a sensitivity to the material being recorded:

Sometimes I can tell before anyone else can that things aren't going well, or that we need to take a break or pause....That is part of the maturity in the work when you're doing....But to interrupt that delicate moment of communication, that's physical - that's knowing....[T]he camera person is aware of your movement, I'm aware of their movement, I'm aware of what's behind my back, the cable on the floor, and the actor's aware of all this. So it's a hyper awareness of everything going on.

William's words here reveal how this corporeal awareness is experienced as a mutual awareness among all cast and crew involved in the recording of a scene. While the audio equipment is present and plays its part in the capture of material, what becomes important here is the acute sensitivity felt and enacted by the location practitioner. In articulating this sensitivity and awareness required of the location sound person, Williams also demonstrates a direct relationship between 'knowing' and physicality. Importantly, this extra-corporeal awareness again is found to be corporeally located and navigated.

Of the research conducted for this study, the most remarkable example of an embodied relationship to location sound work was articulated by Australian professional Chris McCallum. This example is important for the degree and way in which it further challenges technical discourses that obscure or minimise the body of the practitioner. McCallum experiences auditory synaesthesia, whereby he sees colours for sounds. Interestingly, McCallum sees this neurological trait as assisting him in his work, both in terms of correct mic placements and the quality of the sound being heard through the mic. In this way, McCallum reveals an internal and highly personalised reference system that facilitates his work:

[When] I'm matching that with the right microphone or the right microphone position, that all comes together visually for me. If it's off, if the tone and colour [is] outside what the colour should be, I know that something isn't quite right, so I adjust things to make it right... So yes, it does, it helps what I do in a very subconscious way. I don't rely on it, I'm aware of it. And in fact, if I don't have a physical reaction to [the sound being recorded], I know that I'm probably not doing the right thing. I get a physical feeling somewhere in my sternum...[where] there is a kind of pressure there when things are right. And...then I start looking at what I need to do to make it right, either them closer to microphone or a different microphone....there is a physical manifestation - if I don't feel that in my chest, I know there's a problem...I get a physical manifestation - a feeling, of capturing the voice correctly when I do....when I hear a sound, a colour forms in my mind. So as a result of that, particularly when I'm mixing, if I'm blending sounds, colours blend. And if it turns into what I call 'ugly fish colour' which is kind of an olive-green-purple, I scrap it and start again because I know that it hasn't come together the way I wanted it to....

McCallum demonstrates an atypical example with his relationship to his own sensory input. While most location sound professionals may not have the benefit of a coloured sensory internal gauge of their work, the skills of sonic sensitivity are nonetheless paramount and demonstrably common across location practitioners. What is also compelling is the way in which McCallum so clearly correlates sonic quality with physical feelings that he can locate and identify in

his body. Such awareness leads to McCallum making choices and taking actions about what technical changes need to occur (for e.g. changing the microphone or its positioning). In this example, far from obscuring or minimising the presence and participation of the body of the practitioner, it is evident that embodiment is driving the work.

3.6 Under the Microphone: Aural Intimacies and the Heard Body

This chapter has so far discussed the types of embodied awareness employed by location sound practitioners. Here the investigation turns to what I am terming ‘aural intimacy’ to describe the specifically *corporeal* sonic insights the location practitioner is privy to in their work. Again, the positioning of technology as an intermediary is important, yet the role of embodied awareness cannot be downplayed. Having the microphone act as the mediator between bodies actually facilitates a corporeal intimacy that communicates nuanced information to the location sound practitioner.

Scholars and artists have drawn out models of the ‘extra’ sensory abilities and prosthesis provided by audio technology (Weber, 2009; Drever, 2017). The ability of the microphone and headphones to facilitate this extrasensory awareness is noted by practitioners such as Glen Gauthier, who advises learners to “...pay attention; especially to what’s hidden. Consider what’s behind locked doors, above you and below you. Some things you won’t hear until you have a quiet room and the microphone is cranked up” (Toffolo, 2016: NP). While Gauthier is speaking about sourcing and recording environmental sounds and ambiences, what is significant here is the way that the learner is advised by other

practitioners to develop aural observational skills in tandem with the equipment and to be mindful of his or her embodied placement in relation to sounds. Also writing about field recording, John Drever (2017) points to the paradox of increased hearing abilities afforded by the technology, as well as the complication to spatial and embodied placement that ensues. Similarly, Charles Stankievech has also posited that headphones also facilitate a phenomenology of acoustic perception, being a “...modern technological prosthetic” (2007: 5) that problematizes delineations of interior and exterior. The importance of embodiment comes into play when considering how the practitioner is encouraged to use the microphone to penetrate visual barriers and surroundings, and be guided by a corporeal reference to sound sources. It is evident that microphone and headphones facilitate a particular kind of relationship to what is seen (or not seen) and what is heard.

On location for a film production, the recording technology and the practices of observational listening grant the location practitioner an intimate sonic portrait of those bodies connected to wireless microphones. This resonates with how Drever describes the placement of the self in field recording, with headphones and microphones functioning as “auditory prosthesis” (2017: 71). In such a model, technology is incorporated into the bodily schema of the practitioner. However, rather than overemphasising the technology in this scenario, the key point is that the technology facilitates a *deeper* sense of embodiment. This point is elucidated by interviewee Chris McCallum, who explains: “You do hear heartbeats. You can actually tell...before anyone else on set how nervous someone is by their heartbeat”. This aural insight translates into a bodily

understanding and sympathy for the talent that are connected to the microphone. Therefore, this sonic awareness establishes an inter-corporeal relationship.

Concomitant with this privileged insight into the bodily states of those under the microphone, practitioners acknowledge the ethical considerations that play into how this information is managed. In his interview, Australian location recordist Martin Cox argues that being privy to sonic information about individuals or the wider interpersonal politics of a production set requires one to manage the situation in a sensitive way:

Usually you put [the microphones] in here near the sternum...so you hear all that rumbling stuff. It can often, if you're relying on a radio mic for lines, you have to do that line again. No one else heard it, but you have to say to the director, we have to do that line again. And if they ask why, you just say that there was some 'extraneous noise'. You hear a lot of secrets. Often you'll hear what the actors really think about the director. All the time [actors] forget that they're miked up. And a lot of time they will leave set with the radio mic on, and as a courtesy, you just turn that channel down. It's better not to know.

Cox's perspective is also echoed by Jan McLaughlin who notes:

...if [the actors] are wired I have to protect them. From themselves, maybe, from what – I don't know because I never listen. But I know that there are times when actors get pissed with the director and were I to leave that wire up... – so it's a real responsibility - almost a sacred responsibility of their privacy. To hear someone's voice – their performance – and secretly hear it, in a way....it's a very intimate thing, to hear. I'm the first ear, really, to hear that and I'm honoured.

As Cox and McLaughlin demonstrate, being the recipient of 'secret' sounds can require discreet and diplomatic handling of the situation, especially if it has impacted the recording. In this way, management of sound on set is indeed a negotiation of bodies, whereby the location practitioner receives and navigates

such aural intimacies. The sonic capture is shaped by the corporeal presence and sensitivities of the location practitioner.

In taking this point further, practitioners emphasised how certain situations require very high levels of sensitivity, particularly where gender, age or temperament of talent were factors. This was pertinent in situations where the talent are required to be fitted with wireless microphones under costumes. As already noted, the majority of location sound practitioners are male. While he noted that not all people he has worked with display sensitivity to the situation, Chris McCallum points out how experience contributes to greater sensitivity:

But it's the sensitivity with which you approach people, because we are hands on and I've got to tuck transmitters sometimes into underpants, into bra straps, hiding things and I explain, I say, 'the inappropriate touching starts now, this is what I'm going to have to do' and most times people go 'yeah'. Other times, if I look at it, and there are a number of women working together, I'll clue one of them up and say, can you help me do this.... So I think it's an experience thing, I think it's an understanding. I said it earlier – a lot of what we do is psychological...because we're so close to people, because we're constantly adjusting things...you tend to build up quite a close rapport with people...

For McCallum, respect for personal space and other bodies needs to be explicitly articulated in order to establish respect and professionalism when miking talent.

Importantly, the awareness of aural intimacy and the capture of nuanced bodily sounds are not restricted to the location sound professionals. Practitioners reflected on the fact that talent can have very different attitudes to the way in which their performance is captured. While some actors forget about their wireless body microphones, in some cases others intentionally engage with them as part of their approach to a cinematic embodied performance. Australian

sound professional James Currie recalls working with actor Richard Dreyfus on *The Old Man Who Read Love Stories* (Rolf de Heer, 2004), whereby Dreyfus requested to manage his own wireless microphone for the duration of the shoot. The reason for this was two-fold; firstly Dreyfus desired to ensure he captured all the sonic details of a fully embodied performance as it unfolded, and secondly, he did not want to recreate dialogue in postproduction ADR¹⁶:

He [Richard Dreyfus] said to me, what do you think about radio mics? I thought - I'm either going to sink or swim here. I said that I use them a lot. He said, 'Good! You'll get all my body sounds. You'll get everything that I've got. You'll get my heartbeat. You'll get my lips smack'...He dressed himself every morning. He put the microphone in the best position for his performance that day.... he wants to hear himself physically on that track. It was good.

For Currie, this experience was particularly pertinent because of Dreyfus' awareness of the corporeal details of location recording. It also reflected Dreyfus' desire to be actively in charge of the capture of sonic nuances of his character, and to deliberately and consciously engage with the microphones in order to perform the character's embodiment in a highly personalised and detailed way. This reinforces the argument that sonic capture on set is mediated by technologies, but shaped and manifested by the bodies and embodiments involved in the production. A further area of study would be to further investigate the ways in which actors themselves participate in their own sonic capture, the aural community of the film set, as well as the narrative world being imagined for the purposes of performance.

¹⁶ ADR – Automatic Dialogue Replacement (also known as looping). This is where dialogue is re-recorded in postproduction on a dub stage and synced to picture in order to improve audio quality or to address script changes. While this study has not included an in-depth examination of ADR, it is acknowledged that this area of postproduction sound would be rich for embodied analysis.

EMBODIED BOOM OPERATORS

3.7 Introduction to Boom Operating

I think the best job on set is being the boom op, because you're right in there. It's you, the camera-person and the actor – not even the director. It's just three people. It's an incredible privileged, intimate dance that you have in those moments.

(David Williams, Location Sound Mixer)

Of all sound production literature, boom operating¹⁷, as a sub-denomination of location sound, receives the least attention within a theoretical context. And while *field sound recording*, similar in some respects to boom operating, has been examined by scholars, this literature has not had a specific film production focus. Field recording is a broad term that covers many occupational and artistic applications of sound capture, from acoustic ecology to sound art. Originally the term described recordings done outside a recording studio, but it has subsequently become largely synonymous with recordings of environmental or ambient soundscapes¹⁸ and effects. It has been of interest to scholars interested in sonic geographies, acoustic ethnographies and ecologies (Chattopadhyay, 2013; Gallagher & Prior, 2014; Waitt, Ryan & Farbotko, 2014; Harris, 2013; Kelman, 2010; Parmar, 2014; Boyd & Duffy, 2011, 2012; Smith, 2007; Wood, Duffy & Smith, 2007; Westerkamp, 2017; Morton, 2005; Revill, 2016). However, for this study, a film production focus is critical because of the relationship between recording and the live performances of actors. While those engaged in field sound recording may utilise some of the same audio equipment as the boom operator, there are key aspects of boom operating which are particular to a film

¹⁷ A role sometimes referred to in the industry as boom ops, or booming. The boom operator in Australia is also colloquially known as a 'boomie'.

¹⁸ This is also linked to the relationship between field recording and documentary, including ethnomusicology. The role of the development of portable recording devices also were a key factor in its development (Gallagher & Prior, 2014).

context and deserve closer attention. For the boom operator, as the title suggests, gear is intrinsic to the role. However, it is important for scholarship to provide accounts of boom operating which focus on the lived experience and sensory affordances that arise from engaging with the technology.

At the time of writing, there is very little theoretical literature examining the role of the boom operator as part of a film production's sound team collective. The existing materials are practical and technical in nature, mainly drawn from professionals and aimed at learners (see Dorritie, 2003; Atkinson, 1995; Bartlett & Bartlett, 1999; Bartlett 2005; Viers, 2012; Fielden, 2010; Murphy, 2016; Miles, 2015; Rose, 2015). Importantly, these literatures are not concerned with framing the work in terms of theories of embodiment. Further, when 'the body' is explicitly featured within these discussions, certain gendered assumptions and discourses of heteronormative masculinity become apparent, as I will discuss. In light of these concerns, it is imperative that boom operation be included in theorisations of embodied film sound, and I argue that a phenomenology of boom operating contribute to the dismantling of these limitations. Further, discussions of boom operating arguably should not be subsumed under the broad banner of 'location sound', but should be given critical attention as a distinctive profession of location sound.

One notable exception to the lack of literature on boom operating is *Conversations with a Sound Man* (Zielinski & Currie, 2010), which offers a significant step towards reframing boom operating. This publication utilises the conventions of practitioner literature in that it is part-biography, part-interview,

and part-beginners guide to film sound. This book focuses on James Currie, the long-time collaborator of director Rolf de Heer (*Bad Boy Bubby*, *Ten Canoes*, *The Tracker*). Currie has worked in all aspects of sound production, including location and postproduction. The book goes further than most others in framing location sound work, particularly that of the boom operator, as more than a technical role. By doing so, it raises the profile of the profession to one of artistic and creative legitimacy. The chapter 'The Challenge of Boom Operating' (7-14) is particularly relevant because it goes beyond descriptions of audio kit essentials or career paths for beginners, and narrates personal experiences on set as well as Currie's perspectives on booming work. Indeed, it is for this reason that the book transcends being a technical or manual guide, but in fact - significantly for this study - points to something more profound at stake in this under-examined role, which is to question these distinctions between technical and creative.

In general terms, boom operators are the on-set sound professionals who work with the location sound recordist/mixer, and part of their role is to operate the microphones attached to a boom pole, as close as possible to the performance.¹⁹ As stated in the introduction to the chapter, boom operating can be a role that is combined with location recording/mixing, depending on the size of the production. On small productions, the sound recordist will also be operating the boom, and many professionals began their career this way. In contrast, some practitioners devote their career to boom operating. On larger productions, where the budget allows for a larger sound crew, the boom operators are hired by the sound recordist to be part of the location sound team.

¹⁹ They may also perform other microphone preparation tasks including attaching wireless microphones on the body of the talent.

Regardless of their specific sound role, in grey literature location practitioners readily discuss and the tools and techniques of capture in terms of sound quality and aesthetic judgements. This was also demonstrated during interviews for this research, with the concerns evidently based around expectations and ideals of sound quality in a film production context. I argue that this aesthetic framing perpetuates a technological preoccupation that understates the roles of the body. Points of debate range over the advantages and disadvantages of using certain mic types and techniques, with many sound professionals expressing a preference boom recording on location due to a perceived improvement in sound quality. Interestingly, this technological preference remains, despite the fact that boom recording is usually a far more physically involved and challenging activity. This suggests that technology has not successfully erased the body in location sound, even when discourses apparently seem to obscure it.

In terms of sound aesthetics, for Martin Cox, boom mics have a 'richer' sound than wireless mics. Comparatively, in his textbook for learners, Ric Viers describes notes how wireless mics give a 'close' sonic perspective, which means the shot can sound "claustrophobic" (2012: 67).²⁰ Interviewee Mark Lavery also pointed out that wireless mics run the risk of a 'scratchy' sound or signal interference if placed on certain costume fabrics. However, many also acknowledge that logistical constraints can at times impose the forced use wireless microphones. Even when there are concerns about potential technical

²⁰ Viers also points out an advantage of lav mics over boom mics is that they "help isolate the voice from the background" (2012: 67).

problems such as acoustic shadows,²¹ location sound recordists and boom operators are at times offered no choice but to record a scene exclusively with wireless mics. In his interview, Australian boom operator Mark van Kool noted that the amount of booming done on set is reducing due to changes in shooting styles with “multi-cam set ups” that use wide and tight shot camera set-ups simultaneously where it is “impossible to get a boom in”. Such changes to production shooting style, often a result of budget and time constraints, are likely to continue to influence the way in which location sound work is performed. These changes will also likely impact the employment of boom operators in the future. However, despite these constraints and considerations, booming at present continues to be a key role within location sound recording, and therefore also deserves critical attention to the implications of embodied boom work.

Theorising the way a boom operator performs his or her role becomes important for establishing boom operating as a cinesomatic embodiment. As stated above, the boom operator has the responsibility of using a microphone on an extendable ‘boom pole’ to capture dialogue as it is performed on set. Therefore, the boom operator is one of the few bodies on set to be physically in, or on, the perimeter of the focal performance space. It a highly physical role and, as this research reveals, is one that demonstrates the intricate interconnections of embodiment on a film set. Indeed, the embodiment of the boom operator reflects

²¹ As Viers describes, an acoustic shadow occurs when placing a lav mic on an actor’s chest: “An acoustic shadow is similar to a light shadow. An object blocks the source of energy, which reduces the energy beyond the object. Placing a microphone on an actor’s chest creates an acoustic shadow originating from his chin. The sound waves do not reach the mic directly. As a result, the voice will sound duller and flatter than if the mic is in direct sight of the mouth”(2012: 69).

a unique relationship to sound and narrative as it is unfolding on the film set. The interviews with boom operators conducted for this research attest to the fact that, beyond technical knowledge, boom operators develop and utilise a kinaesthetic empathy and hyper-awareness that becomes inextricably bound to the ways in which the boom microphone itself is manoeuvred. In this way, sound capture is a fluid dance between sound wave, sound source, and sound practitioner.

3.8 Moving Bodies: The Dance of the Microphone

Closer examination of boom operating reveals a corporeal similarity with other physical modes of performance. Boom operating is a role that uses often challenging physical techniques to successfully capture performance sound via a pole in as unobtrusive a way as possible. To be unobtrusive, the boom must not appear in the framed shot on camera, nor distract the actors from their performance, yet be close enough to adequately capture the sound. It is the relationship with the boom pole that renders boom operating a distinctive sound practice worthy of closer attention by embodiment scholars, for the boom operator is required to utilise the boom pole with dexterity, stamina and fluidity. James Currie argues that in many ways it is akin to other body disciplines such as dance:

Boom operating provides an entirely different set of experiences from sound recording and incorporates a unique set of features, both physical and mental. Where recording is, in the main, sedentary, boom operation has its roots in dance, balance and rhythm. It demands a good memory and a developing skill at understanding actors and their speech patterns as related to their movements within the frame. And as the boom operator is usually the physically closest person to an actor during a take and has probably dressed them with a radio microphone, the boom operator has to maintain a professional but sensitive approach and needs

to draw upon a deep well of social skills...The boom operator's job is to observe and sense the performers. To listen and then position the microphone or microphones to gather the best response from what is happening at the sound source....Most times the boom operator is the sound recordist's eyes and ears. (Zielinski & Currie, 2010: 7-9)

Currie's description reveals the extent to which boom operating is similar to location recording in how it requires sensitivity, and being 'tuned in' to others. However, the degree of physicality involved enables Currie to draw a clear link between boom operating and other embodied disciplines such as dance and music. This becomes apparent in the boom operator's ability to register and respond to rhythms and the movements of other bodies. Like Currie, in his guidebook publication for learners, Ric Viers also compares boom operating to dance: "Boom operation is all about using fluid movements, like a ballerina. Learn to sway your body without moving the pole....I call this 'The Dance of the Boom Operator'...whatever you have to do to get the mic in the right position. Inches can make all the difference between good sound and okay sound" (2012: 57). The description reveals booming to be a dance between gear and practitioner, and highlights the minute degree to which space and movement have an impact on recording quality.

James Currie makes a conscious move to shift how the role of boom operator is framed, by coining the term 'performance boom operator'. Adding 'performance' to the title argues that boom operating not only be perceived as technical role, but also one that is intimately tuned in to the creative and performative dynamics on set. As a practitioner himself, Currie is elevating role to be included in other categories of creativity associated with filmmaking, and this challenges the hierarchies of value in the film industries. He also demonstrates that this

term 'performance boom operator' is applicable in a dual sense. On the one hand, the boom operator captures performance, but additionally, Currie draws attention to the fact that the execution of boom operating can be paralleled to performance because of its kinship to other embodied disciplines such as dance or musicianship.

For Currie, being a performance boom operator “means having a particular state of mind, a vision of yourself and where you position yourself in regard to drama and the telling of stories...”, and critically - “beyond mere technical skill” (2010: 40). In these words it is evident Currie is speaking from within a industry which values those attributes that are seen as 'creative' or 'artistic', compared to “mere technical skills”. This reinforces the perspective that in an industry context, those production roles that are seen as 'merely technical' are under-valued, and therefore, so are the living bodies performing them. This is echoed by many of the sound professionals, including those interviewed for this study, who have noticed – and lamented - how their work and presence on set is (or isn't) valued. As Martin Cox reflected, “It's a really difficult job. There's no prestige to it either. Its kind of... 'ah, the boom guy'. It's a weird job”. Therefore, studies that seek to investigate and valorise the way in which these 'technical' roles incorporate and rely upon the creative embodied participation of practitioners are well placed to intervene and trouble this popular conception of location sound work.

3.9 Chasing Sounds, Avoiding Shadows: The Art of the Boom Pole

It was found earlier in this chapter how location mixers such as Jan McLaughlin and David Williams experience a corporeally felt relationship to actors during a

scene performance. Interviews with practitioners have found boom operators also feel such embodied connections, yet how boom operators are placed in relation to the unfolding performance significantly differs from that of the recordist/mixer. The goal of the boom operator is to physically occupy space extremely close to the performance, and to achieve a clean recording without appearing in shot or distracting performers. As Currie describes it, boom operating involves figuring out how to record dialogue “within the confines of their performances and movements, without intrusion upon, and with minimum compromise to the action by paying special attention to the actors’ movements and their relationship to the camera.” (2010: 38). This special attention includes keeping out of shot, being aware of casting shadows, appearing in reflections, and “never obstruct[ing] the eye lines of the actors or the action while recording” (ibid).

The special requirements of the boom operator was also articulated by other practitioners such as Martin Cox, who noted:

You’re the only person on set besides the actors that is in front of the camera. But you’re not allowed to be seen or heard. And you have to swing, you have to dangle something just inches away from someone’s head without distracting them. And also, you have to pass a boom pole and a microphone through a light source without causing shadows. And you’re the only person who can’t see the camera.... So you have to be very aware spatially.

Therefore, the boom operator’s body is in a perpetual paradox - being required to be present, and yet simultaneously ‘invisible’ to all others on set, never revealing his or her body or microphone in the recorded picture. Interestingly, in his guide book ‘The Location Sound Bible’, Ric Viers articulates the relationship the boom op must have with the boom pole: “It should become part of his

anatomy. The boom operator should be one with the boom pole – a single life form whose sole purpose is to gather the best dialogue possible” (2012: 47).²² Gendered language and assumptions aside, this advice points to the process of audio equipment becoming incorporated into the bodily schema of a person.

A cinesomatic model of boom operating foregrounds how boom operators are corporeally connected to the unfolding performance on set. In an interview, Australian boom operator Mark van Kool describes how people in his role work in tandem with the performers in focused kinaesthetic ways:

When I’m reading the script I tend to take on their characters. And I’ll be reading their lines and I’m thinking, ok I’m that person, and then I’m that person there. As you get used to working with actors, you get used to how they respond to things, how they respond to dialogue that’s been given so you tend to know if they’re going to jump and be quick or if they’re going to be slow. I watch their facial movements to see when they’re going to start talking so I know I’ve got to swing the boom to them and things like that...The boom, it’s like an extension of your arms. And [you have to know] how you float that around a set in a way that isn’t going to distract the actors, but you’re going to get everything with it. You’ve got to have a good memory. Because you’ve got to remember pages and pages of dialogue. I couldn’t read a scene and recite it to someone, I don’t remember it like that. But as soon as the actors start talking, I know who’s going to talk next.

In this passage, Van Kool illustrates a process of internalised rehearsal that begins while reading the script, and there is an interesting parallel evident between boom operator preparation and an actor’s preparation. Importantly, van Kool describes mentally marking out an embodied relationship to the scene before shooting, much like anticipating and memorising choreography. van Kool

²² Viers also described booming positions as the ‘Booma Sutra’ (2012: 52). While there are no other sexual references in his work, it is interesting that the description of embodied technique in this manual be linked to karma sutra, and interesting further study would be to investigate how language is deployed in professional discourse, and how these reinforce or challenge assumptions about the gender, ethnicity and sexuality of professional sound people.

demonstrates a kinaesthetic connection to the actors while they perform, working the boom in an empathic way that draws on an awareness of scripted lines, as well as the highly nuanced parts of an actor's performance.

As van Kool's account also demonstrates, boom operating presents an interesting paradox of placed embodiment and presence on set. The preparation for boom operating is in some aspects in tandem with the actors, yet the practitioner remains inconspicuous. The boom operator exists amidst the performance space and players, moving in rhythm with them, learns the lines and performance cues through scripts and rehearsals, yet is required to be all but invisible to the performers and the camera. Practitioners describe the need to be sensitive to actor's bodies as the performance vessel, yet the body of the technician is obscured. The boom operator is rendered the invisible and inaudible performer in the space. As van Kool notes:

You've got to learn to work with them, it's not them working with you. I try and work in a way that they don't even know you're there on set....The thing is not to be doing your job in a way that's going to distract them from doing theirs...giving the actors their freedom to do whatever they want to do.

Such a depiction indicates how the boom operator becomes the silent witness for sonic capture, yet remains inextricably bound up in the time and space of performance, participating in the narrative world and translating it sonically.

In investigating boom operating as a physicalized and not merely technical profession, it is pertinent to identify how certain bodily attributes – and bodily discourses – become mobilised as central to the successful performance of the role. Practitioners highlighted two key physical elements of boom operating, the

first of which relates to endurance. As boom operating is a highly physical occupation, practitioners emphasised that certain booming technique were better than others to conserve energy, maintain stamina and flexibility on a minimum 10-hour working day. Learner guidebooks and online communities alike share tips about bodily techniques. On the sound community forum website *Sound Design Stack Exchange*, practitioner Andre Feldmann addressed the question ‘How To Tackle Long Hours of Boom Operation’, sharing that sitting down when possible, resting the boom on the hands rather than holding it, and employing the skeleton, rather than muscles, to take the weight of the equipment were helpful techniques (also cited in Duckett, 2016, 47-48). In a similar vein, Australian interviewee Martin Cox also delineates the difference between technique and strength, and notes that an ‘ideal’ positioning for the boom operator is rare:

It’s a lot about technique. It’s not really about strength. It’s how you stand and the positions you get yourself into. You can boom for a lot longer if you’re in a good position. A really good tip is to be using your skeleton rather than using your muscles. To boom like this [arms held at chest level] is a lot harder than it is to boom with your arms held straight up. You would think it would be opposite, but you can lock your skeleton in so you’re resting on your bones. And this is taking the weight of the boom....You can hold that for a lot longer. Stance is definitely important. I would usually have my legs fairly far apart just to be stable....To be totally honest, you are very rarely in that perfect position, because you always have to work around lights, angles, where the actors are, the framing, so often you’re really uncomfortable.

As Cox and Feldman show, bodily techniques are important in how they facilitate the stamina and endurance that is concomitant with boom professionalism. In these perspectives, embodiment is recast through these adaptive strategies that trades muscular ‘strength’ to intrinsic skeletal support. Practitioners, especially male practitioners, drew on the language associated with masculine strength in

talking about the stamina and endurance required for boom operation. The correlation between codes and practices of masculinity were evident in how stamina endurance was framed by practitioners, particularly male practitioners. A worthwhile future study would be to investigate how the bodies and lived experience of these practitioners are negotiated and self-policed according to the cultural assumptions about male bodies, physical strength and endurance.

The second critical physical element of booming as described by practitioners relates to its improvisational and creative aspects that emerge as the production unfolds. Feldmann describes how booming combines intense bodily and spatial awareness with flexible manoeuvring skills, advising beginners to “Grow eyes in the back of your head” as the best boom operators in the business are able to walk backwards keeping eyes on the mic and actor (cited in Duckett, 2016:51). For Australian boom operator Mark Lavery, the creative art of boom operating is a dance with the boom pole and surroundings:

You have to watch for putting shadows on people and having reflections in glass. Once you’ve done it for a while and you get quite good at it and then you can get creative, you have to swing the pole around a ceiling fan to get the line and then come around. It’s not as simple as plugging everything in and hanging the mic over the and then you’re done. You can get quite good at it and learn different ways of getting around problems.

In Lavery’s account, embodied experience means maintaining a sense of both spatial and corporeal fluidity over the course of a take. Further, there is a direct correlation between embodiment and creative problem solving, as Lavery describes the corporeal learning of boom pole management over time and with experience. Considered together, these two key aspects of physicalized technique for boom operating are significant for reconceptualising the role alongside other

bodily-driven modes of performance as well as other 'creative' bodies participating in the performance capture. Further, the professional discourses around these physical techniques give insight into how the 'successful' booming body learns how to enact its own endurance and stamina.

Conclusion

By directly addressing the lack of a theoretical literature concerning location sound for film, this chapter has investigated practitioner accounts of embodied experiences within location sound practice in order to contribute to the development of a film sound theory that adequately accounts for the bodies of these practitioners. Such an intervention is especially timely, as it is noted that this particular area of filmmaking has not been thoroughly considered in terms of embodiment. While not denying the relevance of technology in this professional role, the approach of this research has provided an alternative account in which the embodiment and lived experiences of the practitioners are recognised and analysed.

In fashioning a theory of cinesomatic embodiments within film sound production, this chapter took into consideration some of the ways in which embodied experience and practice are critical to location sound work for film. Research questions traversed how physical distances are negotiated as well as how a multiplicity of performing and non-performing voices are corporeally managed via technology and – most importantly – the embodied presence and participation of the location sound practitioner. It was shown how location professionals are the pivotal 'ears on set' within the aural community of an on-

set film production, and how the work produces corporeally connected aural intimacies between the practitioner and the performers. This chapter also demonstrated how location sound work establishes a distinctive relationship to the unfolding performances, and presents a model of sonic embodiment that crosses time and space. It was shown how certain physical techniques relevant to each location role, and identified the ways in which this work can be compared to other body-based disciplines. In this way, the limited industrial and scholarly framings of location sound roles were challenged. In the following chapter, the discussion moves into postproduction where post sound roles are examined and analysed through practitioner accounts, in order to further develop a theory of cinesomatic film sound.

Autoethnography #2

Project: Children's animation TV series 'Nori Roller Coaster Boy'

Location: Park Road Post Foley Studios, Wellington, NZ

Passing through the double sound proofed doors into the Foley studios carries with it a sense of self-consciousness. I am aware recordings might be happening, and I feel the pressure to be stealthy. Every noise I make becomes highlighted to my own ears. I am guided through more doors into the Foley stage, where the immediate impression is a sense of a personal soundscape that's highlighted. The acoustics of the room are so dead that every movement becomes a sonic texture pressed up to my eardrums. I rub my fingers together, and notice how crisp the sound is, how unnaturally highlighted it becomes. My body's own soundscape is projected and yet intimate. I am a little daunted by the space and I see a square glass window through to the recordists' console mixing desk. But I cannot see him. The room contains every type of bric-a-brac, a collage of props. It smells musty, like the smell of a garage, or a storage space. The room is lined with padding, and a variety of floor surfaces are set up on the ground. I try to visually take it in, but I am arrested by the strange highlighting of sounds as a result of the acoustically dead space. I can't resist moving my feet, listening again to the crunchy scrape, delighted by how foregrounded it sounds, enchanted with the sense of sonic presence I have not had before. My posture changes, and I bend my knees as a sense of child-like fun creeps in. Slide, tap, crunch, scrape. I see a microphone is set up nearby, pointed to a cluster of wooden blocks, surfaces and toy cars. The Foley team crouch down and begin arranging their props for the record. For the first part of the record, I am seated in the mixing/recording suite, listening to the recordist giving feedback to

each record cue. He communicates to the performers in the studio via wireless microphones, which are in their ear. They are matching rolling sounds to the rollercoaster character. There is a discussion of microphone placement to get the right quality of sound. They break scene sections down into each character's movements. Each little turn, each little movement, gesture or reaction of the character must be marked sonically. One Foley performer is trying to get different articulations of coin bounces. They are finding it challenging, because in the image, the coins are bouncing to a law of gravity that only exists in animation. A tiny shift in the microphone placement produces a different sound. They change the direction in which the prop passes the mic. They are considering texture of sounds, length of sound, energy, quality – attack, technical, mic positioning. Sitting in the mixing room, I feel like I am listening to a live soundtrack. A creeping growl is heard. One performer's stomach spoke. They redid the take. After a break, I am allowed to re-enter the studio and attempt the Foley performance myself. For something so unintimidating as a toy car and a wooden block, I am very nervous and self-conscious. I am aware that the recordist can hear every micro movement I make, every creak of my body, every breath I let out. Except, the micro sounds of my body sneak through. I am told through the headphones that my stomach growled. I did not hear it, or even notice it. I apologise, very embarrassed. The microphone is pointed at the prop set up, and I know it has high gain, so what I am hearing with my ears is not what the microphone is hearing. I am watching the monitor for a cue, and I miss it the first couple of times. I find myself memorising the visuals and trying to anticipate the character movements I know are coming. I over-compensate and come in too early. Start again. This time, my nerves find expression in over-exaggerating a movement and the sound is too loud and clunky. It is a

strange experience, playing with children's cars yet trying to achieve an elusive sound quality. There is a vibration I am creating from pressing the cars down too hard, which I cannot hear, but which means I have to keep trying. I am feeling frustrated by my lack of experience. My body does not know how to make these props speak to the microphone. I know I am lacking the tacit knowledge of an expert, but I cannot repair it simply by knowing this fact. My sense of focus increases, as my attention moves out of my body and onto the screen, and down into the props. The recordist tries to direct me, but I sense he is holding back, possibly he is afraid of offending me or discouraging me because I'm a visitor, and an obvious novice. After about 6 attempts, I relax a little more and think less consciously. I try to imagine I am Nori Rollercoaster Boy, and his movements are as natural as mine. I try to imagine I am one with him, in perfect sync. The more I relax, the better the takes and there is more flow to the process. Finally they tell me we get a usable take, although I suspect they may re-record it after I have left.

CHAPTER FOUR

ACOUSTIC ANATOMIES: EMBODIED TECHNIQUES OF POSTPRODUCTION SOUND PRACTITIONERS

*The recognition of a person in the performance of a skill...is intrinsic
to the understanding of these matters.*

(Polanyi, 1967: 30)

4.1 Introduction to Postproduction Sound

This study argues that film sound scholarship needs to provide a theory of professional film practice that accounts for the embodiment of the practitioner. In the previous chapter, location sound work was explored through this theoretical lens, and it was argued that this area of production sound has been significantly overlooked in scholarship, and demonstrating the corporeal ways in which the location practitioner negotiates, experiences and captures sound on set. Such a move was a tactical intervention against literatures and discourses that obscure the bodies in the work, and frame it primarily in terms of the technology. This chapter extends this argument into an investigation of postproduction sound roles, including Foley, sound design and editing. By providing new practitioner accounts of these roles that specifically canvas aspects of embodiment, this chapter demonstrates how it is a critical factor in the production of viscerally rich and provocative sound work for film. This chapter draws on interviews conducted with Foley artists John Simpson of Australia, Jonathan Bruce, Amy Barber, and James Carroll of New Zealand, and Shelley Roden of the United States, as well as sound editors and designers Justin Doyle, Brent Burge, Nigel Scott and Tim Chaproniere of New Zealand and Chris McCallum, of Australia. Through these interviews, these embodied experiences

of postproduction sound practitioners are demonstrated to be complex entanglements of sensory input, affect, memory and meaning, therefore key to assembling a theory of embodied film sound.

Postproduction is the final phase of sound preparation for a film, and involves a number of roles that collaboratively craft the soundtrack into a completed work, in tandem with the final picture edit. Yet the term ‘postproduction’ is in some ways a misnomer. It is incorrect to imply that postproduction sound does not begin until *after* filming is completed, nonetheless the term ‘postproduction’ remains, and broadly refers to the roles whereby sound is designed, recorded, re-recorded, and synchronised to the cut picture. Depending on the project, sound designers can be brought on before and during filming phases to prepare bespoke recordings that will eventually feature as part of the custom sound design of a film.²³

In providing detailed accounts of experience whilst performing a professional role, my intention here is not to provide an ethnographic study of ‘technological skill’. Neither is this approach intended as a sociological or anthropological analysis of ‘working practices’, although some thinkers from these disciplines do inform the theoretical perspectives underpinning this work. Rather, this discussion is interested in understanding how, and how much, this work invites and relies upon the body as a sensory archive and experiential pilot in order to

²³ This is very much depending on the size and budget of a production as well as the director’s choices. Most of the practitioners interviewed for this study were employed on films that had very large budgets for the sound department, and allocated time for bespoke sound design. Post sound teams also have the responsibility of administrative sound work, such as extensively logging all daily production sound reels as they arrive.

produce emotionally rich sound for film. Drawing these findings from practitioner accounts, the bodies of these professionals – and their rich lived experiences – are foregrounded. Further, as with the previous chapter, a scholarly focus on embodied experience directly challenges those approaches that prioritise and fetishise the technology and tools over those bodies involved in sound production. While postproduction sound work does require interfacing with technology including recording gear, Digital Audio Work Stations (DAWS)²⁴, mixing consoles, and props, the focus here will be on how practitioners draw upon their own embodied knowledge, memory and senses to achieve the sonic outcome. This framing reveals an amplified corporeal engagement with sound that is facilitated – but not overly defined – by the technology itself.

Within the film industry, there are tensions around how postproduction sound work is framed and acknowledged. In a similar vein to location sound as discussed in the previous chapter, these tensions speak to conceptions and assumptions regarding what is considered ‘artistic’ and what is considered ‘technical’ work. Further, it becomes apparent that ‘artistic’ is conceptually conflated with creativity, and is intimately tied to how work – and therefore workers – are socially and industrially valued. Sound production has been designated a technical craft by the Director's Guild of America and the Academy of Motion Picture Arts and Sciences, which prevents editors and mixers from receiving “above the line” artistic credit” (Wright, 2011: 34). Such a framing creates divisions and conflicts between certain professional roles, and perpetuates cultural hierarchies of aesthetic value that legitimize certain

²⁴ Digital Audio Workstation – electronic device and/or software interface used for working with digital audio.

‘artistic’ activities over others. In his overview of Hollywood working practices for sound professionals, Benjamin Wright noted that, “unlike composers...sound editors and mixers do not have the benefit of being considered artists in their own right” (2011: 34). Indeed, celebrated sound designer Randy Thom²⁵ has also voiced his concerns over a technical/creative division by stating: “It’s a terrible tragedy that sound people tend to be thought of as technicians. We need to avoid being pigeonholed as engineers and only engineers” (cited in Wright, 2011: 30).

This industrial framing of postproduction sound work also impacts how production workflows and practices are facilitated, which in turn impacts upon the embodied experiences of professionals. Some practitioners argue that this lack of artistic recognition equates to less time allocated for a process of creative experimentation and collaboration during postproduction. Former Foley artist Vanessa Ament (2014) contends that this has roots in industrial systems that do not promote collaboration across departments, or enable periods of creative distillation. For Ament, the postproduction sound process is flawed due to a ‘money-conscious sensibility’ that means post sound professionals in different disciplines work simultaneously and are offered little time to reflect and refine: “This workflow practice is one key reason why sound professionals are seen as technical workers, rather than the creative artists they actually are” (2014: 151). Apparent in Ament’s words here, as well as Thom’s above is an underlying assumption that technicity and creativity are separate, revealing the differing cultural value attached to each term. These assumptions also have implications for the ways in which postproduction sound practitioners position their work,

²⁵ Thom has been widely recognised for his work on iconic sound effects films including *Apocalypse Now* (Coppola, 1979) and *Star Wars: Return of the Jedi* (Marquand, 1983).

and is arguably one reason why discussions of technical equipment and technique dominate literature and public discourse on postproduction sound.

