School of Design and Built Environment

Faculty of Humanities

Embodied immersive experiences: A path to facilitating connection to non-human nature

Rebecca Scherini

https://orcid.org/0000-0002-3900-1348

This thesis is presented for the Degree of

Doctor of Philosophy

of Curtin University

April 2022

Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262), Approval Number #BE-02-2014

Abstract

In the Anglo-Saxon culture that underpins the planning system in Western Australia, human relationships with non-human nature are troubled. Some suggest that we have entered the age of the Anthropocene, a new geological epoch in which humans have irrevocably altered the Earth (Crutzen 2002; Crutzen 2005; Steffen et al. 2011). I argue that these problems result from human disconnect with non-human nature caused by binaries that characterise Western cultures. Binaries place things in hierarchical opposing pairs, for example: culture/nature, male/female, mind/body, rationality/animality (nature), reason/emotion (nature) (Plumwood 1993, 43). By allocating land uses and developing and enacting statute and policy, planners as part of the institutionalised land use planning system, have an important part to play in where, and how, humans interact with non-human nature. Institutionalised land use planning in Western Australia, the setting of my research, perpetuates these dualisms, further separating humans from non-human nature.

I set out to find out how embodied methodologies can inform approaches to planning that facilitate more connected human relationships with non-human nature. I use an embodied methodology I call 'sensory autoethnography'. The thesis takes the form of evocative autoethnographic writing combined with academic prose. The research takes place across both an urban setting, in the Earthwise community garden in Subiaco, Western Australia, and a non-urban setting on a road trip from Perth, Western Australia, to Darwin in the Northern Territory.

In this thesis I explain and demonstrate the original composite methodology of sensory autoethnography, showing the potential for alternative modes of knowledge production that focus on embodied experience to inform planning and foster more connected relationships with non-human nature. Through my sensory autoethnographic study I provide insight into human relationships with non-human nature in the cultural context of Western Australia. I introduce the idea of 'embodied immersive experiences' in natural places/spaces, which are those comprising immersion in the moment, multi-sensory immersion, mindful movement, and strong affect. I suggest these might offer a direction to challenging the human/nature, human/environment binaries embedded in planning, and developing more connected relationships to non-human nature.

Acknowledgement of traditional owners

I would like to acknowledge and pay respect to the Whadjuk Noongar people whose land Curtin University is situated on and on which my research at Earthwise took place. I would also like to acknowledge and pay respect to the traditional custodians of the land I stayed on during the portion of the research conducted on the road trip Perth to Darwin: The Nanda and Malkana people; the Yinggarda, Baiyungu and Thalanyji people; the Yaburara people; the Kariyarra, Ngarla, and Njamal people; the Yawuru people; the Bunuba people; the Jaru and Kija people; the Miriwoong and Gajerrong people; the Jawoyn, Dagoman and Wardaman people; and the Larrakia people. I would further like to acknowledge that the theme that my thesis centres on, connection to non-human nature, is at the heart of Indigenous Australian culture.

Acknowledgements

I would also like to express my heartfelt thanks to:

This thesis is dedicated to my daughters.

The flesh of my flesh, the joy of my heart, the sunshine of the world.

Contents

List of figures

Part 1: Background

Chapter 1: Planning in the Anthropocene

Figure 1.1: The world is all grass. Figure reproduced from Scherini (2014, 2).

Walking up the hill I run my hands through the tops of the grass, the seeds hitting my hands and each other. The outside of each is soft with two long bristles protruding; these tickle my palms, wrists, and the backs of my hands. It's warm, late spring, and I feel lazy. Soon the grass will die and turn pale yellow, the stems dried and hollow and the seeds noisy in the wind. Come summer, the dry grass will need to be cut to prevent fire. But now the grass is lush, vivid green and almost as tall as me. Sitting down I'm completely hidden in a circle of flattened grass.

Lying in this space, the world is grass and sky.

Rolling on my tummy, the world is all grass.

Childhood memory of tall grass, Perth, WA, November 2014 (Scherini 2014, 2)

This project was conceived because of my life-long interest in human relationships with non-human nature. My earliest memory is of eating egg sandwiches sitting on an orange-striped rock at the picturesque Kalbarri Gorge in WA. I have an affinity for water and have always felt most at peace while in natural places. As I was growing up, I became aware of environmental issues such as the problems of habitat loss and salinity caused by deforestation. These took on a more personal dimension when I moved to an inland country town in South West of Western Australia when I was 10 years old. My childhood experiences led me to develop a social and environmental conscience that accompanied me to adulthood, one that saw myself and other humans as outside of, and harmful to, non-human nature. According to Davison (2008), this binary understanding of humans and non-human nature is common to many Australian environmentalists. Human relationships with non-human nature became the subject of formal study when I enrolled in a course in Urban and Regional Planning at Curtin University. Undertaking this study broadened my perspective, with the literature I read exposing me to the global nature of environmental issues, the impacts of urbanisation, and the issue of climate change, which is the hallmark environmental crisis of this era. I found that the more I engaged with scholarly ideas on human and non-human nature relationships, the more I realised that many of my own assumptions and emotional responses to human relationships with non-human nature needed further examination. I was troubled by my contradictory relationship with non-human nature: I wanted to do work that helped humans form better relationships with non-human nature, yet I positioned myself as outside of, and destructive to, non-human nature. I wondered how I could be part of the solution if I considered myself and other humans fundamentally harmful to non-human nature. Furthermore, I began to understand that these questions were not just relevant to me, but to many non-Indigenous Australians. After completing a cultural studies unit called Ecology and Culture as an elective, I realised that institutionalised land use planning (referred to as 'planning' from this point onwards) also adopts this position, but that this binary thinking could be overturned by recognising that the concept of 'wild' non-human nature is socially constructed. Recognising non-human nature as socially constructed means that non-human nature 'has no fixed meaning, but a variety of meanings attributed to it through representation' (Hillier 1998, 78). I began to wonder if by thinking differently we could change our relationship with non-human nature, and better deal with environmental problems. Yet even when I engaged intellectually with the idea that humans are a part of non-human nature, my emotional response differed: I didn't feel connected.

Figure 1.2: Photograph of author as a child in a natural place/space, Tasmania, approx. 1986. Image by anonymous.

The catalyst for a change in my perspective was a trip to Lake Ballard, a remote salt lake located 800km inland from Perth, the capital city of Western Australia where I carried out part of research for my Honours thesis[1]. In my research I explored the relationship between artwork in 'natural' ('wild') areas and people's relationships with non-human nature (Scherini 2012). My case study was Antony Gormley's site-specific artwork 'Inside Australia' located at Lake Ballard. The artwork comprises 51 metal figures spaced 750 metres apart on the salt lake (Gormely 2012). To get to each figure, visitors must walk across the surface of the lake, leaving track marks in its soft surface. Despite my enthusiasm for visiting the artwork, I was surprised that upon seeing it, I felt strongly that the lake would be better off without it. I felt affronted by the tracks left by visitors, and alienated by the harsh, hot, landscape. However, I had a different experience on my second visit in the early evening, when I set out to view more of the artwork:

> The mud under my bare feet was cool, soft and fine, and the surface of the lake was bouncy. The mud squished between my toes. The distance between the artworks meant I was drawn further and further onto the lake. The setting sun coloured the lake and the salt reflected the light back in silvery tones; a cool breeze kicked up bringing the scent of the scrub. I found myself running across the lake in bursts enjoying the texture and springiness of the surface, then stopping to look at things: animal prints, rocks, patterns in the mud. I no longer felt alien. (Scherini 2014, 10)

Reflecting on this, I realised that without the permission given by the presence of the sculptures, I would not have walked on the lake – seeing myself as hostile to it and better off staying in the camp area, which was already disturbed by humans (a fallen landscape? (Cronon 1995)). I was struck by the difference that the embodied and playful experience had on my relationship with the space, and following the completion of my project, I began to wonder if embodied, sensory experience was important to developing more connected relationships with non-human nature. This question prompted me to undertake the research journey that led to this thesis. In undertaking this research, I also drew on my background in

---

[1] The work in this paragraph draws on the paper 'Exploring Relationships with Non-human Nature in Planning: The Potential of Embodied Research Methodologies. In Where do we go from here?' presented at The Fifteenth Humanities Graduate Research Conference, 12-14 Nov 2014, Curtin University, Perth, Australia. https://espace.curtin.edu.au/bitstream/handle/20.500.11937/82745/Scherini_2014_exploring%20relationships%20with%20non-human%20nature.pdf?sequence=1&isAllowed=y

planning at a local government level and teaching into the undergraduate course at Curtin University. The excerpt below reflects a typical morning in the office as a local government planner:

On the way to my office I heat up a sachet of porridge in the microwave which I will eat at my desk. My desk faces a corner, with a view to the narrow space between the building housing the community services department and our own building. Behind me my colleague's workspace mirrors mine. We have one pot-plant each on our desk, indestructible ZZ plants in shiny purple self-watering pots; these are the bright points of our room, requested by us, and rotated regularly by the office-gardener because there is not enough natural light for them to thrive.

At 9am I check what's in my in-tray. Each application has been filed in a colour coded binder, the plans folded just so to fit within the boundaries of the file and pressed neatly with the application form on top under the binder closure. I can tell by the weight and the colour which ones might be more interesting. But there are so many in the pile! We have so many planning applications that we are always struggling to assess them in the required time-frame, and I am constantly fending calls from unhappy residents and developers who want to get on with building.

I pull the first application on my list from the stand. Yellow folder, medium heft. Another set of two-story town houses by a local developer. The elevations show that the facades alternate yellow brick and red brick, doing just enough to satisfy the requirements of the medium density housing design guidelines for 'interest' and 'variation', but which I know will, in practice, result in a crop of ugly identical looking square boxes with zero vegetation and zero charm. I let out a little sigh from my belly.

Recalling a day in my life as a local government planner, Perth, WA, December 2020

My experience working in local government was at a location that was moderately close to the city, so increasing density was seen as positive thing in line with state targets for infill development aimed at reducing travel times and greenfield development - something I accepted uncritically at the time. However, as reflected in the above excerpt there was a lot of mediocre development; and this focus on infill inadvertently resulted in fewer everyday chances to encounter non-human nature through removal of mature trees, and the creation of small blocks with little garden space. Environmental issues were the domain of a different department within the Council or outside referral authorities, such as the Swan River Trust. Although the team I worked with was supportive of me as a fledgling planner and the Council provided good conditions and training, something was lacking. I felt like little more than instrument of the policies and statute I worked with, and I had a strong sense that my role was to facilitate development. Further, I had spent little time in the area prior to working at the Council and did not feel emotionally connected to the residents or the spaces I visited as part of my work. The need for effective planning work to involve connections to place and people beyond government institutions is stressed by Healy (2010, 201), and in alternative approaches to planning such as advocacy planning (Davidoff 1965). In my day-to-day work there was not any room for embodied or emotional knowledge. I felt the weight of manila folders bearing down on me, crushing my soul. My dissatisfaction with the role of local planner, and a desire to explore ideas, made me move on from working in local government.

> *At lunch I head straight out of the office and across the park to the swimming pool. I squeeze in as many laps as I can in 20 minutes, feeling relief at the use of my tight shoulder muscles and hips to push me through the tepid water, rush to shower and change and dash back across the park, hair still wet, picking up my lunch from the fridge to eat at my desk while I work.*
>
> Recalling a day in my life as a local government planner part 1, Perth, WA, December 2020

I am the 'on duty' planner today, which means I am responsible for responding to queries on the phone or at the front counter.

Reception calls me: a lady wants to talk about some plans for her property, am I available? I unkink from my chair and head to the front counter area. From behind the chest high alcove behind the front counter, I look at the sketches presented to me. 'In principle', I say, 'these look ok – although, of course, a proper assessment will be required...' I hand her a flock of papers '...and you will have to make sure you comply with these policies.'

Next, a call from a resident at a new-ish up-scale housing development on the river, he has put in an application to enclose his patio with sliding fly wire and glass doors.

'I have assessed it', I say, 'but it does not comply with the --- policy'.

He says his wife got Ross River Virus (a virus transmitted by mosquitoes' bites) and now doesn't want to sit outside because of the mosquitoes prevalent by the river. She is retired and spends a lot of time at home. 'Surely', he says, 'we should be able to make our house liveable'.

His manner is arrogant, but underneath that his concern for his wife's health seems genuine. I can understand his frustration that he can't enclose the outdoor living area, which he says would let her enjoy the house again.

'I understand you want to make your wife's life easier' I say 'you sound very frustrated...' As a variation to the policy, it will have to be determined by Council' ... 'The problem is, it means the site coverage will exceed that allowed by the policy, and if you are permitted to enclose this space, we are concerned it will set a precedent...'

We are very cautious about precedents....

Recalling a day in my life as a local government planner part 2, Perth, WA,

December 2020

This chapter provides the background to the research. First, in Section 1.1, I provide the context to the research question. In this section I introduce the concept of the Anthropocene. I then argue that within the planning system in Western Australia, human and non-human nature are viewed in binary terms, resulting in disconnection from nature, which has contributed to the problems of the Anthropocene. I also show how planning contributes to these problems. Finally, I acknowledge that planning in Australia is conducted on Country, and that planning is complicit in perpetuating the structures of settler colonialism that act to deny the continued presence of Country. Second, in Section 1.2 I introduce the key concepts I use throughout this thesis: place/space, non-human nature, natural places/spaces, and embodiment. Third, in Section 1.3, I set out the aim and scope of the research. Fourth, in Section 1.4, I then provide an overview of the research methodology 'sensory autoethnography', followed by an overview of the thesis structure in Section 1.5. Finally, I set out the limitations (Section 1.6) and significance (Section 1.7) of the research.

1.1 Context for the research

In this thesis I argue that scholars and practitioners in planning and related disciplines should be concerned with human relationships with non-human nature. This section provides the context for this assertion as well as introducing some of the key concepts I work with throughout this thesis. I outline three layers of context relevant to this research. First, I introduce the concept of the Anthropocene as a way of thinking about why human relationships with non-human nature matter. Second, I unpack the concept of binary thinking in the Anglo-Saxon culture that underpins the planning system in Western Australia and explain how this perpetuates a disconnect of humans from non-human nature. Finally, I acknowledge that the research takes place on First Nations Country, in Australia, which is a settler colonial society, explain that planning is instrumental in the continuing process of settler colonisation and position my research approach in relation to recent calls for planning to allow this knowledge to 'unsettle' scholarship and practice (Jackson, Porter, and Johnson 2018).

1.1.1 The Anthropocene

'There is no doubt we are in a "climate emergency" as the evidence is all around us', writes planning scholar, Wendy Steele (2021, 15)[2]. Climate change is the hallmark crisis of the Anthropocene, a proposed new geological epoch characterised by rapid and widespread change to the Earth's system caused by humans (Crutzen 2005, 2002). Steffen Fet al. (2011) place the beginning of the Anthropocene era at the start of the 'great acceleration' (Steffen et al. 2011, 849), which refers to the rapid growth in human population, technological advancement and consumption from 1945 to 2000 and onwards, as well as the parallel growth in ill effects to both human and non-human nature[3]. More recently, according to Steffen et al. (2011, 853), along with the continuation of the trends of the great acceleration, the Anthropocene exhibits some new characteristics: first, increasing levels of growth in 'developing' countries including China, Brazil and India and resultant pressures on the Earth's systems; second, scientific advancement in the form of experimentation with genetics and the potential to create new forms of life; and third, a worsening rate of loss of biodiversity. The continuation of the negative trends described by Crutzen (2002) and the added pressures of growing population and biodiversity loss (Steffen et al. 2011, 853) make it clear that (most) current relationships with non-human nature are not beneficial for humans, or non-humans. As I elaborate on in the concluding chapter, the current COVID-19 pandemic illustrates how intimately humans are connected to their environments and how harmful the effects of these changes to the Earth's systems can be, not only for non-humans, but also for humans.

I have adopted the term 'Anthropocene' as a way of framing inquiry into human and non-

human nature relationships. The term is useful because it allows 'interdisciplinary conversation between natural scientists and humanists' (Tsing 2019, as quoted by Haraway and Tsing 2019, 3). Further, because, as argued by Houston (2013, 440), humans are made accountable for their actions, 'it [the Anthropocene] represents a time of political and social

---

[2] The work in this section draws on the paper 'Exploring Relationships with Non-human Nature in Planning: The Potential of Embodied Research Methodologies. In Where do we go from here?' presented at The Fifteenth Humanities Graduate Research Conference, 12-14 Nov 2014, Curtin University, Perth, Australia. https://espace.curtin.edu.au/bitstream/handle/20.500.11937/82745/Scherini_2014_exploring%20relationships%20with%20non-human%20nature.pdf?sequence=1&isAllowed=y

[3] The start date of the Anthropocene has been questioned by Zalasiewicz (2105) who asserts that more research is needed into establishing the date markers of the Anthropocene.

reckoning – where we are called collectively to witness the consequences of human decisions and the impacts of our "failing modernisms" on the conditions of planetary life'. Because humans are identified as the main drivers of change, it acts as an accusation requiring a response (Latour 2013), placing responsibility on humans to try to do something about the problem. The narrative places humans within the earth's system, and no longer separable from non-human non-human nature (Lewis and Maslin 2015; Buck 2015; Chakrabarty 2009; Latour 2013); the idea of a 'pure' non-human nature, separate from humans is rejected and the notion of hybrid nature-cultures takes its place (Harvey 1996). Finally, thinking in this way about hybrid non-human nature-cultures (Haraway 2003) could provide an entry point to imagining new, more connected and more just ways of relating to non-human nature (Buck 2015). The Anthropocene has been used fruitfully to frame recent work in planning by as a 'category within which to think' (Haraway 2019 quoted in Haraway and Tsing 2019, 9) about human relationships with non-human nature. I then argue that the legacy of modernist thinking means that in the Anglo-Saxon culture that underpins the planning system in Western Australia, human and non-human nature are viewed in binary terms, resulting in disconnection from nature, which has contributed to the problems of the Anthropocene. I also show how my discipline, planning, has contributed, and continues to contribute, to these problems. Finally, I acknowledge that planning in Australia is conducted on Country, and that planning is complicit in perpetuating the structures of settler colonialism that act to deny the continued presence of Country.

Despite its usefulness, I acknowledge that the concept of the Anthropocene needs to be considered critically and used to provoke discussion rather than held as a scientific certainty (Simpson 2018). Simpson (2018) shows that the narrative continues the logics of colonialisation, and thus cannot be accepted uncritically. Malm and Hornberg (2014) argue that the narrative demonstrates the dominance of the natural sciences in discussion on climate change and discourages critical analysis of the socio-cultural aspects of climate change. Perversely, the narrative can also be seen to discourage action on climate change by naturalising it as an inevitable consequence of human development (Malm and Hornborg 2014), and by catastrophising it, so that action seems impossible (Patel 2013, 2011). Relatedly, Hararway and Tsing (2019) and Malm and Hornborg (2014) argue that it perpetuates 'species thinking' erasing differences in culture, class, and gender and overlooks the uneven distribution of the cause of the problem, blaming the whole of the species for the actions of only a small portion of the species who are largely responsible for climate change to date. Additionally (Haraway (2015, 55) objects to the way that the humans are

13

central to the narratives of the Anthropocene. In response to these critiques, alternative terms have been proposed. Haraway (2015) suggests the 'Plantationocene', which refers to 'the devastating transforation of diverse kinds of human-tended farms, pastures, and forests into extractive and enclosed plantations, relying on slave labor and other forms of exploited, alienated, and usually spatially transported labor' (Haraway 2015, 162). Moore (2016) proposed another alternative, the Capitalocene, which places the problem in the context of Capitalism. Haraway (2015, 160) argues that the 'Anthropocene is more a boundary event than an epoch… the Anthropocene marks severe discontinuities; what comes after will not be like what came before'. Looking to the future, she writes:

> I also insist that we need a name for the dynamic ongoing sym-chthonic forces and powers of which people are a part, within which ongoingness is at stake. Maybe, but only maybe, and only with intense commitment and collaborative work and play with other terrans, flourishing for rich multispecies assemblages that include people will be possible. I am calling all this the Chthulucene—past, present, and to come.

According to Simpson 'the narrative of the Anthropocene as a signifier of planetary crisis remains emergent and therefore its conceptual content remains unresolved and subject to discursive contestation' (2018, 66). For many scholars (Haraway 2015, 2019; Simpson 2018: Haraway and Tsing 2019; Moore 2016) these terms all serve to generate useful discussion if used critically. Here I use the Anthropocene as category 'within which to think, not to the exclusion of others' (Haraway 2019, 9 quoted in Haraway and Tsing 2019, 9) with an awareness of the tensions held in doing so.

1.1.2 Disconnection from nature

Disconnection from nature in the Anglo-Saxon culture that underpins the planning system in Western Australia can be seen to stem from modernist thinking, in which humans are seen as separate to, and privileged over, non-human nature (Plumwood 1993, 43)[4].

---

[4] The work in this section draws on the paper 'Exploring Relationships with Non-human Nature in Planning: The Potential of Embodied Research Methodologies. In Where do we go from here?' presented at The Fifteenth Humanities Graduate Research Conference, 12-14 Nov 2014, Curtin University, Perth, Australia. https://espace.curtin.edu.au/bitstream/handle/20.500.11937/82745/Scherini_2014_exploring%20relationships%20with%20non-human%20nature.pdf?sequence=1&isAllowed=y

According to Plumwood (1993), the human/non-human nature binary is one of many that are fundamental to modern Western thought. Here I note that in this thesis I use the terms 'Western culture', and 'Western thought' with the understanding that there is not a homogenous Western Culture, but that Western cultures include diversity in ethnicity, class, gender, sexuality, ability and age. Therefore, it is impossible to generalise about Western cultures. However, it is possible to identify cultural assumptions that underpin institutions, such as planning, university education and mass media that I write about in the context of my research in Western Australia. Binaries place things in hierarchical opposing pairs, for example: culture/non-human nature, male/female, mind/body (nature), rationality/animality (nature), reason/emotion (nature) (Plumwood 1993, 43). According to some ecofeminists (Plumwood 1993; Sandilands 1999; Salleh 2017), these binaries mean that in modernist thinking, culture is privileged over non-human nature as well as those things aligned with nature (e.g. women, body, animality, emotion), resulting in the continued exploitation of non-human nature.

This binary view can be identified even in those who care about nature, such as environmentalists (Davison 2008), and in environmental and conservation movements in the West (Cronon 1995; van Holstein and Head 2018; Salleh 2017). Head (2011) argues that the human/non-human nature binary is especially entrenched in Australian thinking because Australia is a settler colonial society. As discussed further in Chapters 5 and 6, the idea that humans are separate from nature is key to the mythology of the 'wilderness'. In this thesis, when I refer to 'wilderness', I am referring to the cultural construct of nature as pristine and untouched by humans (Cronon 1995, 11), which is underpins relationships with nature in the Australian context (Rose 2012; Jackson, Porter, and Johnson 2018). In the case of Australia, the fiction of 'terra nullius' means the Indigenous occupants are aligned with the landscape, and the landscape is considered unoccupied (Moreton-Robinson 2015), allowing the cultural of 'wilderness' to exist. This binary view of human/nature tends to align Indigenous people with nature, continuing the logic of settler colonialism (Jackson, Porter, and Johnson 2018, Porter 2020; Salleh 2017), in which Indigenous people are 'exclusively and reductively understood as separate from capitalist interests and as only authentically Aboriginal when living in close relationship to traditional lands and ecosystems' (van Holstein and Head 2018, 42). Conversely, research by Trigger and Head (2010) shows that many non-Indigenous Australians see themselves as outside of nature and that their attitudes to non-human nature are complex, tied up with feelings of guilt, non-belonging and nostalgia for other places. Head (2016) argues that the presence of such strong binaries makes Australia a particularly good

place to study human relationships with nature, in order to think through solutions to the problems of the Anthropocene. As such, my research, set in Western Australia, is well-positioned to contribute to this understanding.