This research seeks to intervene in a hierarchy of value that would devalue or minimise sound work and workers. As argued earlier, providing practitioner accounts of postproduction sound work that focus on the embodied dimension of the work does not binarise creativity and technicity. It does, however, position the embodied experiences of practitioners as of central importance to those both creative and technical aspects of the work. This challenges technical discussions and framings that disembody practitioners through focus on the gear or tools, and also challenges assumptions that sound work is primarily technical, and that technical practice and artistic (or creative) practice are mutually exclusive.

Indeed, as Wright has pointed out:

...most editors and mixers perform functional tasks - adjusting volume levels, cutting a sound effect, recording a gunshot - their world is about creativity, artistic choices, and, in the case of the Foley artist, performing. These conceptions of sound track construction as art-making practices provide the necessary critical foundation on which to build a history of modern sound technique and social organization. (2011: 30)

The research presented in this present study demonstrates the ways in which this work is irrevocably infused with the embodied realities of those working on the sounds. Paying attention to the ways in which the bodies of the practitioners come to critically matter in the sound work problematizes industry perspectives that equates sound work with technicity rather than creativity, and which marginalises sound professionals as below-the-line technicians, rather than embodied participants co-creating a narrative world.

4.2 Sounds in Motion: The Corporeal Art of Foley

GUARD
Ridden on a horse?

KING ARTHUR
Yes.

GUARD
You're using coconuts.

KING ARTHUR:
What?

GUARD:
You've got two empty halves of coconuts
and you're bangin' 'em together.

(Monty Python and the Holy Grail, 1975)

Foley is a highly specialised branch of postproduction sound effects. The Foley sound effect is a bespoke performance of the sounds that are primarily attached to a character's body. For this reason, Foley is highly significant for embodied theories of film as well as film sound. In terms of critical enquiry, Foley has only relatively recently begun to be examined in depth by emerging scholars (Ament, 2014; Keenan & Pauletto, 2017; Pauletto, 2017; Lewis, 2015; Wright, 2014), some of who were Foley practitioners themselves. Sound scholars Jay Beck and Tony Grajeda noted over a decade ago the near absence of critical discussions of Foley (2008:19). Yet this persistent critical paucity is puzzling, for as Mack Hagood asks: "how much we can know about film without interrogating Foley, the postproduction practice in which off-screen bodies perform sounds that the audience attributes to the bodies on-screen?" (2014: 99).

The industry perception of Foley amidst other areas of sound work has implications for the way that Foley is framed, discussed and valued, both by scholars and the wider sound community. One argument put forward by former Foley artist-turned scholar Vanessa Ament is that the scarcity of Foley-specific literature reflects the excessive focus on other areas of film production, such as cinematography or composition. Additionally, Ament argues that this reflects an industry-based misconception about the work of the Foley practitioner, who until the 1970s, was not even recognised as ‘artist’ in film credits. Ament addresses this in her 2014 doctoral thesis, when she notes:

The mistaken assumption that film sound professionals—mixers, editors, and Foley artists—are only technical craftspeople and not also creative artists continues, as evidenced by their status as below-the-line workers, and by the wealth of research focused on the technology of film sound...discussion of the designer is often relegated to the re-examination of those few “great men” whose names fall easily off the tongues of film sound scholars and fans. (8)²⁶

Her words here also point to another key reason for exploring Foley – by lessening the focus on both technical mediation and celebratization of sound design’s famous few, the (unseen) body of the Foley artist, and the role of embodiment in this work, can become prioritised and critically examined in terms of academic theory. Further, I argue that phenomenological film sound theory becomes much richer when analyses take into account the multiplicities of bodies involved in the production of a film work, such as is evident in the production of sound effects. This promotes the democratisation of film work, whereby all bodies that participate in sound production are equally valued.

²⁶ Ament’s point about gender is highly relevant, and while unable to explore at length here, an area of further study would be to critically examine how gender factors into which sound roles are esteemed and celebrated, particularly in terms of discourses of ‘creativity’ and value. Some scholars such as Melanie Bell (2017) have already suggested that one reason for Foley’s critical neglect is due to the fact that many Foley artists were, and continue to be, women.

In assembling a theoretical discussion of Foley, this chapter draws on the existing Foley literatures cited above, which identify and explain some of the key features of Foley work. This discussion examines how a performer's bodily techniques and knowledges are used to achieve bespoke sound performances. As many practitioners demonstrate, the embodied element of the performance often operates beyond critical self-reflection or analysis, and awareness shifts and hovers between the body, the sound and the image guide track. This points to the epistemological challenge of researching bodily experience, particularly a sensory performance that is without a structured language or notation. Because Foley sits at the nexus of sound and body, of listening and producing, understanding and meaning are created *through* the body, and transmitted to other bodies who register and inhabit these sounds in different times and places. With this framework, it is necessary to draw upon those scholars who examine the phenomenology of performance – including musical performance (Peters, 2012) and dance (Parviainen, 2012) – to examine further the embodied depths of Foley work.

Foley is a physical art of sound production, where the skill of the artist translates to sonic affective power. Foley is beginning to find a place in scholarly discussions of film sound, particularly amongst emerging scholars. Benjamin Wright (2014) points to the implications of Foley both as a means of adding value to a film project, and also in terms of conceptualising the work as a performance art:

Modern Foley practice and the professionals who design and perform direct-to-picture effects carry out duties that now increasingly emphasize the dramatic texture of an otherwise ordinary sound. In addition to

providing synchronized effects that serve the picture, modern Foley practice might therefore be considered as a performance art. In turn, the social and functional tasks of the Foley artist have expanded in ways that reflect their status as sound effects creators and performance artists. (205)

The skill in the performance of the sound has significant implications for the quality and style of the sound itself, and represents the nexus between moving bodies, sounds and narrative meanings.

Foley forges a link between sonic reality and visuality, in that foley actively co-produce aspects of visual content via sound. The foley artist becomes a key player in the creation of a phenomenal reality of visual objects. The link between performance, sound quality and meaning is also articulated by sound designer-turned-scholar Mark Ward, who argues, Foley has the “capacity to influence the phenomenal quality of visual objects” and can “supply or suppress a visual image’s apparent tactile or gustatory qualities. Sound may be manipulated to cause the visual image to appear crisper or brighter” (2015: 159). This points to the fact that Foley work is an art of *nuance*, sculpted by moving bodies of the performers, where, as this research will demonstrate, modulations, shadings and colours of sound as intentionally performed by the Foley artist informs, expresses and shapes contents of the image. As Matthew Lewis points out, “In the field of film-sound theory, analysis of the use of Foley generally emphasises the power of the processes to reinforce the visual presence or actions of the characters presented on the screen” (2015: 103-104). However, while visual content is undoubtedly significant to both foley as practice and audio-visual

storytelling, this thesis asks scholarship to go further than reducing Foley to reinforcing imagery alone.

There are limitations in discussing Foley in terms of how it supports the visual story unfolding on screen. Such a 'functional' perspective on Foley misses the implications for embodied film theory. This is also why a phenomenological approach offers the opportunity to intervene, and to expand upon visual-focused discussions. Foley sound work - provided by living, embodied performers - provides a phenomenological depth for the bodies of characters in a film. Sandra Pauletto describes this in terms of a feeling of engagement and identification:

...not just of stepping into a story, but literally stepping into another body, is made possible at a sensorial, tactile level through sound. Foley sound is the main sound-design vehicle through which we feel the characters' actions and interactions with the storyworld and consequently his/her emotions. (2017: 342)

Here Pauletto acknowledges the sonic phenomenological depth facilitated for audiences by Foley. Yet I wish to bypass the focus on audiences and the moment of 'reception', and instead reiterate the significance of a lived performance for the practitioners. Film sound scholarship needs to expand discussions of phenomenological depth to include practitioners, for it is also here that sound production becomes an embodied unfolding.

In a traditional Foley set up, there is also a third participant in this sonic embodied loop, in the form of the Foley mixer, who is listening to the record external to the sound stage. This person managing the recording gives specific feedback to the performer for achieving the right sound quality, and can identify technical issues such as unusual or unpleasant frequencies not heard by the

naked ear, but captured by the sensitive microphones. In this way, Foley mixers are also an active participant in the performance, yet are removed from the space, and privy only to the sonic information as it occurs. In a traditional Foley set up, the Foley mixer generally has very limited visuals of the performer on the sound stage. Communication between artist and mixer is therefore conducted almost exclusively along aural lines, with the Foley artist speaking into their recording microphones, and the mixer able to speak directly into the performer's headphones.

It is important to outline here how Foley is a performance that relies on corporeal techniques, akin to dance or musical performance. The Foley artists interviewed for this research offer insights into the ways in which the work is skilled, technical, intuitive, musical and corporeal. Foley performance requires processes of enactment and readjustment, suggestive of a model of biofeedback between performer body and instrument – or in this case, Foley prop. As these interviews will reveal, the interaction between performer and prop is comparable to musical improvisation, where tacit knowledge becomes a honed skill central to efficiently and effectively performing Foley. As Keenan and Pauletto note, Foley artists “acquire skill in perceiving the affordances of objects (Gibson 1977)” where performance involves “actively listening to the sound produced, and the sound simultaneously affects the trajectory or intensity of the action performed. This feedback loop of performance, listening and adjustment creates the embodied knowledge about everyday objects at the heart of Foley” (2017: 16). The following discussion will explore in greater depth the ways in which Foley skills are internalized and externalized in a performance context.

4.3 Sounding the Body, Embodying the Sound: Nuanced Foley

At the centre of the tacit knowledge of Foley is a learned awareness of the performative capabilities of props, and how to achieve certain sounds through directed performance. Sandra Pauletto correlates musical performance and Foley performance when she notes: “The Foley artist, like a violin player, has a tacit and embodied knowledge of what movement, what muscle effort, what pressure, can produce the appropriate sound with the appropriate expression” (2017: 346). In other words, the Foley artist must develop a musical sensibility for the use of ‘non-musical’ objects, and this sensibility is learned and articulated through the body of the performer.

Concomitant with this tacit sensibility, another key learned skill of the seasoned Foley professional is also the assessment of a sound’s timbral qualities such as decay and attack, and corresponding physical adjustments to the microphone and performance to capture the desired sound.²⁷ The fact that this can be a process of trial and error is articulated by Australian Foley artist John Simpson, who recalls the challenge of producing the right sound for the titular character in *King Kong* (Jackson, 2005):

We tried all sorts of [props] for [King Kong’s] feet and hands and it just ended up being my feet and hands making those sounds. And we just miked them extremely close, literally an inch away every time. We had the mic on a boom pole following me around so I didn’t go off mic. They gave it the size and the weight. Because to make it big, you can’t slam your foot down because it gets a horrible attack to it. It’s like hitting a drum really hard - you just get that crack of it. But if you hit it slowly, you get this

²⁷ As Keenan and Pauletto also point out in their discussion of enactive sound design, bodily action in sound performance is also a relevant research area in the design and development of intuitive and expressive digital musical instruments (DMIs). Also they argue that “designers should tackle the problem of enactive sound design, and create sound always considering how it enhances multi-sensory experience, simultaneously influences each movement the user makes in an interaction, responds directly and continuously to a user’s movement, and engages their willed action – that is, make them aware of the sonic interaction so that they can acquire new bodily knowledge”(2017:19).

whoosh, and that's what we were after with the feet. So there's no stomping down, it's just putting [down] as heavy as you can without stomping. It's quite tricky.

Simpson demonstrates here the degree of technical knowledge and corporeal awareness and sensitivity needed to produce the right sound for the recording. The learned ability to control the unfolding of a sound in this way, recorded at close range with highly sensitive microphones, reveals a practiced nuanced knowledge of the body. This nuanced musicality inherent in Foley performance is therefore not limited to the body-prop relationship, but extends to the way Foley performers relate to the microphones capturing the performance.

This performer-microphone relationship demonstrates how Foley performance is also a learned spatial and technical awareness. In his interview, New Zealand Foley artist Jonathan Bruce reveals how positioning of the body in relation to the microphone is a key skill. He describes the relationship between performer and microphone, one that requires both an acute sense of physical movement, and a practiced technical awareness for that particular microphone's qualities relative to the space, as well as how the sound waves will perform in that space:

Quite often you'll start with a straight microphone pointing directly at source, and then from there you'll go, this is too tappy, this is too bright, this isn't working. And the mixer doesn't want to have to do everything on the computer. Being able to communicate with the Foley artist and then that Foley artist being able to somehow modify that sound by shifting the mic or changing their shoes or putting something down on the ground.

His words also reiterate the third participant – the Foley mixer – in negotiating the performance via aural participation.

In addition to the question of controlled movements, embodied capacities associated with musicality also become important for a Foley performance. This suggests an interesting contrast between the ‘seasoned’ skills described above, and what are perceived as ‘inherent’ aptitude or talents that are useful for the Foley artist. As Sandra Pauletto asserts, Foley artistry combines abilities in dance, acting and musical performance, requiring a “natural sense of rhythm and tempo as well as the ability to reproduce subtle movements” (2017: 343). Interview participant Jonathan Bruce elucidates some of these key skills in which the Foley artist must be able to control the involuntary reflexive functions of their body, and yet negotiate a performance with this temporal awareness:

[T]iming is important as well...being able to watch an image and recreate it reasonably accurately is important because it means less editing time. Being able to watch it and do it. Breathing’s an interesting one as well because a lot of people don’t understand. There’s a huge amount of people who are interested in Foley and want to do it and come in and think this will be great, and then can’t shallow breathe. You really have to be able to monitor your breathing.

The breathing issue identified by Bruce is critical for the Foley artist because, ironically, while their movements are intended to bring phenomenal life to bodies and objects on screen, they must be able to ‘erase’ their own sonic presence as a living body for the sound capture. While this paradoxical absence-presence of the Foley body will be discussed further in the following chapter, it is suggested here that Foley is a performance that enacts its own effacement. Further, the invisibility and inaudibility of the Foley body also becomes pertinent when considering the industrial and aesthetic framing of Foley work, and their positioning as below-the-line sound practitioners.

4.4 Audible and Inaudible Bodies: Locating the Artist in the Foley

Despite this (attempted) erasure of corporeal presence, I argue that there still remains a cinesomatic connection between performer, sound and film. This is in line with scholar Deniz Peters who argues that the act of making a sound, whether with the body or an instrument retains “...a direct, visible, audible and tactile link between the human making it and the temporal, timbral, and spatial organization of the sound made” (2012: 17). Configuring the musician-listener relationship in corporeal terms provides a useful parallel to Foley work. Peters asserts that “one can hear something of the human making the sound in the sound, or, to appeal to Roland Barthes’ frequently quoted notion of ‘grain’: one can hear the musician’s body in the music” (ibid). Interestingly, this also points to a tension within accepted wisdom and aesthetics of mainstream filmmaking practice – namely that sound recordings must be as ‘clean’ as possible. However, some scholars such as Peters (2012) argue that the most effective and moving sounds still bear the traces of a focused and concentrated *expression*. In other words, while aesthetic conventions do not allow audible evidence of the body of the Foley performer, nonetheless the body communicates itself nonetheless, in subtle corporeal communications. For Peters, this bodily presence in performance can be described as a performer’s “individual and idiomatic playing gestures” as well as “texture, physiognomy, tactility, and breathing” that can be heard by listeners (19).

In problematizing Foley as an ‘invisible’ bodily discipline, there are also interesting parallels between Foley and dance that reinforce a cinesomatic connection between performer, sound and narrative. Foley performance also

involves learning movement sequences in a choreographic way, utilising bodily senses such as muscle memory and proprioception. The interpretation of the materiality of objects involves a developed kinaesthetic and sonic sensibility. For the Foley artist, 'reading' an object for its sonic potential means developing a sense of aural tactility, or sonic-haptic perception. This links to what dance scholar Jaana Parviainen noted about 'tactile-kinesthetic intelligence' which involves the ability to control bodily motions, and to skilfully handle objects, and work together when the body is used for functional and expressive purposes: "Our kinesthetic system, which monitors the activity of these regions, allows us to judge the timing, force, quality, and extent of our movements and to make necessary adjustments in the wake of this information" (2012: 77).

The tactile-kinaesthetic intelligence described above demonstrably comes to matter in Foley, wherein the learning and enacting of sounding props becomes central to the improvised choreographies of this type of performance. Indeed, New Zealand Foley artist James Carroll articulates this connection between dance, musicality and storytelling directly through his account of Foley performance:

It's really bad for my ankles, but I walk on the outside edge of my shoes. Which is terrible and will result in me breaking an ankle one of these days...with feet, more weight is what you want. You never want it to sound tappy and clicky, because it doesn't translate. Even if that's what it sounds like in reality, you've got to put that out of your mind. You've got to go bigger than what it is on screen to make it sound good. We did a film recently that involved lots of big battles and action...throwing props, fists, darting in and out, jumping, rolling, falling. That's all got to be broken down into small little parts and... So: [the character] is going to go – step, step, slide, kick, step, step, and slide - okay. You need to perform it a couple of times and make sure that's right. In a fight scene, you're taking a small chunk. And you've got to remember – character goes: *lunge, lunge, spin*....A lot of it is listening to something and then emulating it.

Carroll's description reveals a process of bodily memorisation, which includes learning choreographed cues, as he internalises the movements required for a complex Foley scene. His words highlight the knowledge that prop selection is critical in order to obtain the right sonic performance, especially as Foley sounds need to be larger than life, in order to live alongside the image track. Further, Carroll shows how a Foley artist's sonic awareness is directly tied in to the physical techniques employed during the performance in order to get the desired sound. These insights reveal how the sonic embodiment of the Foley artist remains present in the produced work, and the 'corporeal trace' of this physicalized performance is realised through the production of these bespoke sounds.

4.5 In the Skin of Experience: Growing the Sonic Vocabulary of the Body

Practitioner accounts in this research suggest that Foley may be theorised as a corporeal language, in which aspects of performance and bodily skill become an embodied lexicon. As with all learned performance skills, level of experience plays a critical role in the ways in which the performer will approach and execute their work. Adrian Curtin (2011) noted that in terms of Foley specifically, 'skill' was generated "...through the practice of designing and building sound effects" and that performance methodologies were "usually passed between practitioners through practical training or apprenticeship" (cited in Keenan and Pauletto, 2017: 17). US-based Foley artist Shelley Roden makes this distinction clear in terms of developing a corporeal lexicon that shifted and deepened as she became more experienced:

When I became a better Foley Artist, I had developed a skill for listening for what the mic was hearing and an ability to change the slightest sound of my foot fall or hand grab or whatever I was manipulating to intentionally play up a specific sound that would come through the microphone in a pleasing way. Also, I could tell the difference between performing for the direct mic or the room mic and I could distinguish between what the mic would consider an ugly sound and a pleasing sound. My sonic vocabulary or ability to "play" my instruments increased along with an awareness of how each sound I was creating might fit in with the sound effects, dialogue, and music that was simultaneously occurring. With this new skill, I could be much less literal with the tools I used to create a sound. For example, I recently did not have a Walkman and headphones on hand for a cue, so I used an old boxy remote with a pen and a plastic nail buffer to sell the sound of the Walkman moving on a character's hip as he walked. My awareness of my body has evolved with experience. In the beginning, I was overly conscious of my body because I was trying to will it to do something that it was not used to doing. Twenty years later, I allow the muscle memory and the intelligence of my body to move on its own so that my brain can simply focus and listen. It is an awesome place to be. Anyone who has excelled at a sport or excelled at any physical art form has felt this. If something is not working, I usually can tell the instant it occurs.

Several elements intrinsic to embodied skills of Foley performance become apparent here and worth unpacking below. Firstly, Roden, like the other interviewee Foley artists Jonathan Bruce and John Simpson, describes the nuanced knowledge the Foley performer employs when working a sound effect in conjunction with the microphone. In this way, the microphone becomes another active participant in the whole Foley set up, and performance is a deliberate and calculated projection to the microphone. While this particular dynamic will be explored in closer detail in the following chapter, it is significant to note here that part of the corporeal vocabulary of Foley work is an internalised awareness of how sounds will translate through recording technology.

Secondly, Roden describes a holistic soundtrack awareness, and as her experience built, so too did her crafted sense of how these particular Foley effects would fit in with the rest of the soundtrack's elements. As a result of this development, Roden notices she is able to balance a micro and meta-focus and sonic sensibility. And thirdly, Roden emphasises how more experience meant a shift from literal to lateral thinking about prop solutions, with the focus being on the sonic qualities rather than realism. And most critically for this argument, it is here that Roden emphasises her own internal embodied knowledge, describing a presence arising out of her attunement and bodily 'intelligence'. The implications of the performer *in* the sound becomes clearer in this context, and is evidently much more than a metaphorical abstraction – it is the phenomenological ground of Foley work.

In drawing out her explanation of the embodied knowledge of a Foley artist, Roden drew on a musical instrument analogy to emphasise her growing sensitivity and musicological awareness of the possibilities for prop sounds. Importantly, as Sandra Pauletto outlines, the Foley artist is required to “...understand the emotions portrayed by the character on screen and the talent to utilize their embodied knowledge of how these emotions manifest themselves in sonic interactions with objects” (2017: 343). This also aligns with Deniz Peters’ argument concerning touch, and that it is the every day lived body and learned phenomenological awareness of the “touch-sound correlation” which extends into knowledge of sound production skill. Such a point also becomes important when considering that body-performed Foley effects are intended to bring phenomenological depth to the characters and created world of a

cinematic narrative. Peters identifies that actively producing sounds with the body “...always incorporates haptic qualities along with sonic qualities” (2012: 22). This hapticity is translated across bodies and listeners, for as Peters notes, “Upon hearing sounds alone, unthinkingly, our lived body suggests potential feelings, *as if* we made those sounds ourselves. Auditory perception invites us to extend and *feel into* the heard, in a sort of haptic completion” (ibid). In this way, it is possible to argue that Foley work is a cinesomatic co-production of bodies feeling sounds, connecting all phases of a film’s production and reception.

A connection between the haptic and the sonic is key for Foley artists working with sounds intended to denote texture and convey movement. As with other bodily skills, specifically locating and articulating the skill *in* the performance can be elusive. As Michael Polanyi had noted:

To acquire the right touch is the endeavour of every learner, and the mature artist counts its possession among his chief accomplishments...Yet when the process of sounding a note on the piano is analysed, it appears difficult to account for the existence of ‘touch’. (1958, 50)

Foley engenders comparisons and metaphors of musicality, yet Foley is separated from Western musical pedagogy that has long-established theories and measures of what constitutes musical excellence and creativity (see Burnard, 2012).²⁸ Roden described her skill in terms of producing appropriate sounds, defined by an intimate knowledge and understanding of microphones, acoustics as well as timbral properties of sounds. The transiency of prop manipulation for an audio recording means that detailed descriptions of how a particular sound was achieved can be ambiguous, particularly considering the

²⁸ In terms of industry recognition Foley is also subsumed under the banner of sound editing, and Foley does not receive its own award category in any of the major industry awards. This also resonates with Ament’s criticism that Foley is not acknowledged for the creative and artistic endeavor that it is.

mind/body relationship as illustrated by Roden earlier, where self-consciousness gives way to a sense of presence.

Drawing directly on practitioner accounts, this section has explored the aspects of embodiment that are critical to Foley work. Demonstrably a performative mode of sound production, Foley has been found to have important parallels with other body disciplines including dance and musical improvisation. Going further, this section has identified how Foley work builds and requires a corporeal sonic vocabulary to be incorporated into the body of the performer. It has argued that Foley is a form of haptic storytelling, where the presence of the body in the sounds challenges aesthetic conventions and recording practices that seek to render these bodies inaudible. In this way, the practitioner accounts presented here challenge industrial attitudes to Foley work and mitigates the preoccupation with technology or audiences in discussions of film sound. The following section extends this investigation to examine other key areas of postproduction sound via the work of effects editing and mixing.

4.6 Sensate Sounds in the Darkened Room: Sound Design and Editing

Audio isn't just a matter of education, whether formal or informal, it's a state of mind, a state of being, a state of desire.

(James Currie, cited in Zielinski & Currie, 2010: 6)

Introduction to Sound Design and Editing

As outlined in the previous section, Foley is now a developing area of film sound scholarship that locates the role of the body in the work. Comparatively, there is significantly less written about film-specific roles such as sound editing and

mixing through the lens of embodiment theory. One reason is arguably because, as with location recording, in many accounts, the emphasis is on technicity as a pathway to creativity. While this is a conventional binary rather than a clear distinction, in this perspective, the 'body' still becomes of less significance.

Accounts of sound design that do engage with theories of embodiment are located in those adjacent areas of research that research modes of perception, such as sonic interaction design and human computer interaction (HCI)(Candau et al., 2017; Rocchesso et al., 2015; Susini, Houix & Misdariis, 2014; Visell et al., 2009). These studies apply scientific analysis and concepts drawn from cognitive sciences, phenomenology and neuroscience to postulate and develop new perceptual technologies. Despite this, expositions of sound editing and mixing in a film studies context are relatively scarce, and many take the form of interviews with recognised professionals (Eskow, 1999; Murch, 2000, 2003; Thom, 2003; Andersen, 2015; Jarrett, 2000; Holder, 2015; Isaza, 2010a, 2010b; Isaza, 2011; Idelson, 2011; Savage, 2012; Toffolo, 2016; Giardina, 2015; Zielinsky & Currie, 2010), technical guidebooks (Kahra, 2018; Sauls & Stark, 2016; Avarese, 2017; Jackson, 2015; Cross, 2013; Viers, 2011; Farnell, 2010; Rose, 2015) or industry overviews (Wright, 2011, 2013). There is considerable scope for film sound scholarship to continue to develop and expand analyses of postproduction sound roles in terms of philosophies of embodiment and embodied experience.

It must be acknowledged, especially by scholars hoping to understand professional's experience, there is often a gap between academic language and concerns, and the practitioner's language and concerns. As sound designer

Randy Thom pointed out in 2007, much of the analytical questions of academia do not translate to the practitioner. For example, Thom argues that conceptual questions around the 'diegesis', a cornerstone of landmark critical investigations into film sound (Chion, 1994), as well as a key analytical tool used by film scholars, is "often irrelevant" in the face of the most important consideration for the sound designer, which is "the effect the story has on its audience" (2). Indeed, in his *Acoustics of the Soul*, Thom draws the distinction between analysing a film, and making one, noting that "[s]torytellers tend to live and work on gut feelings, intuition, and their own raw nerve endings" (2007: 2). In looking at the embodied dimension to the work of sound production, this study in many ways is in alignment with the practitioner's storytelling agenda. By acknowledging Thom's point that, for the professional, the main concern is creating an effect in an audience, this inevitably raises the question of *how*. But instead of answering this in terms of technical specificity, this study is interested in how the practitioner becomes corporeally bound up in the work of creating emotionally and viscerally rich narratives for film.

It is important to acknowledge the way in which technology is situated and mobilised in the professional literatures for postproduction sound, for these literatures play a role in perpetuating technical framings of post sound work. This arguably contributes to the limitation of how this type of work is conceptualised, and the problematic erasure of bodies. Research into postproduction sound roles for film reveal emphasised relationship to the technical tools used to achieve sonic work. This association produces its own tensions for the community of practitioners, as well as having significant

implications for how the body is (dis)placed in the mix. In his critical examination of the fetishization of the 'sound designer', Benjamin Wright astutely summarises the sound design 'dilemma' as "an overvaluation of technology and the 'specialized equipment' of sound editors. The emphasis on technology reinforces the notion that specialist sound editors are only as good as the equipment they use" (2011: 296). He draws out this argument by noting that tech-focused publications such as *Mix* place a premium on postproduction tech tools elevating them by identifying the effect achievements via a discussion of how they were used. Wright notes: "*Mix* editors make a point of asking professionals how certain effects were achieved, and what equipment was used to create them. To non-professionals, the interviews and editorials can quickly devolve into tech-speak" (2011: 296-297).

In acknowledging this concern, the approach of this study deliberately set out to mitigate the overemphasis of the technical. Therefore, as outlined in the methodology section of this thesis, interview questions for this research deliberately avoided a focus on the technical specifications of the tools used. Moreover, these questions were intentionally crafted to glean insight into the more 'unspoken' and under-analysed aspects of this work. Indeed, while some practitioners interviewed for this research did describe the technology they currently or previously used, what is of particular interest to this research is the ways they describe the dimensions of bodily knowledge and sensory engagement playing its part. Therefore, this analysis draws out the at times implicit corporeal narrative inherent in the interviews.

Despite the prevalent association between technology and postproduction sound work, this research reveals implicit and often subtle inclusions of embodied perspectives within such ‘technological’ accounts. Practitioners interviewed for this study emphasised the creative application of technical skills, however, critically for this study, these were often couched in distinctly corporeal terms. In this way, as with Foley, analysis of these interviews reveals a correlation between other performance-based tacit skills such as musical instruments.

Importantly, despite the technocratic tendencies of industry literature as described by Wright above, revelations of the embodied dimensions of post sound work can nonetheless be located in industry-based publications and interviews. Amidst brand-specific technical detailing, practitioners can be found recounting their own tacit and corporeal relationships with the tools. For example, in an interview published online, sound designer and musician Dave Farmer compares some technical tools that changed over time and notes that there was something “very special” about that tool²⁹ because it made sound design more performance based: “It was a sampler that had a dedicated keyboard, and internal sequencer with a hardware button panel that just made it a spectacular tool. There was something about using it that aided creativity in a very tactile way” (cited in Isaza, 2010: NP). While Farmer is specific about the features of the technology, what is notable here is the way the tactile use of it becomes pronounced. Further, Farmer bases his preferences on the way his embodiment was engaged, facilitating the performance of his work in a certain

²⁹ Farmer is referring to the Synclavier – an early digital instrument and music workstation.

way, even if he can't specify what it was which "aided creativity" in this corporeal way.

Practitioner insights about tactile features of certain equipment points to the historical developments in audio technology that have had significant impact on embodied engagement, and also those social and economic mechanisms which fostered a disproportionate importance to technology. Differences between screen-based software-driven tools, and those earlier more physical devices, such as the one Farmer describes, have direct implications for how a practitioner engages with the work.³⁰ Further, the way that technology – and technological developments – are framed by practitioners themselves speaks to conflicts and tensions regarding how creativity itself is framed. Andy Farnell noted practitioners have a "strange relationship with technology" which involves a healthy measure of resistance" in which "...all designers would like to believe they are free and independent of their tools (2014: 94-95). Contextualising these tensions, Farnell notes that "...wherever art is dominated by mass media, for whom it is safer to make technology the star than the artists, there is a skew towards ascribing technology a disproportionate role" (2014: 95). Speaking as a practitioner, Farnell argues that what makes sound design still exciting is "Not the technology, but the impetus to make great art with it, or regardless of it... increasingly with commercial audio technology I get the sense that we are stuck in the situation of a teenager with a new bike, still needing to go and hang out, to

³⁰ As new research in the area of New Interfaces for Musical Expression (NIME) demonstrates, practitioners' preferences for physical involvement in the creation of sound means there is now a move back towards physical controllers of software to bridge the gap that occurred during the digital revolution of the 1990s (Paradisio, 1998; Wanderley & Battier, 2000; Maes et al. 2010; www.nime.org)

be seen with the bike” (ibid). Such a perspective reveals industry-level assumptions and expectations regarding technology that the practitioner must navigate, and reveals the tension in how creativity itself is framed by practitioners. Farnell therefore challenges the fetishizing of technology in professional sound practice, and in doing so reasserts a distinction between technology and art, rather than conflating them.

4.7 Sonic Flows: Embodied Practices of Creativity in Post Sound

*...in flow we always know what needs to be done....
(Csikszentmihalyi, 1996: 111)*

In the interviews conducted for this research, the concept of ‘creative flow’ recurred as a key theme of embodied experience while working. Some practitioners explicitly described experiences of their work in terms of a ‘flow’ or ‘absorption’, where their awareness of time is altered. This concept has been explored by performance theorists who found that flow involved changes to senses of self-awareness and time. In this situation, flow may involve either a decreased or increased sense of embodiment. In their discussion of performance improvisation, Siddall & Waterman describe the experience as a “...form of knowledge creation through expressive practice, whether we are conscious of our bodies in the moment, or transported by what psychologist Mihaly Csikszentmihalyi (1990) famously calls ‘flow’” (2016: 3). Siddall & Waterman emphasise the way improvisation produces heightened experience of the “relationships between our bodies and others”, one which is culturally and historically placed (ibid). Critically, they note that improvisation is about

‘recollection’ and ‘repetition’, and echo descriptions given by sound professionals when they argue that improvisation entails “learned repertoires of sounds and gestures” that become mobilized in the moment (ibid). Based on the interview participants’ responses to describing their work experiences, this discussion argues that sound editing and mixing is an embodied performance that utilises improvisational flow. In this way, a connection may be drawn between embodied techniques of live performance and postproduction sound work.

As this research attests, the practices of sound design and editing produce a performative embodiment that spatially and temporally unfolds. Sound professionals work to produce a sonic reality for a narrative world, which is marked out in spatiality, rhythm, tone and accent. For the sound practitioner, therefore, experiences of time and space at work can be manifold, as he or she is materialising a narrative timeline and phenomenal world. In other words, temporal realities can be challenged when creativity unfolds, as the practitioner is located amidst an emerging sonic work that is tied to fictional and real worlds. And as with musical performers, postproduction sound professionals are simultaneously creating and listening to sonic articulations and modulations, cadences and timbral shadings. While this sensitivity to sonic quality may be inherent in the practitioner, the development of these skills occurs over time. Further, the development of sonic sensitivity is demonstrably bound up in a process of embodied learning. In her ethnographic study of taiko drumming students, Jennifer Winther observed that the learning process produces taiko-specific concepts of sound and time/tempo, which therefore introduces

“embodied definitions of sound and time” (2005: 1417). She noted that conceptions of a ‘temporal when’ – the moment to strike the instrument – becomes “redefined by the flow of her or his arms and the configuration they take to execute a technique. The effectiveness, accuracy, and quality of that execution—and by extension, of the configured body that produced it—are evaluated by the sound” (ibid).

This research finds that while evaluations of unfolding sounds are not based on embodied performance in quite the same way as for a performer with a musical instrument, there is nonetheless a significant degree of bodily conforming with the production tools. Some postproduction practitioners drew comparisons between this ‘performance feeling’, or the ‘feeling-in’ during their work, to their own previous experiences of musical performance. Like musical performance, postproduction sound roles such as editing and mixing require listening for tempo, placement, nuance, and making adjustments with the tools available. Banfield & Burgess note how tools are “...an extension of the person’s sense of body. Thus, flow during artistic practice enables the expansion of the self in myriad ways...” (2013: 68). These activities are described by practitioners with a sense of a creative unfolding. This is illustrated by US-based New Zealand sound editor Justin Doyle, who directly likens the working process to musical improvisation:

When you get into that flow, it really is [like playing an instrument]. You watch somebody like Dave Whitehead³¹ edit and it’s like he is working with marble or something like that...just carving pieces off and just moving things around and it’s this incredible thing to watch where things physically take shape...and what he can clock in a pass, and then the shifts

³¹ New Zealand-based sound designer Dave Whitehead worked with Doyle on *The Hobbit* trilogy.

that he will make – he’s just working with such layers of subtlety with the actual strings of sound, its amazing....What I’ll tend to do is - if I had a particular sound that I wanted to cut, I’ll listen to a lot of things, I’ll make a shortlist of those things and put them into a spotting list. And then I’ll spot 3 or 4 of them to the timeline and try them out and try a different combination, and then I’ll move something back a little bit and it’s amazing, it’s so intuitive. There’s not really too much self-talk or anything like that going on. It is very much like an instrument in the sense that if you’re playing the guitar, you’re not quite sure why you decided to bend a note or to hit two notes, or to play it really lightly or to really dig into it, but it was the right thing in the moment. And I think that’s definitely it – you’re putting sounds in and you’re seeking as much truth in that moment as you can....And if it feels like it anchors the film and what the film was trying to express in that moment, you’ve got it! And the journey to get there is pushing and moulding, very much like clay or something like that, until it feels like it’s in the pocket.³²

In this depiction, sound is notated in both abstract and material terms, being figuratively linked to sculpture, and yet also described as part of an experience of flow.

What is also interesting is the way time is articulated in Doyle’s explanation of the editing process, linked back to improvisation by describing the “right thing in the moment”. This runs parallel with the voiding of conscious self-analysis, as Doyle highlights a sense of being present to the work as it unfolds. This correlates with what Mihaly Csikszentmihalyi outlined in his definition of creative flow, action and awareness are ‘merged’ and self-consciousness disappears (1996: 112). Doyle articulates the improvisational unfurling whereby analytical and technical reasoning is suspended, reflecting Csikszentmihalyi’s claim that creative flow is “the result of intense concentration on the present” (112). Scholars Megan Watkins and Greg Noble are critical of phenomenologies of embodiment that suggest a ‘seamless’ connection between body and

³² A colloquial expression used in music, ‘in the pocket’ indicates a performance coming together successfully.

instrument. By demythologising intuition, these authors emphasise ‘metaphors of tactility’ used to describe the apparent ‘ease’ of learned skills and techniques are “perfected over time through practice” (2015: 217).

The affordance of a sense of expressivity as well as creative ‘flow’ becomes intimately tied up to how a practitioner will physically relate to their equipment. US-based sound professional Mark Sommerville notes, “I also get the feeling of an instrument when I ride a volume fader of a vocal. I play through...with my finger on the fader and I make slight moves to try and get...the right spot.” A similar depiction was described by Australian Chris McCallum, who describes the learning process that occurred during a critical technological changeover phase during his career:

In the 1990s we bought a Lexicon Opus, which was one of the very first multi-track digital recorders, and it was like something out of Star Trek. It was massive, and all the buttons were virtual buttons, so there wasn’t a dedicated button to what we were used to - it changed depending on the application. And I got so good at doing things - because I was doing it so often that muscle memory snuck in - that I couldn’t tell you what I was doing. So...not thinking about which keys you’re playing on a piano, or which fret I’m using, it just happens because your brain does that. It becomes muscle memory.

These insights from McCallum and Sommerville demonstrate the way in which bodily knowledge becomes integrated with the technology itself, and also affords the tools a musicality in which nuanced expressivity is facilitated. Interestingly, the ‘brain’ McCallum mentions is clearly not understood as separate from the body, but speaks to a bodily intelligence that evades critical analysis.

Postproduction practitioners learn to embody physical skills that facilitate their sound work, and configure their embodiment in relation to the tools at hand. However, what is interesting is that changes in technology and tools do not necessarily facilitate a more productive workflow, and it is here where issues with both time and flow become foregrounded. This was articulated in a joint interview with New Zealand-based professionals Brent Burge, Nigel Scott and Tim Chaproniere. Discussing the industry changeover to what is referred to as 'in the box' editing and mixing, whereby mixing is performed via virtual controllers through computer software, rather than large consoles, these practitioners noted how the shift from tangible to virtual necessarily changes the techniques and dimensions of corporeal engagement with the work:

TC: [Mixing] used to be done on big consoles. But now it's becoming more inside computers and setting up shortcuts and templates and tools you can use for each job to make them quicker and faster.

NS: I think you do end up relying on muscle memory.

TC: Yes, there is muscle memory.

BB: Even in, as you say, the layouts. If you speed it up, it's also to know if you hit that button, the desk will be like this. If I then reach over there....

TC: Yes, the desk does become an extension of yourself.

NS: And sometimes you can have – if the desk is being sluggish or a piece of equipment is being sluggish, it can throw your mental state out a little bit.

TC: Yeah that's definitely true.

BB: Yeah, like the new version of Protools. It's so slow! My memory locations – I've actually had to slow my work down, I'm doing it a lot slower. I used to be able to just go through, but these days I'm actually typing in the buttons, I'm pushing on the keypad into the name of the memory location because it hasn't finished creating it...it's terrible. It's that thing about flow.

These practitioner accounts depict postproduction work in terms of an embodied relationship to the tools, and also portray the disruption to ‘flow’ when the technology fails to participate adequately. As these interviews demonstrate, technologies may offer certain expressive affordances but these affordances become part of the process of learning and integration into the bodily knowledge of the user.

Conclusion

This chapter has identified a paucity scholarly literature that places postproduction sound roles in theories of embodiment. This lack was further problematized by the overwhelming focus on technology evident in professional literatures. By drawing from adjacent theories of performance and embodied practice, and examining practitioner accounts, this chapter demonstrates how the production of sound is constituted by the embodied knowledges of the practitioners. In the first section, this chapter explored the development of tacit knowledges and sonic vocabularies of Foley artists, drawing out a cinesomatic connections for the performer. The descriptions of practice offered demonstrate the musicality of Foley bodily skills; as well as the demonstrating relationship between the performer, the microphones, the performance space, the objects being used, and the communication of phenomenal depth to the narrative world.

In the second section of this chapter, embodied practices of sonic creativity and flow were examined, positing a relationship between sound editing and design and musical performance. It explored the ways in which the ‘voice’ of the body is present in sound editing, as well as the relationship between creative flow and

sonic orientations in the embodied approaches to the work. It was found that a diversity of corporeal methodologies facilitated the performance of the work, where tactile interactions with the technology were important for individual experiences of creativity. There is clearly scope for much more research into these roles. The critical objective of this chapter was to place the body in the postproduction mix. Doing so interrupts discourses and industry structures that obscure, and therefore devalue, the bodily work of these practitioners. Instead, it contributes to developing a theory of embodied film sound that takes detailed account of the experiences of soundtrack producers.

Autoethnography #3

Project: Comedy Horror Series Ash Vs. Evil Dead

Location: Bespoke Post, Auckland, NZ

I am seated in the editing room behind Foley recordist mixer Amy Barber and the Foley performer Jonathan Bruce. I am listening to the Foley record. I can't see Jonathan through the small double paned glass window connecting the two rooms, yet I can hear him over the speakers. Amy is directing the sound performance - "Just a little ploppy". Their communication is fast and efficient. Amy uses a foot pedal to facilitate talk back. It reminds me of someone playing the organ. In between takes, they play sound sample 'stings' to motivate and inspire each other. Amy tells me it punctuates the day, instead of Jonathan just listening to her voice. She says it was inspired by seeing a cricket game where stings were used to motivate the crowds. I notice how it breaks the recording process up, and has an immediately energizing effect. There is humour in those stings - Jonathan is about to do a background sound effect, and Amy plays "From a Distance". After a couple of takes, Jonathan decides to do a "slightly different read" of his performance. He alters his movements of a sink with a chain attached to give varied performances. I hear the original production sound, and the sink sounds like plastic. The prop in the scene sounds weak and cheap. Watching the film in fragments heightens awareness of the sound. Amy is describing the frequency sound quality each take has - "clacky, clicky". A take is stopped as Amy hears Jonathan's stomach, "your guts went through that one." There is another record, this time of gun effects. Jonathan pauses after a take. "Got a finger click and a shoulder click in there. Did you hear it?" Amy directs the performance again - "Can you do one a bit more hitty and a little less rattly?" "The scrapier sound was good - it sounded quite old". Finally it is my turn to perform.

The section to work on is a talking demon face protruding from a women's leg. I am watching a clip of this character having a cloth forced into his mouth. The props are wet face flannel cloth and a bucket of water. I am squelching the cloth near the mic. I am really struggling with the smell – I'm not sure if it is the water or the old cloth but it was turning my stomach. Jonathan tells me they use warm water because it feels nicer on the hands and it sounds different to cold water. He tells me that cold water has a higher pitch. I felt a lot of pressure with two people watching and listening with expert ears. My performance anxiety escalates. Amy and Jonathan are giving me directions – "Try and keep the sound continuous" and "manipulate it with your body". Jonathan steps in and demonstrates – "Get all the arms into it, the forearms and elbows even, to keep the sound going. Get very physical. The bigger the better with Foley. You don't want a sound to be too small, so don't be timid with it." I was amazed to see how easy Jonathan makes it look, and how hard it is when you don't know what you're doing. He was giving me directions for the prop sound – "Keep about 70% water in the cloth. Try to stretch out the sound." I am really conscious of making a mess with the water. I am watching the demon face, trying to match squelches with facial jerks. It is a disturbingly strange image, yet I feel for a sense of squelching rhythm. My back starts to ache, as I realise I was unconsciously hunched over. I ruin a couple of takes by breathing out – which I also didn't notice. I try to hold my breath during the takes, which feels very unnatural.

There are lots of things to concentrate on. I wonder if changing my position will make it easier. Mimicking the female character with the demon leg, I crouch down. I feel a crack. Amy tells me: "Your knee was in in that one."

CHAPTER FIVE

SOUNDING-IN TO CHARACTERS AND AUDIENCES: THE EMPATHIC CORPOREALITY OF POSTPRODUCTION SOUND PRACTITIONERS

You know you're getting it right when it feels real.

(David Liversidge, Sound Designer)

5.1 Introduction: The Empathetic Listener

In assembling a cinesomatic model of film sound, this chapter uses phenomenological accounts of professional sound practice to demonstrate the corporeal kinships that stretch across the conceptualisation, realisation and (projected) reception of a filmic work, and connects bodies, both lived and imagined. This discussion investigates how by 'sounding-in', the practitioner becomes deeply implicated in the sound work, and how this entanglement of bodies and sonic expression renders filmic elements such as character and space with sensory richness. Further, I suggest that it is precisely this dynamic that facilitates the engagement of a future audience on a profoundly corporeal level.

Central to this configuration of 'sounding in' is empathy, as the accounts analysed here reveal how practitioners intentionally use themselves as a source and reference to infuse their work with emotional and visceral potency. A historically and theoretically loaded term, Thorsten Gieser pointed out, "empathy is the translation of the German word *Einfühlung* ('feeling-into')" [emphasis added] created from "the word from the Greek *en pathos* ('in suffering/passion') by analogy with the word sympathy..." (2008: 307). The

concept was important in late 19th and 20th century psychology, and deployed across many subfields (ibid). Since then, empathy has been taken up widely and varying in many disciplines including cognitive science, and still attracts considerable debate about its definition, and differences from other similar concepts such as sympathy and emotional contagion (McIver Lopes, 2011). As Edward Warburton argues, empathy is part of a large spectrum of potential “vicarious” responses towards others, and that related terms “...such as compassion, sympathy, and emotion contagion all suggest an affective response to the directly perceived, imagined, or inferred feeling state of another being” (2011: 71). While this discussion does not have the scope to join detailed debates on all differing theoretical lines, empathy remains useful when framed as “a basic embodiment of these feelings and sensations perceptually expressed...” (D'Aloia, 2015: 190).

I argue that postproduction sound practitioners are deploying empathy in a dual way in their professional roles. On the one hand, they are emotionally and physically relating to characters that they must sonically render in a fictionalized world. On the other hand, they are empathic to a future potential audience, and make projections for how their sonic storytelling will ‘play’ to an audience, based off their own responses and judgments. Importantly for scholars interested in embodiment, the early concepts of empathy developed in particular by Theodor Lips, were “... implicitly kinaesthetic” (Reynolds, 2013: 212). As outlined earlier, thinkers from the cognitive sciences have also differentiated between emotional and motor empathy, and applied inquiry to cinema audiences (D'Aloia, 2015). For the purposes of this study, the understanding of empathy is aligned with that

of the theorists of dance and performance such as Warburton as this approach emphasises the corporeal, rather than the overtly cognitive³³. This approach is also pertinent given the parallels between performative modes such as music and dance and postproduction sound work already discussed in the previous chapter. Indeed, as Warburton argues, “The source of empathetic experience in dance is fundamentally somatic” (2011: 73). Further, these recent theories also “foreground its function of communicating emotions in interpersonal relations...” (Reynolds, 2013: 212). Aligned with this framing of empathy, this chapter examines how postproduction sound practitioner roles utilise a markedly – and corporeally – empathic approach to sonically detailing the characters of the film; it also asks how they conceptualise and produce this work in terms of the ‘imagined’ future audience.

While the previous chapter examined Foley, sound design and editing in terms of embodied techniques and tacit knowledge, this chapter further develops the discussion by aligning postproduction sound work with theories of emotional infusion and empathic connection. In this way, the felt relationship(s) between practitioner, character and audience become foregrounded. In the first part of the chapter, interviews with Foley professionals Jonathan Bruce, Amy Barber, John Simpson, Shelley Roden, John Roesch, Scott Curtis and James Carroll reveal how empathic Foley performance creates aural and material realities for the narrative world. Following on from this, the second part of the chapter

³³ It is worth noting that some ‘extended mind’ in cognitive science assumes a hierarchical approach to classifying empathy. Murray Smith (2011) distinguishes “fully fledged” empathy from “low-level phenomena such as affective mimicry and emotional contagion” (1). If an empathic response is considered ‘below’ conscious thought, it is deemed ‘lower level’ which arguably reflects a cognitive bias that has Cartesian undertones.

investigates the empathic corporeality of sound editing and design. Drawing on interviews conducted with sound designers and editors Tom Heuzenroder, Lynne Butler and Wayne Pashley of Australia, Dave Farmer of the United States, Dan Villalobos of the United Kingdom and Matthew Lambourn and Justin Doyle of New Zealand, these accounts demonstrate the ways in which both emotional and physical empathy is critical to the work. Therefore, this chapter builds on the existing literature around empathy in creativity performance, and supplements technological accounts of postproduction roles by demonstrating how the practitioner's 'sounding-in', like the empathic feeling-in *Einfühlung*, is key to producing effective and moving film sound work.

5.2 Foley Matters: Marking the Sounds

Foley is the dialogue of the body.

(Mark Berger, cited in Ament, 2014: 241)

In early production sound practice, when Hollywood studios were moving from silent to sound pictures, Foley was performed by what was then termed a 'Foley walker'.³⁴ As the name suggests, this role was originally concerned with capturing footsteps and limited prop actions in sync. Up until the transition to sound film, some sound effect performances were performed live during early silent films (Cox, 2011).³⁵ In contemporary production practice, performing effects as close to sync as possible with the image remains an important goal due to schedule time pressures. However, digital editing tools now mean Foley artists

³⁴ The historical accounts of Foley development cite Jack Foley as the father of Foley in the American studio system at the time of conversion to sound pictures (Ament, 2014: 7).

³⁵ Foley in film was also foreshadowed by radio sound effects (Crockett, 2015; Lewis, 2015) and early theatre (Keenan & Pauletto, 2017).

can also focus on the performative dimension of the sound, and break sound performances down into microelements to layer up a track. Therefore, Foley as a professional skill and performance is now deeply concerned with the “dynamics of a sound effect” (Wright, 2014: 206). Importantly, this means that Foley effects are performed with the intention that the sound captures and conveys emotional as well as narrative elements intrinsic to the character. In other words, Foley effects are far more than simple sonic cues for synchronisation realism. Instead, the connection between the performer and the character is both enactive and embodied, relying on empathy, immersion and physical skill.

For film sound scholars, Foley work demonstrates an intriguing transmission of sounds and affect from and across seen and unseen bodies. As the opening quote from US re-recording mixer Mark Berger suggests, Foley is about enabling the bodies on screen to ‘speak’ in sonic ways that reinforce their phenomenological depth as characters. As already discussed in the previous chapter, Foley is one area of postproduction sound that has received some critical attention from emerging scholars. The dynamics of body and sound reveal a rich site for theorising embodiment and performance.

As Foley is a bodily performance skill involving creative interpretation and character infusion, connections between Foley performers, characters and narrative reveal a complex cinesomatic synthesis. Investigating the relationship between Foley and filmic affect, Lucy Fife Donaldson has located links “...between experience and practice, in order to recognise the density of film’s audiovisual design and ultimately the collaborative nature of filmmaking”

(2017:32). Fife Donaldson also recognised that attention to filmmaking practice such as Foley was important for film sound theory, yet her particular focus is with the ontological grounds of the work, as well as dismantling illusions of seamless filmmaking:

As well as feeding into larger debates about authenticity embedded in the filmmaking processes and its “illusion of unity”, valuing Foley performance inevitably raises questions about the hierarchies of attention to filmmaking personnel in film criticism, and the separation between scholarship attentive to expressive achievement and to technological processes. The act of making Foley visible/audible contributes to understanding filmmaking as a fragmented and layered process—something that mainstream cinema often seeks to efface.... (2014: 6)

There is scope to build upon Fife Donaldson’s insights by further exploring specific practitioner accounts of working Foley practice to glean insight into the degree to which it is an embodied sonic practice. Doing so actively mitigates the tendency to overlook Foley in filmmaking discourse, and as this research argues, validates those bodies working in sound production.

In terms of the function of film sound, Foley is a crucial sonic link between characters and audiences. Some postproduction practitioners contend that Foley is what brings the listener into a subtle but significant intimate engagement with a created reality. New Zealand-based sound designer and editor Matthew Lambourn argues that Foley offers audiences sounds that are only in theory audible as a result of *proximity*. While he acknowledges that the sonic positioning and prominence of Foley in the final mix is not necessarily always foregrounded, he also argues that Foley nonetheless creates a sense of *physical* intimacy that is essential for an audience to connect with the film. Indeed, Lambourn argues “It sounds small, but you’ve got to have Foley otherwise you’re not there with them

[the characters]. Because you only can ever hear [those sounds] if you're really close to someone." Lambourn's point speaks to the aims of creating a corporeally rich narrative world that draws the audience into a lived sense of nearness and participation. Indeed, Lambourn exemplifies his point by arguing that the Foley of love scenes - such as skin contact, kisses and cloth rustling - are crucial in allowing the audience to be "right there intimately" with the characters. Importantly, for Lambourn, the absence of Foley means that audiences "just won't believe the story" and will remain "outside that fourth wall." This speaks to the aesthetic conventions of the majority of mainstream Hollywood cinema, where the filmmakers aim to facilitate audience immersion, rather than position them as observers to the artifice of filmmaking. Nonetheless, this highlights how Foley is a critical sonic player in this construction. Further, understanding Foley in cinesomatic terms reveals the somatic link between bodies – both living and imagined. In other words, the production of created worlds in cinema requires the work of sensate bodies, in order to communicate phenomenological depth. Therefore, it can be argued that a 'film' in fact lives multiple lives through the layered processes of soundtrack construction, with many bodies contributing depth through embodied collaboration. These soundtracks – and the narrative worlds they realise – are enacted and enriched by many bodies, and are designed to viscerally and emotionally engage an intended audience.³⁶

³⁶ It must be noted that the question of the actor's body has been left out of these discussions, due to the lack of space. This would posit an interesting trajectory for another study, a study already foreshadowed to some extent by Pamela Wojcik's (2006) discussion of the actor's body in mediatized cinema performances.

5.3 Phenomenal Bodies: Performing Foley Characterisation

As an embodied mode of performance, Foley bears certain parallels to more traditional forms of acting, and central to this process is the making of empathic connections that are externalised and expressed outwardly. Foley effects are the vehicle for nuanced expression of a character's world and – most importantly – a character's embodiment. The Foley artist uses their body to 'speak for' a character or object, giving onscreen bodies phenomenal depth and sonic presence in a narrative world. Foley performers simultaneously employ interoception, proprioception and embodied projection as they seek to navigate the sonic performance. The practitioner accounts of this research reveal how the Foley artist is simultaneously *in* their body, and *extending* their embodiment outwards into props and screen images. This level of physical and emotional engagement is comparable to traditional acting performance in terms of how Foley performance is embodied and emotionally infused. McCutcheon & Sellers-Young note that an actor using their body to represent a character "needs to be hyper-aware of her perceptions – aural, visual, kinaesthetic – and how these perceptions operate on the planes of the physiological, psychological, sociological and emotional" (2013: 3-4). By drawing this parallel between acting and Foley performance, it becomes possible to see how Foley artists empathically infuse themselves into characters.

Foley artists aim to achieve performances that portray the emotional content of the scene through a physical performance of sound, and this is where empathic connections become enacted through embodied experience. The Foley practitioners interviewed for this research specifically articulate how they

experience a complex embodiment through this performance process, and it is in these accounts that the links between acting and Foley performance become most apparent. Further, while the interviewees use different comparisons to articulate their experiences, the empathic connection to character and action is a shared experience among Foley artists. It is significant that these interviewees all demonstrate how this empathic connection is corporeally realized. New Zealand-based Foley artist Jonathan Bruce describes his process of subsuming a sense of his own self into the character:

I am the thing, whether it's the man thinking about committing suicide or a bush moving as someone walks past. I become the thing. But it feels more like it's *through*, because you switch off and respond in a way that means you're taking on whatever their motivations are...I let them [the characters] work through me, kind of like a séance, when a ghost enters your body.... I'm the vessel, the medium.

Bruce's description draws on two types of narrative moments, different in their potential emotional weight and significance, in order to articulate his own embodied experience of a performance, which I will unpack further below.

As Bruce's account reveals, it becomes apparent that the emotional weight of the event or moment being depicted in the film is less important to the Foley artist than the integral connection to the performed sound itself. In other words, for the Foley artist, Foley effects – and therefore performances – do not operate under a hierarchy of value, and I argue that one reason for this is because Foley is the sonic voice of narrative nuance. Foley artists are responsible for producing movement-manufactured micro sounds that bring phenomenal depth to a constructed narrative world and character. This democratisation of sound effects is key to a profession that focuses on giving an animating 'voice' to people and

objects. The movements of suicidal character, or an incidental bush movement both carry significantly different emotional weight relative to the narrative, and yet for Bruce, he sees his role as the same in relation to both. The performance itself engenders a specific type of embodied experience, which is both a simultaneous sublimation and expansion of self. Further, Bruce's portrayal of the body as a 'vessel' for this empathic connection reflects what McCutcheon & Sellers-Young note about performance: that the performer's embodiment "...is engaged in the act of consciousness and that some kind of 'bodymind' exists throughout their organism" (2013: 3). Such a configuration posits the body of the Foley artist at the centre of sound creation, and a heightened and altered experience of embodiment at the centre of this empathic connection.

In comparison to Bruce's description of his Foley embodiment as a medium and vessel, US-based Foley artist Shelley Roden depicts her experience of embodiment and empathic connection to characters in terms of a corporeal *absorption* as character becomes permeated into her physical form. For Roden, this process evidently occurs regardless of the varying ranges of emotion present in each scenario:

I am definitely thinking about how my character feels in every given situation and I apply that to my performance. In one moment I may play the angry man who is walking over to punch someone in a bar. And in the next moment I may do a cue for a sobbing man who just lost his child and is trying to walk over to a chair to collapse into. I actually feel these feelings. I think of the emotion and fill my body [with the emotion]. I must imagine myself in the body of my characters or the footsteps will not sound accurate. When performing props I have to completely surrender to being in a character's body. My hands become their hands. The brain cannot get in the way.

Roden emphasises the link between her empathic connections to the characters, and the ‘accuracy’ or ‘believability’ of the sound performance. Much like Bruce noted above, Roden describes her sense of embodiment as a space to be filled *with* the character, suggesting a model of co-habitation. Roden also articulates a mind-body split, whereby the brain in fact potentially *hinders* the work of the body. This perspective is interesting for what it reveals about what types of knowledges are valued in Foley practice, and challenges those Cartesian and cognitivist perspectives that place the ‘mind’ in the brain. Roden’s description also points to the flexibility and diversity that characterises Foley work. Unlike traditional acting performance, empathic development is not necessarily a sustained experience. Instead, Foley artists must employ emotional versatility and adaptability as a wide variety of different sound cues are performed.

In terms of accessing and embodying character, footsteps are a critical aspect of Foley performance for characterisation. For Foley artist Gregg Barbanell, feet and footsteps are “...where you’re judged as a Foley artist” (cited in Crockett, 2015: NP). The practitioners interviewed for this research emphasised how empathic connection means rendering their reading of character specifically into stylised footsteps. New Zealand Foley artist James Carroll describes it as having to “try and get inside a character’s head to a certain degree as to how they walk. If they’re dejected, are they going to be dragging their feet? If they’re proud, are they going to be stomping?” This is also echoed by Australian Foley artist John Simpson, who points out that a character’s walk and physicality is in fact often the entry point for emotional connection, as it enables the artist to read the character’s individuality and emotional state:

You get into a character by the way he walks and whether he is someone who drags his feet or is a determined walker, or a 'slumpy, sloppy' guy. So that all changes the way you do your sound. Probably there is no real preparation apart from just get to know what that character is going to walk like, so the next time you perform him, you're straight into his character...You're right with that person. If they have a sudden move, you do the same thing, because you're just locked in. Because I'm on earpiece all the time, so I'm hearing all the dialogue and you know if they're shouting, or you know what they're doing. Even the tone in their voice will give you, how they're going to be walking

Simpson's account evokes sonic characterisation in terms of both texture and emotional motivation, which speaks to the level of embodied empathy Foley artists strive for. In this way, these Foley practitioners demonstrate a corporeal coupling between the actor's body-as-character and the bodies of those performing the sounds.

5.4 Empathy and Agency: Foley and its Co-Creators

For postproduction professionals, the nuanced characteristics of sonic texture are sought and enacted through physical performance. As these interviews reveal, in Foley a primary concern is achieving the 'right' sound for the character or object. This sense of 'right' is profoundly complex, and can be understood to mean the sounds accurately represent the moment in terms of sonic content such as texture or timbre. It may also mean the practitioner experiences an embodied state in harmony with the characters through the performance. The word *right* is marked in parentheses here to acknowledge how the definition of 'right' is part of broader value systems of aesthetic judgement. Some Foley artists argued that this connection becomes solidified in the cloth pass³⁷, which is often

³⁷ The cloth pass is the industry term for when a Foley team will go through an entire film and perform cloth-related sounds for characters. Foley work is generally always broken down into different sound food-groups for reasons of efficiency.

the first layer of sound to be performed. The 'cloth pass' is where the Foley artist performs all the cloth sounds, and as one phase of producing Foley effects, it is concerned with animating movement with textile intimacy. As Fife Donaldson argued, the importance of Foley work in terms of texture is "... in its attention to fine detail of the relationship between sound and image, and more specifically in the recognition that the materiality of sound, beyond its 'reality', matters to our experience of a film" (2014: 122). However, while Fife Donaldson is considering the audience's reception of the film, here I am particularly interested in the practitioner's experience of his or her own performance.

Practitioner accounts of the cloth pass both reveal and challenge assumptions about mind-body relations, and demonstrate how Foley artists highly value a performance that is managed by the body rather than the mind. During her interview, Amy Barber describes this as "switching the brain off" and "instinctively moving to the pictures...it's tactile, you're moving your body and you're using the fabric". Similarly to Roden, Barber emphasises the embodied over the cognitive for a sonic performance, challenging the mind-body binary, and enacting what Fife Donaldson has described as Foley's dramatized thinking through the body (Fife Donaldson, 2017: 93). This corporeal thinking-through manifests in a felt performance that resonates with characters. This is arguably why some Foley artists find the cloth pass a useful 'entry point' into an emotional and embodied connection with the characters and narrative. Indeed, this is illustrated by Foley practitioner Amy Barber, who noted in her interview:

During the cloth pass, you are able to watch the show and have an understanding of what the character's motivations are. And if you know that the housewife is angry and she's just thrown something and is about

to storm off, then you have to become the housewife at that moment storming off. Because anything less than that is not telling any story whatsoever. If you're not the character, then we shouldn't be doing this job.

These practitioner accounts of Foley performance reveal the ways in which empathic connection highly valued as part of the professional practice, and is facilitated through specific activities such as the cloth pass. Further, these interview excerpts reveal how practitioners frame their embodiment and challenge cognitivist perspective.

In Foley, the relationship between performer and prop speaks to a conceptualisation of object agency. This relationship is key to creating a performance that will resonate across listening and narrative bodies. Further, this relationship also becomes useful to posit a model of cinesomatic embodiment that moves beyond the anthropocentric limits of phenomenology's singular subjectivity. In many ways, the Foley-prop relationship demonstrates what Jane Bennett describes as a "vital materialism". Indeed, Foley artists demonstrate the "...cultivated, patient, sensory attentiveness to nonhuman forces operating outside and inside the human body" (2009: xiv), and which erases an ontological divide between human and nonhuman. The Foley prop and its produced sound becomes a central player in this configuration, and as Bennett points out, "bodies enhance their power in or as a heterogeneous assemblage" (2019: 23).

While the tacit knowledge of Foley performance was discussed in the previous chapter, here it is important to identify the ways in which the prop-performer is

critical to convincingly creating a character that has a sonic presence in the narrative world. This is more than simply producing sounds that speak for the body's movements on screen; the sounds themselves must speak to the emotional and psychological dynamics of that particular character and scene. Sandra Pauletto draws out the object-performer relationship through a description of the manipulation of the props:

A Foley artist has two fundamental skills: the ability to select and play the appropriate prop to produce a sound that represents the object on screen, and the ability to synchronize and perform footsteps or other bodily movements to the picture. The first skill implies a deep knowledge of the physics of objects: of what kind of sound actions the shape and materials of these objects invite a person to perform intuitively; of how materials sound when then are stretched, squeezed, or dropped; or how different-shaped objects can be plucked, banged, or played like a musical instrument. This knowledge is embodied, rooted in practice, "in the ways in which people [. . .] participate in the world" (Dourish 2004: 189), and informed by one's understanding of the "relationship between action and meaning" (Dourish 2004: 126)". (2017: 343)

In addition to the tacit knowledges that are embodied in the performing Foley artist, the participation of resonating objects becomes primary here, and coheres to the empathic connection the artist has to the cinematic moment. By physically engaging with props in this way, the Foley artist is also concerned with the accessing and producing of emotional undertones that supplement and colour the sound as appropriate for that particular character.

Practitioner accounts of Foley attribute significant agency to Foley props, and in this way, the specific selection of props is an active production of empathic connection to the cinematic world. Prop and performer become co-creators in producing emotional undertones through sonic texture, distributing storytelling agency between human and object. For Vanessa Ament (2014), footwear

selection is paramount in achieving a physical and emotional connection to a character. As a prop, shoes must produce the right sound on the right surface in terms of attack, resonance and tonality for the location of the scene. They must also possess sonic qualities that present the right articulation for that particular character. In order to achieve this cinesomatic harmony, Foley artists go through a process of auditioning, where shoes are tested on multiple surfaces. The Foley artists interviewed for this research described auditioning many pairs of shoes until the right 'voice' is found. And concomitant with prop selection, as identified in the previous chapter, intimate knowledge and understanding of the microphone's qualities as well as the studio space are important for facilitating the performance. Therefore, the microphone as a recording device is also an active participant in a cinesomatic performance. Vanessa Ament notes:

The microphone used – as well as the distance from the microphone – affects the performance. The sonic character of the room affects the performance. So choosing a shoe for the character is not simple but, as one gains experience, eliminating improper shoes becomes easier. If the character is heavy, that does not mean she or he walks heavily. How a character walks in different shoes varies. (2014: 87-88)

This depicts a model of performance where the non-human participants including prop, microphone and ambience space coalesce to co-create the narrative moment. In this way, a cinesomatic Foley performance is an amalgamation of these contributing forces to articulate emotional intention.

What makes Foley props particularly valuable and interesting is that they *exceed* present associations with projects and characters. Considered in the light cinesomatic agency, Foley props are living artefact of cinema sound, and their power lies in their ability to sonically animate multiple bodies and narratives.

For example, the same pair of shoes can ‘walk’ for many different characters, in many different narrative worlds, and for as much time as the shoe allows. Indeed, some practitioners describe strong emotional attachment to certain shoes, such as Shelley Roden, who admits she will ‘squeeze’ herself into an old pair if she has to, because the sound of that pair is too good to lose. Similarly, Vanessa Ament has described the relationship between the shoe and the Foley artist, when she notes: “...you might find that in some rooms they [shoes] become your worst enemies and they betray you. Shoes seem to have personalities all their own. Shoes do not necessarily look like what they sound like” (2014: 91). The way that the practitioner engages with the shoe prop also demonstrates how embodied empathy becomes projected through footsteps. Veteran Foley artist John Roesch argues that character empathy is central in terms of how the shoe is used during a performance. For Roesch, nuanced and dramatically appropriate footsteps come from understanding what the character is doing in the scene:

If it’s somebody that has heard the killer in the other room and is trying to sneak out of a creaky wood board floored house quietly, that’s going to be very different than the guy in military clothing going in to clear a house. You’re going to approach those differently just by the type of shoe you’re wearing. The approach will be a real heel-toe definition from the military character, and different for the sneaking out...it’s all in the dramatics, it’s all in the performance.

Roesch therefore demonstrates how the inherent dramatics of the scene are translated into specific and honed physical movement. Yet importantly, the shoe prop is the starting point for unlocking the character. Its sonic participation is important for demonstrating a complex model of practitioner-object relations.

5.5 Obscured Bodies, Reflexive Sounds: The Paradox of Foley

For the researcher, Foley reveals an intriguing paradox of embodiment and performance. Despite the artist's corporeal and emotional immersion in the performance, certain physical and emotional impulses that arise as a result of this absorption are repressed, and the performer as a sensate and responsive living body is effaced. In films containing strong, graphic or difficult content, the performer finds themselves in a position of needing to respond to the content via movement, yet all responses must be channelled into the prop. Therefore, reflexive reactions that instinctively arise must be veiled behind the performance itself. Importantly, here I do not refer to the difficulties of enduring certain sounds specifically, as this will be discussed further in later chapters. Instead, I refer here to narrative content that is powerfully affective – both emotionally and viscerally – to which the Foley artist must perform sounds. In one example, New Zealand Foley artist Jonathan Bruce describes this as an anticipatory reaction to material that must be controlled. While working on a highly graphic horror film, Bruce recalled where his reflexive responses meant he was “thinking: This is going to be horrific... But you can not voice that before it happens”.

The paradox of an obscured performer reveals an interesting tension in how ‘performance’ is conceptualised. Central to this tension is the troubling illusion of unity. Acting is a performative modality where physical action, expressions and vocalisations collectively construct characterisation, yet film acting in particular disrupts the perspective of acting as a holistic phenomenon. Pamela Wojcik compellingly points out the ‘crisis’ of definitions of acting in the digital age, for

sound technology has created a “fissure” between sound and body (2006: 72). Importantly, she speaks to mainstream aesthetic conventions of filmmaking and arguments of perceptual realism when she notes how “[c]inematic identities and notions of authenticity are constructed through the integration of sound and body” (2006: 74). This point was more recently explored by Lucy Fife Donaldson, who identified the ontological duality of performance relative between character and actor, troubles the “illusion of unity” presented in filmmaking by pointing out “the doubled relationship between on-screen bodies is further complicated if we consider that there is another body embedded in the filmmaking process: the body we hear” (2014: 1). In Foley performance, the emotional entanglement and dramatics must only come through in the *sound being produced*, and the presence of the performer - a separate entity to the actors in the film - must be erased. Unexpected, involuntary or reflexive responses must be controlled in order to successfully perform for the effect and obtain a ‘clean’ recording. This ‘clean’ recording becomes pivotal to maintaining what Wojcik describes as the ‘auditory realism’ of aesthetic experience (2006). Therefore, paradoxically, while embodied empathy is key in Foley performance, the performer’s emotional connection to the scene must also be contained and controlled, and the bodies producing these sounds rendered invisible and inaudible.

The first section of this chapter has examined the way Foley bodies ‘matter’ – bringing corporeal substance to characters, and yet ‘immaterialise’ under aesthetic practices that strive for an illusion of cinematic reality. It also explored the sonic and storytelling agency of Foley props as part of a Foley characterisation process. This performer-object configuration presents a

cinesomatic model of performance that mitigates an anthropocentric description of embodiment. The following section extends this discussion to the roles of sound design and editing.

5.6 Empathic Sound Editing: Postproduction Strategies for Cinematic Richness

This study argues that film sound editors set out to infuse their work with intimate sensory inflections. Interviews conducted for this research demonstrate how they are mindful of the ways in which this will ‘play out’ in exhibition spaces, and how a future audience will (ideally) experience it.³⁸ They also aim to amplify and solidify the characters that inhabit these narrative worlds, rendering them with corporeal and emotional depth. The lack of research into postproduction sound embodiments means there is very little exploration of how this phenomenon is realized in working practices. Therefore, this section will address this lack by looking into the ways that postproduction sound uses the bodies of workers to generate empathetic embodiments.

An overwhelming number of the postproduction sound practitioners interviewed for this study have shared how placing themselves in the position of the audience and the characters is key to how they approach their creative work. As this research demonstrates, this is more than merely a rhetorical turn of phrase, but rather a literal emplacement that draws on visceral understandings

³⁸ While this discussion does not go into the issues around distribution and exhibition technology, the ‘ideal’ is an important caveat, for differences in venues mean that while practitioners may posit an ‘idealised’ sonic experience for the cinema audience, this is not necessarily the one that a future listener will experience. The practitioners interviewed for this study did not speak of an ‘ideal’ audience, or acknowledge audience diversity as a factor in the listening experience. For further discussion of these issues, see Altman & Handzo, 1995; Sergi, 2013; Sobchack, 2005; Whittington, 2013; Atkinson, 2011; Beck, 2016; Coulthard, 2016.

and affective sympathies that reinforce the argument that professional sound work for film is an embodied art form. It is also a creative and technical set of skills that requires an empathic capacity on behalf of the practitioner, where dramatic content in the narrative are sonically translated into emotional contours and dramatic arcs via sound work. Here the term emplacement has been deliberately borrowed from anthropology, for its acknowledgement of the relationship between body and place in the study of soundscapes³⁹. This is arguably apt when considering the ecology of bodies and spaces operating as part of a cinema's narrative world(s). Steven Feld describes emplacement as "...understanding the interplay of sound and felt balance in the sense and sensuality of emplacement, of making place..." and points out that one's embodied experiences and memories of places draw heavily on acoustic cues that resonate a particular place. (1996: 97). As practitioners build up the soundscapes of narrative worlds – and the narrative places in those worlds – they inherently become the sensory participants, as much as co-producers, of these worlds.

5.7 Imagined Audiences, Corporeal Projections

Practitioner accounts demonstrate how producing sound for film requires empathic emplacement for the practitioner. It becomes evident how practitioners draw upon their own embodied responses, as well as accumulated experience to sonically sculpt narrative and character. This rendering of storytelling into cinesomatic experience is done with the intention of producing a certain experience for an audience. This involves tapping into the acoustic and

³⁹ In one example, Tom Rice (2003) provided an acousmetology of soundscapes in his anthropological work of the hospital.

psychoacoustic knowledges relative to sound, but also the deeply felt responses to sonic content, as Justin Doyle describes:

The way that sound affects us – we can hear a sound that can scare the shit out of us, or it can make a chill go down our spine. And that's without context – we don't need to see somebody hiding in the shadows with a knife. We just hear a sound and we get scared. And so we carefully choose little elements that we know either do that, or experiments where we find things that create that sense within us. And then we put it into the film and then when other people hear it, it's universal –or to some degree universal.

This quote particularly demonstrates that practitioners are actively engaged in a process that is in effect a sonic rendering and projection of his or her responses. The process is therefore demonstrably both exploratory and experimental. Australian sound designer Tom Heuzenroeder places this practice as central to the work of the profession:

There is a need within the sound design profession to be able to put yourself in the audience, and hear it as though you were an audience member seeing it [the film] for the first time...Once you've become involved in a film, no matter in what way, it's then just a question of: To what degree are you contaminated?

It is interesting to note how the concept of a 'first' filmic experience for an audience is fetishised and idealised, suggesting a purity of aesthetic experience associated with 'the unknown'.⁴⁰ Heuzenroeder distinguishes between the position of a 'normal' audience member, and that of a professional who has been exposed to the material extensively, revealing a tension between practitioner experience and the aesthetic 'goal' of the work. Further, Heuzenroeder describes practitioner connection to the film work in terms of *contagion*. However, I argue that this goes beyond mere metaphor, and is the ontological grounds for arguing that film sound is cinesomatic.

⁴⁰ While unable to pursue in depth here, this fetishisation of an 'original' filmic and sonic experience is worthy of further analysis, particularly in relation to the history of aesthetic experience and art.

Heuzenroeder's depiction of sonic contagion is useful when considering sound's ability to create both physical and emotional effects, a phenomenon of transmission that travels across bodies. The idea of sonic contagion can be read as both emotional *and* physical, as sound is both vibration and sensory suggestion; it is connotative and visceral. Further, I argue it expresses the living link between practitioner, cinema world and audience – an ontological claim that is articulated by Hagood:

Reproduced sound reverberates through the time-space of its reproduction, effectively bringing two moments and spaces into a phenomenological union that is not entirely "real," entirely "virtual," or adequately perceived and understood...When sound is reproduced for a listener, the time- space of its creation is thus internalized to overlay the time-space of the subject." (2014: 109)

Hagood encapsulates what could be described as *the sonic condition* – the unification of time and space, an overlay of worlds for the listener. Yet pushing further here, such a configuration points to the cinesomatic condition – the corporeal projections of sensate bodies striving to communicate sonic affect in postproduction sound.

Practitioner accounts reveal how self-reference is a key part of the process of sonic storytelling. Some interviewees describe their focus in terms of the emotion that they are reaching for with the sound, yet emphasise the tacit ways in which they gauge these emotions. These include describing their experience in terms of 'intuition' and 'instinct'. Importantly, this posits an alternative framing to discourses that prioritise the role of technology in the creation of sound work. Instead, the practitioner's access to this emotional awareness in fact becomes the compass for the technical work and those technical decisions used to construct

the sound work. UK-based sound engineer Dan Villalobos notes that, “Instinct is a great tool to use because it’s what you naturally react with. If you go - OH! – then you know the audience is going to do the same thing.” Interestingly, Villalobos describes the tacit knowledge of ‘instinct’ in a technical rhetoric, yet the salience is in how emotional reaction is felt and metered. And in this configuration, the practitioner is simultaneously self-referencing and projecting, navigating sonic effects on behalf of the imagined (future) audience.

Methodologies of sound design and editing emphasise auditioning, arrangement and fashioning of sonic elements in what may be described as a productive unfolding between practitioner and sound. Yet here the technical steps involved are less important when the goal is of attaining a certain ‘feeling’, and facilitating the participation of the audience. New Zealand sound designer Matthew Lambourn describes this as “a case of just beavering away at it until it feels right. And I do mean *feels* right, as much as *sounds* right, because I really think that’s an important part. I believe you do hear with your mind as much as your ears”. In this way, the technical work is framed as what must be done in order to *produce* the feeling. Lambourn’s words here indicate a mind-feeling association, rather than a body-feeling association, which speaks to the Cartesian framings still prevalent how perception and bodies are discussed. Despite this, Lambourn’s distinction between ‘feeling right’ and ‘sounding right’ reinforces the argument that technical qualifiers are secondary to embodied and emotional ones. Further, Lambourn emphasises how important this is in terms of audience engagement:

Because you want to be drawn into the film so you’re not just standing there watching. You want to be in there almost feeling it yourself almost as a character. You want to be in the character’s space, if not doing exactly

what they're doing....Its like you're sonically representing a feeling as much as you are 'the sound', so you're crossing that fourth wall all the time.