Binary thinking, including seeing humans and non-human nature as separate, is also present in planning, as a result of modernist thinking. Modernist planners believed that the world could be understood, and thereby controlled (Beauregard 2008, 236), using 'rational decision-making and problem-solving techniques, grounded in rigorous social analysis' (Sandercock 1998b, 31). Although planning was a state-based intervention, planners were seen as value-neutral (Hillier 1998): 'Planners laid claim to a scientific and objective knowledge that transcended the interests of capital, labour and state' (Beauregard 2008, 285). Through this same claim to disinterested scientific and objective knowledge, planners were seen as being equipped to identify, and act in, the public interest. Critiques of these assumptions began in the mid-1960s and continue today. Modernist planning has been challenged on a number of grounds. It was argued that not only was this method failing to deliver good social and built outcomes (Sandercock and Lyssiotis 2003), but that in fact planners and the planning system had never been the detached, objective, experts that the model implies (Davidoff 1965, Grabow and Heskin 1973). In addition, theorists provided feminist and post-colonial counter-histories that showed how planning institutionalised a rational, white, male, scientific ordering of the world that marginalised women, people of other races, the poor, queer, and non-able bodied (Sandercock 1998a). However, despite these critiques, planning's approach to human and non-human nature relationships is a modernist one, in which 'land use planning typically formalizes a reductionist ontological division within itself; between non-human nature (land) and society (use)' (Hillier 1998, 78). The continuing impact of modernist thinking on representations of non-human nature within planning means that 'the discursive space of planning separates/purifies the natural and human environments into different domains' (Hillier 1998, 82). This has implications for the way that statute, plans and policies are written and enacted and how land is allocated for different uses, affecting how and where non-humans can exist, and where and how humans can interact with non-human nature. In this way, as Couper points out:

> Separation from nature is, not just an idea. It is materially constructed in the fabric of our towns and cities, not only in the artefacts of bricks and mortar, but in the way we order space. Separation from nature is embedded in how we experience space. (2018, 12)

Following her analysis of the decision making process in the Western Australian land use planning system, Hillier (1998, 83) argued that representation matters because non-humans, although not without agency, are unable to participate in planning decisions directly, thus needing humans to speak on their behalf. As such, 'planning represents an important institutional terrain for the contestation of meanings and relationships with non-human nature' (Whatmore and Boucher 1993, 168). More recently, in response to the issues of the Anthropocene, Houston et al. (2017), and Steele (2021) have challenged human exceptionalism in planning, calling for city planning to acknowledge and accommodate the presence of non-humans. Steele (2021, 133) explains that to move away from human exceptionalism 'entails moving from a vision – as prejudiced as it is delusional – of humans as gods or an earthly elite, towards embracing our common role in the collective more-than-human earth story.' In planning, recent attention has been focussed on the more-than-human. Metzger asserts that,

> What urban planning practice sorely needs at the present moment is the development of an ability to pursue a situated ethics of responsibility, accepting that in the complex ecologies of action that planning interweave with, those that are directly involved in planning endeavours are never in control, but nevertheless always co-responsible. (2016, 597)

He sketches out a 'more-than-human planning founded upon the cultivation of torment and assumption of responsibility, even in the face of wicked relational complexity' (Metzger 2016, 598). Houston et al. (2017) argue that planners need to work towards planning for cities that acknowledge and accommodate the presence of other species (both animals and flora) in the city. They explain that 'deepening planning theory's engagement with more-than-human thinking is a step in this journey' (Houston et al. 2017, 14), and explore the potential of the concepts of 'multispecies entanglements' and 'becoming-world' in doing this. More recently, in her book, 'Planning Wild Cities: Human-Nature Relationships in the Urban Age', Steele (2021) explores how planners can act to improve cities for both humans and non-humans in the age of the Anthropocene, focussing on climate change. She introduces the term 'wild cities' to characterize colonial cities in the Anthropocene, in which the fantasy of ordered or tamed cities is overturned by the intrusion of the 'wild' (colonised) nature (e.g. climate change, Covid-19). Rather than seeing this as an apocalyptic future of things out of human control, she sees the idea of 'wild cities' as having the potential to reframe human relationships with non-human nature, leading to better cities for humans and non-humans.

Steele concludes that solutions to the problems of the 'wild city' through 'an ethic of 'caring-with the wild city'. Steele stresses that this approach

> focuses on entanglements, not taming, and fusion. This distinction allows for distance alongside responsibility, and for contextualized responses to our urban crisis. Wild-ness can be something to be cherished and honoured in nature, including ourselves as well as denigrated and feared as part of a pervasive cycle of genocide and ecocide. (2021, 133)

My research responds to the call by Steele for 'critical analysis put purposefully to work for the future of both people and planet' (2021, 124). Along with these theoretical approaches, practical strategies are being implemented in attempts to improve human relationships with nature in urban areas.

Urban counter-movements

The movements of 'rewilding', 'biophilic cities' and 'bringing nature back' offer suggestions for improving human relationships to non-human nature in cities. The 'rewilding' movement provides provocative and creative ideas on incorporating non-humans in the city (for example, see Sandom et al. 2015; Tsing 2017; Clancy and Ward 2020). Rewilding is defined[5] by Pettorelli et al.:

> The reorganisation of biota and ecosystem processes to set an identified social–ecological system on a preferred trajectory, leading to the self-sustaining provision of ecosystem services with minimal ongoing management. (2018, 1114)

---

[5] However, Pettorelli, Durant, and du Toit (2019) explain that a number of definitions exists across the various framings of the concept, each influenced by cultural framings of nature (see Pettorelli, Durant, and du Toit 2019, 6 for an overview of some of these). Pettorelli, Durant, and du Toit (2019, 7) identify four main framings across literarure: 'Pleistocene rewilding; trophic rewilding; passive rewilding; and ecological rewilding.' The authors (2019, 7) define the early approaches of Pleistocene and Trophic rewilding as being conceptually similar, foccusing on restoration of 'ecological processes lost because of the late-Pleistocene that megafaunal extinctions'. The more recent approaches, of passive rewilding, of European origin, which allows nature to reclaim unused land, and ecological rewilding which promotes 'limited active management to facilitate natural processes and allow them to regain dominance', are similar (Pettorelli, Durant, and du Toit 2019, 8). Definitions and applications of rewilding are context-specific (Pettorelli, Durant, and du Toit 2019; Sweeney, Turnbull, Jones, Letnic, Newsome and Sharp 2019; Carver et al. 2021),

In the Australian context, Sweeneyet al. (2019) advocate the potential for rewilding to improve ecosystem functioning. Although rewilding has some critics, who focus on the problematic concept of wilderness and practical and ethical dimensions relating to animals (for example see von Essen and Allen 2016; Jorgenson 2015; Lorimer 2017), rewilding is also discussed as a potential feature of biophilic cities.

The biophilic cities movement offers another approach to improving human relationships with non-human nature in the city. Biophilia is defined by Wilson (1984, 1) as 'the innate tendency to focus on life and lifelike processes'. Importantly for the embodied focus of my research,

> biophilia describes an orientation to the natural world that engages not just the sensory and rational intelligence of the scientist, but also the aesthetic and affective powers of human mind that cause us sapiens to care about what we know of life beyond ourselves. (Trachsel 2019, 2)

The biophilic cities movement is based on 'the biophilia hypothesis' (Wilson and Kellert 2013, 21), which 'proclaims a human dependence on nature that extends far beyond the simple issues of material and physical sustenance to encompass as well the human craving for aesthetic, intellectual, cognitive, and even spiritual meaning and satisfaction'[6]. Although the biophilia hypothesis is not without critique (for example, Joye and de Block (2011)), it has been used to underpin a biophilic approach to the built environment, both in designing buildings and in urban planning[7]. The biophilic cities movement has been promoted by and adopted in various locations worldwide. For examples, see the edited volumes of principles and case studies by Beatley (2016), Söderlund (2019), Tabb (2020), McDonald and Beatley (2021).

---

[6] Kellert asserts that (2013, 21), 'the human inclination to affiliate with life and lifelike process' is:
- Inherent (that is, biologically based)
- Part of our species' evolutionary heritage
- Associated with human competitive advantage and genetic fitness
- Likely to increase the possibility for achieving individual meaning and personal fulfillment
- The self-interested basis for a human ethic of care and conservation of nature, most especially the diversity of life (Kellert 2013, 21).

[7] McDonald and Beatley (2021, 64) explain that 'biophilic designers and planners argue that the integration of nature into urban design and planning is an important step toward future cities that are uplifting, restorative, beautiful, and designed around a sense of connection with and wonder about the natural world'. The authors argue that biophilic cities are also 'resilient' and 'healthy' cities in which 'caring for nature' is privileged (McDonald and Beatley 2021, 76-78). McDonald and Beatley outline a number of features of biophilic cities including incorporation of 'new forms of wilderness' and 'rewilding'; using creative means of including nature in the city, including 'repurposing' spaces, and utilising 'vertical' and 'horizontal' spaces; encouraging and allowing for outdoor activity; and the ability to 'maximize the potential moments of awe' (2021, 63-83).

Examples of recent variations on the biophilic cities theme include vertical biophilic cities to accommodate growing urban populations (Kotzen 2021; McDonald and Beatley 2021) and 'smart' biophilic cities (Luan da Silva, Klebers Luis Guilherme 2020; Tarek and Ouf 2021).

Another recent approach is the concept of 'bringing nature back' (Mata et al. 2020), which is compatible with the biophilic city movement and builds on the concept of rewilding. Mata et al. explain that 'bringing nature back' focuses on re-introducing native species into urban areas (animals and plants) while acknowledging ongoing Indigenous relationships with Country (including acknowledging that 'wilderness' is actually a cultural construct) (Mata et al. 2020). They explain that BNB differs from 'rewilding' in that unlike the focus of rewilding on large species outside of cities,

> BNB actions embrace any taxon, and are specifically conceptualized to be carried out in urban areas. Most importantly, BNB recognizes that the areas occupied by most modern cities around the world were and continue to be the realm of Indigenous peoples, departing starkly from the notion that present-day urban environments were wild, in a state of wilderness or not actively managed by humans before colonial settlement. (Mata et al 2020, 351)

Mata et al. conducted a study of pop-up parks in Australia in 2019, looking at the ability of these to aid BNB. However, this idea has yet to be explored further. Rewilding, biophilic cities, and 'bringing nature back' provide practical approaches to the forging better human and nature relationships in cities. The recent developments in these fields speak to the continuing importance of human and non-human nature relationships in cities for planning and related fields.

1.1.3 Planning on Country

> Country is the Aboriginal English word which encompasses this vibrant and sentient understanding of place/space which becomes bounded through its interconnectivity. Country and everything it encompasses is an active participant in the world, shaping and creating it. (Bawaka Country including Wright et al. 2016, 456)

The notion of place offered by Bawaka Country including Wright et al. (2016) calls to the fore the need to recognise that, despite continued efforts at forgetting or denying that Indigenous

20

relationships to the land preceded White invasion and continue, urban Australia is constructed on Country (Rose 2012; Jackson, Porter, and Johnson 2018; Porter 2020; Steele 2021). As Porter (2018, 239) writes, 'all places in Australia, whether urban or otherwise, are Indigenous places. Every inch of glass, steel, concrete and tarmac is dug into and bolted onto Country'. Therefore, any planning theory or practice must be allowed to 'be complicated and troubled by the underlying structure of settler-colonial relations and the continued presence of Country' (Porter 2018, 244). Planning is implicated in the creation and ongoing production of Australia as a settler colony.

Planning acts as a tool of settler colonialism. Jackson, Porter, and Johnson (2018, 63) explain that

> surveying, naming, mapping and delimiting territories for particular groups, selling and developing land, property rights, and changing uses – all are recognisably planning practices, and all were used for dispossession in Australia. (Jackson, Porter, and Johnson 2018, 63)

According to the authors, the fiction of 'terra nullius' (land belonging to nobody) was used to justify the invasion of Australia (Jackson, Porter, and Johnson 2018): although Indigenous people were present, they were classified by the British as not having a system of property. The authors further contend that Western logic of binaries (introduced in section 1.1.2) was used to make the dispossession of Indigenous people appear acceptable. Indigenous people were Othered and constructed as the lesser than the colonists, according to Jackson, Porter, and Johnson:

> The category 'European or white settler' comes to equate with agriculture, cities, civilisation, development, progress, order, reason and virtue. The 'Indigenous' category comes to be associated with savage, backward, primitive, maladapted and undeveloped'. (2018, 22)

The categorisation of Australia as effectively unoccupied using the fiction of terra nullius creates the conditions for the ongoing process of colonisation (Moreton-Robinson 2015, 23).

Planning is still a powerful actor in the production of spaces, and produces spaces that reflect the agenda of settler colonialism. According to Jackson, Porter, and Johnson:

Everything from urban and town settlements to the demarcation of reserves and national parks to the organisation of agricultural and urban lands can be seen as expressions of a colonial ordering of space, and thus a continuation of the settler-colonial project of dispossession. Such spatial arrangements are always at the same time a repression of alternative spatial orders. (2018, 30)

As recently as 2018, Jackson, Porter, and Johnson asserted that 'at its core, Australian planning continues to ignore the fact that its practice is intricately woven into the story of Indigenous dispossession and unjust relations with the Australian state, a story that reverberates across Australian history to the present' (244). As noted by Porter (2018, 244), this behoves planning scholarship and practice to do better at recognising its role in perpetuating settler colonialism.

I acknowledge that this research takes place on Country, in a 'colonial present' (Simpson 2018, 3). Australia's context as a settler colonial society underpins relationships with non-human nature (van Holstein and Head 2019), as well as the structure of planning as a discipline and profession (Jackson, Porter, and Johnson 2018). Throughout this thesis I use the term 'settler colonial' because the term draws attention to the underlying structure of Australia as settler colony of British Empire in the context of colonial studies, with the acknowledgement that, as Jackson, Porter, and Johnson (2018, 2) explain, the term 'is an inappropriately apolitical terminology that serves to obscure the violence of dispossession'. As explained by Jackson, Porter, and Johnson:

Settler colonies… are predicated on dispossession and the re- placement of Indigenous people with settlers who do not return to their country of origin (Wolfe 1999). Consequently, the British Empire 'was the first global realm in which large-scale taking and reallocations of land became the leading activities, activities engaging administrative attention and invention' (Weaver 2003, p. 24, emphasis in original). This continues to constitute the underlying logic and structure of Australian society today. Accounts of planning in Australia that do not acknowledge that underpinning logic will, consequently, be seriously deficient. (Jackson, Porter, and Johnson 2018, 3)

In response to Jackson, Porter, and Johnson's (call for planning scholars to 'deepen planning's understandings of its origins and role in perpetuating colonial spatial practices and attitudes' 2018, 3), I have attempted to situate my exploration and analysis of human's relationships

with non-human nature within the context of Australia as a settler colonial society throughout the thesis.