Lambourn's account articulates the goal of rendering emotional and narrative content into sonic language in order to produce the experience of participation for an audience. Further, this participation is one that emphasises the crossing over from observation to corporeal engagement in the spaces, actions and emotions of the cinematic world.

As is by now apparent, emotional as well as sonic sensitivity is used to consciously and deliberately create a particular kind of cinema experience for an audience. Yet practitioners reveal that creating a certain experience for an audience means also being mindful of sensory and information overload, and more importantly, knowing how to facilitate a sonic experience which actively involves the audience within the storytelling. In his interview, Dave Farmer emphasises the importance of restraint, which for him facilitates an even deeper level of audience engagement:

A lot of times we're putting too much [sound] in. And it doesn't let the audience participate in the storytelling. If you're hitting them over the head with a sound, they don't get to wonder. Because a lot of times audiences are filling in the gaps themselves, and it's good for them to do that. Otherwise they're just observers and they're not experiencing the story....

It is interesting that Farmer describes sonic overload as 'hitting over the head', an arrestingly corporeal depiction of sonic experience or 'sonic assault'. Further, Farmer's practitioner perspective here acknowledges how the cinematic experience is a process of active co-creation between audience, narrative and sound. Therefore, by being able to empathically manage and metabolise sounds

on behalf of an intended audience, the practitioner is able to create a particular type of sonic storytelling that supports the cinesomatic immersion of its audience.

5.8 Emotional Emplacements: Turning Story Into Sensory Spaces

A key element of postproduction sound work is the rendering narrative space through sound. Some practitioners interviewed for this research described their work as reaching for emotion, and translating this into sonic language. This runs in tandem with awareness and sensitivity to all the narrative components, and the 'places' and spaces of a cinema's narrative are also turned into sonic sensory textures. Widening this perspective even further, how this sensate storytelling is realised in temporal and spatial terms for exhibition spaces also becomes significant for the practitioner. Justin Doyle demonstrates that editors consider how an audience will experience a sound, particularly in the exhibition space of a surround sound cinema:⁴¹

I do participate in it somehow... I'm looking at the image and I'm conscious of the experience that the sound I'm putting in is creating – how that is working in conjunction with that image and how that effect is blossoming out. I sometimes think about the space. I sometimes think about the theatre and how the sound will affect or excite that space. It's like this felt sense thing....

This description of participation is interesting, as Doyle highlights a multiplicity of empathic perspectives and emplacements being employed. He outlines how his participation is realised in terms of an affective rendering of the cinema

⁴¹ This raises an interesting issue in terms of 'ideal' exhibition spaces, and as some practitioners identified in their interviews, producing a soundtrack involves producing three versions – one for the cinema, TV and handheld devices. This raises many questions about the different 'experiences' of cinema sound, and an interesting further area of study would be a comparison of soundtracks across mediums. However, for this study discussion refers to surround sound cinema spaces.

theatre space. Further, Doyle is articulating the acoustic awareness of a corporeally engaged sound editor who is tasked with finding ways to define diegetic worlds. This awareness is the cornerstone for the construction of a spatially resonant narrative space.

Since a key consideration for a sound professional is how audiences will hear a film,⁴² it therefore becomes important for the practitioner that the working environments facilitate construction of a spatialised sound experience for a future audience. As Avarese advises learners, “You are going to be making decisions about left-right panning, ambience that immerses the audience, and the level of dialogue based on your listening environment” (2017: 5). There are two approaches that a practitioner incorporates into his or her practice of editing, one approach involving the use of headphones while editing. Avarese clarifies how this option facilitates decisions about sound placement relative to the body of the listener, noting that: “With headphones, one has a sense of a “phantom” center, where we experience sound that is coming from the center of our head; like it is in the middle of our forehead” (ibid). Avarese describes sound editing as “like working under a microscope”, acknowledging that “headphones are good tools when performing surgery”, of “miniscule edits” (ibid).

Examining the performance of sound in an exhibition space raises questions around how practitioners seek an ‘ideal’ - and concomitantly - ‘flawless’ sonic experience for the audience. Sound editing moves between both micro and macro detailing, and the other approach is to use surround sound in the edit

⁴² This consideration is also paramount for mixers, who focus almost exclusively on details of sound placement. This study discussion has limited its scope of discussion to editing.

suite via speakers. As some practitioners revealed, since the work of sound editing and mixing is about the magnification of sound, it can be a 'horrifying' experience to arrive at a mixing theatre and discover a previously unheard problem with a sound. Therefore, being able to hear sounds from a phantom centre, as Avarese describes above, as well as acoustically – in a corporeally inhabited space – becomes critical. Matthew Lambourn articulates this when he notes:

When you're making a film soundtrack, you have to listen to it on speakers that will tell you everything. Because you don't want it to get to a cinema where you haven't heard something that it might play. In that respect, in the mix room is the best time you're ever going to hear the film. And that includes even the flashiest cinemas, because they're never going to be exactly the same shape with exactly the same speakers and set up exactly the same way. And really, unless you had a whole lot of cinemas that were exactly the same design, there's no way of standardising that, so you've basically got to get it best you can in that room, and then assume that it will play almost as good in most cinemas.

As Lambourn points out, detail in sound can be in proportion to the quality and capacity of the speakers. However, while Lambourn points out the inherent differences in exhibition playback systems, underlying such concern is the aim of an 'ideal' sonic experience for an audience. This 'ideal', according to mainstream filmmaking aesthetic practice, posits a seamless cinematic experience with maximum immersion and minimum disruption. Yet for film sound scholars, exhibition is the ground for theorising sonic experience in terms of diversity. Rick Altman already made the claim for the "heterogeneous nature of the cinema experience", which for scholars "... opens the field to consideration of a broad spectrum of objects, processes, and activities..." (1992: 6-7). Indeed, by arguing for heterogeneous cinema experience, Altman challenged the idea of a pure

sound experience.⁴³ This points to a tension between practitioners' notions of the 'audience' and the actual diversity of audience experiences. I argue that this diversity of exhibition spaces and audiences – and therefore, sonic experiences – plays a part in the cinesomatic experience of any film. Therefore, while professional practices may assume an idealised sonic experience – and therefore an assumed and ideal listening subject – a cinesomatic perspective on film sound acknowledges and embraces the complexities that inform any given film sound experience.

5.9 Affective Architecture: The Layering In of Sound and Self

This study argues that postproduction sound work is the creation of affective architecture, built into the filmic narrative. Practitioner accounts reveal how the process of the selecting and assembling of sounds during a sound edit is both a literal and a performative layering. In postproduction film sound, the three main 'food groups'⁴⁴ are dialogue, music and effects, referred to professionally as D-M-E. Each category or 'stem' may contain many separate tracks mixed together. Avarese notes that beginners need to "learn to listen in layers" and that "creating sonic landscapes involves placing layers of individual sounds together in order to form a single reality" (2017: 72). This study demonstrates that an affective process can occur whereby a practitioner becomes corporeally invested and engaged within the sonic architecture as it is being assembled.

⁴³ Other film sound scholars such as Kerins (2006; 2011) and Sergi (2013) have considered the technological developments of the exhibition space alongside techniques of storytelling.

⁴⁴ Benjamin Wright found in his study of Hollywood sound professionals that it is "not uncommon" for practitioners to "describe their work in gastronomic terms" (2011: 352).

Using their knowledge of sound's affective and visceral power, sound designers and editors aim to convey multiple levels of characterisation and reality. It is significant that sound sources present in the layering process are a composite of effects, some of which may be recorded and constructed by the practitioners themselves. In this way, the editing process becomes a rich site for theorising an embodied connection between practitioner and work. In these instances, the sound editor becomes a perpetual corporeal presence within the effects, and therefore within the narrative world. In discussing how he constructed a CGI ghost character on a past project, Justin Doyle delineated the elements and strategies he used to convey different levels of reality at play for the character:

Every time [the character] would speak – in his breaths we would put the classic stuff – small animal growls, screechy little things – you could drag your fingernails across things and get little squeaks and things. So when he would inhale you'd get this sound – (imitates sound)⁴⁵ that would come across and it made him sound like he had come from the depths of hell. So you take those sounds away and you take his regular breathing – that presents one reality of that character. But then you want to add extra layers of sound, and suddenly you're cueing into a part of our brain.

In reaching for a deep audience connection, it is significant that Doyle used bespoke recordings such as fingernail scrapes as a sonic layer to the character, intended to richly enhance the perception of the character's presence in the narrative world. By considering such an example of layered character design in terms of sound sources, the corporeal 'traces' of the practitioner render the work an anthropomorphic composite. In other words, Doyle demonstrates how the practitioner becomes materially woven into the fabric of the sound piece, and

⁴⁵ It is worthwhile to note that many of the practitioners who were interviewed via Skype or in person performed a communicative technique when describing sounds. These interviewees used their own bodies and mouths to produce and 'recreate' sound effects. An interesting future area of study would be to examine how sound professionals use their body to communicate specific sound effects in the absence of technology.

therefore sonic characterisation can be redefined as a corporeal fusion of real and synthesised embodiments.

Going further in this vein, some practitioners demonstrate how the process of empathic layering involves what may be described as oscillating embodiments. In this configuration, the practitioner is shifting between critically assessing sounds in relation to the narrative and character, and empathic emplacements into an imagined audience's experience. This oscillation is key to how a practitioner will perform a 'sounding-in' to both characters and audiences. Sound designer Dave Farmer articulates this conscious crafting of audience engagement:

The first layer of it is the sound of it. You're looking at the images and thinking that it doesn't match. For example, you may want it to sound more sizzly or have more rock in it. It doesn't sound alive yet. So you figure out what it's lacking that will bring it to life. And then once you get that in place, you start to think from an audience perspective. What do I want them to hear here? Before you even start working, you watch it with no sound and determine - what do you want the audience to feel? It's a give and take thing about putting yourself in the audience perspective and trying to figure out - am I giving away too much too soon? Does this sound real? Is that working? Is it not? Is it too much sound?

Farmer's description here articulates this shifting between the analytically evaluative and the empathic. The process involves making decisions around the 'unfolding' of information, as well as the affective content of the sound itself. Further, by characterising sounds in terms of textures, it is apparent how materiality is key to how Farmer uses sound to animate narrative worlds and characters.

The complexity of oscillating embodiments in sound design and editing also demonstrates the cinesomatic connections between the practitioner and character. Importantly, some practitioner accounts reveal the extent to which empathic engagements are kinaesthetically realised. Australian sound professional Lynne Butler describes this engagement in a markedly kinaesthetic framing:

I find when I'm editing that I will move with the characters, mimicking their movements and voices. It's a strange empathetic connection. I find myself becoming very invested in what the characters are feeling. I...find myself saying the lines sometimes. It's strange that you become so intimately in tune with characters. This is particularly obvious at wrap parties when I feel I know the actors/ characters really well and realise they don't have a clue who I am. It's a really interesting thing to go on a journey through the project. I enjoy some aspect of every project I work on (even if it's not what I usually like or believe in) because I invest a part of myself in the story and characters.

Noticeably resonant with the descriptions offered by Foley performers, this connection between practitioner and character as articulated by Butler speaks to an embodied immersion in the characters and the narrative world. Ironically, this connection blurs and problematizes social and professional relationships and associations that exist externally to the cinematic world. Nonetheless, by sounding-in to characters through their bodily performance, Butler demonstrates the degree to which sound editing is a corporeal investment for the practitioner. This a point is further echoed by Australian sound professional Wayne Pashley, who defines sound work specifically in relation to the actor-character embodiments. It is worthwhile to note that Pashley himself has worked as an actor, which arguably facilitates a particular insight into this empathic connection:

What [actors] do and what they put themselves through is what I try to put myself through in terms of sound. Whether they're method or not, they become engrossed - they take on the character, on the story and that's part of my job with sound...[the sounds] have to become actors in the story infrastructure....I'm always trying to be a part of their embodiment - what are they thinking? Why are they wearing that?...I always try and find the reason for it, and I try to stick with the main character's thrust of what their emotional intent is and what their goals are.

Here Pashley places the role of sound work as supporting these onscreen bodies.

In this configuration, understanding intent within the narrative involves a 'reading' and projected embodiment into the 'infrastructure' of the cinematic world via the embodiment of the actors/characters. Both these practitioner accounts demonstrate how producing sonic work for cinema requires empathic understandings and connections to the cinematic world. Further, these connections are demonstrably realised in corporeal terms.

Conclusion

Drawing on practitioner accounts, this chapter has argued that postproduction sound practitioners are deeply and corporeally implicated in their sound work. This is expressed in kinaesthetic and emotionally empathic connections to character and spaces, as well as intended audiences. The first section of the chapter focused on Foley, demonstrating how Foley artists provide phenomenological depth and sonic presence for onscreen bodies through a process of performative infusion akin to other performance modes such as acting. It has demonstrated how empathic infusion was used to capture meaning and emotion in recordings. It also looked closely at the performer-prop

relationship, offering a model of cinesomatic embodiment that challenges the anthropocentric limitations of traditional phenomenology.

The second section of the chapter focused on sound design and editing, and how these roles entail processes of emotional emplacements and projections for a future imagined audience. It has become evident that practitioners draw upon their own embodied responses, as well as accumulated experience, in order to sonically sculpt narrative and character. It was demonstrated how producing work that 'sounds right' and 'feels right' is highly regarded by practitioners, and this finding challenges discourses that fetishise technology and obscure embodiment. It also examined the degree to which the practitioner becomes corporeally bound up in the layering process of editing work, theorising this as an experience of oscillating embodiment. In this framing, the sound designer/editor is rendered a perpetual corporeal presence within the narrative world. This chapter has identified and theorised the process of 'sounding-in', a cinesomatic embodiment wherein the sound practitioner is empathically driven to produce expressive sound work.

Autoethnography #4
Sound Library Demo with Matthew Lambourn
Location: Pow Post, Wellington, NZ

I walk down a hallway of doors leading to edit suites. Through one door I hear a line of dialogue being repeated over and over again. It is a child's voice, squeaky and bouncy. Further down I hear a crash effect through the door. A crescendo of heavy thuds followed by ringing metal. It is repeated. And again.

I step into the windowless edit suite with Matthew Lambourn. We are surrounded by speakers, and lit up by the glow of three large computer monitors. He is demonstrating his sound library to me. He plays me a file entitled 'Rips Grindy Bloody'. The sounds that come through the speakers are very close, clear and crisp - a sticky wet mulching sound. Listening to this file, in this cave, it is like my ears have become hyper sensitive, and I can hear in high definition, far beyond the reach of my everyday acoustic listening. The sounds are disgusting and visceral, and very evocative. I am fascinated, and my thinking becomes suspended by being exposed to these sounds. I am not visualising images, as much as I am noticing an emerging relationship to my own body. How close is this sound? How much does the sticky wetness in all its sharply defined glory draw me back into my own skin? The sound becomes a visceral texture. I begin to understand that what makes a 'great' sound effect is one that has this range and dynamism in a small sequence. I am told that these sounds were actually created by messing around with fruits and vegetables. He remembers the smell of the fruit. Abruptly, Matthew Lambourn moves into punches – a range of textures. Bony punch, squelchy punch, meaty punch. Lambourn introduces a file "Here's a punch with some juicy stuff on the end." The impact sound has the faintest trail of liquid that eases the 'burst' attack into

something altogether more physical, where boundaries have been breached. Then Lambourn demonstrates some files in his 'blood library'. I feel oddly nauseous, and I'm not sure if it's because I've been told it is real blood. Would I feel that way if I were told it was cream? Then he plays a track that he knows has a special meaning for me. I hear the sounds of trickling water, delicate and nuanced, soothing and dulcet. Water tempered with tinkles of glass sounds, layered in musical tones. I feel a delighted thrill, a moment of recognition and placement; I realise I am hearing a sound file from The Lord of the Rings. I don't need to be told, but the words come out – "Is that Rivendell?" Matt confirms, "That is Rivendell". The sound file was titled 'Rivendell Glassy Streams'. Such a beautiful assemblage of sounds, and the evoke the fantasy wonder of that film's fictional world, a world which enchanted me back in 2001, and set me on the path towards studying film sound. Here I am, hearing the sounds from that world, isolated from its filmic context, and long after it was produced. I recognise this aural universe, and reconnect with the feelings it evoked for me, and continues to evoke. I realise I feel strangely closer to that fictional fantasy world in this moment, as if hearing the sound in isolation makes it more real, and takes me closer to it. I feel a wonderful sense of privilege, nostalgia and also – curiously, defiance. This is more than mere novelty. Rivendell is still alive, and it can be revisited any day, every day, in this library.

CHAPTER SIX

ARCHIVAL RESONANCES: EMBODIED LIBRARIES AND THE CORPOREAL LIVES OF SONIC EFFECTS

Thanks to recording, sound exists in the memories of machines and surfaces as well as the memories of people.
(Sterne, 2009: 57)

6.1 Introduction to Sound Files and Libraries

This chapter explores issues and questions around the postproduction sound practitioner and their key artistic material – sound files. This focus grew directly out of observations and interviews conducted for this research, which reveal an intriguingly layered and interactive relationship between the professional and his or her sound library. Further, it became apparent that the lack of library-focused theoretical discussions in film sound theory also reflected the absence of phenomenological accounts of library database engagement more broadly.

While the ‘sound library’ has been referred to in overviews or practitioner accounts of professional Hollywood sound practice (Wright, 2013; Ament, 2014; Greene, 2011; LoBrutto, 1994) these discussions do not directly analyse the sound library from an embodied perspective. Instead, this literature frames the sound library as part of the functional tool-kit of a sound professional, albeit a highly valued part. Indeed, how the film sound practitioner engages with sound libraries is conspicuously unanalysed within film sound theory. This chapter aims to address this gap, by exploring the corporeal dimensions of working with a sound library and the deeply corporeal nature of sound library material engagement.

‘Sound file’ is a term that suggests a particular way of understanding and framing sound. It speaks to the technological impact that digital technologies have had on postproduction sound practices, within wider contexts of digital information management systems. What this research argues is that by moving past an overtly technical focus in such discussions to inspect the sound file and the sound library through the lens of embodiment reveals many pathways and patterns of corporeal connection. In other words, framing the sound library as a corporeally-infused resource further reveals the cinesomatic connections in film sound production. It becomes evident how even this smallest unit of sonic expression can capture, provoke and perform a multiplicity of embodied narratives. Therefore, the practitioner’s sound library becomes much more than a repository of sonic data, but becomes a living archive and sensory palette. In this way, the technical framings of sound libraries are necessarily revised.

Locating the ‘sound file’ raises larger questions about the way that sonic language functions, particularly within a Western mainstream aesthetic context. It is important to acknowledge that sonic language in filmmaking operates in culturally and historically specific ways. Film sound scholarship has analysed the evolving aesthetics of Hollywood soundtrack storytelling from a textual, genre and/or technological perspective, particularly cultural lexicons of sound effects (Lastra, 2012, 2013; Whittington, 2007, 2009; Sergi, 2004; Beck, 2016; Connor, 2013; Donnelly, 2009, 2013; Flueckiger, 2009; Hanson, 2007; Hoier, 2017, Kerins, 2006; Kulezic-Wilson, 2017). This chapter argues that looking at the sound library specifically as a visceral resource drawn from lived experience is particularly useful for a discussion of embodied film sound. This is because the

sound library speaks to, and through, the practitioner in phenomenologically rich and at times highly personal ways.

Taken here as a singular entity, the sound file is micro component used in assembling a corporeally rich soundtrack. It is no misnomer that these libraries are referred to as 'effects' libraries, and no coincidence that theorists have identified a conceptual and practical crossover between effects and affects (Hanson, 2007; Hagood, 2014; Flueckiger, 2009; Hoier, 2017). Drawing on interviews conducted with postproduction practitioners Wayne Pashley, Matthew Lambourn, Dave Farmer, Justin Doyle, Tom Heuzenroeder, Brent Burge and Stefanie Ng, this chapter analyses how sound designers, editors and Foley artists are corporeally engaged in a rich and layered relationship to their sound libraries. Doing so, this chapter argues that the sound library be reconceptualised as an archive of somatic affect, and contributes to emerging discussions that reframe professional and technical practice in terms of embodiment.

6.2 Multiple Sonic Lives: Cinesomatic Sound Files

If you've got a sound of a chair scraping, it's got to have its own life...the word spirit comes to mind because it's got to have that character – you've got to instil that character into the object. And anyone can move a sound file from a CD and slap it on a picture, but it's that whole philosophy behind...the soul or the character of the sounds that you're listening to.
(Matthew Lambourn)

For professionals working in postproduction sound, the sound file is the basic unit with which a soundtrack is built. The soundtrack can be conceptualised as the arrangement of many sound files into a cohesive whole, and the 'sound

library' is the term for the database management system where files are located. Broadly speaking, a sound file is "a container for stored digital data that usually has a meaningful name" (Robjohns & White, 2018, NP). This explanation points to a fissure between the way sound is categorised, notated and managed as a resource and creative asset, and the way it is in fact experienced and articulated. In other words, the very framing and definition of 'sound file' erases the bodily processes involved in its production. Further, portraying sound as a unit of data obscures the material reality of sound as it is heard and felt by living bodies.

For scholars interested in the materiality of sound, an alternative framing is to consider the sound file as a contained capture of lived experience. This capture has the potential to provoke visceral responses in each listener upon each hearing, and has the ability to be multiplied indefinitely. Particularly intriguing is the fact that a single sound file may populate many different projects, and may be worked and re-worked in each new incarnation to bear new performative dynamics or provoke new contextual meanings. Following this logic of multiplicity and re-contextualisation, this points to how the phenomenology of film sound experience is also about the reincarnation of sonic affects. These affects/effects are repeatedly transmitted and re-populated across many listening bodies. The sound practitioner is the intermediary between technology and phenomenological experience; both through his or her own embodied responses, and, as argued in the previous chapter, as the pilot 'body' for a future audience.

To utilise their reservoir of sound files, practitioners must employ digital library-specific technical applications such as database management, advanced search skills and familiarity with metadata glossaries. However, these skills are arguably the pathway to the more critical aspect of working with sound libraries, which involves the auditioning and assessment of located sounds. As has already been argued in previous chapters, the practitioner's main goal is to produce an emotionally and viscerally provocative sound work for an audience in a way that supports the film's storytelling. Therefore, the locating of specific sound files to use in any given scene becomes an exercise of both critical listening as well as phenomenological engagement. As these interviews reveal, working with sounds stored and managed in a sound library can in fact become an embodied negotiation of affect and meaning.

In this research, some postproduction practitioners specifically detailed particular relationships to certain sound files in their collection. The sound files in question were not only perceived in terms of sonic 'content', but were loaded with meanings and somatic memories personal to the practitioner. What is intriguing is the way such a relationship can become implicated in many productions, as sounds are reused for other projects. As Chion has noted, sound is "influenced and parasitized by all manner of extrasonic associations and representations" (2016: 201). Due to these extrasonic associations, sound cannot possibly suggest a 'homogenous category of perception' (ibid, 205). In a cinesomatic configuration of film sound, embodied meanings and affective resonances become recycled and reconfigured over and over. In this way, both

the semantic and the corporeal meanings of sounds are rendered and recast across multiple narratives, temporalities and bodies.

A sound file's power is on one level indexical, yet also profoundly somatic. Further, this somatic experience of sound is central to conceptualising the sound file as *cinesomatic*. Barry Truax critiques a "reductionist implication of listening 'to' sound", as if it were an object that we approach as detached individuals" (2017: 172), and argues for the "dynamic quality of aural experience" (ibid). This parallels with recent shifts in theories of subjectivity, where lived experience is configured as "...a paradigm of imbrication, cohabitation, and coextension wherein the limits of the subject cannot be assumed" (Kapchan, 2015: 41). Sound facilitates corporeal interconnections across production phases and reception contexts. The micro (sound file) and macro (soundtrack) elements of sonic narrative in film enact and provoke a 're-telling' of visceral affect.

The ability of sound to transpose and mutate meanings and sensory responses is critical for the postproduction sound professional. As sound designer Mark Ward argues, "synaesthetic forms of re-association that is the engine of cinematic meaning-making, acting to generate affectively-laden multimodal metaphor and facilitate conceptual blending" (2015: 162). This is significant not only for an intended audience, but also for those who work with a library of sounds to communicate layers of meaning. The library provides a plethora of sonic choices that the practitioner navigates in order to produce the desired effect. However, as Andy Birtwistle points out, the final film soundtrack is "a material assemblage of sounds structured in time" which presents "a multiplicity of sonic phenomena"

to an audience, as opposed to “discrete, neatly differentiated individual sounds” (2010: 16). This articulates the key difference in practitioner and audience experiences of listening, and must be acknowledged when examining how the practitioner engages with a soundtrack as it is being built. Understanding soundtracks in terms of audience reception represents one aspect of the film sound experience, but does not theorise the ways in which the practitioner experiences the sonic work as a work-in-progress. An examination of how the practitioner engages with his or her sound library – and the sound files within that library – becomes highly relevant in a theory of embodied film sound production.

6.3 Resonant Repository: The Postproduction Sound Library

Recognition is a bodily experience and opens up new possibilities...The ability to recognise is relative to the historical, cultural and technological embodiment of the observer.

(Crease, 1997: 218)

In theorising the embodied connection between a practitioner and the sound library, it is important to outline what the sound library is and how it works in professional contexts. This is particularly significant because a practitioner’s or company’s library of sound effects is considered a key professional asset, and moreover one which becomes tied into a practitioner’s resume of previous work. In this way, perceptions of both aesthetic and professional value within the film sound community become mobilised. As Bourdieu pointed out, questions around aesthetic taste as well as ‘quality’ are “...armed with a pertinence principle which is socially constituted and acquired” (1984: 42). Such an insight is significant for an industry, a role, as well as a creative tool that requires the professional to

display “artistic competence” (Bourdieu, 1984: 43). ‘Sound library’ is understood here as the continually expanding digital database of recordings built up from a range of sources. It is important to underscore that a sound library can in fact be a collection of multiple libraries, including personal libraries, project libraries owned and administered by a particular production company, as well as commercial and community sound libraries. As the interviews for this research attest, the content of each of these libraries - and its perceived value - differs widely. In terms of commercial and community sound libraries, the terms and conditions of usage are written into the purchase or acquisition process,⁴⁶ although usage of this material becomes potentially fraught for a practitioner, as I will discuss later. The circumstances of acquisition and management of personal as well as project libraries can differ significantly. Without venturing into intellectual property laws, the general etiquette of library access as explained by New Zealand sound professional Matthew Lambourn is that while the production company stores and administers the libraries for their productions, a practitioner has permanent rights to access and reuse library content of a film on which he or she has worked. In terms of ownership of the sonic material, the situation becomes much more convoluted and depends on contractual agreements. Sound files from these projects may already be in the practitioner’s personal library, or they may be accessed through the production company’s library database.

In addition to the project-related material, the range of contents in a practitioner’s individual library also varies, depending on what an editor has

⁴⁶ Depending on the company, a purchased sound from a commercial library may have a license whereby that company retains the rights.

decided to acquire, or personally record. According to Matthew Lambourn, sound editors share sound files very frequently⁴⁷. He summarises the exchange bargaining process: “Jeep sounds in exchange for snow footsteps”. However, he goes on to clarify that in some cases, sound editors are particularly protective of certain sounds, and will not share these into a ‘common’ library. This can either be because of personal expense incurred in purchasing or recording the sound, or because of they developed “a signature sound” that should not be made available for use in other films⁴⁸. Therefore, the sonic ‘collection’ may become key currency for the postproduction sound practitioner.⁴⁹ In these ways, the sound library becomes elevated far beyond a functional tool kit, but is rendered with aesthetic and professional value within the film sound industry.

Research into film sound practice reveals the critical importance of the sound library to the postproduction professional. Given its central place in the production processes and value systems of the film sound industry, its near absence from theoretical accounts of embodied film sound practice means it is imperative that it be included in the development of film sound theory. Professional sound libraries contain vast quantities of sound files, including those that have been ‘sweetened’⁵⁰, or those that are ‘raw’ recordings. Further,

⁴⁷ It is acknowledged that Lambourn is speaking within the New Zealand sound community, and that differences may exist in other film industries.

⁴⁸ Some interviewees indicated that a sound designer or editor might use their library as leverage to attract future jobs. There are industry anecdotes and stories about sound designers hearing a piece of their own signature sound design for one project in another film. While it remains the province of the practitioner and/or production company to pursue legal action regarding this, such a breach of etiquette is heavily frowned upon by many practitioners.

⁴⁹ However, Lambourn also questioned to what extent this works, because “Many productions like, and expect to get, original material”.

⁵⁰ Sweetening is a vague and broad term to denote sound that has been altered in some way. It may refer to editing or mixing, but generally speaking sweetening “is the process of flavouring the sound with additional elements, equalization, or other effects” (Viers, 2012: 207). It is interesting that the term suggests ‘improvement’ in a sound, which speaks to aesthetic ideals.

Stanley Alten clarifies that there are both ‘prerecorded’ and ‘produced’ effects in a sound library. The prerecorded effects “...are distributed on a digital disc or down loaded from sound-effect libraries on the Internet” while ‘produced effects’ “...can be either live or electronically generated” (2014: 324). He also adds that the ‘hard effects’ obtained from the production recording are a third source of effects (ibid).

The ways, and amount to which an editor uses any of these types of effects is considered highly important in terms of the practitioner’s own body of work and creative voice, as well as the aesthetic brand of a production or company. This also applies to movie franchises produced by a particular parent company. In his overview of sound production practice in Hollywood, Benjamin Wright notes how sound effects can become, “...the primary means by which a facility asserted its own identity in the sound community. Sound effects elements were not only the tools of a sound editor’s trade, but also represented a facility’s signature ‘sound’” (2011: 94). While Wright is referring here to the collective signature sound of a particular production company or postproduction facility, this is also applicable to the freelance practitioner, particularly as their profile and industry recognition grows.

Comparatively, the use of commercial sound effects is potentially contentious. While many practitioners frequently rely on externally and commercially sourced recordings for convenience and diversity of recordings, concerns remain about originality and recognisability of these sounds, the technical quality of recordings, limitations inherent in the recording, and the potential investment of

an editor's time in order to combat these issues. Alten argues that commercial sound effect libraries also have three significant disadvantages for the practitioner:

[Y]ou give up control over the dynamics and the timing of an effect; ambiances vary, so effects that are edited together may not match one another or those you require in your production; and an effect may not be long enough for your needs. Other disadvantages are imprecise titles and mediocre sound and production quality, particularly of the downloadable materials. (2014: 326)

In addition to these technical considerations, the issue of recognisable commercial effects becomes tied up with larger considerations about originality, the aesthetic value of certain sounds and what constitutes good creative practice for a postproduction sound practitioner. Originality remains a key marker of aesthetic value in music, and as Pamela Burnard argues, this is part of the legacy of the Romantic period which fostered an “expressive aesthetic of originality and authenticity”, one in which “inspiration and originality, privileges the creator as an absolute individual” (2012: NP). This is clearly echoed in film sound, for as Benjamin Wright noted, “Stock libraries have become much more than repositories for every kind of functional sound effect. As an occupational ideology, sound editors approach the use of sound effects with an ear toward their unique aural signature, a practice that is tied to the industry's preference for original field recordings” (2011: 101).

This perspective on originality is reinforced by many seasoned practitioners, such as New Zealand sound designer Dave Whitehead, who offers the following advice to beginner practitioners: “Start recording everything in your world now. Your library is so important, and it's how you will give your original voice to

your projects. You don't need anything expensive to start with; just start recording" (cited in Sutherland, 2016: NP); similarly by Tim Prebble who believes the library is "your unique contribution" (Isaza, 2011: NP), and Matthew Lambourn who believes "your library should be different to every other library". This is also advised in guide manuals for novices, such as Alten who advises aspiring sound designers to:

Take an audio recorder with you wherever you go. Record sounds to study and to discover their sonic characteristics. Manipulate them in the studio for their potential to be processed into other sounds. Sound designers have been doing this for years, and they do not miss the opportunity to record new and unusual sounds to add to their sound-effect libraries. They bring their recorders to toy stores to take advantage of the rich array of sounds that toys generate; on vacations to document that unique sound of a wave that does not crash but haps [sic] against the shore.... (2014: 309)

These practitioner accounts reveal the degree to which original recordings are valued, and perceived as intrinsic to expressing a practitioner's professional voice. Further, these accounts posit the embodied participation of the practitioner through the listening/recording process, implying that this physical participation is necessary to the process, and that the practitioner's presence renders the recording with more value.

The emphasis on capturing and building a personal signature into recordings that form the basis of a personalised sound library is key for understanding the industrial framing of this resource. It also points to the ways in which 'good creative practice' as defined by practitioners means cultivating an 'original' sonic palette, particularly through field recording, which involves a process of embodied tuning to the environment. However, I wish to go further here, and argue that it is sound files – particularly (but not exclusively) those recorded by

the practitioner – that capture and repeat phenomenological experiences for the practitioner. In other words, ‘sound files’ are containers of affect; they retain and reproduce somatic experiences that begin with the practitioner, and may go on to affect other listening bodies in cinematic contexts. As this research will demonstrate, this reinforces the argument that the practitioner’s embodiment is central to reconceptualising the sound library as a reservoir of corporeal affect.

The specific location and environment of the individual practitioner is also significant, for being pre-positioned as a listener and participant in an existing soundscape becomes an influencing factor shaping the library. As Isabelle Delmotte notes, sonic exposure “...transforms the human body into an archivist and translator of sounds as well as into an active participant in the pre-conception, existence and organisation of soundscapes” (2015: 183). Film sound practitioners make use of their surrounding soundscapes in recordings that make up part of their sound libraries, a practice also performed in sound art and acoustic ecology (Bohme, 2000; Carter, 2003; Augoyard, 2005; Blesser & Salter, 2009; Licht, 2009, Parmar, 2014, Westerkamp, 2017). For example, New Zealand-based sound designer Tim Prebble pointed out that the local sound designers in Wellington all have “epic wind libraries” (Isaza, 2011: NP). Evidently, the relationship between the surrounding soundscape and the practitioner becomes significant in shaping the resources of the library. In this way, the embodied placement of the practitioner, as well as the recordings themselves, become geographically and historically located. While practitioners ultimately aim for a wide palette library that offers the breadth of sound types and textures, an individual library will nonetheless bear both the signature of

where and when the practitioner is situated. I argue that this factor brings phenomenologically rich memories specific to each field recording, and each experience of re-listening provides a reawakening of somatic remembering.

In a phenomenologically loaded relationship between practitioner and sound file, these units of sound becomes much more than 'sonic data'. The associative and generative nature of sound means that environmentally located and affect-laden sounds are translated into a multitude of new narrative worlds. This reuse and transposition into further new creative works means practitioner-based corporeal stories behind the recording gets woven and re-woven into the fabric of any further projects produced with these sounds. I argue that this can be theorised as a cinesomatic transmission, which becomes the material grounds for the communication and internalisation of meaning and corporeal affect for other listeners. Mack Hagood argues for the ontology of the cinema sound experience in terms of sound reproduction and transmission:

Reproduced sound reverberates through the time-space of its reproduction, effectively bringing two moments and spaces into a phenomenological union that is not entirely "real," entirely "virtual," or adequately perceived and understood....When sound is reproduced for a listener, the time- space of its creation is thus internalized to overlay the time-space of the subject.... which create multiple ontological realms for the subject to move between. (2014: 109)

Hagood's point about the reverberant nature of sound producing multiple realms within the listener-subject is a useful way to consider how the practitioner engages with the contents of his or her sound library and concomitantly, how the sound file becomes a rendered unit of embodied meaning. Therefore, the totality of the sonic experience of any film is an augmentation of a multitude of sonic-

somatic narratives. These narratives are then imparted, and re-embodied, through a process of interpretation by an audience.

6.4 Stockpiling Sounds: Building and Auditioning Libraries

Listening breaks apart the shell of the subject, eases the borders of identity, and initiates an interdependence whereby one is constituted by the whole environmental horizon.

(LaBelle, 2006: 245)

As is by now apparent, the sound library is a highly valued resource for the sound practitioner, and a pivotal player in a postproduction sound company. For Matthew Lambourn, a sound library “is a *taonga* - this is a Māori word meaning 'treasure' or sacrosanct item.” Lambourn acknowledges that the sound library has “economic value” but also requires “due respect and care”, because it is “the heart of a sound company”. Aspects of working with a sound library includes searching via metadata, auditioning sounds, positioning them in the soundtrack and further crafting them in relation to other sounds. All these processes are geared towards producing sonic storytelling and maximising the impact of the key narrative moments. For veteran sound designer Randy Thom, considering the character of each sound is important, and each sound must be considered individually for its ability to express, communicate and provoke: “When you’re deciding what sound effects to sync to a scene, you’re ‘casting’ each sound to play a role” (2014: NP). Thom’s words here speak to the ways in which sound designers understand sound working performatively, and how all characteristics of a sound are considered for their ability to embody and communicate the intended feeling and information.

However, in arguing for a cinesomatic relationship between practitioner and library, it is important to demonstrate how the auditioning of sound files is not only a process of analytical selection, but also an exercise in embodied feedback between practitioner and sound. Further, considering this process in terms of philosophies of listening enables scholarship examine this area of sound work in both abstract and corporeal terms. This is important for challenging the humanist bias associated with phenomenology. For Brandon LaBelle, listening is an experience of “diffused subjectivity”:

...through listening, an individual is extended beyond the boundaries of singularity and toward a broader space necessarily multiple, for ‘as soon as you begin to pay attention, the borders between things become less clear. Such a dynamic positions individuality as porous and volatile imbued with surrounding space and situated inside an ecology of acoustical events. (2006: 245)

Such a formulation is useful when examining the practitioner’s physical experience of sitting through sound auditions and the building of a sound scene. Applying LaBelle’s model of listening as distributed subjectivity to the practitioner enables insight into how working with sound libraries is an embodied loop of narrative and sensorial experience. The practitioner locates, listens and responds both critically and phenomenologically, and through listening, subjectivity simultaneously placed and dispersed. The practitioner’s awareness and responses are moving between sound-being-auditioned, narrative and the listening body. Articulating this process exposes the limitations of those technical accounts of sound work that obscure or minimise the bodily dynamic behind technological workflows. Further, identifying and theorising this embodied work problematizes discussions of film sound that focus on the ‘soundtrack’ as an end result, rather than as an unfolding participative process.

6.5 Marshalling Sounds, Wrangling Metadata: Managing the Library

Much professional and informal industry literature focuses on how practitioners achieved certain effects through the use of technical applications (Andersen, 2015; Isaza, 2010a, Isaza, 2010b; Krug, 2012; Savage, 2012; Sutherland, 2016; *The Cargo Cult*, 2014). While the sound library is often an implicit feature in discussions of sound effects, it is framed in terms of its database functionality and subsumed under discussions of other applications and processes such as plug-ins and processors. The ongoing updating and development of DAW applications provides much fodder for discussion among audiophiles and professionals alike (Farnell, 2014; Hancock, 2007; Sutherland, 2016). Specific industry sourced references to sound libraries are concerned with promoting commercial products such as new library collections or databases that promise to facilitate easy library use (Hanish, 2015). In contradiction to these framings, this study argues it is important for scholarship to consider practitioner-sound library engagement as a phenomenological process in itself.

Working with sound libraries is so integral to professional sound editing that many audio textbooks devote chapters to helping learners understand the principles of sound file management. As a sound library can be substantial, these experts' guidelines assist with questions around metadata and searchability of sound files. In his best-selling book *The Sound Effects Bible*, Rick Viers offers a list of tips for beginner sound designers when building a sound library which points to a corporeal way of relating to the content:

... you should name the sound what it is, and not what it was. You will undoubtedly find material that doesn't sound like what was recorded but instead sounds like it should be called something else. Name the file based

on what it sounds like....Remember, the brain can't see what was recorded. It can only interpret what it hears based on its memories of other sounds. This concept is your first step into the world of sound design. As you deprogram your mind to forget what it sees with your eyes and reprogram it to see with your ears, you will find a whole new dimension to the sound effects recording process. After some experience with editing files using this principle, you'll find yourself thinking differently while recording. And more importantly, you'll start hearing differently (2011: 172).⁵¹

Viers' instructions demonstrate a key way that practitioners think about libraries, whereby the sonic quality of the sound is considered more important for library cataloguing, than a truthful documentation of the recording source. In this way, it is possible to see how the sound library is actively shaped into a corporeal resource for the practitioner, as sound files are catalogued based on perceptual judgements. Further, this advice demonstrates how practitioner engagement with sound files is a phenomenological endeavour that utilises sensory memory and perceptual associations. In contrast to cognitivism, Viers identifies the cognitive *de-programming* which occurs as a result of working with files in this way, and which further facilitates interpretative approaches to sound work drawn from bodily registers. In this way, building and working with a sound library demonstrably becomes a process of re-training and corporeal self-reference.

Sound library databases reveal a functionality design that is comparable with other digital database catalogue systems. In terms of managing the contents, there are a variety of locators with which sound files can be found. Database search engines can locate effects by category, word, synonym or catalog number

⁵¹ Considering Viers' work was published in 2011, useful further comparison research could be to track the changes and developments to the capabilities and features of sound library databases and potentially identify if or how these changes facilitated a more embodied engagement with sound files.

(Alten, 2014: 341). Further, pre-recorded libraries may come with “an index, timing information” as well as cue descriptions. Amidst this organisation of data, Alten acknowledges that the location and auditioning of effects can be time consuming. This is something echoed by other practitioners such as Brent Burge, who reveals, “Libraries are built of a massive amount of crap, to be honest, and they actually get unwieldy. You search for a dog bark and you get 3,000 dog barks. And you’ve got to go through them”. Given the time-critical nature of much postproduction work, this issue becomes important for the practitioner. To combat this problem, Alten advises learners that some database systems and software programs “...facilitate searching, locating and auditioning a sound effect in seconds. Many sound—effect library distributors have their own search engines to facilitate finding, auditioning and organizing sound effects” (2014: 341). Dave Farmer corroborates this: “...Thank God for databases like *Soundminer* where you can search for things and audition them right then and there. But that’s also a problem – having too many sounds. Because I’ll search for ‘explosion’ and there will be 20,000 records that will turn up. It’s like - how am I supposed to find the one I want? Because there are lots of bad ones in there, too.”

The process of library searching and management draws upon a learned industry language for sound effects, as well as an internalised familiarity with library contents. Significantly, some practitioners develop and implement their own personalised language into their metadata based on synaesthetic or emotional associations. This assists not only in the efficient location of sound effects but establishes an embodied relationship to the database that is based on subjective meanings and emotional and/or corporeal effects. American sound

editor Frank Warner describes how he catalogue sounds in terms of synaesthetic associations: “I used a lot of red sounds, blue sounds, green sounds, which meant something only to me....Red to me was more of a hard, mean sound; blue could be more passive. Green could be pastoral, very light or airy. It often depended on my mood when I started writing about my combination of sounds for the picture” (cited in LoBrutto, 1994: 29). In this way, the embodied reality of the practitioner becomes an imprint in the metadata of the file itself, and the library becomes a polymorphic palette which shifts and changes according to the state of it’s creator, and the project in question.

The naming of files in a library reveals interesting correlations between language and sound, and points to an inherent tension between the linguistic design of information management systems, and the plasticity of sonic interpretation. The individuality of response to sound has been articulated by Tajadura-Jiménez who concluded that, “...there are no universal sounds that will trigger exactly the same reactions in everyone” (2008: 38). In a sound library context, it becomes apparent that file naming is tied to the perceptual interpretations of the practitioner. For Alten, it is important that practitioners “develop a sound vocabulary”, and doing so facilitates perceptual development and a communal sonic language within a sound team:

Coining words that are descriptive of the effect you are trying to achieve not only hones your own perceptions but also provides others on the sound team with an indication of what you are going for. There are hundreds of terms used for sound effects, such as twung, squidge, whibble, wubba, boink, kabong, zuzz, and so on....Such terms are inexact, of course, and need objective association to make them clear to others, but they do have a sonic texture and, in some examples, a pointed ‘visual’ impact by themselves.” (2014: 309)

Comparatively, Corey points out the difficulty sound professionals face when applying language to denote sound quality. Indeed, Corey argues against subjective labelling, on the grounds that these descriptions can be vague, and advises that ambiguities can be reduced “...if we know the exact meaning of the adjectives we use. We can certainly develop our own vocabulary to describe various qualities of sound, but these descriptors may not match what other engineers develop” (2016: 29). Corey’s concerns indicate potential hindrances to seamless sound file location within shared libraries, a perspective that problematizes current taxonomies of sound terms.

Yet even working within common language parameters does not necessarily streamline searches in large libraries. New Zealand sound editor Stefanie Ng gives insight into the multitude of ways in which a word search locates sounds in a library:

Type in ‘gurgle’ and see what comes up. It might be a camel, it might be custard, or it might be a baby. It’s all about what words you have....It’s the same deal with something like ‘shing’. A sword – shing just becomes vocabulary...if you say shing, people usually know what you mean - sword shings. Is shing even a word in the English language? Well, if I say a shing, you know what I mean. Whooshes, swishes - otherwise you have to make it up. Sometimes the sound designer will give you a bunch of his files and you have to put them in the library, but you have to describe them. [This file sounds like] something deep resonant, tonal – what is it? It’s like trying to describe an emotional sound.

Ng’s account reveals how the naming metadata conventions are heavily onomatopoeic, and that certain words become informally incorporated into a body of postproduction sound language.⁵² These issues with the naming of sound

⁵² An important acknowledgement is that sound file naming conventions differ among audio-related industries such as music production, gaming and so on. An area of further research is a cross-industry comparison to consider how naming conventions are defined and determined within these creative and cultural industry contexts.

files means that practitioners must therefore learn, develop and integrate multiple sound labelling vocabularies. These vocabularies arise from a shared language of sound effects, yet also implicitly incorporate the embodiment of the practitioner through perceptual interpretation.

6.6 Sound Familiar? The Challenge of Innovation

[You] should draw from as many difference sources as possible. Don't try and copy, or be informed just by what someone else has done sound-wise....you're not just informed by copying that cool sound.

(David Liversidge, Sound Designer)

Postproduction sound practitioners aim for sound effects to combine the functional with the inventive. It is useful to reiterate here the different uses and functions of sound effects in terms of a motion picture narrative. In professional parlance, 'hard effects' are those attached to screen actions, such as a door closing or a gunshot; 'soft effects' form the background fabric of a scene, are not explicitly synced to picture, and do not have a clearly defined beginning and end, and such as traffic ambience (Alten, 2014: 309). A hard or soft effect may be a single file, or the layering of several sound files, either raw or processed. While this discussion does speak of a 'sound file' as if were a singular entity, it is recognised that many 'files' in a sound library are in fact compiles of several effects coalesced into a processed effect.

Practitioner accounts of sound file usage reveal that a sound's recognisability - and therefore intertextual referentiality - is a key concern. That digital sound data can be endlessly reproduced, and re-populated into new works, troubles the equation of aesthetic value with an original. Much has been written about

authenticity and originality in art as an aesthetic concern in a culture of reproduction (Benjamin, 1998; Sterne, 2003), with some seeking to “...challenge the traditional outlook whereby a copy is seen as necessarily inferior to the original, and where terms such as ‘authenticity’ have been accepted uncritically” (Leach, 2016: 129).

Further, the association between originality and artistic legitimacy, particularly in audio-related industries such as music, has also been critiqued as a ‘mythical cult of genius’ legacy from the Romantic Movement (Burnard, 2012: NP). Yet, as Bridson et al., (2017) point out, the politics of authenticity still significantly impact artistic brands in the contemporary marketplace of cultural goods. And as the earlier parts of this chapter demonstrated, sonic branding is eminently significant in the context of a global cinema industry. Because of these concerns, for the practitioner, the sourcing, use and re-use of certain sounds must be strategic, and is often balanced against pressing time constraints. Sound designer Roland Heap noted that there are “...only a few thousand sound-effect libraries, and however many million hours of content being created each year – it’s inevitable there’s some repetition” (cited in Hunt, 2019: NP). This is supported by Foley artist Vanessa Ament who acknowledges that it is “...more practical and efficient to utilize a sound effects library for the more typical sounds found in a scene” (2014: 40). However, those sound files sourced from commercially available libraries and databases heighten the risk of a sound being recognisable, and therefore contextually linked to other media.

This recognisability may in some cases be desirable and deliberate, such as the recurring insider joke of the ‘Wilhelm Scream’ that ran amongst the sound community. According to Hunt, this sound effect has been used in at least 380 films since 1951 (2019: NP). In discussing the Wilhelm scream specifically, Tom Heuzenroeder points out, practitioners at times employ deliberate citations through sound effects, and are playfully used by these individuals as aural signatures attached to films:

Ben Burt used to put the Wilhelm scream in because he rediscovered it...from an archive somewhere and used it as a signature sound. So if you heard that, you knew it was a Ben Burt soundtrack. But other people have used it as well and so now you can't categorically say it's a Ben Burt soundtrack. Even I've used it as a joke...on one film, at the director's request.

Two key points must be drawn from Heuzenroeder's anecdote; firstly, specific sound effects can become a cinesonic meme, through which sound practitioners and other industry creatives participate in shared moments of cognizant intertextual referencing. This arguably functions to affirm and enact a practitioner's participation in this professional community, and also communicate this belonging to peers through a demonstrated awareness of this 'insider' language. Secondly, it is significant that the originating practitioner Ben Burt is a high profile sound designer, deeply respected in the industry, particularly for his iconic work on the first of the *Star Wars* franchise. Therefore, the narrative of Burt's re-discovery and repurposing of an archival sound becomes part of sound design folklore, becoming inherently associated with

Burt's personal brand as a sonic signature.⁵³ The continuation of this 'joke' enables practitioners to actively participate in professional community-building. The reuse of sound files, particularly those that have a unique or recognisable aural signature, is evidently a double-edged sword for practitioners. As noted above, recycling certain sound files can be helpful and timesaving, and deliberately contribute to the sonic branding of the practitioner, the company or film franchise. Some practitioners such as Roland Heap describe recognisable sound files as 'classic', and Heap believes that most audiences will not notice their repetition. Indeed, for Heap the re-use of sound files is less important than how an audience responds to the sounds, and argues "it's only a cliché when people start noticing" (Hunt, 2019: NP).⁵⁴ Alternatively, as other practitioners have pointed out, this file reuse can in certain circumstances become potentially problematic. Some believe that sonic 'recognition' may not be overt, and can subtly impact audience immersion due to the intertextual references that interrupt the cohesion of the narrative world. In this way, the sound draws attention to itself as a citation, whether deliberate or not.

The postproduction practitioners interviewed for this research expressed strong aversion to 'recognisable' sound effects that have been reused repeatedly in commercial contexts including other films, TV series and advertisements. This is articulated by Matthew Lambourn, who notes:

The thing I hate with a passion is people that just use stock libraries. And File Number 1 of CD Number 1. I've got a list of about a dozen or more sfx that me and my assistants and anyone I work with are completely banned

⁵³ This sound effect has been so extensively re-used that many postproduction practitioners interviewed for this research complained that this over-use citation has lost its humour and disrupts their own experience of the film.

⁵⁴ The example Roland Heap uses is the "Red-Tailed Hawk Cry" (Hunt, 2019: NP)

[from using] on a movie because they're off a sound library called *Hollywood Edge*, which does a great recording, but people seem to use the same one every time. From *The Simpsons* to commercials to big budget movies to low budget movies....One is the red-tailed kite which sounds like a desert eagle.⁵⁵ Every time it's set in the American desert, the same sound. And not just the same sound, the same recording, the same file.

Here it is possible to see the tension between competing agendas of branding versus audience immersion. Further, issues around the cultural value of bespoke sound work become mobilised, as the desire to produce 'fresh' or new sound material becomes especially apparent. Justin Doyle further explains this perspective, and positions it within the context of how a sound practitioner sees his or her responsibility:

...Any of the over-used commercial sfx just feel really tired, and over used and the fact that you've heard them so many times before means that they've lost their uniqueness. And Dave Whitehead would always tell us that new pictures need new sounds. And so you can't just go to the *Hollywood Edge* library and grab "Explosion Number 4", or you can't just grab this commercial door. Better that you go out and record new sfx and create something new and make it unique, because the picture's unique. The pictures aren't cut together from stock footage. They haven't just cut and pasted from other films that have already been made, so we shouldn't either. I certainly understand that some people are under time constraints and everything like that, but it doesn't take that long to record a sound. Every now and again you hear commercial sfx that have been overused time and time again and it feels like somebody was just cutting corners...

What is of interest here is the operating assumptions regarding what constitutes 'good' sound practice and 'good' sound, particularly as befits the aesthetic practices of much mainstream cinema. The dominant trend towards audience immersion in this market means that recognisable sounds can potentially alienate listeners who are unconsciously or consciously drawn out of a narrative world by intertextual associations. Further, the value attributed to a bespoke

⁵⁵ Lambourn is directly referencing the 'Red-Tailed Hawk Cry' that Heap also mentioned.

sound effect produced by a practitioner is demonstrably different to sound effects sourced from stock libraries.

As these practitioner accounts attest, the bespoke sound effect is a highly valued entity and creative practice by professionals, arguably pivotal in constituting postproduction sound work as artistic and creative. In this way, the sonic choices of a practitioner signal to other practitioners how work practices are being performed, and therefore presents a statement about that practitioner's own professional value. In other words, sound file choices arguably perform a "social partitioning", as the practices of a 'good' sound practitioner need to reflect the "conception of artists as original and inspired" (Hanquinet, Roose & Savage, 2014: 116). Matthew Lambourn summarises his attitude towards the use of recognisable sound effects: "I just can't stand that because it's lazy." Significantly, even practitioners such as Roland Heap who openly accept the use of recognisable effects also echo this sentiment. Heap admitted that his re-use of certain 'classic' sound effects is "lazy", but argues that the sound effect nonetheless performs its role as "it does provoke an emotional response" (Hunt, 2019: NP).

The digital availability of certain sound files also evidently influences their perceived value, given that widely available sounds are more likely to be used, and therefore more recognisable. As Matthew Lambourn explains:

It's amazing because these sound libraries are available to everybody. From app makers to computer games to film and ads....There's about a dozen sounds that I'll never, ever use because they're used in everything.

Bourdieu's theory of distinction (1984) is relevant here, as it becomes apparent how this area of cultural production seeks to differentiate between mass-produced and bespoke materials, particularly because of their ability to draw attention to their own mass production and circulation. The commodification of sound effects problematizes the conceptualization of art as "...an autonomous realm of human endeavour separate from social, political, and economic constraints" (Mascia-Lees, 2011: 3). As a result of this, a core element of postproduction sound work engenders a particular relationship with the sound library. This is not to say, however, that stock sound files have no use or value for practitioners. As Tom Heuzenroeder points out:

It is still good to have a sound library, the reason being that so much of what the sound library is can be changed... You can mangle it in so many ways that it becomes something new anyway. I'll bet no one has ever used that particular reverb and that particular EQ on that particular sound before. Or if they have – show me where.

However, this comment reinforces that perspective that the creative process geared towards producing a 'new' sound, and that a practitioner's work is distinguished by its distinctiveness and originality.

6.7 Collections and Recollections: The Sound Library as Sensory Archive

What is memory-laden exceeds the scope of the human: memory takes us into the envioning world as well as into our individual lives.
(Casey, 2000: xix)

In developing a model of cinesomatic complexity between the practitioner and the sound library, it is demonstrated how the multiplicity of somatic memories becomes an intertwining of sound and subjectivities. Importantly, these somatic memories become a key part of how a practitioner will continue to relate to their

library, as well as their unfolding work. To argue for a living cinesomatic relationship of practitioner and their sound library is to recognise the multitude of living sonic narratives possible, and that a sound file can become corporeal kindling for many listeners in many contexts. Further, by engendering sensory responses in many listeners, it is possible to argue that sounds' multifarious abilities exceed each textual occurrence. Drawing on Bergson's theory of memory, sound art theorist Salome Voegelin articulates the fluidity of meaning and affect which moves between artist, sound work and audience as a "...heterogeneity of memories triggered by the same memory material, stirring up a plethora of emotional extensions of the work" (2006: 17). Bergson's theory of memory postulates that perception is already saturated with existing memories in which "...immediate and present data of our senses we mingle a thousand details out of our past experience" (1991: 33). In applying this to sound art, Voegelin argues for the generative power of sound used in the creation of fictional spaces, and refers to "sonic memory material" where, through sound, memory is triggered and materialised in the now (2006: 13).

In applying Voegelin's perspective to the sound library, this study argues that memories become reinvented and re-lived in each generative engagement with sounds. Practitioner accounts of sound libraries align with what Voegelin describes as a continual unfolding engagement with sound. This engagement is not universal, but speaks to the listener in material terms, where "It is always my embodied listening that realises sound, however virtual its material reality remains" (2006: 17). The interviews with postproduction practitioners conducted for this research attest to individual and often intensely personal

somatic relationships to particular sound files and specific recordings. A practitioner may have aurally marked⁵⁶ and recorded a sound heard in their environment, or arranged for a specific recording to take place. These recordings then go into the practitioner's database of sounds for potential future use and processing. I argue that a multiplicity of sonic stories becomes apparent through the reproduction of a sound file itself in many projects. A sound file extends into multiple narratives, that continue to exist and rebirth into somatic experiences for new listeners.

It has been argued in phenomenology (Ihde, 2011; Cook, 2015; Droumeva & Andrisani, 2011; Sobchack, 2005) and psychoacoustics (Eitan & Granot, 2006; Campos Calvo-Sotelo, 2014; Grimshaw, 2017; Heller, 2013; Susini, Houix & Misdariis, 2014; Tajadura-Jiménez, 2008; Vickers, Hogg & Worrall, 2017) that hearing is framed and determined by the embodiment of the hearer. In this framing, meanings and interpretations of sounds are not fixed, but are culturally, historically and somatically informed. Practitioner accounts reveal how sound libraries contain material that is personal to the practitioner, and yet also able to facilitate new interpretations in other hearing contexts. A somatically informed sound file is a sound that has been rendered rich with provocative power and association, and which can draw upon the memories of the listener. Wayne Pashley describes this connection:

It's the first thing when you're a baby in a womb that you are experiencing of the real world outside of the mother's body. So what happens in that period starts you off for the rest of your life in terms of

⁵⁶ I use this expression 'aurally marked' to denote how a practitioner has been conditioned to notice environmental sounds in a certain way as a result of their training and experience. Much like making a 'mental note', aural marking of sounds for some practitioners was described as verbal mimicking, memorizing and/or recording the sounds.

interpreting sound, and how it affects you emotionally... I find that sound triggers more memory than anything else as well. You can hear a gate squeak - when you were a kid at your house, and the side gate was always the gate you went into, when you get called for dinner or something. And that squeak will stay with you forever. And you might hear a similar squeak 30 years later and go, 'Oh my God! That's that gate!' So the memory connection is huge.

Pashley's description aligns with what Sean Street had noted about sound's ability to provide "...direct entry to a lost or forgotten experience, and can be almost devastatingly potent because of this (2015: 10)". In examining the relationship between memory, archives, technology and culture, Street also situates sonic memory in corporeal terms noting the "...significant link between the physical body and memory" made "...most tangible through sound, because we hear not only through our ears but also through our whole body" (ibid, 151). This clearly posits memory as corporeally located, and claims that sound is central to accessing and triggering these somatically loaded memories.

For those who work with sound professionally, the connection and memory activated by listening to sound files reveals an embodied immersion in the sonic conditions of a recording that may be recalled by the process of listening and re-listening. Tara Rodgers reflected that:

...many times I would go back and access tapes that I made thirty years ago and end up using some of them...What's also really great, as I was listening and trying to find the spots on those tapes, I would just drop in and hear this sound, and I would go, I remember that! I recorded that in this location, at about this time in the afternoon, and it smelled like that, you know? And I'd fast forward a bit, and I'd think, I remember that! Even if it's not perfectly logged in my records: Oh, yeah, I was in that tree! [Laughs] In that location. Its just amazing, all that sound brings to you. You'd think that because it's so abstract, that those memories wouldn't attach so strongly, but they do (2010: 69).

Here Rodgers makes explicit the degree to which sonic memories become infused in the practitioner's embodiment, which is not removed by the passage of time. In this way, the sound practitioner's library both defies temporal reality⁵⁷ and engenders further sensory memories associated with the original recording.

It is not merely nostalgia that is reawakened by certain sound recordings. This is also where geographically specific sounds are woven into the library, and while using sound files for new projects practitioners can experience a 'bleed through' of personal associations and sensorial connections. As Street points out, "The original context of hearing the sound is very important...because sound memory unlocks other senses (2015: 3). In this way, the sound library is shown to be a somatic archive individual to the practitioner. In demonstrating the crossover, Matthew Lambourn describes recording his house in Wellington during an earthquake:

I did a TV series after the big Christchurch earthquake, about the people that lived there and their struggles. And I used a lot of sounds from around my house. So rattling windows and rattling doors and shaking bookcases and things like that. And every time I heard [the series], it sounded exactly like my windows do in an earthquake. I worked on it so much that sometimes - because we always get earthquakes in Wellington - when we did get an earthquake, I was saying, oh hang on, is that the show, or is it reality? So I won't do that again, record the sound of my home shaking.

Here Lambourn demonstrates a sensory crossover between the memory of personally lived sounds, the recordings of a real event, and the narrative re-

⁵⁷ This is also to a degree dependent on the technology used to capture and store the sound file. Rodgers makes the interesting point that she retrieved her older recordings because there was less background interference heard in the files. The relationship between technology and sound has been examined by theorists Jansen (2009), Pinch & Reinecke (2009) and Sterne (2009).

creation of a sonic world that was based on true events. Lambourn points to the fact that his professional immersion in these sounds over a long period of time transposed onto his daily life so that he experienced what Baudrillard (1994) would describe as a 'hyper real' momentary blending of actual and narrative worlds.

Spaces, objects and moments in time are captured in sound files, creating a somatically active and personally resonant sound library for a practitioner. Matthew Lambourn notes how other sensory and narrative associations from the original recording experience may also be retained. This occurs in two ways; firstly by weaving in the spaces and sounds that are intimately tied to the sound practitioner's life:

I've got sound files that only I've got and even if they're just as boring as fridges, that you might put into a domestic scene, that's my fridge and I recorded that in 1997 while I was holiday up north and now it's singing in the movie and so on. It's just adding a little bit of your own world into it. I think it is really important. And the number of times I've kicked myself that I haven't been carrying a recorder because there's been just the right plane by or just the right wave coming in from the beach or something.

The process of recording is arguably a narration of the sound practitioner's personal life and lived experience. These recordings then go on to form part of the sonic palette he or she uses to produce professional film work. As Matthew Lambourn demonstrates, through the use of a particular sound file - a temporal and spatial moment that speaks to the practitioner's personal life - is woven into new narrative spaces in each new filmic project.

The second way in which this occurs is how the sounds run counter to the new narrative contexts and content project. Therefore, the first experience of the recording becomes inextricably bound up in the sound file itself. While new semantic and affective meanings are generated in new projects, the body retains the phenomenological memory of the first engagement. In creating recordings for a specific gore library for a horror film, Lambourn notes how when re-listening to these sound files, pleasant sensory memories are reactivated:

And also working with libraries that are made from fruit, I can still smell the delicious smell when I was cutting up the persimmon or peeling the pineapple and other fruits.

Interestingly, this pleasure is despite the 'unpleasant' affective responses the sounds are intended to evoke for a future audience. In this way, the sonic experience of a horror film, for example, is a revisitation and reliving of pleasurable sensory memories from another time. Lambourn demonstrates how the lived experience of the creation of a sound file, its sensory dimensions and memory, continues to resonate long after the recording process.

This somatic-sensory link is also pertinent to the embodied placement and location of the practitioner at the time of recording, and these connections permeate the sound library. Dave Farmer reveals the degree to which this sonic sensitivity and capacity for somatically cataloguing sounds as they occur in the environment follows the practitioner around:

You just tend to associate things with where they were - particularly if you have described them appropriately. Because some things I recorded 20 years ago and I can remember recording them....It's a bit of a curse because we record stuff all the time to use. And so when I hear something - for example, I'll go to the grocery store and I'll hear the doors open and it's got some weird sound - oh my god that's cool! So I can't switch that

off. Whenever we go on vacation, I'm always taking a little recorder with me. I'll be at the beach and say, we'll I've just got to go over here for a few minutes and get some surf because right over here is sloshing, and it's not too white-noisy. And the wife and daughter are like, fine. So they'll just leave me and I'll disappear for an hour or two and go record something. You're always running into great sound material. We were in an underground parking garage underneath a gym, and somebody was playing basketball above us. And when the balls would hit the floor it just made this weird (imitates sound) sound. So I was like just, I wish I'd bought a recorder! I didn't bring a recorder! So I had to sit out there with a little app on my phone getting it the best I could. But I can't not try to get it. So meanwhile, family are in the car waiting. So there's a lot of that – just the fact that you can't shut it off. Because we're always trying to get something that will be amazing, and that will help. That might save me, you know? And it does – plenty of times. I'll get asked – where'd you make that sound? Oh while I was on vacation – this weird ironing board in our hotel room. If I didn't record it, then you're stuck with trying to find something commercially or something like that. So you just can't turn it off.

Here Farmer reveals that the process of sonic collection is inescapably bound to the practitioner's embodiment and geographic location. This sonic sensitivity is not only an occupational habit, but also arguably a professional 'tuning' that constitutes the way the practitioner relates to the world. That Farmer is highlighting in these anecdotes the importance of capturing 'new' and unexpected sounds reinforces the points made earlier about fresh and 'original' recordings sourced by the individual practitioner. And while the location of the practitioner changes, this embodied receptivity to sounds and their narrative potential does not change. In such a situation, mundane sounds are transformed by a professional listener who imbues them with affective capacities. Farmer therefore demonstrates how being a sound practitioner produces an experience of embodiment in which lived experience becomes a constant sonic rendering. In this way, the textures of every day life and personal narratives become building blocks for future sound design.

Conclusion

This chapter has argued that the sound effects library offers a way of conceptualising how postproduction sound work is a living archive of corporeal affect, personal narratives and moments. It has shown how the postproduction sound practitioner becomes implicated and incorporated in the sonic files that form the library database, and which go on to form the sonic fabric of future cinema worlds. In this way, the sound file has been theorised as cinesomatic currency, which possesses the ability to live multiple sonic lives across many contexts.

Discussions of digital library use need to integrate embodied discussions to identify how the user becomes corporeally engaged with the contents of the library, especially when 'data' is materially affecting. This chapter has examined how the postproduction sound practitioner's library is built, and managed, and how sounds are auditioned as part of the creative process. This auditioning also reveals the degree to which the work is a process of critical listening and physical engagement. Further, by examining the contentious issue of sound sources, including files from commercially available libraries, it has been demonstrated how sound files and their acquisition function as key cultural capital for the sound practitioner, and how they operate within industry value systems. This chapter has also argued that the sound library be reconceptualised as sensory archive, demonstrating how sound files carry personal and specific memories and sonic data becomes reconfigured as a sensory unit. Existing discussions of sound libraries do not adequately depict how the sound library is part of the creative process of postproduction sound. The sound library bears the

traces of lived experience for a practitioner, which may be reinvoked with each listen. Further, this lived experience as an archival repository becomes the foundation for other narratives, and affect becomes translated into new corporeal experiences as a process of endless re-telling.

CHAPTER SEVEN

THE SONIC IMPRINT: THE IMPACT OF SOUND WORK ON THE PRACTITIONER

It is actually surprising how little we know about sound. As our tools for playing with sound grow in their capacity for expression, we discover new ways for sound to act on the body, and on consciousness.

(Jordan, 2008: 260)

7.1 Introduction to the Sonic Imprint

In the previous chapters, the sonic entanglements between practitioners and their work were examined across several different professional roles and practices. In doing so, new understandings have emerged about the ways in which sound professionals are corporeally integrated with their work, and how much the work in fact requires and depends on such embodied engagement. The notion of impact has been both implicitly and explicitly present in looking at these corporeal entanglements throughout this study. In this chapter, impact is examined in accounts of individual experience as well as in terms of wider industrial contexts.

The powerful ability of sound to provoke and perpetuate certain embodied experiences is evidently complicated for the sound practitioner. The Cambridge Dictionary defines impact as “the force or action of one object hitting another”, or “to have an influence on something” (2019: NP). Conceptualising sonic experience in terms of impact is not to argue for a unilateral model of influence, or to impose a reductionist model of ‘sound - receiving body’ flow. Rather, by investigating the dimensions of embodied sonic impact for sound practitioners,

the wider scope and enduring impacts of sonic effects becomes apparent. This complicates the popular conceptions of sound work that obscure the real bodies behind narratives of technological prowess, and the implicit – but erroneous – assumptions of invulnerability.

This chapter examines some challenging aspects of sound work, and the ways in which practitioners aim to negotiate the physical, mental and social strains that affect their professional and personal realities. Therefore, the notion of ‘imprint’ becomes useful, as it suggests an *impression* that leaves a material trace. Here the phenomenological theories of vibration and hapticity facilitate a theoretical framework with which to place discussions of lived experience for sound practitioners. Conceptualising sound in this way assists scholars investigate how sonic materials and aspects of professional sound practice affects practitioners in corporeal terms.

Accordingly, further micro and macro implications and questions arise; on one hand about the structural or industrial aspects of professional sound work, and on the other hand how the relationship between individuals and sonic material is navigated in the presence of difficult sound. Understanding impacts of sound work demythologises creative work and “the bourgeois myth” of “an autonomous subject as the wellspring of creativity” (Banks, 2007: 81). Further, by prioritising narratives of lived experience in terms of the bodies that must live, and at times, endure, challenging sound work, this discussion problematizes “work as play” conceptions of creative work (Deuze, Martin & Allen, 2007: 347). This is in line with Gill & Pratt who argue, “...(unpleasant) affective experiences –

as well as the pleasures of the work – need to be theorized to furnish a full understanding of the experience of cultural work” (2008: 16).

In this chapter, impact – or the sonic imprint - is examined in psychoemotional and physiological dimensions to account for the lived experience for the sound professional. Drawing on interviews with Foley artists Amy Barber, James Carroll and John Simpson, as well sound designers and editors Tom Heuzenroeder, Wayne Pashley, Dave Farmer, David Fisk, Justin Doyle and Martyn Zub, sonic imprints are explored in corporeal terms – identifying the ways in which sound work has had tangible influence on the bodies of these professionals. They are also explored in psychological, emotional and social terms, with this study examining how aspects of sound work affects the mood and interpersonal relationships of the practitioner over an extended period of time. Importantly, such a framing does not partition the body from the social, the emotional or the social and reinforce conceptual divisions of lived experience. Rather, taking a compartmentalised approach is necessary to illustrate the degree and breadth to which certain aspects of sonic work may influence and alter the lived experience of those who work with sound consistently. Further, it recognises that sound work is not only about *content*, but also the industrial contexts that define working practices for those involved.

7.2 Feeling The Sounds: Embodying the Professional Sonic Encounter

As outlined in Chapter Two, the majority of film criticism and film sound analysis has examined the film as a text, or traced materialist theories of mimetic resonance to consider how *audiences* feel a film while sitting through it (see

Batcho, 2017; Eidsheim, 2015, Quinlivan, 2012; Fife Donaldson, 2017). These perspectives are very useful and pertinent, however there is considerable scope to investigate the lived experience of sound production work. Contextual encounters with sound are markedly different for audiences as opposed to practitioner. The tendency to conflate sound work with technology reduces or removes the space for bodily experience – particularly challenging experiences - to be acknowledged and discussed.

For the practitioner, sonic encounters are defined and constrained within industrial contexts, which shape and prolong material encounters with sound. As Veit Erlmann reminds us, hearing is a sensory experience that involves the entire body: “...it is not only the ear that listens; so too, do the ganglia, the eighth pair of cranial nerves, and even the solar plexus....our entire rich interior world also acts in response to the ear....” (2010: 125). Such a perspective avoids reducing listening to an auditory mechanism located in the ear, rather highlighting the coaction of bodily responses that occur during a listening experience. This heightens the stakes for those who are materially immersed in sound as an occupation, particularly when either the sounds or the narrative content are particularly challenging.

Phenomenological film theorist Jenny Chamarette asked scholars to consider: “What cinematic encounters go beyond the cinema? And what will be the future shapes of these encounters be?” (2012: 235). Chamarette was not speaking directly to film sound scholars, yet her question is nonetheless pertinent here. I have argued in this thesis and elsewhere (Walker, 2018) that the experience of

film sound be theorised as 'cinesomatic', a term intended to encapsulate how film sound provokes an extended sensory experience for listeners that can exceed the film's narrative. In other words, engaging with film sound engenders the awakening, re-living and re-configuring of personal somatic memories or reactions, which may overlay, enrich or contradict the film's narrative. In this way, the experience of a film, and its soundtrack, is rendered a lived experience of multiple narratives, and where meaning becomes translated into the corporeal.

Conceptualising film sound in this way avoids limiting sonic analysis to textual readings, and prioritises the role of the body and subjective lived experience in interpreting and responding to sound. However, it is imperative to expand this concept further to situate the lived experiences of the sound practitioner as part of the wider shared corporeal experiences of film sound. As stated earlier, to discuss only audience experiences of cinematic engagement – or to frame discussions from an audience perspective – is to overlook those bodies and embodiments responsible for producing content. It also over-emphasises the reception of a completed work, missing the process of sonic unfolding with which the embodiment of the practitioners is caught up in. Further, audience-focused discussions of cinematic engagement are insufficient to account for the wider frameworks, structures and influences that create sonic content for film, or how these are a factor in the difficult embodied experiences of the sound professional.

As has already been argued in this study, perhaps surprisingly, there has been a scarcity of sustained exploration of film sound practitioner experience within an embodied theoretical framework. Importantly, enquiry into the corporeal dimensions of lived experience for sound professionals is not only overlooked by film sound scholars. Industry-based publications, online forums and blogs abound, yet specific and involved discussions around the impact of work practices on physical and mental health, social relationships and wellness are relatively sparse compared to the overwhelming focus on technical tools and techniques. This is despite the fact that, as new research is demonstrating, professional sound work can have significant impacts on all aspects of a practitioner's life, including health, finances, interpersonal relationships and family dynamics. In looking closer at this critical scarcity, implications about the industry itself, as well as cultural norms and narratives concerning working bodies becomes apparent. As I will discuss in the section below, minimising or ignoring the corporeal dimensions of sound work – especially as concerns potential difficulties and compromising conditions - is demonstrably structural to the industry itself. The following discussion will counter this tendency, arguing that the foregrounding of embodiment in research into film sound production enables scholarship to create a space in which corporeal realities, both positive and negative, are identified and validated.

One reason for such an erasure of bodies in creative sound production arguably speaks to the temporary and project-based structure of work characteristic of the creative industries. As Eikhof & Warhurst identified, the project-based model endemic to the industry means that “...work is undertaken by project teams or

‘motley crews’...brought together for specific projects” that are then disbanded after the project completion (2013: 498). Consequently, practitioners exist in a “highly individualized and precarious” labour market (Lee, 2012: 483). These industry conditions have the potential to significantly impact how practitioners narrate – or silence – their embodied experiences. Indeed, sociologists have critiqued contemporary labour market structures for the way in which they disempower the working populace. Bourdieu argued that such employee insecurity has a direct impact on those affected, as well as an indirect impact on all others. For Bourdieu, the fear of unemployment that this insecurity arouses is “methodically exploited” by the labour structures and strategies of capitalist markets (1998: 84).

Such industrial structures are evidently not conducive to organised or unionised activity, nor to they facilitate open forums to discuss unsatisfactory or difficult aspects of production sound work. In Australia, trade union membership declined from around 2.5 million in 1976 to 1.5 million in 2016, and it was found that young workers, or casual/part time workers are considerably less likely to be union members (Gilfillan & McGann, 2018: 1). Significantly, the Media Entertainment and Arts Alliance (MEAA), the Australian union for the creative industries that represents sound professionals, experienced a 31.4% drop in membership between 2003 and 2017 (Gilfillan & McGann, 2018: 5). In their survey of the creative industries worldwide, Hennekam and Bennett also found that despite the presence of trade unions, “[s]ome participants were simply too occupied with their daily struggles to think about their rights” (2017: 80). Further, as several interview participants in this study have voiced, while tax-

deductible, union membership is still considered expensive, and for freelance and contract-based work, this adds to the financial precariousness against which they already struggle. In acknowledging the global nature of the problem, it is critical that scholarship intervene by also examining the challenging aspects of creative sound work. By foregrounding embodiment as a point of critical enquiry, such research may mitigate the denial or minimisation of these potential impacts and identify possible routes for change.

Further, new research findings into the creative industries specifically reveal such aspects that may significantly predispose practitioners towards mental and physical health issues. As van den Eynde, Fisher & Sonn identified, negative impacts of irregular work patterns are particularly visible in social relationships, with their research finding 58% of their participants “had problems finding time for their families, 63% had difficulties maintaining a social life, and 45% reported difficulties keeping contact with their friends in the industry” (2016: 79). The authors concluded from these findings that there was a strong possibility of social isolation for these creative workers, which meant significant “risk factors for negative mental health outcomes, with consequential impacts on accessing social networks and support” (ibid).

This chapter will demonstrate the ways in which the professional sound work is often defined by challenging experiences that impact on lives of the practitioner. However, the details of these difficulties are absent from many public and professional forums for sound. Industrial pressures are arguably a factor here – for instance, the highly competitive aspect of the industry means practitioners

are required to exhibit a high level of competence and a 'can-do' attitude. A global feature of the creative industries, including postproduction sound, is that it is governed by unpredictable and highly competitive work that is obtained through networking and personal reputation (Bennett & Hennekam, 2018: 1455). However, as Ashton (2011) argues, concepts of 'professionalism' are not neutral, and "...industry norms can be evaluated and contested" (2011: 555).

It is also significant that the sound industry is overwhelmingly represented by white middle class male practitioners, and arguably social and cultural gender norms influence the ways in which vulnerability is expressed within this profession. Of the responders to the anonymous survey conducted for this study, 81% identified as male to 19% female, and of the participants interviewed, 36 were male and 7 were female. Historically, it has been found that the sound industry was deeply gendered and masculinized (Bell, 2017: 441), and that even in a contemporary context, there is an "enduring symbolic association of masculinity and technology by which cultural images and representations of technology converge with prevailing images of masculinity and power" (Faulkner, 2001: 79). While this study does not have the scope to examine the full implications and complexities of such gender disparity, ageism (Hennekam, 2015) or the lack of ethnic and social diversity (Eikhof & Warhurst, 2013; Banks, Gill & Taylor, 2013), this is not to sideline the relevance of diversity in the creative industries. Indeed, as Oakley has pointed out, the question of participation – "of who gets to be a worker in these industries" - is critical to the relationship between symbolic texts and self-understanding as a society (2013: 64). It is important to recognise that these contributing factors arguably

perpetuate a mythology of masculinity and technology that conceals bodies in all their material fragility. However, the overall invisibility and inaudibility of those accounts of embodiment that challenge these mythologies are important for scholarship. As I will discuss below, these mythologies of creativity and masculinity are directly challenged by the emerging research that reveals the difficulties associated with the work, and the potentially profound impacts these have on practitioners.