1.2 Key concepts

This section introduces the key concepts used throughout this thesis: place/space, non-human nature, natural places/spaces and embodiment.

1.2.1 Place/space

In this thesis, I conceptualise place/space as not only *experienced* by humans as embodied but as being *constituted* relationally through human and non-human interactions in continual co-becoming. Bawaka Country including Wright et al. (2016, 456) use the concept of co-becoming to explain a relational view of place/space in which

> more-than-humans and humans co-become as place/space, in deep relation to all the diverse co-becomings that also constitute it. Place/space is its doings, its beings, its knowings, its co-becomings. (Bawaka Country including Wright et al. 2016, 456)

Following Bawaka Country including Wright et al. (2016) I use the term place/space to indicate that there is no such thing as abstract space separate from place (Bawaka Country including Wright et al. 2016, 461). On this, Bawaka Country including Wright et al. argue that 'there is no space that is not full of more-than-human meaning, that is not bound up with how we are all continually created, how we co-become' (2016, 461). Co-becoming is described by Suchet-Pearson, Wright and Burarrwanga as follows:

> All the things, affects, emotions, processes, relationships, all the humans and non-human beings, the smells, the waves, the light, the material and the non-material, the ephemeral, those that were and will be, the actors and actants; these are not things or objects, rather they are constantly in a process of becoming, becoming and emerging together in particular times/places and through particular entangled relationships. (2013, 188)

This understanding of place/space overturns the nature/culture dualism (Suchet-Pearson, Wright and Burarrwanga 2013, 188) problematised earlier in this chapter. Relational understanding of place/space that focuses on embodied connection also address the problem of notions of space or place as fluid having the 'tendency to make the material world disappear' (Baldacchino 2010, 764), as well as following Massey's call for 'a creative relation to the non-human as another participant in this making of places' (2005, 357).

Relational understandings of space and place have come to the fore in the social sciences since the 1990's (Country et al. 2016; also see McDowell [1993] for a detailed review of the work of Feminist geographers on relational space until the early 1990s). Massey (2004) proposes geographers pursue the idea of relational space as an alternative to both place as closed and limited to embodied, local experience; and space as completely abstract. Her influential book, *For Space* (2005) further develops the idea of space as relational. Massey proposes that spaces are 'the product of interrelations; as constituted through interactions, from the immensity of the global to the intimately tiny' (2005, 31). Further, they are 'predicated upon the existence of plurality', and finally, she conceives of spaces as 'always under construction… never finished; never closed' (Massy 2005, 31). Rather than seeing place as a pre-existing and stable foundation in which events take place, increasingly, 'space is seen as an outcome and product of interactions' (Baldacchino 2010, 763), such as that proposed by Massey (2005). However, this approach has been criticised as overlooking the embodied experience of spaces (Baldacchino 2010, Bawaka Country including Wright et al. 2016), as well as factors such as race, class, and location that influence how space is experienced (Jones 2009, 493; Tuana 2008). In response to these concerns, geographers have worked towards understanding of space as both embodied and relational (Jones 2009; Tuana 2008; Bawaka Country including Wright et al. 2016; Weir 2009).

Embodied, relational understandings of place/space are of relevance to my thesis because they address the nature/culture dualism present in Western, Anglo-Saxon culture that underpins the planning system in Western Australia, problematised earlier in this chapter, and present alternate approaches to the problems of the Anthropocene. Tuana's (2008, 192) work on relational place/space uses the term 'interactionism', which 'acknowledges the robust porosity between phenomena that destabilizes any effort to finalize a nature/culture divide'. Tuana (2008) takes the example of Hurricane Katrina, which devastated parts of New Orleans in 2005 to illustrate the 'viscous porosity' of the world. She argues that Hurricane Katrina was a natural phenomenon but was made possible through the warming of the water

caused by climate change. Another perspective, drawing on research exploring the traditional owners' knowledge of the southern portion of the Murray Darling Basin, provided by Weir uses the term 'connectivity thinking' to describe 'a conceptual framework that focuses on relationships, flows and connections' (2009, Para 1). Weir explains that 'seeing the world as connectivity addresses the separation of culture and nature because connectivity places people (and their culture) *within* relationships with the environment (or natural world)' (Weir 2009, S4). Further, Head argues that relational understandings of place have the

> potential to reframe climate change debate, from one that contains human/nature binaries, to one that focuses on potential to reframe climate change debates away from simplistic discussion of 'problems' and 'solutions' (a typically modernist way of thinking that forever tempts technocentric investment) towards a more uncertain, but lively sense of encounter between humans, things, plants, animals, technology.' (Head 2012, 705)

Bawaka Country including Wright et al. also support the idea that relational ideas of place/space can help to make tangible the interrelated nature of climate change, often seen as an 'unbounded phenomenon' as the effects are seen in specific place/spaces/events (e.g. death of a coral reef, fires, floods) (2016, 470). They also argue that it can,

> enable geographers to attend to their co-becomings more acutely, to open new windows on the human and more than-human beings that co-constitute their worlds and, importantly, may shift relationships of power away from an (Anglo) human-centred dominance towards a reconceptualization of a co-emergent world based on intimate human - more-than-human relationships of responsibility and care. (Bawaka Country including Wright et al. 2016, 470)

Rose argues that 'connectivity thinking radically challenges hyperseparation' (2017, 494) present in Western cultures, problematised earlier in this chapter. As such, adopting a relational view of place/space in my thesis helps to provide a lens through which to view humans' interactions with non-human nature that does not reproduce existing binaries. In doing this I am aware of the risk of appropriating Indigenous knowledge; however I aim to use this concept in the spirit it is offered by Bawaka Country including Wright et al. (2016, 469), to help Geographers and related disciplines think differently about human relationships with non-human nature. To help to understand relational place/space from my (non-

25

Indigenous, Anglo Saxon) perspective, and focus on my particular interest in the role of embodiment, throughout this thesis I also draw on the work of Merleau-Ponty on 'flesh of the world', which I introduce in section 1.2.3 below.

1.2.2 Non-human nature

As I outlined in section 1.1.2 above, one legacy of modernist thinking has been a binary view of humans and nature, in which humans are seen as separate from, and privileged over, non-human nature (Plumwood 1993, 43). This results in the domination of nature by humans, and global environmental problems such as deforestation, pollution, species loss and global warming that characterise the age of the Anthropocene (Crutzen 2005). This problematic understanding of human and nature relationships has been challenged in a number of fields in academia, including eco-feminism (Plumwood 2002; Plumwood 1993, Sandilands 1999), environmental humanities (Buck 2015; Head 2016; Houston 2013), political ecology (Escobar 1996; Giblett 2011; Peet, Robbins, and Watts 2011; Robbins 2004), urban political ecology (Gandy 2005, 2006; Heynen 2014; Loftus 2012; Swyngedouw 2006; Swyngedouw, Kaika, and Heynen 2006a, b; Zimmer 2010), urban studies (Houston et al. 2017; Steele 2021), Indigenous studies (Weir 2009; Country et al 2015, Bawak Coutry et al 2016), and work on the more-than-human (Fishel 2017, Wolfe 2009; Hohti and MacLure 2022; Fijn and Kavesh 2022). It is now broadly accepted in the humanities that there is no hard and fast division between the natural and the social, and instead we need to think in terms of socio-natures or nature-cultures (Haraway 2003). However, as Castree argues:

> the baroque jargon of academia may confidently declare that there never was a Maginot line dividing natural things from social things. But in several walks of life people continue to speak and act as though such a divide were self-evident. (2004, 191)

Further, as Soper points out, in everyday life, 'for the most part, when 'nature' is used to speak of the non-human it is [used]… in a concrete sense to refer to that part of the environment in which we have had no hand in creating' (1995, 16). For this reason, I, along with others who write about human relationships with non-human nature (for example see Head 2016), I have to acknowledge the awkwardness of trying to address lack of connection

present in Western, English speaking, cultures while using the problematic term 'nature' or it's relatives.

In this thesis I adopt the terms 'non-humans', and 'non-human nature' to try to go some way to addressing this awkwardness, while being able to write about this dominant dualistic conception of nature. The 'non' in 'non-human nature' implies humans are seen (by me, the author) as part of nature, while the inclusion of the word 'nature' refers to the 'nature' that the institutionalised land use planning system is concerned with – individual plants and animals, and ecosystems at different levels both urban and non-urban (such as verges, gardens, parks, bushland, and coastal and river systems).

1.2.3 Natural places/spaces

I use the term 'natural places/spaces' to describe places that myself and those interviewed as part of my research, described as feeling a connection to non-human nature. I acknowledge that this term possesses the same awkwardness as 'nature', in that characterising something 'natural' conjures an opposite (in this case, an unnatural space), that seems in direct opposition to a relational view of the world, described above by Bawaka Country including Wright et al. (2016, 461). However, I have persisted with its use because I found it is necessary to have a term to describe the kinds of spaces that myself and other participants in the research spoke about; these spaces are characterised by the presence of plants and animals. They are spaces where it is possible to encounter non-humans and that foreground human interactions with non-human nature.

1.2.4 Embodiment

In this section, I briefly introduce the notion of embodiment which I expand on in Chapter 2. Embodiment is inherent in the notion of co-becoming described in Section 1.2.1 above, as it is through our embodied selves that we co-become with the places/spaces we spend time in. The concept is also central to my methodology, sensory autoethnography, described in section 1.4 and Chapter 3. Merleau-Ponty (1962/2005), is a key theorist on embodiment, and I draw on his work on the 'lived body' and 'flesh of the world' throughout this thesis. Merleau-Ponty's (1968) concept of the 'lived body' provides an alternative to the

binary view of the mind/body in Western culture (Plumwood 1993, 43). Rather than seeing the body as separate from, and inferior to, the mind, the lived body refers to our mind and body intertwined as they interact with the world, and acknowledges the agency and wisdom of the body, understanding our bodies as subjects not objects (Merleau-Ponty 1962/2005). Taking an embodied perspective as a researcher means undertaking the research with an awareness of the self as embodied, and understanding the body as a site of meaning. I argue that this embodied work could be a catalyst for broader change within planning and related disciplines because, 'emotional knowing is as important, or sometimes more important, than conceptual knowing, especially if we need to summon the psychic energy to meet the ecological crisis we currently face' (Tacey 1995, Kindle LOC 153). Further, the concept of embodiment could provide a way for planners to form connections to non-human nature. Using the concept of embodiment can allow researchers and planners to work around the complexities of entrenched discourses and contradictory views of non-human nature by understanding the world through our 'lived bodies' (Merleau-Ponty 1962/2005).

In section 1.2.1 above, I introduced the notion of place/space as *constituted* relationally through human and non-human interactions in continual co-becoming. Throughout this thesis, along with the work of scholars such as Bawaka Country including Wright et al. (2016), I use Merleau-Ponty's ideas on embodiment and 'flesh of the world' (1968) to help theorise how embodied relationships with non-human nature in place/spaces might lead to a sense of connection to non-human nature. Merleau-Ponty's (1964, 1962/2005) notion of space as experienced by the 'lived body', introduced in Chapter 2, shows that it is through our embodied interactions with the world that we come to know it. Merleau Ponty's concept of 'flesh of the world' (1968) (which is explained in section 1.2.3 below and expanded on in chapter 2) develops this further by seeing humans, non-human nature and the rest of the world as all being comprised of 'flesh of the world' (some sentient and some not). 'Flesh of the world' in this context is used by Merleau-Ponty as an 'element' (1968, 139) or 'texture' (Brook 2005, 359) that makes up both humans and the rest of the world. The concept of 'flesh of the world' overturns human/nature, self/other and self/world binaries as our embodied selves can be seen to literally constitute part of these spaces, challenging the division not only between body/mind but also between body/environment, providing insight into how embodiment is especially relevant to planning. Further, I suggest that 'flesh of the world' offers an understanding of self as embodied and embodied selves as part of the same 'fabric of the world' (Brook 2005, 359) as non-human nature. As such, it could provide a powerful way of reframing human and non-human nature relationships as connected that is

compatible with the notion of place/space provided by Bawaka Country including Wright et al. (2016) introduced in section 1.2.1 above.

1.3 Aim and scope of the research

My research aim is to address the following research question: How can embodied methodologies inform approaches to planning that facilitate more connected human relationships with non-human nature? I respond to the following objectives in doing so:

1. Develop an embodied methodology to explore human relationships with non-human nature.
2. Explore how people feel and think about, and behave towards, non-human nature in the cultural context of my research.
3. Suggest ways planning can challenge current binaries in planning thinking and action and develop more connected relationships to non-human nature.

1.4 Overview of the research methodology and methods

Here I provide an overview of the methodology and methods used in conducting this research, so that the reader can understand the structure and content of the thesis in the chapters that precede chapter 3, in which I explain my methodological approach in more detail, and chapter 4, in which I detail the locations and methods of the research. In conducting this research, I used an original composite methodology I call 'sensory autoethnography'. Sensory autoethnography is an approach to autoethnography in which I have drawn on sensory ethnography methods, as described by Pink (2009b), to help me pay attention to embodied experience during my research. I chose to centre the research on the self because of the insight it would give me into embodied experience. In this project I have delved into my own embodied experience at the Earthwise community garden, in Subiaco, Western Australia and on the road trip from Perth, Western Australia, to Darwin, Northern Territory, Australia. I participated in activities at Earthwise during 2014 and 2015, with the formal data collection process of participant observation and interview data spanning from February 2014 - November 2014. I used the methods of field notes, journaling, and photographic record keeping. Although the research focussed on my own experience, my

research also includes the voices of participants at Earthwise, aiming to exploit the potential of autoethnography to allow 'relations with others in context [to] move in and out of the centre of the research as the self moves fluidly from centre to periphery and back' (Humberstone 2011, 499). The second portion of the research took place on a road trip I undertook from Perth, Western Australia to Darwin, Northern Territory, over seven weeks in February - March 2016. I used the data collection methods of field notes, journaling and embodied writing. However, it should be noted that in an autoethnographic project, the lived experience of the researcher is data, so there is not a discrete data collection phase; instead data collection is ongoing throughout the life of the project and can include memories preceding the project (Pink 2015).

In this chapter, and the following chapters, I use excerpts of embodied writing, field notes and journal entries.

Embodied writing appears in grey, black bordered text boxes as follows:

> *Embodied writing content….*
>
> <div align="right">Title, location year</div>

PhD journal entries and field notes appear in white text boxes formatted as follows:

> PhD Journal/Field notes topic, location, month year
>
> Content…
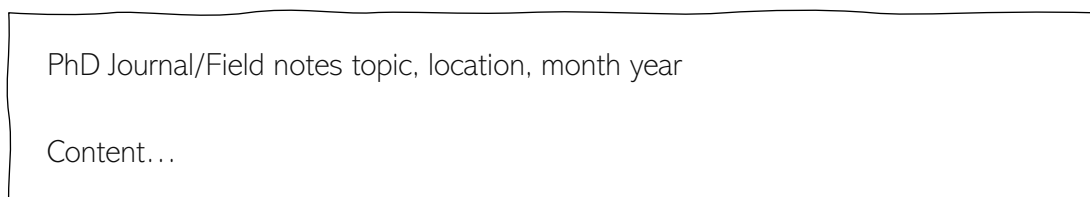
I explain embodied writing in more detail in Chapters 2 and 4; however I briefly introduce the concept and my process here to provide context for the reader up to this point. The embodied writing, including the excerpt that opened this chapter (Childhood memory of tall grass, Perth, WA , November 2014), was done using a word processing program on my computer. In some instances, such as the excerpts where I talk about my embodied experiences of breastfeeding and holding baby #1 or #2, I am writing about my present moment embodied experience, whereas in others, such as the excerpt 'Memories of tall grass' that opens chapter one, I used the method of 'emotional recall' (Ellis 1999, 675), also drawing on my field notes and journal entries to re-enter the space of the event. The field notes from my time at Earthwise were recorded on paper after each session at Earthwise then expanded on by typing into a Word document when I arrived home the same day. Journal entries for the road trip were written on the day, either on paper and transcribed into a Word document the same night, or directly into a Word document on my laptop.

Embodiment is central to researching and writing a sensory autoethnography. I draw on the work of Anderson (2001) on embodied writing, and Pink's (2015) directive to pay attention to the senses in the planning, undertaking and reporting of sensory ethnographic research. The importance of this is that, as Anderson argues, by 'relaying human experience *from the inside out* and entwining in words our senses with the senses of the world, embodied writing affirms human life as embedded in the sensual world in which we live our lives' (2001, 2). The process and the finished product affirm the body as a subject rather than an object and highlight human connectedness to place/space (Anderson 2001; Tuinamuana and Yoo 2020; Yoo 2020; Yoo 2021). The process of embodied writing, as part of sensory autoethnography, can reveal different insights than other methods (Anderson 2001, 15; Downing 2015, 2); for me, this difference arose from enquiry informed by the wisdom of the embodied subject.

Drawing on sensory ethnography, I see paying attention to the senses as a route to understanding embodied experience. In this thesis, I have adopted the five-sense model, with one modification - to replace the sense of touch with that of haptic sensations (discussed in more depth in Chapter 3). Sensory ethnography also recognises that the research is emplaced and adopts a relational understanding of place/space as described above in Section 1.2.1, and outlined in the context of sensory ethnography by Pink (2015).

In communicating the findings of sensory autoethnography, I follow Pink's lead (2009b; 2015) in aiming to invite others to understand the experience studied. In my thesis I combine vignettes written in an embodied, evocative style (as described in the paragraph above) with

more traditional academic analysis. I chose to include a substantial number of excerpts of evocative autoethnographic writing in the finished product of my research because I see this kind of writing (Ellis and Bochner 2000, 744) as an effective way to challenge the traditional suite of qualitative methods used in planning. Further, I suggest that that by exploring and representing relationships with non-human nature from an embodied perspective, sensory autoethnographic research has the potential to challenge dualistic notions of humans/nature within planning.

1.5 Overview of the thesis

The thesis is divided into three parts:

<u>Part 1</u> (Chapters 1, 2 and 3) provides a background to my research. Following this introductory chapter, in Chapter 2, I delve further into the concept of embodiment, introduced above in this chapter, and, using my autoethnographic research, argue that connection to embodied self is important for researchers, practitioners and people who desire a more connected relationship to non-human nature. I demonstrate how the embodied practices of mindfulness and yoga, and using embodied research methods helped develop my sense of self as body subject, and suggest this has potential for others. Next, in chapter 3, building on the argument developed in Chapter 2 of the importance of embodiment, I describe my embodied methodological approach of sensory autoethnography.

<u>Part 2</u> (Chapters 4, 5 and 6) describes the methods and settings of my research and presents a discussion of my research findings. First in this part (Chapter 4) I tell the story of my personal journey, intertwined with a description of the development and undertaking of this project – what methods I used and how I carried out my research. Next, I describe and discuss the findings of autoethnographic research, first looking at human and non-human relationships in the urban context, through the lens of the Earthwise community garden (Chapter 5), then in the non-urban context through the lens of the road trip I undertook from Perth to Darwin (Chapter 6). In these two chapters I explore existing relationships to nature in the cultural context of my research in Western Australia. I show that relationships are troubled and complex and that feelings of disconnect do exist. However, my research also showed that for me, and participants at Earthwise community garden, spending time

interacting with non-human nature resulted feelings of connection. In these chapters, I build an argument that focussing on embodied experiences, such as those experienced by me and participants at Earthwise, provides a way to build on existing connections.

<u>Part 3</u> (Chapters 7 and 8) concludes the thesis. In chapter 7, I argue that the times I felt connected to non-human nature across both components of my research showed similar qualities. I describe these times as constituting 'embodied immersive experiences'. Finally, in conclusion (Chapter 8), I bring together the conclusions from my research to directly address the research aim and objectives. First, I outline what I discovered about how people think and feel about, and behave towards, non-human nature in the cultural context of my research; attitudes are complex and ambivalent, but embodied experience offered a productive lens though which to gain explore and foster better relationships with non-human nature. Second, I explain how utilising the embodied approach of sensory autoethnography demonstrates the promise of embodied methodologies for providing insight into planning issues, and challenging binaries embedded in planning. Third, using Merleau-Ponty's (1962/2005, 1968) notion of embodiment, I demonstrate that a first step to connecting to non-human nature is to develop a sense of self as a body-subject. Fourth, I argue that participating in 'embodied immersive experiences' in natural places/spaces can help foster connections with non-human nature. 'Embodied immersive experiences' are those which comprise immersion in the moment, multi-sensory immersion, and strong affect.

1.6 Limitations of the research

I draw on literature from many different areas of study: It is outside the scope of this project to exhaustively review each field; instead, I have drawn on some of the literature from each field that relates most directly to my research question and objectives.

As an autoethnographic study in a particular setting (Western Australia) the results of my research are not generalisable. Some notable points on the particularity of my experience are that: The focus on becoming a body-subject is centred on female experience (and in particular, my experience as an educated, white, 30-something Australian woman who has borne two children); I am an urban dweller, meaning my perspective is likely to differ from non-urban dwellers; and I am second generation Australian of Anglo-Saxon/European descent.

In this thesis I focus on the Anglo-Saxon culture that underpins the Western Australian planning system, and which has shaped my relationship to nature. It is outside the scope of my thesis to explore the nuances of relationships to non-human nature within other migrant groups or Indigenous communities in Australia. My research offers one perspective among a multitude that provides an embodied understanding of the topic. While my experience is not generalisable, this understanding can still be useful in informing planning research and practice in a Western, English speaking, context.

1.7 Significance of the research

This research has theoretical, methodological and practical significance for land use planning scholars and practitioners. The thesis makes a methodological contribution by explaining and demonstrating the methodology of sensory autoethnography. Planning theory and practice can benefit from insight gained though alternative modes of knowledge production, such as those that, like sensory autoethnography, focus on embodied experience. The knowledge gained from the use of embodied research methods could help researchers and planners to form a deeper and more nuanced understanding of the complexity of human relationships with non-human nature. These methodologies also lend themselves to alternative approaches to disseminating knowledge such as autoethnographic writing; the use of these techniques can provide a valuable addition to the existing modes of communication used within academia and institutionalised land use planning. I also suggest that utilising embodied methodologies, such as sensory autoethnography, can help to challenge mind/body, reason/emotion and body/environment binaries present in planning, which in turn could have implications for how human relationships to non-human nature are understood and approached. The research contributes to the theoretical discussion on human and non-human nature relationships, which is lacking in urban planning (Swyngedouw 2010; Wilkinson 2012; Houston et al. 2018). Finally, the original concept of 'embodied immersive experiences' in natural places/spaces makes a contribution to helping think about how more connected relationships between humans and non-humans can be facilitated. This provides a direction for further exploration in research and practice.

Chapter 2: Reframing the body as a subject and connection to non-human nature

Figure 2.1: Yoga in the caravan park, Kalbarri, WA, 2015. Image by author.

I am sitting at my computer with baby at my breast. Soft and warm and smelling of her smell and clean washing and milk, she is cradled in my left arm, her bum on my knee like I'm a lounge. She is almost 4 months old and like a very grown up baby she is looking around curiously, distracted by the change of scene that's the study. The overwhelmingly visceral nature of pregnancy, then the birth and now the daily care of the baby has made even clearer to me that our experience of life is embodied and emotional. I try and reformulate my thoughts as I feel the 'let down' of my milk. I can feel it flowing strongly in rivulets that raise the translucent skin on my breasts, and baby needs to put her whole attention into drinking. I remember that this 'let down' sensation that is described in a chapter of a book I have on my desk 'The Body in Every-day Life'. In it, Britton (1998) uses an embodied approach to help make sense of this aspect of motherhood and women's experience in society – her focus on their embodied experience contrasts with a medicalised/Cartesian understanding of what our bodies do and how they function. She argues that the language of the medical discipline around this issue is used to discipline the messy and unpredictable female body. Like the participants in her study, I can say that a focus on the technical aspects of birth and breastfeeding left me totally unprepared for the embodied experience of it. Like medicine (see Leder 1998), planning is part of the scientific paradigm and treats the human body and nature as objects rather than subjects.

Embodied experience of mothering baby #1 at 4 months old, Perth, WA, December 2017

In this chapter I return to the problematic of the mind/body binary discussed in the introduction; I suggest that, in many Western cultures, there is a disconnect between mind and body, and that the body is seen as an object, not a subject. This chapter provides the theoretical background for the notion of embodiment, which I work with throughout this thesis. I argue that a precursor to connection to non-human nature is connection to embodied self. I show that reframing the body as a subject, and the self as an embodied being can be a step towards connecting with human and non-humans. From such an embodied perspective, humans may be better equipped to address the problems of the Anthropocene.

In this chapter I first expand on the notion of embodiment, outlined in the introductory chapter, providing a brief history of the concept, I then introduce the ideas of Merleau-Ponty, which I use throughout this thesis in my discussion of my autoethnographic research. Next I expand on these ideas as I describe the process of coming to recognise my own embodiment, which is linked to rejecting two perspectives that I, and others in my culture, had previously taken for granted. The first is the dualistic view of the mind/body. The second is an internalised valuing of the body for its adherence to Western standards of beauty and fitness. I then describe how engagement in the practices of mindfulness and yoga, as well as immersion in the research methodology of sensory autoethnography, helped me to both reject these ideas and develop a sense of self as embodied subject. I am not claiming that these are the only ways in which people can come to recognise their embodied presence in the world. However, I describe my experiences and the insights I gained from them in the hope they might help others do the same.