One of the key findings of studies into the creative industries is an operative assumption that it is an “antidote to work” (Wright, 2018: 316). Indeed, the mythology and mystique of creative work may be because, as David Lee found, creative occupations are perceived as more interesting and glamorous than other jobs, and that media work promises autonomy, self expression and social recognition for one’s labours (2012: 486). Within such an ethos, for creative workers, a long established doctrine of creativity is perpetuated, in which the narrative of work is framed as deeply pleasurable, rewarding, emotionally intense (Lee, 2012: 483). Similarly, van den Eynde, Fisher & Sonn discovered a major theme emerging from their research is of industry workers expressing their “overwhelming passion” for their creative work (2016: 2). These authors suggest such ‘passion’ is a “collective strength” and a “powerful element to bind the industry”, and importantly, they argue that this passion may be both an antidote to the many negative aspects of creative work, as well as a motivating factor to work against the ‘negative’ aspects of the Australian entertainment industry (ibid).

Despite - or perhaps because - of such optimism, it is important to observe the ways in which the realities of sound work challenges assumptions about creative work. Exploring the accounts of practitioners' lived experience means the bodies – and embodiments – of professional sound work may be understood in both critical and professional discussions. As Wright has found, empirical research into professional sound work raises question marks over the long-term sustainability of a creative career within the current context (Wright, 2018: 483). Therefore, drawing on the first person accounts, this chapter is situated to interrogate some challenging aspects of professional sound work which may “trouble the optimistic conception” (Wright, 2018: 316) of creative work.

Another key finding of emerging research is how working in the creative industries can have significant physical, emotional, psychological and social implications for those involved. This chapter aims to focus an investigation into how these implications are realised for the film sound practitioner. Firstly, this chapter will examine ways in which sound work becomes a production of corporeal endurance in the ability to tolerate and metabolise difficult sonic and narrative content. It also expands the discussion from the physiological and emotional to the social, exploring practitioner accounts that reveal the ways in which impacts of sound work can endure beyond the studio. Drawing on interviews with postproduction professionals including New Zealand Foley artists Amy Barber, James Carroll, Australian Foley artist John Simpson, Australian sound editors Wayne Pashley, Tom Heuzenroeder, and US-based sound editors Dave Farmer, Justin Doyle, David Fisk and Martyn Zub, this chapter aims to facilitate direct accounts of embodied experience in these

contexts. The findings discussed here suggest significant global implications across professional, social, political and industrial contexts.

7.3 The Melodic and the Misophonic: Sonic Endurance

...to hear is also to be touched, both physically and emotionally. We feel low sounds vibrate in our stomachs...sharp sudden sound makes us flinch involuntarily...In listening, one is engaged in a synergy with the world and the senses, a hearing/though that is the essence of what we mean by gut reaction – a response that is simultaneously physiological and psychological.... (Dyson, 2009: 4)

Acknowledging the phenomenal qualities of sound as a vibrational medium is key to arguing for a sonic imprint as a result of professional sound work. Sound waves are capable of producing polysemic sensory experiences in a receiver. Yet despite its ephemeral nature, I argue in line with the theorists of the materiality of sound, that sound imprints and impinges upon the bodies and lives of listeners. More specifically, this configuration becomes even more pertinent and relevant when examining the experiences of those who are occupationally immersed in sounds. Dyson's description above aptly characterises listening as an intersection of embodied physical and emotional responses, and also points to the physicality of sound in terms of contact and tangibility. Other sound philosophers such as Salome Voegelin (2010; 2014), Brandon LaBelle (2006; 2010) and Anne Cranny-Francis (2008; 2009) argue for a vibrant materiality of sound, emphasising how it manifests and reaffirms the corporeal presence of a listening body. Critically, while the vibrational dynamic of sound is fleeting, I argue that the phenomenon of embodied listening is not. Existing discussions of the corporeal sound experience do not go far enough in examining sound-affects/effects as a persistent and enduring encounter. In other words, I contend

that sonic experience and its corporeal resonances can linger and endure in a sonic imprint, where by sound encounters can shape and transmute other aspects of lived experience. Further, as this chapter demonstrates how working with sound professionally can at times be an act of perseverance, and its after-effects can require further management.

To investigate the phenomenology of professional sound work, the corporeal interactions between sonic material and body become pertinent for analysis. Embodiment scholars of sound employ models of hapticity to argue for a material encounter between sound wave and receptive flesh. Cranny-Francis describes this as a 'sonic touch', framing the listener's embodiment in terms of a haptic encounter:

The sonic touch created by film is a distributed sense, a polymorphously perverse touch that affects the entire body of the viewer – most acutely, at high frequencies, through the eardrums, but, at lower frequencies, through the entire body. And when the proprioceptive sense is also engaged, then the filmic touch is more of a sensory mesh or net than a specific sensation such as a tap on the shoulder. Engaging the viewer corporeally in this way, then, resists the hierarchic logic of visual and verbal textuality, which positions the viewer as rationalist subject, demanding the suppression of somatic responses in favour of conceptual augmentation. (2009: 167-168)

Cranny-Francis draws out the primacy of somatic response in a sonic encounter, locating frequencies specifically on and in the body of a listener. However, while Cranny-Francis convincingly articulates this acoustic-corporeal connection, the limitation inherent in her discussion is that she is speaking exclusively about cinema audiences. Film sound scholarship is yet to apply these theoretical insights in-depth to the experiences of professional sound practitioners. Cranny-Francis' insights remain useful and pertinent when expanding the scope to

include the ways in which a professional will occupy, and be occupied, by the sounds they are working with.

One significant challenge of postproduction sound work includes working with ‘unpleasant’ sounds and/or difficult narrative content. As these interviews reveal, such instances render sound work an act of *en-duration*, with the practitioner being required to tolerate and accommodate discomforts into their corporeal selves. Cinema audiences may self-consciously pursue ‘high impact’ genres such as horror or action as an act of cinematic thrill-seeking. Comparatively, for the sound practitioner, producing material is a daily creative and technical practice that can have immediate and ongoing corporeal and social impacts. Media theorists have long been concerned with the impact of distressing content on audiences (Wertham, 1968; Barker & Petley, 1997; Gauntlett, 2005; Ferguson & Beresin, 2017). While this study does not have the space to engage with historical or current debates regarding ‘media effects’, suffice to say here that the lack of interest in practitioner impacts suggests an assumption of immunity for the creators, or that embodied experiences are once again subordinated to technological discourse.

Audience experience of violence is evidently still a primary concern for film theorists; Lisa Coulthard speaks of “the central spectatorial problematic that violence sets up: how is the viewer to react to the horror, gore, brutality, or cruelty depicted on screen?” (2017: 50). However, I argue that it is also important to ask how the sound practitioner negotiates their experience while creating sonic horror, gore, brutality and cruelty. Coulthard contends that

‘immersion’ as a scholarly concept has lost explanatory value due to the fact it has been overused to sell cinema sound technology, as well as among trade magazines and artist interviews. In discussing aesthetic trends in sound design, Coulthard argues that the sense of a spectator’s spatial immersion is “prioritized over the spectator’s sentimental attachment to characters or events” (2017: 54).

While her point is pertinent, I argue that this does not negate the fact that sound is immersive, and that arguably the perceived over-emphasis on audience immersion is even more reason why a study of practitioner immersion and impact is important. Further, for the sound practitioner, ‘spatial’ soundtrack elements or such as ambiances, or carefully placed sfx, are just as important as narrative events or characters for producing a cinematic world that fully engages a future audience on a corporeal level. As has been argued in earlier chapters, the practitioner uses his or her own embodied experience as a reference for ensuring the material has visceral and emotional saliency for the narrative. This is supported by practitioner-academic Mark Ward who notes how these often “dismissed” aspects of the soundtrack are “often collectively referred to as ‘noise,’ and few theorise their worth” (2015: 157). What becomes critically important here is how the practitioner is placed in relation to dysphemistic content as it is being produced, and how they experience their own embodiment as part of this creative unfolding.

Conceptualising the corporeal engagement of a body in and with a sound is important when considering how difficult sound work is felt and managed by a practitioner. As was noted in the literature overview of Chapter Two, Grimshaw

and Garner have posited the relationship between sound and embodiment as one of mutuality, whereby lived experience influences the perception of sound, and concomitantly that sound can influence perception and belief intrinsic to the lived experience:

Embodiment factors are a constant influence on our adherence to the world and can, in many ways, determine our perception. The constitution of sound as a perceptual entity depends on how we attune to it. Epistemic beliefs and affective state significantly impact the specific contextual information we apply to a sound wave (should it be present) and it is that information that determines the perceived sound. This street is not one-way, however, and it also seems a more than plausible proposition that the affective and cognitive potential of sound to influence future perceptions forms a cycle within which sound influences belief and that that, in turn, influences sound....” (2015: 110)

In other words, Grimshaw and Garner are arguing that the sonic experience is a constitutive loop, re-enacted and reinvoked at each perceptual encounter. This bilateral flow of influence and impact becomes useful when examining how practitioners engage with difficult sounds as part of their work, particularly in situations where the listener is *also* creating and managing the sounds themselves.

Practitioner embodiment is arguably a conscious negotiation of uncomfortable sonic affect as well as thematically challenging content. Scholars have noted that verbal or visual stimuli are not as corporeally affecting as sound (Cranny-Francis, 2008), and identified how loud distressing sound has been used in sonic warfare as a means of torture (Goodman, 2010). Therefore, examining how a practitioner manages unpleasant sonic experiences as part of their professional practice is significant for a discussion of sonic impact. While it is perhaps unsurprising that certain genres require more difficult sonic material than

others, endurance issues around extended edit periods become especially apparent when working with certain types of sounds or artistic approaches to sonic storytelling.

Some practitioners interviewed for this research discussed the demands of certain genres or subject matter that utilise high impact sonic sequences. Sound designer Tom Heuzenroeder demonstrates this point when recalling his experiences working on a 90-minute documentary about extreme surfing:

It's no surprise that this film had a lot of white-water sequences in it - almost 90 minutes worth. Since it is difficult to get any meaningful sound recording out in turbulent water from surfers and jet-skiers on location, much of the sonic experience had to be re-constructed. Crashing super-waves and white water gives off a lot of thunderous white noise, which at high volume is only tolerable for a brief period. As an audience member you really feel like you've been on a rush over the 90 minutes running time of the film, but editing that for seven weeks was really an assault on my ears and it took a month or more to recover from it.

This description reinforces the significance of separating theoretical discussions of audience experience from practitioner experiences, where the work clearly becomes an act of endurance that the practitioner feels obligated to metabolise and manage. Heuzenroeder himself makes the clear distinction between an audience's immersive experience and his own experience as the aural architect of the film.

Interestingly, after the film's completion, Heuzenroeder recalls speaking to the film's mixer, who also had a similar experience of taking a long time to 'recover' from the film itself, revealing a brief informal acknowledgement of the difficulty of the project. This informality is important because it reveals one way in which practitioners acknowledge the effects of the sound, and implicitly recognise their

vulnerability to sonic impacts. However, the implication of enduring this discomfort is subsumed under this acknowledged communal suffering, and arguably reaffirms the (male) practitioner as what Wright describes as a passionate creative worker (2018: 321).

It is significant that the challenge of this kind of sonic work is exacerbated by the schedules that are endemic to the industry. Heuzenroeder specifically describes how he had to detail the action being seen in sonic terms, noting, "...there were just so many waves. So – ok, I've done that one, phew, that took about an hour to get right. Oh, here's another one. And another one, and another one....There was a modicum of time pressure, so I didn't quite have the freedom to say I'll do it later." The awareness of time pressure highlighted by Heuzenroeder is important, as this means that he was not able to manage his time specifically to minimise or balance these sonic impacts. While the problematic of industry time schedules will be discussed further in the following chapter, the key insight here is the relationship between genre, sonic content and practitioner impact, especially as framed by the production schedules within which the practitioner must operate.

Foley artist Amy Barber also argues that corporeal difficulty and discomfort doesn't just necessarily arise from the *quality* of the sound, but also the volume at which it is necessary to listen to it, and the technology mediating the sound. As Andrew Czink notes, "Amplification and reproduction allow us to experience sound in previously unheard of ways. Amplification may work like a sonic microscope giving us access to sounds that would otherwise be impossible to

hear at all” (2010: 108). For Barber, the role that the body does or doesn’t play in the production of the sound impacts how unpleasant sound is experienced by the practitioner. Barber describes recording an effects library of metal scrapes as “very brutal” to record, and notes how her positioning in relation to the sound performance intensified her experience:

It’s sometimes different when you’re in the perform role - it’s still loud but it’s not the same sort of sound. But when you’re in the mixing room and it’s coming out quite bright through the speakers. Those sounds are coming through to me and I can’t see what’s happening. I just get this intense sound. And I have to listen to it at a level that is loud enough to pick up any extraneous sounds like breathing or anything that we don’t want. It was a weird experience because at the time I was going through physical pain but it was also – afterwards...I don’t really know how I felt. I can’t even really explain it - you definitely do get affected by it.

Barber identifies here the *lack* of visuals as a factor in making her experience worse. This suggests that the isolation between the listener and the unpleasant performed sounds creates a heightened listening encounter, and that passivity in relation to these sounds amplifies what Cranny-Francis describes as the ‘visceral intimacy’ of a wholly embodied response to sound (2008: NP). This is echoed by Chion argues that “...when there is nothing but sound, the sound becomes all the sensations and ceases to be ‘just’ sound” (2013: 328).

As a Foley professional who has worked in both performing and mixing roles, Barber draws a distinction between the *performing* of a sound, and the *hearing* of a sound. Further, the hearing of the sound in this example is mediated by audio technology arranged and designed to capture and playback a heightened sonic event. This suggests that in some situations, the sonic immersion in difficult sound can be palliated or mediated through the corporeal engagement of

physical performance. Further, the role of the speakers in producing an unnaturally brightened and intense sound is in stark contrast to the performing of those sounds in space. As Alan Williams points out, "...in sound recording, as in image recording, the apparatus performs a significant perceptual work for us – isolating, intensifying analyzing sonic and visual material" (1980: 58). Barber evidently struggles for words with which to describe her embodied experiences, yet indicates a corporeal impact that continued after the record finished. It is apparent through Barber's account that for the practitioner, the relationship between the body, its activity (or inactivity) and sound is significant in the metabolising challenging and unpleasant frequencies.

In a similar vein to Heuzenroeder and Barber, a troubled account of embodied impact is detailed by Wayne Pashley, who recalled his work experiences during *Mad Max: Fury Road*. Unsurprisingly, The *Mad Max* franchise relies heavily on a comprehensive palette of 'motor' sounds and these are used to not only place the audience in the middle of the action, but also as a sonic fabric intended to echo the dystopian and barren world of the narrative, where troubled embodiment itself is a key thematic. Many extended sequences in *Fury Road* contain an unrelenting sonic assault of deep engine roars, revs and rumbles, while other sound design elements including combat effects, dialogue and Foley are similarly worked around the harsh metallic palette. Wayne Pashley summed up his experience in the *Mad Max* sonosphere as "very, very distressing", and describes what it was like for him to work on this film for an extended period of time:

[This film needs] a very dirty sound. Rust and dust and metals - very, very tough. There's a great example of emotionally at times sickening. It affects your gut, when you go - ooh, those frequencies are not cool -

they're not nice. Grinding metal and a crash - one after the other. Those frequencies – evil frequencies that are 3 kHz and 5 kHz. They're just a horrible frequency and they bite. I don't like biting sounds. I call those sounds "Go Away Sounds". And it can be in the voice as well. You're up there the 3-5k area, mid-range bright – that's very much "Go Away". You've got to be very, very careful with it. It's like - ugh! At times I could only listen to it for a short period. It can work for the filmmaker – exactly everything I said can work to the filmmaker's favour, which obviously, that was what they were going for. So - one hit, boom, bang! Oh gee that hit you hard. There's a reason to have it, but to work with it all day is killer. It's like - oh my god! You've just got to push through it. It's very emotional. You feel it in your gut. And your ears, as I was saying – the most sensitive sense that we have and it's the first thing that's going to – argh! There were times when I had to shut my eyes. And sometimes that can be worse. So you think – I can't shut my ears really, unless I put my fingers in my ears, but I can shut my eyes. So you shut your eyes, and it's even worse.

Pashley's account reveals the conflict created between aiming to meet the artistic and aesthetic vision of the director, yet corporeally managing the inevitable impact that results from prolonged exposure to these sorts of sounds. The direct relationship between the sonic content and the conscious experience of the practitioner is articulated in distinctly corporeal terms, yet is framed in terms of endurance, where a practitioner has to "push through" and continue with the work.

Like Barber noted above, Pashley also describes how the lack of visuals heightens the sonic experience and intensifies the discomfort whilst working with certain sounds. Here again it is possible to see parallels between professional sound work and accounts of sound as torture, where the sound edit suite is comparable to what Paulo Chagas describes as the immersive space of the torture cell, which is "soundproofed and deprived of light" (2006: 121). Chagas argues that such an extreme environment is significant in understanding

the power of sound embodiment, because the body cannot escape the sensory experience, and is unable to resist the deterritorialization of the cognitive and physical domains (Chagas, 2006: 121). In other words, the corporeal intensity of the experience of sound in the edit room is heightened by the inescapability of the sound. Without definitively comparing professional sound work to torture, it is nonetheless important to see how the practitioner's lived sonic experience in this way becomes a professional skill of managing and enduring sonic impact.

The discussion thus far has focused on the singular experience of the practitioner as he or she works on content in isolation. However, other accounts also reveal the situations in which difficult sonic material creates an aural community that is solidified by the shared experience of discomfort. The idea of an aural or acoustic community is not new, and has been deployed in studies of acoustic ecology (Truax, 2001; Chattopadhyay, 2013), surround soundscapes of the cinema (Ward, 2016) as well as histographies of sonic remembering (Birdsall, 2009). However, it has not been applied to a production context for film sound professionals. Further, by examining the shared experience of sonic discomfort among practitioners, it becomes evident how these discomforts are framed, articulated and managed by those who are forced to endure them. It also becomes evident how the 'body' of the practitioner is positioned in relation to creative sound work, and industry discourses about the work.

It is important to reiterate that against this backdrop of potential discomfort, the goal of creative sound work is to invoke and engage and embodied listener. Porcello reminds us that sound professionals aim to "...projects as many possible

listening situations and experiences...as possible" (1996: 5). In postproduction sound, particularly during the mixing phase, the use of difficult sonic material becomes a shared burden among colleagues, as the collaborative engine of postproduction sound means affective experiences are transmitted and relived. In this configuration, the bodies of the postproduction practitioners become a living community of corporeal affect, where notes and experiences are shared as they are lived, as part of the creative unfolding. Sound designer Dave Farmer recalls how elements of his sound design for *The Lord of the Rings* trilogy was particularly difficult for the mixers who were then required to work with the material at exhibition volumes. The Middle Earth soniverse is based on organic materials such as wood and rock, and key pieces of sound design include heavily stylised vocalisations. Farmer designed and edited the Nazgul Ring Wraith creature effects⁵⁸, a particularly unpleasant collection of sounds that resulted in a difficult time for his colleagues during the mix. The mixers were in the challenging position of being required to repeatedly listen back to sequences at full surround sound volumes:

It was loud effects. The mixers hated me for it, because in the mix you've got to go back and forth over these scenes hundreds of times and big loud theatre volumes. You can't turn it down. You've got to go through it at loud volumes. And Nazguls are so shrieky and so piercing, so they hated it. They hated working with those scenes. But too bad, right?

Farmer's portrayal of a captive audience of mixers, and the playful insouciance towards corporeal suffering of his colleagues reflect broader industry assumptions about the place of the body in relation to creative sound work.

⁵⁸ The Ring Wraiths' core signature sound was composed of recordings of co-writer/producer Fran Walsh's screams, and manipulated with vocal FX. Farmer described in a 2010 interview how he used his own voice for the more human elements to the sound and to create a more diverse collection, including what he describes as 'inhale screams', which made him lightheaded and required to lie down afterwards (Isaza, 2010: NP).

As argued earlier in this chapter, work in the creative industries is “passionate work” (Gill & Pratt, 2008:15) and this passion is tied into “articulating, developing, maintaining and enacting professional identity” (Deuze & Lewis, 2013:164). In such a scenario, practitioners are not offered a genuine space to seriously contest or complaint about discomfort experienced as a result of their role. To do so would potentially be seen to compromise their professionalism, as well as the sense of honour attached to enduring the difficulties of creative work. As Siebert & Wilson found, complainers in the industry “...quickly became unemployable...” (2013: 717), and it is reasonable to assert that the social mechanism of sourcing employment restricts other complaints (2013: 716). Further, I argue that such denials or dismissiveness towards occupational discomforts reiterates perspectives towards embodiment already established by the gendered nature of the industry and the “...association between technology, masculinity, and the very notion of what constitutes skilled work...”(Wajcman, 2004: 27). This points to an interesting tension inherent in the bodies and experiences of embodiment in postproduction sound work; on the one hand, practitioners are encouraged to show ‘grit’ through difficult aspects of the work, and on the other hand, are required to spatially and affectively attune their bodies to the sound work in order to gauge the creation of a corporeally arresting sound work.

Interestingly, some of the literature aimed at fledgling professionals reveals how further developing self-awareness is encouraged. In other words, having a consciously embodied relationship to sounds is clearly valued, demonstrating that for practitioners, cognitive analysis requires corporeal awareness. Learners

are encouraged to employ both sensory and analytical registers, for “feeling the sound and sensing what works are also critical to active analysis as is being aware of the relationship between your taste and mood and your response to sound” (Alten, 2014: 309). Therefore, it is significant to examine individual strategies for managing difficult sonic content, and how this is drawn from a profoundly corporeal awareness of one’s own embodiment.

Dave Farmer reflected on the capacity of certain sounds to physically and emotionally affect him, acknowledging the necessity of employing certain techniques in order to make the edit session more palatable:

It can make you pretty jittery at times....[S]ounds that are really high-end and brittle. For example, glass - I don’t enjoy working with glass, but sometimes you have to. You try to find ways to warm it up, and take off some of that super brittle high end. Because that stuff really messes with you over loud volumes and for lots of hours. It can give you headache and make you testy. And really get on your nerves. Anything that is bright. Glass is the worst, but there’s lot of metal that can be highly abrasive to your ears. Gunshots as well – sounds that are very transient can be a pain too. I try to roll off a lot of the high end on those things to get them back down to a softer level, because it doesn’t really need to be that bright. And once you roll off a bunch of high end, you think you’ve taken off too much. And after you work with it for a little bit you realise this is still working great. And if you put the high end back it’s like- oh my god! You realise it doesn’t really need to be that piercing or bright. Not volumes, but frequencies above 11 kHz. You can roll off stuff over that and you won’t really notice it...once you take it off, you get used to it and it’s so much easier on you.

Farmer reiterates the inevitability and acceptance of enduring unpleasant frequencies. A key aspect of this acceptance is the personal strategy for managing sounds in a way that reduces the levels of impact on his embodiment. While he is describing this process in technical terms, it reveals the degree to which the practitioner must manage sonic materials in relation to their own embodiment. Therefore, despite overly technical discourses that elide the

presence and potential vulnerability of the body to sound affects, practitioners are evidently aware of sonic discomforts and part of their role becomes an ongoing negotiation between the 'work' and the embodied experience of, and during, the work.

Questions about sonic imprints become relevant when examining how practitioners respond to narrative and sonic content that is specifically related to other narrative *bodies*. A key perspective of the phenomenological approach is that the body of the subject is the cornerstone of being-in-the-world, for as Merleau-Ponty described it, the world is not cognitive, but materially lived (2002). Further, it has been argued by sound philosophers that through sound, ideas of the dualistic separation between bodies and the world are invalidated. As LaBelle writes, "Sound is a material event that activates the unsteady arena existing between bodies.... sound charges the spaces that surround us with an animating presence – a *presencing*" (2017: 275). Yet paradoxically, this dissolution of borders simultaneously allows the practitioner to experience his or her own embodiment more deeply as a result of the corporeal awakenings triggered by sound. Michel Chion notes how sonic recognition "can awaken via memory, a conditioned reflex, corporeal vibrations. Sound is...bisensorial from bodily memory" (2016: 206). As discussed in previous chapters, empathic engagement again becomes pertinent in how bodily-associated sounds are registered and metabolised by the practitioner. Further, this process of sonic metabolisation demonstrates the enduring nature of sonic impacts.

As some practitioners identify, sound can become loaded with personal triggers, and these triggers may have profoundly emotional and corporeal impacts. As Anne Cranny-Francis points out, sound can be understood as affecting a listener not only through the immediate physical or sensory reception, but “...also through the memory it evokes of other events and their associated perceptions, which may involve all the senses, not only hearing” (2008: NP). I would add to this by noting that this includes involuntary or reflexive responses embedded in the bodily intelligence and sensitivity of the practitioner that are also stimulated by sound. In practitioner accounts of sound work, this is shown to play out in personalised ways. American sound editor David Fisk recalls working on a project involving lots of vomiting, which became extremely difficult because of his “strong gag reflex.” For Fisk, his bodily involvement was particularly provoked on this reflexive level, and the sound work became as much about managing the involuntary urges of his body as it was about creating a ‘soundtrack’.

In a very similar vein, Foley artist James Carroll identifies his own experience of empathic crossover triggered by his own immersion of in the film and his sound work:

You do get caught up in the film. ...after you’ve watched it a fair few times, there’s certain bits that you start to pick up...and you do start to connect with it...Often there’s scenes where there’s something particularly gross or nasty happening. My recordist is hilarious – he hates the sound of mouth sounds. He can’t stand it. So if it’s eating, kissing, anything like that – he really can’t deal with it. So whenever there’s a kissing scene, you’ve got to make the kissing sounds. That really affects him...he has a real physical reaction to that sound. I did a film a while ago where there was a bunch of guys and they were throwing up on a giant egg to make it birth. It was basically a whole bunch of guys vomiting and we were trying to do vomit sounds, and that set me off. It was difficult...But then there was

another film where a character had broken a dog's neck and I had to do the sound of a dog having its neck broken, and that was horrible. It involved a handful of gravel with some material wrapped around it to get that (imitates sound). But that was like – I feel terrible doing this! It's odd. Often you will have a connection to something on the screen, you'll have a reaction to something on the screen, but once you start putting that sound in, especially if you're performing it, you really do have a – (shudder) yechhh. It gets to you.

Like Fisk, Carroll also was viscerally triggered by sounds of vomiting – yet being a Foley artist required Carroll to re-create the vomit sounds with his own body, drawing upon his phenomenological memories of vomiting, yet without overly triggering the natural vomit reflex.

Interestingly, the connection between sound and corporeal action, between memory and reflex become realised in these sonic encounters.⁵⁹ What the above examples demonstrate is how connecting to a sound can in fact problematize the embodiment of the practitioner, and this can extend beyond the context of the performance itself. Deniz Peters argues that, “Even in the presence of the physical making of organized sounds in performance, what we hear becomes expressive presence only via our bodily experience in listening” (2012: 18). In other words, it is the bodily experience of listening that constitutes how sounds are received, and Peters goes further to say that the tactile element of listening means listeners “may experience sonic gestures haptically, feeling their tactile qualities arising from our bodily knowledge” (2012: 21). What is interesting is how to consider such a configuration in terms of the misophonic responses to

⁵⁹ In the reverse scenario, Carroll also discusses how Foley artists are at times required not only to perform props, but also consume them. Carroll recalls a project that “ruined pears forever” for him when he was required to perform eating. For the right texture and sound performance, Carroll was required to ‘speed-eat’ an entire bag of pears until the Foley team were satisfied the correct variations of sounds had been captured. It would be a mistake to see no more than an amusing anecdote about over-eating and antipathy for fruit.

particular sounds, such as those described by Carroll. As these examples demonstrate, postproduction sound practitioners are often called upon to work with sounds that can produce strong visceral reactions, and endure sounds that are unpleasant to the point of pain. These responses can be exacerbated by the fact that the practitioner must spend an extended period of time working with these sounds, or indeed that they must be experienced in louder than normal volumes.

7.4 Attack and Decay: Sustained Sonic Impacts

As has become evident in the discussion thus far, part of the challenge of postproduction sound work is the length of time practitioners must engage with certain sounds. Arguing for the longevity of the sonic encounter to a certain extent challenges the assumption that sound is a fleeting encounter, temporally bounded. As LaBelle has already noted, the materiality of sound is key to understanding our embodied relationship to it, for the nature of a dynamic acoustic experience means “...we might appreciate the ways in which they envelope the body; one is enfolded by sound, with each wave an event that brushes over our corporeal figure; we are touched, or hit by sound – it is all over me” (2017: 277). Theorists such as Vijay Iyer have stressed the temporality of sound, where the “...fundamental consequence of physical embodiment and environmental situatedness is the fact that things take time. Temporality must ground our conception of physically embodied cognition”(2008: 275). However, such a perspective is appropriate if only speaking in *acoustic* terms – that is, in terms of the physicality of sound waves encountering a sensate body. Such a criticism was articulated by Grimshaw and Garner, who noted that that an

acoustic definition of sound performs an “objective purging of the phenomenology of experience” (2015: 22). Reducing definitions of the sonic encounter to the acoustical event is problematic when considering how some practitioners interviewed for this research described the enduring nature of sonic encounters. Further, it does not adequately address sound’s ability to provoke and sustain affective states that may manifest in psychosocial ways. Nor does it demonstrate how disturbing or distressing content may affect the practitioner who is tasked with producing sound for this material.

Rick Altman once asked scholars to consider “What does cinema facilitate? What are its residual effects? What kind of afterlife does the cinema event have?” (1992: 13). He was posing this question to the audience experience, and yet such a question is eminently pertinent for the sound practitioner. The understanding of sonic impact as a result of professional sound work is further expanded when some practitioner accounts detail a measure of immersion and engagement that extends beyond the studio. While film analysis has often focused on how audiences experience cinema, particularly in relation to ‘high impact’ genres such as horror or action, exploring the placement of the practitioner who has an enduring relationship to this material is equally significant. And further, it is pertinent to examine the degree to which practitioners experience a ‘bleeding through’ of sonic affect. Further, while this study does not suggest a *causal* relationship between health, wellness and content for a practitioner, it is interested in examining how encounters with sound on a professional level are not necessarily bound and contained by formal contexts such as professional spaces or working hours.

Like Farmer described above, Justin Doyle also details the emotional and physical impact when working with certain sounds in terms of their acoustic and psychoacoustic properties. However, Doyle goes further in mapping the physiological to the psychosocial:

I would always make excuses when I would come home and I'm just in a terrible state with my wife. If I've been working on hard effects sequences – really loud, violent sequences would mess me up. Because one of the tricky things is that louder you make things, the more even the frequency response becomes. So if you work at a quiet volume, you can't really hear the low end, judge the low end or judge the top end correctly. But if you turn things up, that flattens out so you can get a more accurate picture of what's happening. So there's a certain level of volume that we kind of have to work at. And we often work at reference level as well, either 79dB or some at 85 or 82. So you're kind of working at a reasonably high level when you're working on very loud sequences. And you can turn it down for a little bit, but you can't hear all the character of the sound. So you tend to be exposing yourself to some pretty sharp impacts and things. So if you're cutting a violent sequence and a lot of sword fighting and a lot of heavy hard effects – punching and stabbing and all of that sort of stuff – I find that you get all those bursts of adrenaline in your system and shock and stress from those loud sequences. And I find I would get home and I would just be really wound up from those sequences. And I would make that excuse – its like, yeah, I've been putting in the sounds of people punching each other in the face all day, so I'm a little bit disturbed at the moment.

The key concept of a sonic imprint bleeding in the lived experience of the practitioner is demonstrated here, as Doyle identifies how certain sounds can take a reasonable amount of time to 'wear off'. In describing his experience of the longer-term sonic impacts, Doyle feels obliged him to "make excuses" for his state around his partner. While this point will be examined further in the following chapter, there is an implicit resignation evident in both Doyle and Farmer's accounts which speaks to the way in which occupational discomfort is displaced onto the individual practitioner for management.

Practitioner accounts demonstrate professional-personal bleed through, an instance of the sonic imprint as a result of sound work. Sound editor Martyn Zub recalled the experience of working on a film that contained scenes that then seeped into his own personal life as it unfolded:

A perfect example was the film I worked on recently which featured a car accident. I was cutting and designing the car accident scene, which was very dark and bleak with bad weather. Then on the weekend my partner and I were going on a road trip. The weather was also really bad, and I found I just couldn't stop thinking about car accidents. The work puts your headspace in a certain place. Definitely all of these kinds of scenes do. And because in that film everybody in the car got killed – I'm thinking, ok, this is pretty bleak. I'm now on a road trip and the weather's shocking as well. Definitely, it definitely affects you. Some things are very grim. It's definitely the darker films, when people are getting killed or tortured or something awful like that. If you're working on a dark film, it takes you to a dark place mentally. You will walk out of the studio feeling very heavy yourself. My wife says she can tell when I'm in a heavy film, compared to when I'm working on a Disney film. She notices that I am quiet and a bit more reserved. And the music that I want to listen to at home is a bit more aggressive.

While this anecdote reveals a moment of narrative verisimilitude, familiar to cinema audiences, it also reveals the degree to which creative sound work places the practitioner in emotionally and mentally challenging situations. While larger questions about depictions and cultures of violence lurk here, what is of particular interest is the connection Zub draws between the film's content and his own mental state. This is important because, when combined with the other health challenges discussed in the following chapter, there is potential for mental health-related issues to become exacerbated in some susceptible individuals. Further, the felt after effects of working on 'heavy' content communicates itself to those close to practitioners and personal spaces become reconfigured as the practitioner negotiates their own 'come down' from these states.

While this discussion does not draw a direct link between distressing narrative content and compromised mental health, it is important to acknowledge that effects and impacts are clearly noticed and felt by practitioners. These impacts may be caused or compounded by industry conditions that make it difficult for a practitioner to take time away from a project, as Heuzenroeder acknowledged earlier. Alternatively, impacts may be from the content itself, which may be distressing or personally triggering. Studies now show that there needs to be more support available to those who do find themselves struggling. In a study surveying the mental health of workers in the Australian entertainment industry van den Eynde, Fisher & Sonn found that many of their participants working in broadcasting, film and media equipment chose not to respond to questions directly related to their mental health (2016: 95). This finding certainly supports the argument made earlier that practitioners are conditioned to minimise complaints and accept difficulties in a highly competitive and masculinised work culture. For those who did answer questions, it was found that 63.8% of sound professionals “indicate potential depression symptomatology” and 30.1% “indicate potential anxiety symptomatology and are in need of further follow up” (2016: 97). van den Eynde, Fisher & Sonn argue that their findings demonstrate “the need for specialist mental health support and services for the broadcasting, film and recorded media equipment operators in the Australian creative and entertainment industries (2016: 98). This is also supported by the survey conducted for this research, in which 75% of participants believed that there was not enough support or discussion around mental health, and 62% responded that they wanted to know more about how to maintain physical and mental wellness in their profession. There is clearly much at stake in questioning

the ways in which sound practitioners are potentially affected and impacted by their work.

7.5 Ongoing Reverberations: Locating the Body Amidst Work-Life Blurring

In developing an understanding of the lived experience of sound practitioners, this chapter has examined how concomitant with sonic work, the professional experiences - and at times endures - ongoing affects. The discussion has thus far focused on the more dissonant experiences that resulted from working with unpleasant narrative and sonic content. Here, the discussion is interested in how a work-life bleed is in fact engendered by the nature of the role itself, and how an extended experience of sonic awareness becomes intrinsic to how a practitioner will locate his or her own embodiment in their surroundings. For example, as earlier chapters have shown, habitual Foley work creates bodily awareness that connects externalised movement to performed rhythms internalised by the performer.

However, it is possible to identify how a blurring between work and personal time occurs, as some Foley artists notice the unique way in which they interact with other living bodies: Foley artist John Simpson notes:

You come out of the studio and you'd go off to the shop to get some lunch. But because you've been watching people all the time walking, I'll find I'm still in that mode and I'll be walking in sync with someone down the street. I just can't help myself. I'll just see them and start doing what they're doing....And in places like the coffee shop or whatever, you're just listening to people and it's not their conversation, it's just their feet and the way they're walking. And you're just picking up on sounds all the time. Can't help it - its just there

Here Simpson details the way in which this tuning of his corporeal sensibilities for echoing visual movements becomes entrenched into his lived experience outside the studio. The idea of Foley as a 'performance' can therefore be extended, for in this blurring between the personal and the professional, the notion of a 'performing body' is concomitant with the wider non-working lived experience of the practitioner. This idea is also echoed by another Foley artist Amy Barber, who notes:

The following people down the street and matching their walk (laughs) is more Foley...you know, just following in their footsteps and seeing if you can match them. It just happens because I think we're both so passionate about sound. It's just natural that it comes through in your daily life. It just pops in.

As Barber's description reveals, there is a sense of automation to this crossover, and she draws a connection between the passion for the work, and this corporeal attunement. In such a configuration, this tuning to the rhythms and movements of other non-narrative bodies demonstrates reflexive, a result of a certain professional conditioning. Indeed, for some Foley artists, such a corporeal connection evidently extends into their unconscious lives. For James Carroll⁶⁰, Foley performance manifests in a blurred distinction between lived experience, dreams and work:

I wake up in the middle of the night having dreams that I need to Foley the sound of me rolling over in bed. You can't escape it. I'll have dreams with Simon my recordist going – "No that's not good enough. No you've got to make it sound better than that". And I'll be saying – "I'm trying to sleep!" (Laughs). You're doing so many hours a day. John Simpson would tell me a story that he has to consciously *not* Foley people that are walking down the street. He would start walking in time with people (laughs). And I've definitely done that as well. Drives my wife insane – sometimes I'll just start Foleying here. She'll be doing something and I'll

⁶⁰ James Carroll undertook apprentice training under Foley artist John Simpson.

start making the sounds of what she's doing – and she'll yell cut it out! (Laughs). I do that more just to annoy her.

Carroll here also demonstrates the way in which a professional immersion leads to a corporeal habit that reiterates itself in everyday life.

Comparatively, Justin Doyle has also articulated how long hours of immersion in his work has meant his dreams have been impacted:

When we've been going a lot, I come home and I totally just have Protools dreams. I'm totally editing. The way that I'm interfacing with life – there's this complete conflation where I'll be having a dream like I'm parking the car, but the car is regions of audio that I'm moving into the space. It just gets completely conflated and it's really disturbing. I absolutely have Protools dreams. I don't think that you can make a brain go there for that unnaturally long period of time without it affecting the actual structure and software [of the brain].

As these experiences reveal, the immersion of professional sound work means that professionals experience intriguing corporeal impacts. Further, this aestheticized work-life bleed through arguably naturalises the culture of long hours that have been shown as intrinsic to the creative industries.