2.1 Embodiment as a challenge to the mind/body dualism

The notion of embodiment, which outlined briefly in the introduction, is that we relate to, and experience the world, through our bodies (Soper 1995); embodiment therefore provides a challenge to the mind/body dualism which persists in Western thought. The relationship between the mind and the body has been the subject of philosophical enquiry in Western thought, emerging in Ancient Greece (5th and 4th Century BC) where 'the body crystallizes as an object of thought and praxis' (Holmes 2017, 3). More recently, the 17th Century Dutch philosopher Descartes is credited with advocating the mind/body dualism that

is perpetuated in Western thought to this day (Leder 2009; Bula 2018). Bula describes this dualism as follows,

> the existence of mind is ascertained before, and independently of, that of the body, which leads to the ontological position that mind and body are two ontologically and gnoseologically independent substances (with the implication that the mind could exist independently of the body!)'. (Bula 2018, 7)

According to Leder (1990, 8) the influence of Descartes' ideas is that the dominant understanding of embodiment in the West is that the mind is the site of awareness, and both the human body and other living beings are without awareness. Descartes' understanding of the mind/body was largely responsible for the 'mind-body problem' that is still subject of philosophical enquiry today (Peterman 2017). Leder (1990, 8) describes Descartes' view of the body as functioning like a machine, without its own intelligence, and of non-human nature as comprised of mechanistic processes which could be understood and thereby controlled (Leder 1998). The legacy of this view is a dominant understanding in Western thought that the mind is understood to be the centre of experience, and linked to soul, while the body is seen as 'functional but not meaningful' (Brandt 2006, 143). This dualistic understanding of the mind/body is problematic because it cuts humans off from a full experience of the world, one which is informed by the understandings of our mind-body in which humans' interrelatedness with others is felt and understood.

Despite its persistence, the mind/body dualism does not remain unchallenged. Following Descartes in the 17th Century, Dutch philosopher Spinoza (1632-1677)

> makes three claims about the relationship of the mind and the body: (1) Parallelism: the mind relates to other minds in the same way that the body relates to other bodies (2) Idea-of: the mind is the idea of the body; or, the body is the object [objectum] of the mind. (3) One and the same: the mind and the body are "one and the same thing, understood in two different ways". (Peterman 2017, 6)

Spinoza's ideas are still of relevance in philosophy and neuroscience today (Peterman 2017).

The field of posthumanism also offers pertinent perspectives on embodiment, which foreground the agency of non-humans. Peterson explains that:

fostered by loosely federated areas of inquiry such as animal studies, systems theory, actor-network theory, object-oriented ontology, and speculative realism, this turn does not so much name a singular doctrine or movement as it does a broad theoretical reorientation that aims to shift our attention toward a concern for nonhuman alterity. (2017, 1)

For Wolfe, posthumanism challenges the humanist idea of the disembodied and autonomous human subject: instead 'it names the embodiment and embeddedness of the human being in not just its biological but also its technological world' while also de-centring the human (2009, xv). Fishel provides an example of how posthumanism does this by using the microbe 'to complicate the human subject as a body among other bodies and to demonstrate how the human body is connected and tangled with the material world' (2017, 113). She cites data from the Human Microbiome Project (Nelson et al. 2010), which shows that the human microbiome makes up 90% of the cells in the human body.[8] Based on this information that humans are comprised partially of a community of microbes/non-humans, she promotes the idea of the body as a 'lively vessel'. This idea challanges the body/environment and human/nature dualisms to show

> the involvement and fecundity of the human as 'superorganism.' While we do experience our bodies as containers at some levels, these containers are busy, robust, entangled, and teeming with connections and relationships — much more so than previously imagined. These bodies are not shells with skin stretched across lonely organs: these are nested sets of permeable bodies. (Fishel 2017, 114)

Fishel (2017, 67) argues that these ideas pose ethical and practical challenges to human interactions with both human and non-human others. Posthumanism also poses a challenge to the divisions between being and knowing. Barad (2003), puts forward a posthumanist view of the world as ageatic - ascribing both humans and non-humans agency. Barad proposes an 'onto-epistem-ology - the study of practices of knowing in being' based on the argument that humans are not separate from the world (2003, 828). She writes that,

---

[8] The human microbiome is comprised of microorganisms such as bacteria, fungi, parasites, and viruses that live in or on human bodies which can be helpful (for example in digesting food), or harmful (for example viruses) (Harvard School of Public Health 2022).

we do not obtain knowledge by standing outside of the world; we know because 'we' are of the world'. 'We' are not outside observers of the world. Nor are we simply located at particular places in the world; rather, we are part of the world in its ongoing intra-activity (Barad 2003, 828).

These diverse but related fields show that embodiment is central to challenging the human/nature divide that dominates Western thinking.

In this thesis, I contribute to the work of bringing the body back into scholarship and thinking on human and non-human nature by working with the ideas of Merleau-Ponty (1964, 1968), a key thinker on embodiment. In his book, *The Phenomenology of Perception*, Merleau-Ponty (1962/2005) uses observations from classical psychology to demonstrate that the body is a subject rather than an object. These 'subject' characteristics are that it is always with us, we can never remove it from our field of perceptions, we can feel 'double sensations' and we have affective ability (e.g. to feel pain) (1962/2005, 108). In contrast to the Cartesian idea of the body as being without agency, Merleau-Ponty (1964, 5) believed that the body 'is on the side of the subject; it is *our point of view on the world,* the place where the spirit takes on a certain physical and historical situation' (Italics in original). Merleau-Ponty's ideas of embodiment also show that humans understand the world through the senses united in our moving bodies as we participate in the world. Humans are in the world and of the world, rather than being observers taking in information through the senses to be processed in the mind (Ingold 2000, 262). Importantly for my methodology of sensory autoethnography, explained further in the next chapter, and according to Ingold (2000, 262), Merleau-Ponty's ideas show that '[t]here is no separation of senses: Any one sense, in 'homing in' on a particular topic of attention brings with it the concordant operations of all the others'. Thus, when I refer to multi-sensory experience in my discussion below, I refer to the experience of the body-subject participating in the world. Merleau-Ponty (1968, 1962/2005) also saw the body-subject as inter-corporeal – constantly in contact with, changing, and being changed by the world. Merleau-Ponty's ideas are particularly relevant to my research because not only does he provide a non-dualistic conception of the mind-body relationship, but his ideas of 'flesh of the world' can also be seen to point to a non-dualistic ethical position on human and nature relationships (Bannon 2011; Brook 2005; Clarke 2002). I further explain two of Merleau-Ponty's ideas in my discussion below on reframing myself as a body-subject, that of the 'lived body' and of 'flesh of the world'.

2.2 Unlearning Western notions of the body/mind and reframing the body as a subject

I argue that it is important to reframe the body as a subject because this enables full participation in the world, and is a condition for connection to others, both human and non-human. In this section I combine a discussion of my own experience with theory to further unpack the concept of embodiment. First, I problematise the objectification of the body drawing on 'objectification theory' and my own experience (Fredrickson and Roberts 1997). Second, I use Merleau-Ponty's notion of embodiment to explain how the body can be reframed as a subject, and why this is important. In this subsection I go on to explain the role that mindfulness and yoga have had for me, and could have for others, in helping connection to embodied self, demonstrating how it is possible to develop body-awareness. I conclude this section by showing how Merleau-Ponty's concept of 'flesh of the world' can help planners to theorise a non-dualistic understanding of human and non-human nature.

2.2.1 Body objectification and a full experience of the world

Before I started this project, I viewed my body as tool subservient to my mind, believing that it (my body) should do what I (my mind) wanted regardless of signals like pain or fatigue. I saw forcing it to my will and ignoring these signals as strength of character. In particular, in my teenage years I became particularly preoccupied with making my body conform to society's idea of beauty as displayed in the media. Un-learning this view of my body as an object to be admired, or as a problematic to be disciplined, imperfect and always wanting, not enough, or too much, and re-learning to understand my body as the threshold of experience is an important part of my research and personal journey. Although I did not anticipate this being part of my PhD project, I realise that it feels impossible to talk about embodiment without talking about the problematic way in which women's bodies are framed in Western cultures. When I think about my daughters I feel even more strongly the importance of this un-learning, because they may mirror their body image from me. Along with the predominant mode of viewing the mind and body as separate in Western culture (Plumwood 1993), women are additionally hampered by the sexual objectification of women in Western culture (Bartky 1990). Frederickson and Roberts (1997) describe the internalisation of objectification, viewing oneself as if from an outside, evaluating

perspective, as self-objectification. I use this concept to help explain my, and other women's[9], unhelpful view of the body. Of particular relevance to my project is that self-objectification is linked to a lack of awareness of bodily sensations and an inability to reach flow (Csikszentmihalyi 1991), where one is completely immersed in an activity. Thus, rejecting self-objectification, and reconceptualising self as a body-subject is an important step to forming more connected relationships with the world, including non-human nature.

'Objectification theory' put forward by Fredrickson and Roberts (1997) can help to explain why women in Western cultures may be particularly prone to being disconnected from their embodied selves. The authors offer an explanation of the effects of sexual objectification of women in their 'objectification theory' which 'posits that the cultural milieu of objectification functions to socialise girls and women to, at some level, treat themselves as objects to be looked at and evaluated' (1997, 177).[10] They describe sexual objectification as 'the experience of being treated as a body (or collection of body parts) valued predominantly for its use to (or consumption by) others' (1997, 177). Young (2005, 44) argues that

> an essential part of the situation of being a woman is that of living the ever-present possibility that one will be gazed upon as a mere body, as shape and flesh that presents itself as the potential object of another subject's intentions and manipulations rather than a living manifestation of intentions and actions.

The internalisation of this objectification can make women see themselves as a 'body-objects' rather than a 'body-subjects', to use Merleau-Ponty's terms. A body-subject 'is experientially aware and connected to feelings and sensations of the corporeal body' (Malecki, Rhodes, and Ussher 2018, 938), whereas, in contrast, a 'body-object' is the self seen through the eyes of others. For some women or girls self-objectification occurs only

---

[9] I don't claim to speak for all women, or even all white, privileged, Western women. There are all sorts of differences among women including culture, race, sexuality, ability (see bell hooks [2000] for an account of how these differences affect feminist politics). However, as Tomm (1995, 12) points out, issues such as low self-esteem in women are institutionalised across categories of difference. As hooks argues that despite feminist advances (such as the right to wear pants to work), 'girls today are often just as self-hating when it comes to their bodies as their pre-feminist counter-parts were' (2000, 34).

[10] Fredrickson and Roberts (1997) do not claim to be representative of all women of all ages, races, abilities etc. and say that the findings are mostly relevant to White American women of or near childbearing age. It also does not relate to men; although the effects of self-objectification are likely to be harmful to men, there is less study on this, plus the historical and current trend is more focussed on objectifying women not men, although the media increasingly objectifies men too. Some current studies focus on the objectification of gay men, and teenage men. My own experience only relates to being a White, able-bodied, 30-something woman.

occasionally, for example when made aware of other's appraisal of them (e.g. A man catcalling at them), or an 'implied others appraisal of them' (for example when swimsuit shopping) (Fredrickson and Harrison 2005, 82). For others it occurs much more frequently, and in some it is a habitual mode of being (Fredrickson and Roberts 1997, 181). Self-objectification is most likely to begin in adolescence, as a girl's developing body starts to gain attention from men and she becomes aware she can be thought of as an object (Fredrickson and Roberts 1997). De Beauvoir (2011 / 1949, 404) describes this awareness in a young woman:

> She becomes an object; and she grasps herself as object; she is surprised to discover this new aspect of her being: it seems to her that she has been doubled; instead of coinciding exactly with her self, here she is existing outside of her self.

This 'doubling' means that for women, 'the body frequently is both the subject and the object for itself at the same time and in reference to the same act' (Young 2005, 154). Self-objectification can cut women off from having a full experience of their own lives, limiting their ability to reach states of 'peak experience'[11], limiting their awareness of internal bodily sensations, and also resulting in feelings of shame and anxiety, and being linked to depression, eating disorders, sexual dysfunction and lack of sexual assertiveness (Fredrickson and Roberts 1997). Two of these features – the ability to reach peak experiences and limiting awareness of internal bodily sensations – are particularly relevant to my research.