Isabelle Delmotte pointed out that sound “can make cinematic ‘realities’ more real than life events” (2015: 173). Practitioners report being emotionally and psychologically affected by fictional works because much of the application to the work requires emotional and psychological immersion. During his experience working on the American thriller *Tempted* (2001), Wayne Pashley describes the undertones of the film that he was required to render into a sonic language:

It was a very dark sex thriller set in New Orleans, and a lot of the themes of the film were about the swamps of New Orleans, and the underbelly dark world of voodoo. Very dangerous film and the emotional state of the three characters were heavy duty. And I found that that film took a big toll because you were constantly thinking – swamp. You were constantly thinking – mud, dirt, and filth and anger and fear. A lot of really heavy stuff. And the insects of the place. It was just heavy. And I was always constantly trying to find those thematic angles with the sound. I would say, if there were a film I was completely affected by, it would have been that one. And when it was done, I did not want to go back there. I did not want to see it, I just was done. I had to get out of that strange dark place. That one was very tough because you were constantly looking for the rhythms of it. What I like to try and do in any design of any films – first thing is, you're looking at the characters. What are they saying? How are they responding? Because it's all about cause and effect. Acting is like a contact sport. They offer something and then the person has got to give back. So it's always a cause and effect of drama, and the same goes for sound effects. This happens, then that happens. So what I try to do is look for the thematic and emotional content of the character, and try to as much as I can look at the themes of the film and the scene itself. So you're trying to find something that is not necessarily of the real world, but more about the musical rhythmic intent. The intent, really. So that gets into your blood, when you start doing that every day...you do find yourself getting completely swamped by it and overtaken by it outside of your days work. And you're always listening for something new. So I think it does take over.

Pashley's description points two critical issues are a factor in a practitioner being affected; firstly the intention to create a sonic world appropriate to the narrative content means a high amount of reading into the material and consequent emotional investment. Secondly, locating the intent behind the content also means locating intrinsic rhythms and opportunities to communicate this intent in a concentrated effort. This results in the emotional undertones of the material bleeding so much into the subjective lived experience of the practitioner that the effects are felt outside of working hours. Pashley describes a sense of being taken over, and even uses embodied metaphors in his language - 'into your blood' and being 'swamped' - to indicate his experience of submersion into that particular sonic world. It is therefore evident that there is a relationship between

immersion and sonic impact for a practitioner. In this relationship, the merging of fictional content with lived experience speaks to both the high degree of focus a practitioner offers their work, as well as the culture of long hours which mandate a temporal immersion as much as a sonic immersion.

Conclusion

By positing the concept of the sonic imprint, this chapter aimed to frame and discuss the ways in which practitioners experience intensified, extended and/or ongoing effects of their sound work. In expanding definitions of listening and vibrational interaction beyond purely acoustic terms, it becomes possible to demonstrate how the impact of professional sound work also includes physical, emotional and psychological aspects.

The phenomenon of immersion is shown to be both a result of the amount of time in which a sonic encounter occurs, as well as the contents of both the sound and narrative in question. Given the industrial and cultural contexts and operative assumptions of the creative industries, a discussion of the impact of sound work becomes paramount. It mitigates tendency to minimise or erase the presence of receptive bodies – and their vulnerability to sonic effects. It also raises questions about some of the longer-term impacts on the psychosocial lives of practitioners, particularly in terms of how these impacts are experienced in non-professional contexts. Within a current climate of increased concern over the health and wellness of creative practitioners, research needs to acknowledge and investigate how practitioners experience these impacts, and manage them. Doing so provides a richer account of the lived experiences of sound

practitioners. The following chapter will further develop some of the issues raised around health and wellness in more detail.

CHAPTER EIGHT

CORPOREAL CHALLENGES: THE HEALTH AND WELLNESS OF SOUND PRACTITIONERS

8.1 Introduction to Practitioner Health and Wellness

This chapter aims to further develop an inquiry into the lived impacts of occupational production sound work, particularly around questions of physical and mental health. Such an investigation is timely, for as van den Eynde, Fisher & Sonn point out, “there is little research related to people who work in this sector of the creative industries, thus little is known about their well-being” (2016: 18). This issue also emerged during interviews with some professionals as part of this research, and has also become glaringly apparent in the industry more broadly as a result of the tragic suicide of Australian film sound mixer Gregg Rudloff.

In the neighbouring area of the music industry, there is evidence of a growing awareness of health issues, reflected in the new availability of both counselling and financial services for music workers, initiatives that are the result of collaborations between industry bodies and associations. Examples of these new resources include *The Unison Benevolent Fund* (Raine, 2017) and *Over the Bridge* (Lose, 2018) in Canada, or the *Music Minds Matter* in the United Kingdom, which offers a 24/7 support line, as well as advice on legal issues (Unattributed, 2017). Lobenfeld (2017) has pointed out that the music industry is becoming far more proactive about mental health issues for musicians. However, his account of the struggles of high-profile celebrities neglects to attend to the experience of those working ‘behind the scenes’ in music production.

Comparatively, for the film sound practitioners, there is a conspicuous lack either industry or scholarly resources around health issues, with open discussions only now beginning to publicly emerge. The scant material that touches upon strategies for general health and wellbeing being can be located in informal sources such as online peer-conducted interviews and articles (see Isaza, 2009; Meyer, 2017; Marshall, 2018; Mongeau, 2018). At an industry level, open discussions are only just emerging. The Association of Sound Designers in the United Kingdom hosted their very first Mental Health Awareness session on May 31st, 2019 (*associationofsounddesigners.com*). In the anonymous online survey of sound professionals conducted for this research, 75% of the 80 industry professionals who responded indicated their belief that there is not enough awareness, support or open discussion around mental illness in the industry, 17% were unsure, and 8% felt that there was enough. Further, 62% wanted to know more about maintaining physical and mental wellness in their profession, 17% were unsure and 22% responded that they did not want to know more.

Yet evident in industry dialogue are the core assumptions and expectations about maintaining practitioner health. The critical health studies scholars of healthism have already critiqued the politics of health as it is framed in social and cultural discourses (Crawford, 1980; Lupton, 1995; Greenhalgh & Wessely, 2014; Brown, 2018; Cairney, McGannon, & Atkinson, 2018). These scholars have revealed the move to individualise health, where as Ayo pointed out, individuals “should work and live to maximize their own health” (2012: 100). Such a perspective is problematic in that it displaces the burden of health care from the

shoulders of the state and onto the consciousness of individual citizens” (ibid). Indeed, with one notable exception, which will be discussed later, the overall lack of formal and informal literature concerning coping strategies and awareness of physical and mental health issues in the film sound community is indicative of broader assumptions and expectations regarding work in creative industries.

As outlined earlier, the creative industries are characterised by temporary, intermittent and precarious work that features “long hours and bulimic patterns of working” (Gill & Pratt, 2008: 14). It has also been found that work in these industries collapse or erase boundaries between work and play, offers poor remuneration and engenders “profound insecurity and anxiety” regarding receiving future work, earning a sufficient living as well as “keeping up” with changes, be they structural or technological (ibid). Current research into the creative industries reveals the extent to which it is characterised by self-employed or and multiple-employed workers who report little to no protection for either their current work situation or their future needs (Hennekam & Bennett, 2017: 80). As a result, practitioners are found to undertake multiple jobs with irregular work hours, extended shifts, workdays and working weeks, and significantly, these factors “...are all likely to negatively impact health and safety, including psychological well-being” (ibid).

As Ingersoll points out, in an Australian context there is little published on the employment systems, structures and institutions operating within the film industry. As a result, the role of trade unions and professional associations in the bargaining processes around wage setting and negotiations of work conditions

are under-explored, and consequently, informed awareness of labour mobility and employment opportunity are also lacking (2014: 50). Ingersoll makes the compelling argument that creative workers such as those who work in the film industry “should have a voice” and that there should be “an open and transparent analysis of employment in this context” (ibid). Bourdieu was particularly critical of precarious work as it obstructs hope for the future that he saw as essential to “...rebel (individually or collectively) against intolerable working or living conditions” (1998: 82). By drawing on interviews conducted for this research as well as a survey of Australian screen sound professionals conducted in association with industry body the Australian Screen Sound Guild, this chapter aims to contribute to current discussions of health and wellness which speak directly to the industry by demonstrating the parameters by which health is potentially compromised as a result of professional sound work.

Importantly, as the previous chapter touched upon, the paucity of forum discussions about these difficulties speaks to the reluctance on behalf of creative workers to voice concerns, for fear of potentially jeopardising future work. Mark Deuze discusses coping strategies for such precariousness, including “avoiding behaviour which could be seen as awkward, inconvenient or confrontational (2007: 194). While Deuze was particularly focused on industry newcomers, and their vulnerability to potential exploitation (2007: 193), I argue that such concerns are equally as valid for seasoned professionals of many years industry standing. Considering 84% of this study’s survey responders identified as freelance employees, with 71% expressing concern about having enough work in the future, and factoring in that 48% of all responders were aged between 40-60,

these concerns are demonstrably still applicable to established professionals. Further, as this research demonstrates, there is a very high demand for more industry support and information regarding wellness, particularly mental health, as well as a desire for structural changes to those working practices and conditions that compound these health issues.

It is only in very recent times that mental health for film sound practitioners is being discussed in a public forum, partly fuelled by the recent suicide of Academy Award winning sound mixer Gregg Rudloff in January 2019. Practitioners such as Gregg Rudloff's former colleague David White (Groves, 2019), and Australian theatre sound designer Stefan Gregory and theatre composer Nate Edmondson are publically drawing attention to the factors that contribute to mental health problems for those working as sound practitioners (Reich, 2019). This chapter therefore addresses some questions of occupational impact on health, particularly through the lens of physical and mental wellness, for both production and postproduction professionals. Such an enquiry places embodiment at the core of industrial issues and challenges which are endemic to the creative industries more generally.

As this research demonstrates, compromised health may occur over long periods of time. Despite the existence of some forms of regulatory guidelines to prevent illness and injury, industry pressures and changes to working practices appear to increase the potential for both physical and mental health issues in practitioners. A key piece of recent research into these issues was the report entitled *Working in the Australian Entertainment Industry* (2016). This report was produced

through Victoria University in association with Entertainment Assist, an Australian advocacy charity for those who work in the 'entertainment industry'. In this particular study, the authors chose to target 3 'groups' of creative professionals, including (1) performers, (2) performance arts support workers and (3) broadcasting, film and recorded media equipment operators.

The authors van den Eynde, Fisher & Sonn found that creative workers had difficulty negotiating what they describe as 'bruising' and 'toxic' work environments and experienced a "lack support from their industry" (2016: 2-3). Significantly, this report also identified that the main barrier to practitioners seeking help was the fear of that individual's reputation might be tarnished, and as a result they might not get any more work (2016: 131). Overall, their findings strongly suggest that the entertainment and cultural industry is in "severe distress", and urgently needs early prevention and intervention programs to reduce the impacts of those with health and wellbeing problems, and to prevent new occurrences" (2016: 1). Further, some of their findings paint an alarming picture of the challenges facing creative practitioners, including significantly higher incidences of mental health problems, drug and alcohol use and suicidality (ibid). More specifically, these authors found that indicators of anxiety and depression symptomology are well above the general population norms, with suicide ideation is 6 times greater, suicide planning over 4 times greater, and attempted suicide more than double that of the general population (ibid).

It is important to clarify, amidst a discussion of health concerns and corporeal challenges for sound professionals, that those who participated in this research

described their experienced difficulties in answer to specific questions about physical challenges of their work, working conditions, and their bodies. Significantly, many were quick to follow up critical reflections with a reiteration of a sense of privilege for being able to do this kind of work, articulating an abiding love for their profession and reflecting what Gill & Pratt describe as the “passionate attachment” to creative work (2008: 14). This point is important, because as much research on creative industries has found, an ethos of ‘sacrifice’ in the pursuit of passion (Banks, Gill & Taylor, 2013: 3) persists, whereby “notions of vocation or calling” were considered compensation for a lack of material reward or the “ability to endure” difficult conditions” (Wright, 2018: 316). Indeed, as Wright has found, knowing the risks and drawbacks of creative work rarely diminishes this passion (2018: 318). In spite of these cited difficulties, consistent findings reveal creative workers experience their work as “profoundly satisfying and intensely pleasurable” (Gill & Pratt, 2008: 15).

However, while discussing the difficulties of creativity does not ignore these payoffs, it is important to challenge assumptions and rhetoric about the work that may minimise or obscure these potential issues. Further, persisting in a denial or minimisation of difficulty in the face of a “labour of love” means that industry structures and practices continue to go unchallenged, and the wellness of practitioners may continue to be compromised. Indeed, as Lee has pointed out, the ‘doctrine’ of creativity as a form of immensely pleasurable and rewarding work “also functions to mask exploitation” and obscure questions over the long-term sustainability of a career in the creative industries (2012: 483).

Research into the lived experience of the creative industries reveals conflicting attitudes about how the practitioner is positioned in relation to aspects of the work. Significantly, Lee found interviewees expressed “deep ambivalence about their working lives” (2012: 483), and I argue this ambivalence reflects the difficulty practitioners face in negotiating the challenging aspects of the work, especially in the face of industry discourses and structures which intentionally or unintentionally minimise them. As this chapter will demonstrate, public and professional attitudes towards the challenging – and potentially damaging – aspects of creative work are at times at odds with emerging awareness and concerns about health and wellness. Therefore, this chapter specifically examines the issues of fatigue, stamina, illness and injury, and explores how the body of the practitioner is positioned and framed by industry practice. It also draws upon practitioner accounts of embodied experience to provide direct insight into how these relations are lived and negotiated by those involved, mitigating any tendency to medically objectify sensate bodies and subjective experiences. By articulating the range of challenging experiences facing sound practitioners, it becomes apparent that some aspects of the film industry are not conducive to the overall health and wellness of the sound practitioner

8.2 Fitness and Fatigue: The Requirements of the Body in Sound Work

As has become apparent throughout this study, professional sound roles have very different physical requirements, which, in turn produces unique corporeal challenges for the bodies of those professionals. Therefore, each particular sound role necessitates very different health management strategies. It is important here to clarify what is meant by ‘health’ and ‘safety’, as well as what constitutes

‘injury’. This study deliberately intends these terms to be understood in the broadest sense, and that ‘injury’ be framed as any instance of an practitioner’s compromised health, be it physical or mental. There are defined occupational health and safety guidelines for production professionals in Australia that are the result of a negotiation between the Media Entertainment & Arts Alliance (MEAA) and Screen Australia (see <https://www.meaa.org/download/draft-national-film-and-tv-safety-guidelines-2004/>). While these guidelines are about injury prevention and safe working practices, they are pointedly focused on a production context, and do not include postproduction. Further, they do not contain information necessary for a practitioner to perform his or her job without occupational injury to oneself as a result of the work itself.

Comparatively, in New Zealand, at the time of writing, industry collective ScreenSafe is producing an updated set of guidelines for health and safety in the screen industry.⁶¹ The purpose of the guidelines were to “provide practical guidance to employers, contractors, employees and others working within the screen sector on how they can meet their obligations under the Health and Safety at Work Act 2015”. (1). However, these guidelines do not constitute “legal advice” about obligations under the Health and Safety at Work Act 2015 (1). These guidelines do acknowledge postproduction risk, and there are two chapters of relevance for postproduction professionals, including one on ‘Occupational Overuse Syndrome’ (or RSI)⁶² as well as a chapter on ‘Fatigue’.⁶³

⁶¹ see http://screensafe.co.nz/wp-content/uploads/2017/06/ScreenSafe_HS_Guidelines_April2016.pdf (accessed 5 April, 2019)

⁶² See http://screensafe.co.nz/wp-content/uploads/2018/11/ScreenSafe_OOS.pdf

⁶³ See http://screensafe.co.nz/wp-content/uploads/2017/07/ScreenSafe_Fatigue.pdf (last accessed 5 April, 2019)

Both documents outline what OOS (or RSI) and fatigue are, both acute and chronic, as well as describing some potential causes. For fatigue in particular, potential causes include work schedules, sleep disruptions, environmental conditions (including noise), physical exertion (including constantly holding a posture), mentally demanding work (such as that requires intense concentration) and emotional well-being. The recommendations are to “consider developing a fatigue policy to sit alongside your health and safety policy” which should specify maximum workday length as well as procedures for reporting and managing fatigued workers. There is also a scoring checklist provided to identify fatigue and its causes.

Despite the presence of guidelines and recommendations for the health and safety of employees, practitioner accounts provided in this study challenge idealistic notions of creative work by providing details into the corporeal demands placed on the body. Further, in line with the ideology of neo-liberalism, they reinforce the perspective that good health remains to a large extent the responsibility of the individual (Lavrence & Lozanski, 2014). These anecdotes of work experience that detail physical problems such as strain, fatigue and injury are consistently framed in terms of a sense of personal responsibility on the part of the practitioner. Location sound practitioners in particular are required to maintain a certain level of physical ability – including fitness, strength, stamina, flexibility and agility - concomitant with knowledge of physical techniques that are crucial to the performance of the work. More specifically, the professional performance of location sound roles – especially boom operation - demands a

relatively high level of physical health, as well as an understanding of body techniques that may minimise the incidence or risk of injury.

Boom operating requires the carrying, holding and manoeuvring of microphones on boom poles directly with the body, often for long periods of time. As New York-based location sound professional Jesse Flaitz notes, there are a number of factors in this professional scenario which indicate health risks for the practitioner:

Wearing a sound bag all day is a challenge. There's heavy stress on the upper back and shoulders and arms. It's not a very good job – well, it's good for chiropractors, we keep them in business. But boom operators do this all day in awkward positions and it's not a workout like people think. You're not exercising your body – what you're really doing is putting your body in terrible positions and leveraging it in ways that are unhealthy. So that's not great....[Y]ou're 12 hours a day moving cases up and down, pulling things back and forth. And then you're living off snacks and chocolates and probably have 8-10 cups of coffee a day. So it's not a physically rewarding environment to be in. It's a lot of stress.

Flaitz's description points towards the corporeal stresses of the role, and physical strategies used to combat fatigue. His critique of these strategies suggests healthism with its emphasis on individual healthy living. The issue of 'healthy/unhealthy eating' as part of personal responsibility is highly mobilised in contemporary discourses of health (Throsby, 2018). Contemporary framings of health also emphasise individual lifestyle strategies such as exercise to maintain health (Cairney, McGannon & Atkinson, 2018; de Vries et al., 2015). For Flaitz, stress is noticeably experienced corporeally. Interestingly, this also challenges the assumption that the physicality of such work equates to greater physical health and fitness.

In recognising the physical challenges of location sound, some practitioners described how they consciously work to mitigate these. This demonstrates the degree to which production sound work is in fact an ongoing process of corporeal reflection and reaction, defined by and determined by a profoundly lived, embodied engagement. Mitigation ranges from those micro strategies employed in the moment, to lifestyle adjustments that also include personal time spent, as Dan Villalobos explains:

Physically, I think not a lot of people realise you have to be physically healthy and physically able. Usually on location you're lifting things, you're carrying things, you're running back and forth, you're walking back and forth, you're crouching for periods of time, you're still for a lot of the time... So you have to have strong arms, you have to have strong stamina. ... taking regular breaks is important. Usually an hour and a half to two hours at a time then its good to take maybe 10, 15 minute break, go for walk, or do a very light stretch. Yoga helps sometimes.

What is pertinent here is how in Villalobos' description, physical necessities of strength and stamina are highlighted, but also that the language and practices of wellness and self-care are self-consciously deployed. Further, Villalobos' reference to yoga supports Godrej's argument that yoga has come to reinforce neoliberal constructions of selfhood (2017: 773). This correlation strengthens the argument that occupational health and wellness becomes the responsibility of the sound practitioner, and also demonstrates the degree to which the practitioner is consciously engaged with their own embodied experience as part of their work. These difficulties are clearly significant in that the practitioner must ensure that their personal 'lifestyle' facilitate the physical demands of location sound work.

Comparatively, postproduction sound work can require both physical and sedentary work. As has become evident in previous chapters, Foley, like boom operating, also requires a high level of physical fitness, agility and strength in order to meet the particular demands of the role. Foley also requires the Foley artist to strategize how to manage fatigue, as well manage those physical requirements that place strain on the body. As Jonathan Bruce points out, fatigue is not necessarily always a product of physical exertion. Instead, fatigue in Foley may be the result of a high level of focus held by and within, the body. In this way, focus itself 'wears' the performing body, and posture and positioning are held and incorporated into an intense corporeal awareness:

You've got to be reasonably strong. There are a lot of things to lift around and move. Quite often you're working on your own within the room and so having strength is important. Yes, stamina....The way we work is with headphones, so it can be fatiguing sometimes to be wearing headphones for ten hours or eight hours. And also fatiguing being on your feet for that amount of time. Normally you're running around the Foley room. There's a physical element, which is the duration of the day. But a lot of it is hard to explain unless you've actually done it. For instance, when you're walking a character and you're in a poised position waiting for a cue to begin. That held position, which accumulatively works out to be maybe 45 minutes across the whole day – or maybe an hour and a half, even two hours – I don't really know how to time it. But you're ready for the thing to happen and that's fatiguing as well.

Bruce's description illuminates multiple facets of fatigue in Foley work, and his revelation of the challenge of pre-performance embodiment reveals a corporeal difficulty that the performer must negotiate and manage. More specifically, the physically held position *pre-performance* – a concentrated and controlled stillness with intent listening– presents an accumulative source of fatigue. In this way, physical performance and endurance becomes engaged and extended *beyond* the actual sounds of a Foley performance. The body of the Foley

performer navigates both stillness and movement, and in this way, continually wears performance as well as the absence of performance. Therefore, the 'Foley performance' is as a term that may be enlarged, to be seen as more than the production of sounds with the body, but also how the body is situated in the negotiation of sound and silence.

In addition to the fatigue associated with held postures, other Foley artists interviewed for this research recalled working on specific productions that included 'high impact' physical challenges where the physical exertions and performed techniques were physically felt by the performer long after a session concluded. Foley artist John Simpson recalls his experiences working on *The Hobbit* trilogy films:

[O]n *The Hobbit*...we had all these old armour kits which we got from the Weta people which are made of steel and they're incredibly sharp and spiky. But you're trying to make all this clanging noise. And they're quite heavy, and you might do a big long run of that, and it's nothing like athletic training but you end up with scars all over you from nicks of stuff and battling the armour. And then there's a lot of body falls and stuff. So physically where you're not landing yourself on the ground, but I've got a big leather jacket and bits and pieces that you just slam into the concrete and you've got to put some weight behind it. But when you've done a lot of them, your neck and shoulders are killing at the end of the day. That's just because I'm getting too old now for that sort of stuff.

Simpson here equates some of his physical discomforts with the nature of the work and the props being used, and some of the discomfort with age. In this way, tolerance and acceptance of discomforts are framed in terms of an ageing body, which works to legitimise the complaint. There is an implication here within Simpson's framing of his discomfort that arguably reflects the cultural expectation that fragility and limitations of the working body be obscured as

much as possible. While there are gendered issues at stake here, this also raises the question of lifecycles for creative workers, as some theorists have acknowledged that participation in creative work assumes or expects youth and able-bodiedness (McRobbie, 2002). Simpson's own reflections of his physicality consciously draw attention to his age, raising questions around the possibility of Foley work for an 'ageing' body, as well as the implicit assumption that (male) bodies must endure discomfort with as little complaint as possible.

8.3 Chasing Vitality: Maintaining Health During The Long Haul

Postproduction sound editing and mixing also present significant corporeal challenges for the practitioner. Researchers and practitioners alike have identified how the dominant value of time remains central, particularly in an industry structured around production schedules which inevitably come down to "crunch time". Accounts reveal a framework where "crunches" are inevitable and accepted, or where effective "time management" is seen as a practitioner's responsibility. Importantly, these issues are not restricted to postproduction sound but are broadly endemic to all the creative industries, where it is acknowledged that "Self-exploitation is rife, hours are long, the work is mostly deunionized, and there is no clear demarcation between work and leisure time" (Lee, 2012: 481). This issue is articulated by interviewee Martyn Zub, who identified the shifts in industry work practices, which means "...ultimately our schedules get tighter and tighter...you've got to do more and more work in a shorter time..."

Long hours, deflated budgets and compressed schedules are well documented across the creative industries. As Deuze, Martin & Allen discussed in their overview of the gaming industry, “[d]uring crunch time, 80-hour work-weeks can become the norm” and a survey of 1000 industry professionals conducted by the International Game Developers Association (IGDA) found “35 per cent of workers reporting that they worked 65–80 hours during crunch periods”, and alarmingly, found that “46 per cent reported that this overtime went uncompensated...”(2007: 341) Further, Deuze et al. noted “it was found that 35 per cent worked 65 to 80 hours during ‘crunch weeks’ (time near the end of the development cycle), and 13 per cent reported average crunch weeks of over 80 hours.” (2007: 348-349).

Importantly, “crunch time”, while indicative of a short burst of intense activity in a short time span, in fact was found to average “from a month to six months (recurring around every milestone deadline, thus creating a sense of ‘perma-crunch’)” (ibid). This aligns with the survey findings conducted for this research in which 39% of respondents reported spending “45 hours or more” on their jobs a week. However, 26% of responders stressed the variability of the working week, and one pointed out workload weeks were “sometimes 55 hours, sometimes 95+ hours per week”, while others noted 60 and 70 hour weeks, but that no year is the same, and no project is the same. Further, 93% of these responders reported performing unpaid work, with one anonymous practitioner in the survey elaborating that unpaid work can become endemic to the way that the industry functions:

It's not taking unpaid work that the problem. The problem is taking paid work and then budgets and schedule blow out. Sound being at the end [of the production schedule] often can't delay delivery of work. So as other departments delay hand over, our deadlines don't change, resulting in massive amounts of overtime often 'capped' by productions. So I often end up working 30+ hours a week unpaid to meet deadlines. Productions and producers cry poor because of blow outs in budget in other departments ie animation and so they will come and say that they still need to project completed by there is no money for overtime but you still need to do the work to a high quality. So you often end up working for free in your overtime outs.

This response clearly demonstrates the way in which expectations regarding overtime and working for free have become normalised within a larger chain of industry scheduling practices. There is a strong suggestion here that the naturalisation of unpaid work is a consequence of industry practices. How practitioners grapple with this issue is reflected in a recent blog post by Ryan Ike on the popular sound community website *A Sound Effect* entitled '7 Sound Alternatives To Working For Free', (<https://www.asoundeffect.com/7-alternatives-to-working-for-free/>, 2019). This post suggests a variety of strategies including trading skills, (i.e. doing sound work in exchange for someone doing a website), negotiating networking access to clients, or revenue sharing.

Given this backdrop of widely fluctuating workflows, incomes and potentially gruelling working weeks, it is important to identify and discuss the embodied experiences of those who endeavour to meet these demands in the pursuit of their career goals. In other words, how practitioners manage their embodiment, given this culture of long hours, and how these experiences are articulated, becomes significant. Further, it is important to contextualise the embodied

experiences of practitioners within this industrial framework where the working practices described above are normalised. Unsurprisingly, many practitioners identified difficulties experienced through their bodies, which included the challenge of maintaining focus, energy and aural clarity. As Dave Farmer noted:

...[W]e're stuck in front of a computer for 11 hours a day. So we don't get up and move enough; you're eyes get tired from staring at the screens trying to read the text; your ears continually throughout the day get fatigued; late nights sometimes...And sometimes in the very late stages of a project it can be super late hours – really long hours, day after day after day - with lots of picture changes coming in. So that becomes a real problem too. The picture is changing all the time, so you're trying to keep up all this work with the picture. Sometimes we'll get 2 or 3 versions of a reel in the same day and so we spend the vast majority of our time just patching it to stay up to date, and that's not creative work forward. It's just trying to maintain it so it doesn't fall apart.

Farmer's words here illustrate the difficulties which can emerge, particularly on large-scale productions, as a result of changes to the technology and industry practices which have increasingly blurred picture and sound edit production phases and workflows. For sound editors, deadlines butted against constantly changing picture edits arrests the development of new creative work. As Farmer points out, conforming sound to the new picture edits is a time-consuming process⁶⁴, which contributes to the accumulation of fatigue.

However, as some practitioners point out, the scope and size of an overall project will have long-term implications for health management. This is described by Wayne Pashley, who acknowledges the physical and social toll of the work he does:

⁶⁴ Conforming is synchronizing sound to picture. On major productions with many audio tracks, changing edits as small as two frames will have an impact on the sync and therefore need to be adjusted.

Physically, you've got to be very careful because you do big, big hours. And family life starts to suffer from all that. So you have to try and get a balance of that, because pending the size of the film it can be very, very demanding...Physically you've got to take care of yourself because it will be all-consuming....sometimes you might only have 3 months on a film and that's ok. Other times...I've been on a film for 18 months, 2 years. And that can take its toll on a physical level.

While Pashley isn't specific about what for him constitutes a physical toll, he is specific in articulating a felt sense of personal responsibility maintain physical health. He also articulates the awareness of needing to balance these demands with personal relationships.

It is unsurprising that projects involving long hours, such as those described above have the potential to negatively impact the mental and physical wellness of a sound practitioner. It is important to examine this in closer detail, particularly as described by the practitioners themselves, who must navigate and negotiate work demands with their own health. Like Farmer, US based sound designer David Fisk identifies the way in which the intensive and absorbing nature of the work produces in him a particular corporeal state, one which can promote fatigue and exhaustion:

It's a sedentary job. As a sound designer, you're sitting down most of the day. And in terms of your health that's not really good for you. You want to try and get up and move around and get out. You can get zoned in and 2 or 3 hours can go by like that. But you can also easily get fatigued and not realise until you stop. Sometimes you're under a deadline and you have to plough through. I was working on a game – it was a 36-hour shift. It wasn't planned that way, it just happened. Sometimes you have to deal with that. You may have really late nights. It's hard to eat healthier.

Fisk's description demonstrates the way in which features of postproduction sound work practices facilitates less than ideal health practices, however Fisk

clearly articulates acceptance of these conditions as inevitable. If we accept medical discourse around 'good health' in terms of nutrition, exercise, movement and rest, it becomes apparent that practitioners are more or less forced into an occupational situation that predisposes them to compromised health. Further, this explicit acceptance that postproduction sound work is 'unhealthy' and that the practitioner must 'deal' with this displaces industry-wide occupational health issues onto the individual. As a result, the problematic expectations and working structures of the industry itself go unchallenged.

The issue of working hours for a sound practitioner also becomes a significant factor when questioning the lack of employee diversity in the creative industries. McRobbie noted that in the cultural sector, workers up to the age of approximately 40 "...now normatively self-exploit themselves by working hours no employer could legally enforce..." (2002: 101). Eikhof & Warhurst argue that project-based work models perpetuate social inequalities in the creative industries, particularly as the unsocial working hours as well as geographical flexibility required for these roles "... add further constraints for workers with childcare responsibilities, and such workers are predominantly female" (2013: 500). As Oakley has also pointed out, since the first cultural industry initiatives in the United Kingdom, these factors have led to the increasing "...marginalization of women, ethnic minorities and the working class from participation in cultural labour markets..." (2013: 57). And while the troubling issues of inequality and diversity endemic to creative work are as yet unresolved, this study argues that narrating the corporeal experiences of those who are prepared or able to endure such antisocial work hours is important in

creating an embodied account of creative work.⁶⁵ It also looks at the consequences of these issues, mapping a way forward that may be more inclusive. Further, this acknowledges that while social and cultural privilege is clearly a factor in how a practitioner comes to be a practitioner, the accounts presented here do problematize the tendency to glamourize or fetishise creative work, or as Toynbee describes it, "...treat[s] cultural production as an elevated kind of work, or even beyond work altogether" (2013: 85).

As is now becoming apparent, professional sound work bears a significant cost to the embodiment and lives of the practitioners. Practitioner accounts reveal how embodiment is negotiated in the context of wider narratives about creative work and what constitutes a professional. In other words, what is at stake is how professional identities are constructed in the context of demanding work. New Zealand sound designer Justin Doyle goes into detail of his experience of working on *The Hobbit*:

The physical challenge is that towards the back end of the job, it gets pretty gruelling. The actual number of hours that you're doing, and consecutive days that you're working, and the level of concentration that you need to maintain, is physically quite demanding. It really does take a certain kind of person to be able to get to the end in one piece, because it does knock you around a little bit. So physically – the standard film week is a 50-hour week normally anyway. So my day is 8.30 to 7.30, just as a normal working week. And then towards the back end of a job, you'll start to do 6 days a week, 7 days a week, 10.30pm finishes, midnight finishes. And then certainly once you start pushing towards the print master of this, there's this line in the sand when you have to deliver the film. And there is always more that can be done. And the visual effects on a lot of these big films are always coming in late, and so it really gets backed up because we're the last in the chain. So [even though] we're the last to see those images, we've still got to make sure that the sound's in sync with those images and that the sound's appropriate for them. So our workload

⁶⁵ A further area for research would be to examine the embodied experience of practitioners across the industry with the aim of focusing on the experiences of those who have had to balance carer's responsibilities.

– just dealing with the picture changes that are taking place and the changing vfx, means that we'll do a hundred hour weeks. 110-hour weeks sometimes. The longest I went was maybe 3 months without a day off. So it can be pretty epic. And so that can be physically quite tiring and then you realise that mentally, you're done. You've really got to keep digging deep to actually still do the work, because there's a degree of complexity in what we're doing to keep everything in sync and dealing with all of these changes, and tracking all of these changes. It requires a high degree of concentration as well. So it is quite demanding, physically, just doing the hours and mentally, staying focused for that length of time.... I think that developing a really good sense of self discipline and the ability to concentrate for long periods of time – I think that that's really critical, because that's a huge part of it as well.

Doyle's description illustrates what is an arguably unsustainable working model, reflecting Gregg's point that "...the fact that labour now escapes spatial and temporal measures poses obvious problems for defining work limits" (2013: 122). This depiction of work hours is arguably incompatible with other non-work arenas such as caring responsibilities, which consequently further embeds the inequalities of access to and participation in these professions discussed above. Doyle also speaks to an idea of 'specialness' by noting that it takes a "certain kind of person" to do this work, and it is possible to see how these ideas around professionalism produce a certain type of 'privileged labouring subject', one who is granted the means and access to participate in the work without complaint. I argue that in the context of discussing these corporeal difficulties, Doyle is actively reinforcing certain meanings attached to creative work, in which the vulnerability of the body is to an extent suppressed, while the idea of individual as a creative professional is reinforced. This reflects what Deuze noted about how creative workers manage and give meaning to their professional identity, in which being "...original, talented, and unique is an essential ingredient of media work (2007: 240).

Importantly, like the other practitioners interviewed, Doyle also identifies the self-responsibility for both meeting these demands, and managing the corporeal outcomes in terms of physical health. He goes on to discuss his personal strategies for mitigating this physical and mental impact:

I find that exercise is really important for me. You can always tell when I've got a lot on because I go running a lot. And I remember when a colleague and I started a Korean film, we were going to have 8 weeks to cut all the sfx for the science fiction film. And it was the craziest film I'd ever seen, there was so much in it. And my strategy was, I'd get up in the morning, I would go for a run, and that would set me up and everything seems possible after a run. And then when I would come home, because I'd been furiously cutting and creating sfx all day I was really wound up and I'd go for another run, just to burn up all of that. And that made a big difference. I always make a point of going for a walk at lunchtime, I always get outside. And get some fresh air and some sunlight on my skin so I can actually sleep. And I eat really healthily, I always eat salads and things like that, make green smoothies, drink tonnes of herbal tea throughout the day. And try to only have 2 coffees. It's all there in terms of diet and exercise, trying to make sure that I can regulate the amount of sleep I get by getting exposure to sunlight and getting up and moving around frequently. But I've tried everything from, I'll do yoga in my room, I'll do breathing exercises, I'll meditate, at periods during the day if I feel my concentration waning. But that's just me, there are other people who just eat whatever they like and sit there and hammer away. But I find that to function at that high level for that amount of time I really have to be careful.

As Doyle has revealed here, the extent to which this work can impact the health and lives of the practitioner is significant. While Doyle individualises the health issue by making a point about his own careful choices in assisting his health, there is no evidence that he considered the expectations regarding hours of work and deadlines are unreasonable or untenable. Interestingly, his informal use of tool terminology 'hammer' was also used by other practitioners to colloquially describe the work, yet this figure of speech echoes certain framings of masculinity, and performs an elision of the body behind mechanical rhetoric.

Further, the practitioner's self-management of health reiterates the argument that healthism discourses shift responsibility away from the employer or governing institutions (Ayo, 2012: 100). By producing the self-governing individual body, rather than the shared embodied experience of a larger group, narratives of health or health struggles are confined to the arena of informal and anecdotal commentary. As a result, criticisms and complaints lack a forum with which to be heard.

Producing an embodied account of sound practice within industrial contexts argues that, despite the 'silence' or absence of the body in much discussion of sound work, such accounts reveal the degree to which physicality and non-work related corporeal practices may assist and facilitate, or limit and challenge the work. In other words, the material realities of practitioner's bodies and their state of health are intricately bound to the production of sound work. As the discussion so far has found, practitioners are apt to internalise and individualise the experience of health, even in the face of significantly challenging work situations. While some accounts have shown the attempted elision of the body behind narratives of professionalism, it is also apparent that the body and embodied experience may also be integrated into work processes such as problem solving. New Zealand-based sound designer David Liversidge also discussed how physical exercise was key for his ability to maintain mental focus:

I try and do a lot of exercise, I find that really helps me. Either running or cycling or I used to do Ironman. That just really helps me. Going for a half hour run and then going back into it puts me in the right frame of mind. And you're quite often, by not thinking about the problem, you're solving the problem.

Explicit here in Liversidge's perspective is the importance of the body and movement in facilitating 'mental' problem-solving. Liversidge has identified a link between aerobic physical activity and mental preparation, which, rather than reinforcing the dualistic pre-eminence of the mind, in fact speaks to the role of the body in creative thinking.

8.4 Tones, Timbre and Tinnitus: Ear Fatigue

Unsurprisingly, an occupational hazard of roles that specialise in highly concentrated listening is a sensory fatigue in hearing that can affect and impede the progress of work as a professional listener. The implications of ear fatigue go far beyond temporary hearing loss for the practitioner. Ear fatigue is a phenomenon that can hinder his or her work performance. It also risks long-term impacts with potential for permanent hearing damage. Working in a deadline-driven industry means that professionals are very often expected or required to continue to perform sound work by pushing through fatigue. There are online resources shared among professionals and audiophiles that explain what ear fatigue is, and provide suggestions for combating its ill-effects⁶⁶. However, the informal, anecdotal and colloquial management of ear fatigue suggests this issue is also primarily dealt with by the individual practitioner. Industry guideline documents such as the New Zealand ScreenSafe Proposed Guidelines clearly acknowledge that prolonged and excessive exposure to noise is problematic, yet does not specify which professional roles are most at risk in

⁶⁶ See: <https://www.edmprod.com/5-tips-for-avoiding-ear-fatigue-while-mixing/> (last accessed 7 April, 2019); <https://www.youtube.com/watch?v=SnF5iAnqJmY> (last accessed 8 April, 2019); <https://vintageking.com/blog/2018/02/prevent-ear-fatigue/> (last accessed 8 April, 2019), <https://producelikeapro.com/blog/managing-ear-fatigue-faq-friday/> (accessed 8 April, 2019), <https://www.kvraudio.com/forum/viewtopic.php?t=146245> (accessed 8 April, 2019).

postproduction. As this research demonstrates, the nature of the work means that postproduction sound practitioners in particular are highly vulnerable to its effects.

The ScreenSafe Guidelines Section 5 discusses the issue of ‘noise management’ as a key concern for the occupational health and safety of screen professionals⁶⁷. This document cites that “Excessive noise, both short but extremely loud noise (impulse noise) and prolonged continuous noise” can induce hearing loss. It also specifies that excessive noise exposure “can also trigger workplace stress, causing anxiety or psychological harm, as well as headaches, fatigue and decreased concentration, increasing the risk of accidents. Excessive noise and noisy processes are also often associated with vibrations, which can impact a worker’s health. Excessive noise exposure can also prevent people from hearing alarms or warning signals, limiting awareness and potentially leading to avoidable accidents.” However, proposed remedies for damaging noise exposure are not necessarily feasible for the postproduction practitioner. This document suggests “elimination” or “minimisation” of noise as a mitigating strategy, which includes using “hearing protection devices (HPDS)”, “increasing the distance between the noise source and the exposed person, or “decreasing the time the at-risk person is exposed to the noise.” As has already become apparent, time reduction is clearly not always an option for postproduction sound practitioners. Further, this chapter will also demonstrate why the use of HPDS or similar noise reduction strategies are not always viable.

⁶⁷ See: <http://screensafe.co.nz/guidelines/noise-management/>, (last accessed 7 April, 2019)

Ear fatigue is both an acoustic and psychoacoustic phenomenon, which can impact the practitioner's ability to perform their role effectively. The embodied accounts of ear fatigue presented in this study also demonstrate a re-configured relationship between the practitioner and his or her sound work. This re-configuring to a certain extent renders practitioner as more alienated from the work. As sensory input becomes tired and muddled, embodied responses and gauges are also impeded. More specifically, some practitioners have noted how ear fatigue manifests for them as a loss of objectivity and clarity, both in terms of emotional storytelling, as well as being less able to delineate the nuances of sonic units being used. Therefore critical and technical skills can become compromised by the fact that the ears can be overused. As Alten has noted, for the audio professional it is fundamentally important that one has the ability to listen "...with careful discrimination to style, interpretation, nuance, and technical quality in evaluating the content, function, characteristics and fidelity of a sound. To have educated ears, however, it is essential to have healthy ears..." (2014: 307).

These embodied accounts provide insight into the ways in which ear fatigue begins to affect the performance of the practitioner. For Dan Villalobos:

Some sounds begin to blur into other sounds, and you can't mix as well. If you're levelling all these different elements together in a production, it's tricky if you can't hear properly. On the extreme end, you can damage your ears, you can get tinnitus if you continue to do that for a long time. So the outcome will suffer if you can't strike that balance right....you're really listening: Are there any gaps? Are there any pops and clicks? You're going over and over it. Are the parts fitting together properly? ...Your brain also – you get drained if you listen too much. So that's an issue....you lose objectivity...So again it goes back to taking breaks and making sure you're having a right balance of not hurting your ears...I struggle

sometimes when I have a project and there's a lot to do and there's no time to have a break, you have to keep going.

Here Villalobos describes the relationship between concentrated listening for extended periods of time, and demonstrates the loss of objectivity that manifests as a sonic blurring. Significantly, Villalobos also acknowledges the conflict between taking rest and workload and/or deadlines, a pressurised situation that results in his not taking breaks. This point was also raised by Martyn Zub, who reflected: "I probably don't break or get away from it as much as I should."

It is evident that the occupational issues associated with being a professional sound practitioner can be insidious; ear fatigue may not necessarily be apparent to the practitioner during a daily work session. Rather, the effects of fatigue may only become apparent upon returning to the work after a break, after the ears have recalibrated and readjusted. Several sound practitioners stressed the importance of leaving the room and 'resetting' the ears, even for a brief period. Interestingly, the manifestation of ear fatigue as an embodied account portrays a highly complex and paradoxical relationship between the practitioner and his or her work. Remaining physically tied to the space and sounds whilst fatigued can result in temporary alienation from the work, as described above by Villalobos. Concomitantly, a corporeal break from the work can result in it 'sounding different', re-establishing a new and emerging relationship with the sound work.

As Laura Dunkley notes:

You go back to it the next day and it may not sound the same. Your ears get really tired, and you can over-use your ears, and so it's really good practice to get up, go get a coffee, go down the hallway, go back, listen again, or even the next day. You could have a change of mind. I think everyone does.

This is also echoed by David Liversidge, who describes his strategy to ‘reset’ the ears:

You should always take breaks. And [change] the context that you’re listening to things as well. ... every couple of hours you have to go away and listen to pink noise⁶⁸, and just reset the eardrums and go back into it. After about 10 hours you’ve got tired ears. It’s really difficult to do that.

It is interesting that while discussing the experience of fatigue as a result of intensive listening and long working hours, Farley describes his auditory technique as ‘resetting’ the ears. This language he uses depicts the bodies performing sound work almost in ‘machine-like’ or ‘computer-like’ terms.

The exposure to sounds can be fatiguing in terms of both the nature and quality of the sound, as well as the time spent with a specific sound. Another account of ear fatigue is also given by Shaun Farley, who differentiates the potential causes of ear fatigue as a result of specific types of sound work:

Dealing with the same sound over and over again gets tiring. Dealing with loud sounds – when working on heavy action scenes – it’s going to be loud. And there’s no getting around that - that can be fatiguing. And I’ll deal with that by just turning down the volume for a little while during the basic cutting, and try to get levels set at that volume and turning it back up every once and a while to check in and see how it’s working in that context. So it can get tiring and fatiguing, within a day or even over a course of a week. And in different ways sometimes it’s just the tedium of footstep, footstep, footstep - for 8-10 hours a day for 4 or 5 days straight that I’m cutting footsteps in a single reel.

As Farley points out here, fatigue often results from the challenging aspects of sound work including loud sounds, repetitive sounds and intensive listening.

⁶⁸ Pink noise in technical terms is defined as “A random signal with a power spectral density which is inversely proportional to the frequency. Each octave carries an equal amount of noise power. Pink noise sounds natural, and resembles the sound of a waterfall.” (Robjohns & White, 2019: NP).

Importantly, his response reveals why some of the mitigating strategies suggested by Screen Industry health advocates is not necessarily viable. For example, the use of hearing protection devices to assist with loud noise minimisation is not possible for a practitioner who needs to hear sounds at volumes loud enough to pick up any unexpected or unwanted frequencies. As Farley affirms, practitioners will work with lower volumes for a period of time before ‘checking’ at a louder volume. This is also echoed by Martyn Zub, who notes “And if I’m not listening to loud areas, I kind of turn it down and listen to it back 10db lower, just to get me through... ear fatigue is definitely a thing, and it definitely plays in our life”.

However, even this mitigating strategy can be overborne by the amount of time needed to work on a particular sequence, or impending deadlines. These accounts reveal a tension in how a practitioner manages their own ear fatigue against those industry structures and practices that foster and compound this fatigue. Mixer Tim Chaproniere explains the situation which renders it difficult to combat ear fatigue:

Ear fatigue is just part of the job, you get used to it over time. There are points where you just realise that you’ve hit a point where you should stop, and you lose sense of what you’re doing. When that happens, the best thing is to look at it the next day and revise it. But in film too, the best way to look at your work is to see the whole thing through. And it’s hard because we work scene by scene, and you think you’ve got something awesome, but then you look at it in a run and it changes. So you really need to see the flow of the whole film together to get a good sense of what you’ve done. It’s good to spend time away from it, but that never happens.

For Chaproniere, as other practitioners have indicated, the most pressing issue that prevents adequate rest is time constraints, and Chaproniere also indicates

an implicit acceptance of this issue. This problem was also raised by the survey responders for this study. Responders were given the opportunity in an open answer question to identify significant changes to the industry in the last decade. A recurring theme was around “schedules getting tighter” and “budgets getting smaller.”⁶⁹ These two issues go hand in hand, for the smaller the budget, the less time allocated to postproduction sound.

There are instances where practitioners have openly critiqued the shrinking budgets and timescales provided for sound professionals. US Foley artist Michael Broomberg, have publically derided this situation. Broomberg noted when he was given eight days to do Foley work on an action feature film, which he described as “ridiculous” (Adler, 2012: 1). The ‘pinch’ of shrinking budgets is felt across all departments in all creative industries, with one survey produced by Bluescape finding that “66% of respondents pointed to shrinking film budgets as the top issue affecting the film industry”. Robert Kraft describes a similar situation with budgets for music in film, where “The studio wants us to do more with less” (Sandler, 2007: 1). Therefore, it is especially important to facilitate research into the lived experiences of these sound professionals in order to transpose embodied accounts onto industry frameworks.

8.5 Bodies Compromised: Materialising Illness and Injury

As outlined earlier in the chapter, the New Zealand industry body ScreenSafe produced health and safety guidelines for screen industry personnel, with one

⁶⁹ Some of the other issues pertained to finances and underselling work in order to undercut competitors, due to the over-saturation of people seeking work in these areas. While unable to explore this in depth here, it is also a key issue for practitioners.

chapter directly addressing ‘Occupational Overuse Syndrome’ (OOS), previously referred to as Repetitive Strain Injury (RSI). The OOS chapter does provide information about symptoms of OOS, causes or aggravating factors as well as preventative strategies⁷⁰. Intriguingly, the list of ‘high risk roles’ provided includes cleaners, kitchen workers, machinists, hairdressers and carpenters, but does not directly cite postproduction roles such as sound editing. The closest role was ‘typist’ however this was vaguely specified as “producers, assistants, production office”. Such an omission arguably reinforces the perspective that the majority of occupational health and safety advice within the screen industry is focused away from postproduction. Furthermore, whether practitioners actively seek out this information or engage with the recommendations is not evident – an important area for future research. Similarly, when illness or injury is encountered as a result of the work, there is very little evidence or data regarding how many practitioners seek legal action, or pursue any kind of formal complaint.

As creative industries are broadly characterised by networking-based employment opportunities, the question of managing occupational health and safety becomes fraught. Indeed, as Deuze, Martin & Allen (2007) argued, “The ability of external organizations such as unions to influence, establish or enforce industry-wide standards has thus far been marginal” (349). Further, they go on to acknowledge that, “the personal networks needed to maintain employment within these structures may supercede the tendency to participate within these advocacy groups” (349). In his paper regarding the proposal for a Safety Blue

⁷⁰ See http://screensafe.co.nz/wp-content/uploads/2018/11/ScreenSafe_OOS.pdf, accessed 5 April, 2019.

Induction Card for media industry workers, Nicholas Oughton noted that, “People are unprepared to ask for safe conditions in case they do not get employed again” (2008: 2). Therefore, practitioners must balance risk of injury, or raising concerns or problems with injury – actual or potential - against perceived risks to future employment opportunity. In the survey conducted for this research, participants were asked whether they had experienced any significant health issues directly as a result of their work. 60% reported that they had not, while 35% reported that they had, and 5% preferred not to say. Further, of those who acknowledged a health impact, 74% described this as ‘moderate impact’, and 26% described it as ‘significant impact’.

In looking closer at OOS, it is possible to discern the complex relationship between bodily experiences, industry conditions, expectations and assumptions. Some theorists have described the way in which repetitive motions at the heart of OOS become a manifestation of bodily positioning. Despite the fact that OOS has been raised to public consciousness across a broad range of computer-based industries (Hopkins, 1990), the reality is that in postproduction sound, the risk of OOS is far more acute. This is arguably both a result of the structure of occupation in this area, as well as the relationship that the practitioner has to his or her work.

As postproduction sound is project-based work that routinely exceeds a ‘typical’ 40-hour week, and is demonstrably driven by deadlines, sound practitioners are arguably put in a position of having to compromise their bodies. The physical aspect to sound editing means is that it often requires repeated motions, which

may lead the operator to overuse certain muscles, or hold a certain posture for longer than is comfortable. Interestingly, practitioner accounts also reveal what Leder (1990) describes as the 'absent body'. New Zealand sound editor Laura Dunkley and Dialogue editor Stefanie Ng both described their experiences of developing OOS as a result of long hours doing repetitive computer actions, which affected not only their hands and wrists, but also shoulders, necks and backs. Interestingly, both Ng and Dunkley noted that they found their injuries occurred while absorbed in the work. Dunkley noted how practitioners often forget to stand up as they become "so lost in the session", signalling the degree to which 'creative flow' becomes a factor in the embodiment of the practitioner. Ng goes into further detail about her experiences:

The standard contract – most of us are contractors in this business – is 10 hours a day. And unless you're going out recording all the time, it's very sedentary compared to other people. So you are sitting...for 10 hours a day, often more. And that's just the minimum. The stress on your body is related with just sitting for so long. I've just got my shoulder fixed, because I started doing this job when I was 20, and I was doing these grunty hours. I'm 29 now, so that's almost 10 years and my shoulder was actually further forward than the other one. I was off-balance and the physiotherapist told me this is just due to overuse. She managed to massage it out after 4 sessions, so I feel good now. And I know it's to do with me – when you're concentrating heaps and this sort of happens (demonstrates leaning forward). So I know it's my fault, you just don't think about it. You're not noticing it. And a lot of the time with deadlines, it's like, we need it now. So you are dialled in doing it. But yeah I've got to try and take care of my body a lot because I haven't been very good to it.

Like Dunkley, Ng also points to the way in which absorption in the work 'flow' means the practitioner is not attending to discomfort or potentially injurious postures that occur whilst working. Her embodiment becomes temporarily invisible to her awareness, and becomes enmeshed in a corporeal creative fusion with the work at hand.

However, what is also highly significant is the way in which Ng assumes full responsibility for her injury, framing her experience of embodiment wholly in terms of her individual agency, or as her “fault”. She implicitly accepts the industrial conditions that may predispose toward injury, yet iterates the perspective that health and bodily maintenance is up to the practitioner. For McRobbie (2002), this enactment of self-reliance creates “new modes of self-disciplining” (99) which works to shift “...the burdens of health and safety shifted away from the big employers to the self-employed and semi-employed themselves.” (105). Further, as Aho & Aho had noted in their work on the phenomenology of illness, “the predilection for speed has helped constitute a particular kind of Euro-American body. It is also implicated in shaping how these bodies are cared for. This occurs by privileging therapies that themselves promise speedy outcomes” (2008: 48) While they are speaking specifically to a therapeutic context, it is possible to identify the correlation to the body of the sound professional. While practitioner accounts reveal assumed responsibility on behalf of the practitioner to maintain healthy work practices and be aware of potential problems, this nonetheless raises questions around the ways in which certain work environments, practices and standards may encourage practitioners to ignore problems in order to get the work done on time.

Many practitioners articulate how both physical and mental health issues is an endemic problem within the creative industries, stemming from existing industry structures. Further, there is evidence to suggest that while some practitioners such as Ng, Doyle and Fisk internalise these health issues in terms of personal responsibility, others are challenging industry structures and calling

for more collective responses and action. Dan Villalobos argues that solutions need to be negotiated and discussed in at an industry level. He suggests peers within the industry might be able to make an impact by discussing things as a group:

I think that people should come together...and address [mental and physical health] officially as a group. I think there needs to be more education across the board, because kids look up to these people and I think by passing the message down, then eventually the standards and the expectations will change. It doesn't necessarily mean that you will become less efficient or productive - it just means it might take an extra day to get things done. Or an extra two days. And that's ok....I think to address these issues would be the number one thing...Because if it's a body, like a union, maybe they could actually support you and you can fall back on. Because maybe you don't know about exercise, or keeping healthy. [Or] you want to be [healthy], but it [the work] restricts you from doing that. If you have something to fall back on, like a body, that has all the information or can set up a yearly workshop that happens, a forum and people can come together...and discuss what is the best way forward.If you say to someone...I have an illness that has nothing to do with my work...unless you have a name for yourself or a good portfolio, then its tricky to have people want to work with you.

Here, Villalobos points directly to the expectations for self-exploitation and problematic working hours as needing to change. He also cites industry organisations and unions as being important to facilitate this change, with some suggestions for the ways in which awareness and information for wellness could be shared amongst the community.

Importantly, this perspective was also echoed in the survey conducted for this research, with a question directly asking if participants felt they received “adequate support” from professional organisations. 63% of responders felt that they did not receive adequate support, 25% were unsure, and only 12% felt that there was adequate support. When specifying the desired changes that ideally

industry organisations would assist with, responders included comments like “More family-friendly jobs and conditions”, “changes to working hours and longer turnarounds”, “shorter hours”, “more realistic deadlines” as well as “more union regulation across the board, especially for overtime and pay rates.” This was a common point among participants, with one responder noting that Australian pay rates had been stagnant for 10 years with another specifying the need for standardised pay rates across all postproduction areas such as visual effects, editing, and so on. Further, a number of responders also specified the need of “repercussions for forced overtime”, “controls to stop producers exploiting newer workers with free or extremely low paying work”. They also voiced more more general concerns that indicate how practitioners see their own value as perceived by their peers, such as “being more respected” and “more understanding of what it takes to make a soundtrack.”

As mentioned at the beginning of this chapter, an open dialogue among professionals is beginning to occur. In an Australian context, the death of Academy-award winning sound professional Gregg Rudloff has triggered colleagues and associates to instigate an open discussion about health issues and their relationship to industry structures as they currently stand. There is also evidence that peer-run forums may be an informal source of health information for practitioners. For example, Duckett (2016) published a series of Q&A material taken from online forums where people share practical guides to maintaining physical health in their respective sound roles. Similarly, composer Chance Thomas identified the lack of information for practitioners, and noted how in the “dozens of books” he read about about the craft and business, “None

of them ever addressed this topic. None” (Mongeau, 2018: NP). As a result, when Thomas authored his own career guidebook for composers, he decided that “...a chapter on good working habits and healthy balance was a top priority” These examples suggest some movement towards increased awareness and dialogue pertaining to the health and wellness for creative practitioners. An key outcome and contribution of this research from an industry standpoint is further facilitating the discussion about expectations, health and work practices for sound practitioners.

Conclusion

This chapter examined the issue of corporeal difficulties that result from professional sound work, including various forms of fatigue and overuse injuries. By articulating those embodied experiences that result from the challenging aspects of sound work, as well examining the industry practices which compound them, it has becomes undeniably apparent that certain aspects of the film industry are not conducive to the overall health and wellness of the sound practitioner. While there are clear risks and scenarios of compromised health as a result of the work itself, it is also evident that the financial and time pressures inherent in the industry exacerbate these risks. The practitioner accounts presented here offer detailed insight into how these experiences are lived and negotiated by these bodies behind the sound work.

This chapter has also examined how the neoliberal discourses of health has resulted in many practitioners expressing an internalised sense of responsibility to managing their own state of wellness, even in those professional contexts and

conditions that impede and problematize this management. Further, emerging criticism reveals that some practitioners are aware needing more realistic or sustainable work practices and expectations within the industry. This research demonstrates growing concerns for the sustainability of postproduction sound work, as well as criticism of the creative industries more broadly in how it further engenders social inequality. Conflicts and tensions become apparent between the individualised narrative of the self-responsible worker, popular framings and fetishisations of creative work, and the realities of embodied experience. This research also reflects an increasing demand for more support and regulation from industry bodies, yet it is shown how core characteristics of the creative industries, including lack of security and a network-based system of recruitment mean many practitioners do not participate in the organised dissent offered by these industry bodies.

The accounts of embodiment presented here demonstrate how practitioners experience and negotiate their wellness, yet these are contextualised against the assumptions and expectations inherent in the creative industries. This is an area with considerable scope for further research, as recent findings and tragic events suggest further dire consequences if these issues go unaddressed. Therefore this chapter contributes to discussions about health and wellness that is significant on a macro scale, as it is felt at the level of the lived.

CONCLUSION

This study has theorised the experience of film sound as a cinesomatic experience, in order to take into account the multiple bodies, lived experiences, narratives and industrial contexts which inform, invent, influence and shape the production and experience of a film's soundtrack. This research actively argued that film sound scholarship needs to move beyond audience-focused or textual analyses of film sound to include accounts of embodiment and lived experience of those practitioners who work with sound professionally.

By investigating the lived subjective experiences of those producing sonic works for motion picture narrative, these largely 'invisible' and 'inaudible' practitioner bodies and embodiments have been shown as critical to the production of sonic work in a multitude of ways. Further, by examining models of embodiment as experienced by practitioners in various production contexts, the phenomenological richness and complexity of sound production, both as an individual and a collective enterprise, has been demonstrated and valorised.

This research has provided first person accounts of embodied experience drawn from interviews with working practitioners, and has also contextualised these within broader industrial accounts and frameworks. In line with phenomenology's interest in individual subjective experience, this study has sought to articulate lived embodiment through these first person accounts of interview participants. However, to combat the troubling humanistic limitations of phenomenology, it has also investigated how these 'bodies' and 'embodiments'

are operating within those historical, cultural, economic and political frameworks that shape and influence individual experience. As a result, this research offers critical insight into issues that have emerged from individual accounts but that are significant both nationally and internationally.

By asking questions about the ways in which location and postproduction sound practitioners are holistically engaged and affected through and within their work and sonic engagements, this study has demonstrated how the production of affecting sonic work is, in fact, contingent on the embodied investments and lived experiences of those practitioners. Contrary to existing accounts and literatures that emphasise the technical applications at the core of sonic work, the perspectives presented in this study render lived experience and bodily knowledge at the forefront of professional sound practice. By understanding the degree to which film sound production can be considered a profoundly embodied creative and professional practice, further critical implications arise relating to the industrial conditions and contexts which frame this professional practice. It has located the need for further future study into the accessibility and sustainability of this professional work, as well as how factors such as such as gender or age influence who can be a sound professional, and in what capacity.

In assembling a theory of film sound as cinesomatic, this study used an interdisciplinary approach, drawing on phenomenology, object ontology, sociology of the body and bodily practice as well as dance and performance theory to critically investigate the lived experiences of those 'bodies' working in film sound production. The subjective accounts presented here reveal the way in

which the body of the practitioner is central to producing corporeally and emotionally rich sonic work. By drawing out accounts of lived experience as part of professional sound work, including senses, memory, empathic connections, reflexive reactions as well as sonic sensitivities – this study employed philosophical framings to account for experience as mediated and located in the body. Further, this study investigated the more difficult, challenging and contentious aspects of professional sonic work as expressed by the practitioners, critically opening up future discussions about sustainable working practices, mental and physical health and industrial structures that impede or facilitate these.

Chapter Two presented an overview of the interdisciplinary literature informing this project, drawing together the philosophical and theoretical strands and foundations that were key to conceptualising ‘cinesomatic’ for film sound theory. These included phenomenology, affect theory, object-ontologies and sociology. This chapter introduced some of the key theoretical perspectives and debates underpinning early and current scholarship of cinema, sound and embodiment. It also identified the limitations evident in these writings, noting the prioritisation of audience experience, and an overemphasis on the visibility of the cinema experience. Drawing together these diverse literatures and perspectives positioned this study to contribute to the development of a theory of embodied film sound practice, one that shifts the focus from audiences to producers of sonic content.

Chapter Three engaged with empirical research and theory to argue that location sound work be framed in terms of an acoustic ontology. This chapter demonstrated the ways in which some of the aspects of this professional practice engender connections between bodies working on set, in which ‘embodiment’ becomes an experience of relationality, intersubjectivity and plurality. The practitioner accounts presented in this chapter demonstrate location sound work as a mutually constitutive engagement whereby the work affects the corporeal orientations of the practitioner, and the lived experience of the practitioner affects the production of the sound work.

Chapter Four engaged theories of embodied practice, music, performance and dance, and creativity as well as accounts provided by practitioners and industry experts to demonstrate how postproduction sound work is achieved through a learned bodily knowing and honed sensitivity. It has demonstrated how professional sound work may be theorised as cinesomatic embodiments. This chapter examined the tacit knowledge utilised by Foley artists, and how the bodies of these performers acquire a sonic vocabulary through haptic knowledge. Despite every professional aesthetic imperative to erase the body’s presence in this work, what is found is the body in the sound, a corporeal trace. It then went on to investigate how the body of sound editors is located in the work, and how practitioners describe their embodied practices in terms of musical knowledge and creative flow. The personal methodologies for engaging with the technical tools reveal the diversity of embodied approaches to sound work, revealing the diversity of embodied experience. Discussing these areas of

professional sound work in terms of theories of embodiment also mitigates the 'invisibility' of the bodies of sound professionals working in postproduction.

Chapter Five further investigated the pathways of the corporeal engagement between postproduction sound practitioners and their sound work, looking more specifically at how these practitioners create empathic connections to narrative characters and imagined future audiences. It demonstrated how a cinesomatic kinship exists between bodies (both real and imagined), which enables the continuation of sonic affect. This chapter demonstrated how postproduction practitioners use their bodies and emotions as a reference and guide to infuse their work with corporeal depth and emotional richness for characters and audiences. It also located the role of objects in becoming active agents in creating meaning. For the Foley artist, the paradoxical placement of bodies, obscured yet present, was examined, as well as how sound editors physically and emotionally place themselves in the mix and contribute to turning exhibition spaces into meaningful, narratively charged places. This chapter has found that the practitioner becomes the emotional compass for the technical aspects of the work, and professional sound work become a personal performance, accessing emotional content and rendering it in sonic terms.

Chapter Six argued for the importance of redefining understandings of databases and digital libraries, based on the demonstrably somatic relationship between the postproduction sound practitioner and their collection of sound files. This directly addressed the absence of phenomenological or embodied accounts of libraries and archives. This chapter demonstrated how a data unit in this context

cannot be conceived of as divorced from bodies of users. By exploring two intrinsic aspects of the postproduction sound library, including the recording and building phase as well as the use of these elements, this chapter demonstrates how the library files live multiple sonic lives. Location-based recordings are key to a phenomenologically rich file for the practitioner, and this becomes further complicated and enlarged during the process of auditioning and selecting sounds for use in a project. Therefore, this chapter has argued that the library be reconfigured as a sensory archive, and the sound file reconceptualised as sensory kindling, highly significant for personal emplacements and meanings, which are lived and re-lived, exchanged and reinvented with each new incarnation of a sound work.

In a move to challenge the optimistic and glamorous depictions of creative work, Chapter Seven examined how practitioners work with difficult sonic and narrative content. Using a notion of impact and endurance, both short term and ongoing physiological, emotional and social affects are identified through practitioner accounts, revealing the significant implications of some sound work on physical, emotional and social health for the practitioner. The hapticity of sound itself, combined with distressing or unpleasant content is a factor in understanding physiological and emotional experiences that result from immersion in these sonic elements.

Further developing some of the health and wellness issues raised in relation to sonic impacts, Chapter Eight broadens its discussion of embodiment to include the practitioner as a participant in wider sociocultural and industrial contexts.

The findings of this chapter reveal an area in critical need of further research, as these findings speak to the issues of physical and mental health of those in creative industries, including film sound production. The findings of this chapter, as well as the limited available existing research, speak to a pressing industry-wide need to instigate discussions, measures and make resources available to protect the health and rights of those who work in the cultural industries. There are evidently firmly entrenched assumptions about personal responsibility for health and wellness, in the face of industrial conditions.

In conclusion, this thesis has found that the concept of cinesomatic embodiment is useful to theorise how embodiment is conceptually and materially central to cinema sound design. While restricting the focus of the study to the few select roles in location and postproduction sound, it has also found that there is considerable scope for future research, with many other aspects of professional sound work and affiliated crafts yet to be investigated thoroughly through such a critical lens. This study has valorised lived experience as the grounds of research and philosophies of film sound, and firmly placed the body of the practitioner in film sound theory. It has rendered the inaudible bodies of practitioners audible, and the invisibility of their corporeal realities visible. The cinesomatic model of film sound demonstrates how practitioner embodied knowledges and rich sensory experiences render sonic storytelling. Concomitantly, it demonstrates how sonic materials infiltrate and influence practitioner's embodied experiences. Yet it also acknowledges that for the professional, such embodied experiences of sound occur within larger social, cultural and industrial contexts. By locating embodied experiences within these contexts, this research offers insight into

some of the troubling implications of some professional sound work. In this way, this study contributes to problematizing popular conceptions of these creative roles and practices, and deepens the understandings of how professional sound work is not only technical work but also bodywork. Therefore, a cinesomatic theory of film sound allows professional bodies and embodiments a voice, and offers a space with which to frame the corporeal experiences of sound.

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APPENDIX A – INTERVIEW PARTICIPANTS

TABLE 1 - PRODUCTION

Name	Country	Role
Martin Cox	Australia	Location
Mark van Kool	Australia	Location (Boom)
Mark Lavery	Australia	Location (Boom)
Chris McCallum	Australia	Location
Ben Osmo	Australia	Location
Jono Cary	United Kingdom	Location
Jesse Flaitz	United States	Location
Jan McLaughlin	United States	Location
Greco Nogueria	Brazil	Location
David Williams	United States	Location
Dan Villalobos	United Kingdom	Location
James Currie	Australia	Location

TABLE 2 - POSTPRODUCTION

Name	Country	Role
Matthew Lambourn	New Zealand	Sound editing / design
David Fisk	United States	Sound editing / design
David Farmer	United States	Sound editing / design
David Liversidge	New Zealand	Sound editing / design
Brent Burge	New Zealand	Sound editing / design

Justin Doyle	United States	Sound editing / design
Laura Dunkley	New Zealand	Sound editing / design
Steganie Ng	New Zealand	Dialogue Editing
Mark Sommerville	United States	Sound editing / design
Martyn Zub	United States	Sound editing / design
Shaun Farley	United States	Sound editing / design
Tim Chaproniere	New Zealand	Rerecording Mixer
Nigel Scott	New Zealand	Rerecording Mixer
Tim Prebble	New Zealand	Sound editing / design
Tom Heuzenroeder	Australia	Sound editing / design
Wayne Pashley	Australia	Sound editing / design
Joel Pinteric	Australia	Sound editing / design
Amy Barber	New Zealand	Foley
Jonathan Bruce	New Zealand	Foley
John Simpson	Australia	Foley
James Carroll	New Zealand	Foley
Shelley Roden	United States	Foley
John Roesch	United States	Foley
Scott Curtis	United States	Foley

APPENDIX B - QUESTIONS FOR INTERVIEW PARTICIPANTS

These interviews followed a semi-structured interview schedule, at times developing in other directions depending on what the interviewee responded. Questions were slightly tailored to the participant's overall role – whether production or postproduction, and included specific questions around productions that particular practitioner had worked on.

1. What inspires you the most about sound?
2. What led you to work in the sound industry?
3. What kind of training did you undertake?
4. Can you describe what your work comprises of? What do you actually do and how do you do it?
5. What are the physical and mental challenges of your role?
6. Do you have a favourite and a least favourite sound to work with? Please share why you feel this way?
7. What kinds of sound projects make you excited and why?
8. Can you tell me about your typical day?
9. Can you share your experiences of a production that had particular meaning or interest for you?
10. Do you have a favourite film for sound? Can you describe why you love it?
11. Have you ever felt that working with particular sounds (or just sound generally) for long periods of time has had a physical and/or emotional effect on you?

12. Is there any aspect of your work that is unpleasant or particularly difficult?
13. Do you believe the type of work you do affects your daily life and perceptions of the world around you when you're away from the job? Can you share any examples?
14. Can you describe a project that you worked on that you will never forget?
And why do you feel this way?
15. Do you have a pet peeve when it comes to sound design?
16. How do you relate to the characters you are doing sound for? Do you ever imagine yourself in the body of the characters when you are doing sound for a scene?
17. Do you ever imagine yourself in the body of the audience when you are doing sound for a scene?
18. Are there any other strategies you use to make the sound as good as you want it to be?
19. How much of your job is technical and how much is creative?
20. When you're in the thick of doing your job, how do you feel about the technology you're using?
21. Can you describe your physical relationship to the equipment you are working with?
22. What skills and traits do you feel a person needs to have in order to master the role you do?
23. What is the most important thing for a sound practitioner in your role to remember when at work?

24. How is it decided what kind of sonic 'palette' a film will have, or a particular 'world' within that film will have? How do you make sure it will 'translate' to an audience?
25. When working with sound, how do you decide if something is working the way you want it to?
26. Does real world sound ever sound 'fake' to you?
27. How much time are you allocated to create new sounds for a production?
28. Do you ever have dreams about the sound universe you are working on?

APPENDIX C - THE AUSTRALIAN SCREEN SOUND GUILD

The Australian Screen Sound Guild is an industry body that represents screen sound professions across all media and holds yearly peer awards recognising achievements in the field. The screen sound crafts recognised and represented by the ASSG include Location Sound, Sound Editing, Sound Mixing and Engineering, Television Production Audio and Multimedia.

For more information, see <http://assg.org.au>

(Last accessed 15 July, 2019)

APPENDIX D - ANONYMOUS SURVEY QUESTIONS FOR ASSG MEMBERS AND AFFILIATES:

PARTICIPATION AND CONSENT:

I consent to participate in this short study about the postproduction sound industry being conducted through Macquarie University and The Australian Screen Sound Guild.

I acknowledge that participation in this survey is voluntary and anonymous.

I can skip any question. I am aware that a general summary overview of this research project's findings will be made available to the Australian Screen Sound Guild and that any individual written responses in this survey will be kept strictly confidential.

I agree (Proceeds questionnaire)

I disagree (Close) – *END OF SURVEY*

WORK EXPERIENCE:

Age? [Tick box] (20-30) (31-40) (41-50) (50-60) (60+) (Prefer not to say)

Gender? [Tick box] (M) (F) (Neither) (Prefer not to say)

Please describe your professional role title (e.g sound editor, dialogue editor, mixer, etc) [Open field answer]

Is availability of work an issue for you? (Y/N/Sometimes)

What best describes your employment status:

(*Freelance/Contractor) (*Ongoing/Permanent) (*Not sure)

If you are freelance/contract: how much time in a year are you unemployed? (None/

0-2 months / 2-4 months / 4-6 months / 6+ months]

If contract - How long is the average contract you are on? (Open field)

Where does the majority of your work come from? (e.g. Australia, China, USA, etc) (Open Field)

How many years have you worked in your current role?

Less than 1 year / 1-5 years / 5-10 years / More than 10 years

How many hours per week do you spend working in your job?

(Less than 25 / 25-35 / 36-45 / More than 45 hours / It Varies)

If It Varies, please give details (Open Field)

Do you currently have caring responsibilities for family members? (Y/N/Prefer not to say)

If Y – does this have significant impact on your work life? (Y/N/Prefer not to say)

If Y – Please specify how you mitigate this impact (open field)

Have you worked in other sound roles other than your current area? If so, please specify role titles and years in each role? (Y/N)

If Y, please list previous role titles and years in each role? (Open field)

Did you ever undertake unpaid work during your career? (Y/N)

If Y, on average how much time would you spend on unpaid work in a year (Less than 2 months / between 2 and 4 months / between 4 and 6 months / between 6 months and 1 year)

If Y - Why did you undertake unpaid work? (e.g. to build up experience, as a favour to a friend, strong interest in the project, etc.)

(Open Field)

If Y – How were you able to support yourself during periods of unpaid work?

Have you worked overseas during your career? (Y/N)

If Y, please indicate where and for how long? (Open field)

Have there been any major changes to working practices in the last 10 years that have affected you? (Open field)

What, if anything, do you wish you'd known when you started in your current profession? (Open field)

HEALTH:

Do you think there is enough awareness/support/discussion around mental health and physical wellness in your industry? (Y/N)

Would you like to know more about maintaining mental and physical wellness in your profession? (Y/N)

Have you had any health issues as a result of your job? (Y/N/Prefer not to say)

If Y – How would you rate it's impact on your ability to perform your role? (Not at all / Moderate impact / significant impact)

Please give details and any strategies used to deal with the issue? (Optional)

Do you feel that people in your role are adequately supported by professional organisations? (Y/N)

Are there things you would like to see change in your industry? (ie working hours, flexible job arrangements, working practices etc) (Y/N)

If Y – please specify (open field)

Is there anything else your professional organisations could be doing to assist people in your professional role? (Y/N)

If Y – please specify (open field)

APPENDIX E - AUDIO GLOSSARY AND LIST OF ABBREVIATIONS

Acoustic shadow: Signal interference that can occur where sound waves are obstructed or disrupted.

Boom: A microphone attached to a boom pole.

Conforming: Also known as 'assembling', it is the process of synchronizing sound to picture on a timeline during the edit process

DAWS: Digital Audio Workstation – electronic device and/or software interface used for working with digital audio.

Fader: A controller that enables the increasing or decreasing of audio signal levels

FX: An abbreviation of 'effects', also sometimes referred to as SFX, sound effects.

Lav Microphone: A lavalier microphone (also sometimes referred to as lapel mic, clip mic, body mic, collar mic, neck mic or personal mic) is a small generally wireless microphone attached to a speaker's body.

Mic: An abbreviation of microphone.

Mixing Console: The device and interface for combining many audio inputs.

Processed: The electronic manipulating of audio signals.

Pro Tools: A digital audio workstation used in sound recording and sound production.

Raw: Not to be confused with RAW audio format, raw here means a sound file that has not been processed or altered.

Sweetened: A term that relates to fine-tuning or enhancing a sound.

APPENDIX F – MACQUARIE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE APPROVAL

Below documents include:

1. Macquarie University Human Research Ethics Committee Approval for research activities, Reference No. 5201600671
2. Amendment request approval, Reference No. 5201821054373

Office of the Deputy Vice-Chancellor
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MACQUARIE
University
SYDNEY • AUSTRALIA

28 October 2016

Dear Dr Matthews

Reference No: 5201600671

Title: *Sound (In)habited: Cinesomatic Narratives and Sonic Embodiments*

Thank you for submitting the above application for ethical and scientific review. Your application was considered by the Macquarie University Human Research Ethics Committee (HREC (Human Sciences & Humanities)).

I am pleased to advise that ethical and scientific approval has been granted for this project to be conducted by:

- Macquarie University

This research meets the requirements set out in the *National Statement on Ethical Conduct in Human Research* (2007 – Updated May 2015) (the *National Statement*).

Standard Conditions of Approval:

1. Continuing compliance with the requirements of the *National Statement*, which is available at the following website:

<http://www.nhmrc.gov.au/book/national-statement-ethical-conduct-human-research>

2. This approval is valid for five (5) years, subject to the submission of annual reports. Please submit your reports on the anniversary of the approval for this protocol.

3. All adverse events, including events which might affect the continued ethical and scientific acceptability of the project, must be reported to the HREC within 72 hours.

4. Proposed changes to the protocol and associated documents must be submitted to the Committee for approval before implementation.

It is the responsibility of the Chief investigator to retain a copy of all documentation related to this project and to forward a copy of this approval letter to all personnel listed on the project.

Should you have any queries regarding your project, please contact the Ethics Secretariat on 9850 4194 or by email ethics.secretariat@mq.edu.au

The HREC (Human Sciences and Humanities) Terms of Reference and Standard Operating Procedures are available from the Research Office website at:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics

The HREC (Human Sciences and Humanities) wishes you every success in your research.

Yours sincerely

Dr Karolyn White
Director, Research Ethics & Integrity,
Chair, Human Research Ethics Committee (Human Sciences and Humanities)

This HREC is constituted and operates in accordance with the National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research* (2007) and the *CPMP/ICH Note for Guidance on Good Clinical Practice*.

Details of this approval are as follows:

Approval Date: 28 October 2016

The following documentation has been reviewed and approved by the HREC (Human Sciences & Humanities):

Documents reviewed	Version no.	Date
Macquarie University Ethics Application Form		Revised application received 12/10/2016
Response addressing the issues raised by the HREC		Received 12/10/2016
Advertisement	1	12/10/2016
Approach Letter	1	12/10/2016
Participant Information and Consent Form	1	12/10/2016
Questions for Foley Artists	1	19/08/2016
Questions for Sound Designers/Engineers	1	19/08/2016
Interview Questions for Sound Recordists	1	19/08/2016

*If the document has no version date listed one will be created for you. Please ensure the footer of these documents are updated to include this version date to ensure ongoing version control.

HREC Application - Amendment Approved - 5201821054373 - Matthews

donotreply@infonetica.net <donotreply@infonetica.net>

Mon, Sep 17, 2018 at 4:34 PM

To: nicole.matthews@mq.edu.au

Cc: nicole.matthews@mq.edu.au, alison.walker1@students.mq.edu.au

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**MACQUARIE**
University
SYDNEY • AUSTRALIA

Dear Dr Matthews

RE: 5201821054373 - Sound (In)habited: Cinesomatic Narratives and Sonic Embodiments

Your amendment request has been approved.

You may access the application by logging into the [Human Research Ethics Management System](#).

Kind regards,

Ethics SecretariatResearch Services | [Level 3, 17 Wally's Walk](#)
Macquarie University, NSW 2109, Australia

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