A significant way in which self-objectification is harmful, and may interfere with connection to human and non-human others, is to prevent a woman from reaching states of what Fredrickson and Harrison (2005, 83) calls 'peak experience' or 'flow' states, or at least make this more difficult. 'Flow' is a term coined by psychologist Csikszentmihalyi (1991, 3), which he describes as 'when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile'. In this state, 'people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will

---

[11] DeMares provides this explanation of peak experience: 'Peak experience has been variously described as 'the most ecstatic, joyous, happiest, blissful moment in one's life' (Maslow in Cleary and Shapiro 1995, p. 174); a direct, holistic experience of being (Rosenblatt and Bartlett 1976);'an intense and highly valued moment' (Privette 1983, p. 1361); and one of the 'most exciting and fulfilling experiences which the person has ever had' (Thorne 1963, p. 248, in Warren 1986). Such moments are characterized by absorption, attention and clear focus (ibid.), and lead to an experience of the transpersonal (i.e., egoless) self (Rosenblatt and Bartlett 1976; Goswami 1993).'

continue to do it even at great cost, for the sheer sake of doing it' (Csikszentmihalyi 1991, 4). Csikszentmihalyi (2014, 230) explains that 'the defining feature of flow is intense experiential involvement in moment-to-moment activity. Attention is fully invested in the task at hand, and the person functions at his or her fullest capacity. Self-objectification, however, 'depletes mental resources as the individual takes on the never-ending task of envisioning an (implicitly objectifying) observer's view of her body' (Fredrickson and Harrison 2005, 83), making it impossible to reach a flow state. Fredrickson and Roberts (1997) predicted that experiencing self-objectification would lead to adolescent girls to perform badly , in tasks such as interviews, tests, or competitive sports, as as their minds would be split between the task and monitering their appearance while perfoming the task. This was later confirmed in a study on young women's motor skills by the authors (2005). Certainly, when I was a teenager at school, I refused to play sports (except swimming, made me feel capable at and at ease) because I was crippled by anxiety about performing badly, and lacking the un-selfconciousness to forget myself and focus on my moving body, the moving ball, and so on, and needing to do so in the full view of my class. As I left behind my teenage years, I developed strategies to try to avoid this 'doubling' and engage with my embodied self – walking alone in the early morning, swimming, and later yoga and meditation have provided me with an alternate space. However, episodes of self-objectification still occur, interrupting my flow time, even after I have conciously recognised and tried to reject self-objectification, as captured in this entry on yoga:

> *Doing yoga in caravan parks is challenging. If I get up really early and am finished by 6:45 then I feel a reasonable sense of alone-ness and privacy, but if I'm late, like today, then there are all sorts of people around, and although I try to remain internally focussed I can't help myself becoming self-conscious and distracted from my practice, wondering how they perceive me, hoping I look more at the graceful end of the yoga spectrum rather than the strained end. Turning yoga into a performance not for me.*
>
> Who am I doing yoga for? Coral Bay, Western Australia, February 2016

The above excerpt demonstrates the way in which attention is split between what could be flow activity, and viewing self through the eyes of others, making it impossible to maintain a flow state.

Another way in which self-objectification cuts people off from connecting with human and non-human others is that it limits awareness of internal bodily sensations. Fredrickson and Roberts (1997, 184) posit that this can happen in two ways: the first is that holding in awareness their appearance to others takes so much of their attention that there is less left to attend to internal bodily sensations; and the second is that dieting, often from a young age, requires girls/women to ignore their body's hunger signals. As touched on above, trying to make my body conform to Western notions of beauty has resulted in me (along with other Western women) engaging in dieting or restricted eating practices of various kinds from time to time over my teenage years and until I had my first child. Fredrickson and Roberts (1997, 184) suggest it may not be possible to ignore just some bodily cues, but that tuning out hunger cues may limit access to other internal bodily sensations. Ignoring or suppressing bodily cues as a result of self-objectification means disconnecting with the body and privileging the mind's desires over the needs communicated by the body; this must in turn limit the ability to connect in an embodied way with others human and non-human.

2.3 The notion of embodiment and dualistic notions of mind/body

Merleau-Ponty's notion of embodiment provides a non-dualistic way of theorising the relationship between the mind and the body, in which the 'lived body' is seen as the threshold of experience. The term the 'lived body' is used to denote the body, including what the body knows, the conscious mind, and its being in the world interacting with other subjects (Bullington 2013). Bullington describes the 'lived body' as a person's 'lived relationship to the world', which she explains is 'an ambiguous unity, both subject and object, both mind and body, intertwined, understood in terms of levels, or planes of signification rather than mutually exclusive categories of being' (2013, 30). According to Clarke, the notion of the lived body does not mean mind and body are one and the same, but that 'mind and body are mutually referential and can neither be considered nor exist in isolation' (2002, 214). Merleau-Ponty viewed the mind and body as inextricably intertwined in a complex

relationship that allowed the body to be both material and intentional (Leder 1998, 124). The intentionality of the body-subject is key to Merleau-Ponty ideas and is described by Reuter as 'the body-subject's concrete, spatial and pre-reflective directedness towards the lived world' (1999, 72). In a very different conception of the mind-body relationship of Cartesian thinking, Merleau-Ponty (1962/2005) believed that the body-subject understands things at a level prior to thought and that the body-subject acts intentionally in the world. He argued that the body is a not tool of the brain, but moves without objective direction from the mind: 'in movement, the relationship between decision and action is a magic one' (Merleau-Ponty 1962/2005, 108). That means that rather than being reliant on the mind to make meaning for us, we can experience a direct, embodied relationship with the world (Merleau-Ponty 1962/2005, 162). Our bodies are the interface with the environment, including the places/spaces that we spend time in, making embodiment a concept that planning should be concerned with.

2.4 Re-framing the self as a body-subject through embodied practices

I take the same route through the caravan park enjoying the post-rain smell of eucalyptus and grass to the beach for a run. I sprint to the groyne as fast as I can in long strides. Bare feet on fine sand, splashing the shallow water. I'm not a runner, but even so I'm taken by how well my legs carry me if I ask them. My muscles contract, strong and capable. There is extra flesh, sure, by our cultural standards, but my body is beautiful and functional. I'm annoyed by all the time I have wasted on thinking I should be thinner.

Loving my body that moves me, Cervantes, WA, February 2016

The excerpt above provides an example of how the road trip Perth-Darwin was a catalyst for the conscious unlearning of the unhelpful ideas on the dualistic relationship between the mind and body that I problematised earlier in this chapter. The road trip allowed space for reflection offered by the rhythm of journeying, and the journaling I was doing for this project; the journey inward paralleling the journey north. However, this had been brewing since the conception of this project, aided by my increasing interest in the embodied practices of mindfulness, yoga, and using sensory autoethnography. Rejecting Western notions of the body and re-framing the body as the site of experience can both offer a powerful new way of relating to the world, as described by Pinkola-Estes:

> The idea in our culture of body solely as sculpture is wrong. Body is not marble. That is not its purpose. Its purpose is to protect, contain, support, and fire the spirit and soul within it, to be a repository for memory, to fill us with feeling - that is the supreme psychic nourishment. It is to lift and propel us, fill us with feeling to prove that we exist, that we are here, to give us grounding, heft and weight. It is wrong to think of it as a place we leave in order to soar to the spirit. The body is the launcher of those experiences. Without body there would be no sensations of crossing thresholds, there would be no sense of lifting, no sense of height, weightlessness. All that comes from the body. The body is the rocket. The nose its capsule, the soul looks out the window into the mysterious starry night and is dazzled. (1992, 206)

In this sub-section I introduce and discuss how the embodied practices of mindfulness, yoga, and research helped me in reframing myself as an embodied subject.

2.4.1. Mindfulness

Practising mindfulness was one way in which I developed a sense of myself as a body-subject. Mindfulness is a term used for both a practice and a state of being. Or in Nhat's words,

> [m]indfulness is at the same time a means and an end, the seed and the fruit. When we practice mindfulness to build up concentration, mindfulness is a seed. But mindfulness is the life of awareness: the presence of mindfulness is the presence of life, and therefore mindfulness is also the fruit. (2008, 14)

There are a multitude of definitions of mindfulness across both Buddhist and Western scholarship (Khoury et al. [2017] provide a good overview of these). However, the term was first introduced to me in a Mindfulness Based Stress Reduction course using Kabat-Zinn's curriculum I undertook at Curtin. Kabat-Zinn defines mindfulness as: 'The awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment' (Zinn 2015). Awareness of the present moment 'refers to the full awareness of processes relating to the following: (1) body, (2) feelings, (3) mind, and (4) phenomena' (Khoury et al. 2017, 17). Being mindful, particularly for people like myself who experience anxiety, is *hard*! Anxiety is the antithesis of mindfulness, as the mind of a person who feels anxious, even more than that of an average person, wants to ruminate over past events and worry over future events (Borkovec 2002). Practising mindfulness generally involves a lot of noticing I am doing this, again and again and again, and attempting to notice this in a non-judgemental, loving way without getting caught up in an internal narrative.

By encouraging the practitioner to pay attention to and stay grounded in the body, mindfulness practice can be used to develop a sense of self as a body-subject.[12] The Mindfulness Based Stress Reduction course included a variety of practices focused on cultivating mindfulness, including the three minute breathing exercise, body scan, walking meditation, and an eating meditation (Kabat-Zinn 2017). These practices work to build awareness of the self as embodied in different ways. For example, the 'three minute breathing space' is a breath awareness meditation that focuses on the breath as a tool to ground the practitioner in their body and the present moment, while the body scan focuses on noticing non-judgementally and compassionately what is going on in each part of the body, by bringing attention and the breath to each, and then to the body as whole (Kabat-Zinn 2017). I found that use of these practices helped me to develop a sense of self as a body-subject in direct relationship with the world. I am not alone in this experience; studies by Silverstein, Brown, Roth and Britton (2011), Gibson (2014), Tihanyi et al. (2016), and Szucs, Dyer and Lees (2020) show that body awareness has been correlated with mindfulness practice. Mindfulness can also help connection to others through the act of noticing and

---

[12] Mindfulness practice is not suitable for everyone. According to Gibson (2019, 10) 'meditation, mindfulness, or any body-focused practice can trigger autonomic hyperarousal, perceptual disturbances, traumatic memory re experiencing, and even psychosis'. Body awareness style meditations such as the body scan can also activate memories of past trauma (Gibson 2019, 10).

being present with them. Further, as I expand on in Chapter 7, mindfulness practices can build a sense of interconnectedness with both humans and non-human nature more directly (Van Gordon, Shonin, and Richardson 2018). The excerpt below describes the joy of direct moment-to-moment experience with my second child when she was four months old:

> *The little one is nestled in the crook of my arm. It is hard to write with her cooing and looking intently at my face; her cheeks long to be kissed and her small but robust body to be held close. Heaven is to hold her to my chest, feeling her tummy expand against me as she breathes in and out, inhaling her smell while the soft hairs on her head tickle my lips and nostrils, then bounce her out and up until she laughs and mirror her milky smelling smile, nose to nose.*
>
> *When I hold her I am completely immersed in the sensory, emotional, connection we have together: I am acting as a body-subject.*
>
> Embodied connection with baby #2 at four months old, Perth, WA, November 2019

This excerpt provides an example of the capacity to feel an inter-embodied relationship with the world when mindfully aware and acting as a body subject.

2.4.2 Yoga

Yoga philosophies and practices date back to 500BCE in South East Asia (Baier, Maas, and Preisendanz 2018, 2), however, the emergence of yoga in the West is dated about 100 years ago (Besant 2012, 3). The development of modern postural yoga, the sphere which I practice and write about, in the West has seen a diverse range of practices and approaches develop (Besant 2012, 3). Hassan writes that modern yoga 'functions with a variety of styles and lineages, some authentic and some with intentional disconnections to its roots' (2020, 27). Although these practices can be personally meaningful, modern postural yoga has been

commodified within the 'yoga industrial complex' (Hassan 2020). Critical yoga studies explore the many issue that exist within the practice and framing of modern yoga; scholars such as Bakataki (2015) show how modern yoga appropriates Indian cultural practices, while privileging white practitioners over those historically marginalised. Dominant representations of yoga show white women performing physical acts, but also searching for spiritual enlightenment through accessing Eastern knowledges (Hassan 2020). Hassan explains that,

> such representations participate in a form of erasure, where yoga as a system relies upon authentic global linkages, but also seeks to dismantle its roots and produce a consumable apparatus marketable to Western audiences (2020, 29).

Modern yoga, even while dominated by images of white women, also participates in suppression of the voices of Indian women through upholding patriarchal structures, both Indian and Western (Hassan 2020, 29). It is beyond the scope of my thesis to delve further into the debates within the sphere of modern yoga, however it is important to hold in attention these issues, while still acknowledging that modern yoga practice remains an important part of many people's lives, including my own.

Yoga is another way in which people can become more aware of internal bodily sensations, helping them to move away from self-objectification, and towards viewing the body as a subject (Rani and Rao 1994; Hirschman 2006; Mahlo and Tiggermann 2016). The excerpt below shows how the practice of yoga connects me to my own embodied experience and shows a relationship to self as a body-subject, rather than a body-object.

> *I find a mostly flat spot in the hollow on top of the dune and start my yoga practice with the sun behind me and the moon in front. The vista is so magic that I feel distracted and diffuse, and I struggle to draw my attention into myself. As I begin the sequence of breath and movement I realise I'm overwhelmingly tired. My limbs feel heavy and I drag myself through the practice. The soft sand under my mat shifts too much with my weight and adds to the sense of struggling to move fluidly. I cry during backbends as my chest cracks open, but stay solid during the headstand. When I finish it's light, and I settle into rest with my heels and fingers hanging over the edges of the mat into the fine sand as I let my breath return to its own pattern.*
>
> Yoga bringing my awareness to my body, Exmouth, WA, February 2016

The reason that yoga is so good at developing awareness of internal bodily sensations is that yoga requires practitioners to match breath to movement and movement to internal bodily cues, rather than external ones.[13] There have been a number of studies which mirror my experience in terms of the benefits of yoga in this regard. For example, a study conducted by Rani and Rao (1994), using a survey to compare 'body awareness' between yoga practitioners and non-yoga practitioners in a group of women and men, found that the group of yoga practitioners had significantly higher body awareness. Hirschman (2006) used multiple surveys of 20 women and three men to study the relationship between weekly yoga practice, self-objectification and embodiment and well-being in young women, and found that more yoga equated with reduced self-objectification and better well-being. Similarly, Mahlo and Tiggermann (2016) conducted a study on the relationship between yoga practice, self-objectification and body image in women using a survey method of 320 women in Australia and found that yoga practitioners reported lower levels of self-objectification and more

---

[13] Some forms of yoga do move away from this, for example, Bikrim yoga, which relies on scripted instructions and mirrors.

positive body image. These findings on the positive influence of yoga on body-awareness and reducing self-objectification parallel my experience.

In research specifically looking at the ability of yoga to challenge the mind/body divide, sociologists Humberstone and Cutler-Riddick (2015) used an interpretative phenomenological research approach, comprised of their own participation in yoga classes, observation and interviews, to look at the effects of yoga on perceptions of ageing in ageing women (from early old age defined as beginning at 60). They looked specifically at the mind/body divide in perceptions of ageing and found that yoga practice provided a space where 'through body and breathing techniques, body reflection and relaxation practices, on occasions, body-mind dualism was resisted and a reconfigured ontology of body-mind integration was rehearsed through which the women reconstructed an alternative embodiment of ageing' (2015, 1236). Morley (2001) also argues that yoga can actualise Merleau-Ponty's notion of the 'lived body' by breaking down mind/body distinctions. He argues that people often focus on the parts of our body in contact with the external world and think of our bodies from the perspective of an observer outside ourselves, ignoring the inner body and resulting in an alienation from our bodies. However, he suggests that the practice of pranayama (breath control), central to yoga practice, breaks down binaries of inside/outside and self/other, as the act of breathing takes in air, passes it from the through the body and back out into the world. This breaking down of the distinction between interior and exterior can be explained in reference to Merleau-Ponty's notion of 'flesh of the world' (1968), discussed further below. By turning attention inwards, yoga practice encourages proprioception - sensing internal bodily sensations - bringing into awareness the relationship between the body in the world and the inner body.

2.4.3 Sensory autoethnography

By demanding I pay attention to, and write about, my embodied experience, an embodied research methodology made me more aware of my own embodiment. Following the advice of Pink (2009b), when carrying out my research, I aimed to focus my attention on my sensory experience, reminding myself to check in with the different senses. Drawing on mindfulness and yoga practice, I used the breath as a tool to connect to embodied experience. Using the practice of embodied writing, I explored my ideas and produced the excerpts of writing which appear throughout this thesis. The breath was key here too, as

described by Snowber (2016, 44): the breath acts to connect us to our bodies and our lives and animates our language expressed through the written word. Embodied writing can communicate experience and ideas in a more meaningful and visceral way, inviting audiences to connect with the subject matter at an emotional level as well as an intellectual one. However, both the act and the finished product of embodied, or sensory autoethnographic, writing are important. This method of writing has the effect of bringing the writer into awareness of their embodied selves. This process is described in Anderson who writes about how through practising embodied writing she became more connected to her body and the world:

> As a style of writing, embodied writing is itself an act of embodiment. Nature feels close and dear. Writers attune to the movements of water, earth, air, and fire, which ever coax our bodily senses to explore. In so doing, embodied writing becomes not only a skill appropriate to research, but a path of transformation that nourishes an enlivened sense of presence in and of the world. (2001, 2)

Using embodied methods, researchers can develop their connection to their embodied experience, which Anderson (2001) tells us is waiting to be acknowledged and to show us its wisdom; if we listen, it can lead us to more connected, compassionate and imaginative ways of living.

In her beautiful book on embodied enquiry, Snowber (2016) suggests some practical ways in which researchers can become more embodied. She points out that even as the academy has acknowledged the importance of embodied experience and begun to theorise and research about this, the body is excluded from academics' writing and research practices. Snowber (2016) urges academics to listen to their bodies, letting the body tell them about their deepest knowing and their limitations. Snowber (2016) refers to both their work and their personal lives, but the boundaries are not stable. Her own writing practice includes walking or dancing in turn with writing. She stresses the importance of movement, in whatever form is suited to the individual, and of cycles of work, movement and solitude. Snowber (2016) suggests finding practices that fit in with one's life; the segments of the cycle can be short ten or twenty minutes, or even a quick stretch, or a yawn or deep breath. In the context of Snowber's (2016) work, the usefulness of mindfulness and yoga practice is clear, as a practice of breath, mindfulness and solitude, and could be useful integrated into the workday as an embodiment-enhancing practice. Pre-baby, my best writing time was after yoga, at the café nearby, still sweaty, over breakfast of coffee and fruit. At this time, I was

54

relaxed and enjoyed my study, and the ideas from the books leapt from the page into my mind and onto the paper in copious notes. When I started the PhD, and I was working in the garden as a volunteer and engaging in a daily mindfulness and yoga practice, I was, without realising it, developing myself as an embodied researcher.

However, it is challenging to adopt this way of working in a culture that values productivity over process, as described in the excerpts below.

'Walking is a bodily movement that not only connects the body to the ground but also includes different postures, speeds, and rhythms. These shape the tactile interactions between the moving body and the ground, and play a fundamental part in how the surroundings are sensually experienced' (Lund 2005, 28) ... How much more fun to be walking! I think enviously, imagining how nice a walk in the bush would be after this morning's rain – long strides over bumpy red rocks varnished by the rain, droplets sparkling on the leaves of the eucalyptus trees...

I shift uncomfortably in my chair. Here, my 'scholar's body' (Stoller 1997, 10) longs to BE walking, not writing about it. My pelvis (a great knower of this according to Snowber [2016]) nags insistently for me to move my bum from the chair and give some relief to the niggling ache inside my right hip (one of these mysterious and difficult-to-describe somatic interior sensations [Paterson 2009, 779-780]). I think about Snowber's (2016) book on embodied writing and promise myself I will take my next five-minute break to address the concerns of my hips. I wonder what my day would look like if I trusted enough in these ideas on embodied writing to enact them; I wonder if I can make writing and stretching, or walking, into a continuous creative dance as she describes. I managed this in the rhythm of travelling when on my way to Darwin, but not lately. I'm frustrated by how difficult it is to stop falling back into conventions – in writing I keep falling back into academic prose; in action, I find it so hard to affirm a creative work process that does not look like an academic performing a hard slog at a desk.

On being an embodied (?) researcher, Perth, WA, August 2018

For me now, it is a constant struggle to remember that these embodied practices have worth. I keep falling into old habits, thinking yoga doesn't help me meet my word count. But it may, as Snowber (2016) suggests, by allowing the ideas space, and letting the wisdom of the body in. My struggle now is finding a way to honour what my body wants, as well as meet my commitments, as expressed in this excerpt below, written after the birth of my first child:

> *I need to sleep, but I need to write. I need to sleep and write, but I need to do paid work. I want to stretch, but I feel guilty - I should be writing. I want to spend all my time with baby, but I need to write, make money, cook, and keep the house clean. The house could always be cleaner. My life has changed now, and so has my body, I can see that the same practice isn't working now, but I know I need movement. I need to find a way to do things in smaller ways and not to feel I should do more. My body made a baby, and it's feeding her, it's pretty busy and I don't want to push myself to reach an expectation of intense physical practice. Yet sometimes I long to do yoga or run or swim until my lungs burst. But honestly, I believe my body is telling me the time is not yet right. And it's been a whole year already!!! I hear what my body tells me, yet I write through sickness, achy back and sore hips because I don't know how to trust myself to more flexible practices and still meet my deadlines.*
>
> Challenges to being an embodied researcher, Perth, WA, September 2018

This has only got more challenging with the birth of my second child; however, that does not mean it is not worthwhile. Through our individual practices we can help to challenge the predominant mode of acting within Western culture and academy, allowing the wisdom of our embodied selves to help us find ways to address the problems of the Anthropocene. For planners, as a starting point, it means thinking about how work practices and a planning system that welcomed embodied knowledge would look; I pick up this thread in the concluding chapter.

56

2.5 Merleau-Ponty's 'flesh of the world' and embodied connection to human and non-human others

The above discussion on mindfulness, yoga, and embodied research methods illustrates that these practices are not only about connection to self, but also about connection to others. This is important to my research, as connection to others is at the heart of notions of connecting to non-human others. In looking to explain this, I found that Merleau-Ponty's (1968) notion of 'flesh of the world' can provide an insight into why this might be the case. In this section, I explain the idea of 'flesh of the world' and show how it can provide non-binary ways of thinking about our relationship with others, both human and non-human. I use examples from my life to show how activities involving intimate interactions with others can help to reveal the inter-embodied nature of our existence. I argue that this can be extended to the non-human, and that the idea of 'flesh of the world' helps to show how.

Earlier in this chapter, I explained the idea of the 'body-subject', in which the body is acknowledged as the site of meaning and experience. For Merleau-Ponty, to be in the world as a 'body-subject' is also to be inter-embodied (Merleau-Ponty 1968, 1962/2005). Merleau-Ponty demonstrated that 'bodies cannot be separated from the spaces, objects and other bodies with which they interact' (Lupton 2013, 39). He believed that 'the experience of being embodied is mediated by our continual interaction with other human and non-human bodies' (Weiss 1999, 5). According to Lupton, the relationship between mother and baby in pregnancy and through caring practices such as breastfeeding in early childhood are the clearest examples of inter-embodiment:

> Merleau-Ponty sees the intercorporeal nature of the mother–child relationship as a primary example of the doubling, overlapping and two-sided nature of human embodiment. Through touching-being touched, moving-being moved, feeling being felt, hearing-being heard, the bodies of the mother and infant come close, or bend to each other, and then spread away from each other. The concept of 'infant' and 'mother' each defines and is inseparable from the other, and each body's 'being-in-the-world' is shaped by the other's. (2013, 40)

The excerpt below shows the inter-embodied nature of the mother child relationship.

> *I look down at her and my heart cracks open; how is it possible to feel such intense wonder, love and joy in the midst of the mundane. Like a backbend in yoga, opening my ribs and exposing my heart, this baby leaves me stripped back, vulnerable, and raw. She is so perfect, the flesh of my flesh, almost asleep in my arm, with her hand on my breast in proprietary way, breathing in and out, her tummy to my tummy while I type with my left hand.*
>
> Inter-embodied mother and baby #1 at 6 months old, Perth, WA, January 2018

As described in the excerpt on yoga above (in section 2.4.2), while back-bending, my chest, associated in yoga with the heart chakra, literally, and audibly, cracks open, accompanied by a feeling of openness, release, connection to the world, and vulnerability; in the excerpt above, my internal felt experience of inter-embodied connection with my child mirrors this experience in yoga. In both instances the inter-embodied nature of being is *felt* by me to be true.

The concept of 'flesh of the world' (Merleau-Ponty 1968) can help theorise this felt understanding of inter-embodiment further. Merleau-Ponty's concept of 'flesh of the world', only partially developed before his death, referring to both the human body and the rest of the world, introduces the idea of inter-corporeality with other human bodies, and, arguably, the non-human world, potentially providing a non-dualistic way of conceptualising human and nature relationships that is grounded in embodied experience. In her clear and thoughtful account of 'flesh of the world', Brook explains that, in a radical move, the idea of 'flesh of the world' 'arises from an attempt to picture reality in a way that reflects how it is; not just for us, as experiencing subjects seen as somehow separate from an objective world, but also for the world' (2005, 355). However, she adds that, because Merleau-Ponty's ideas required reframing our understanding of our relationship with the rest of the world, existing language didn't easily allow it to be expressed; this led him to use a set of terms that were designated meanings in the context of his work. Cataldi (1993) also warns that its unfinished nature, and 'novel terms' used to avoid setting up the traditional Western subject/object

division, make it difficult to understand and interpret. (Additionally, the work is translated from French, which despite the liberal use of footnotes by the translators to flag potential ambiguity, must confuse matters further.) With this in mind, I have attempted to clearly articulate my understanding of 'flesh of the world', which I use as an opening to conceptualise more connected human and non-human nature relationships.

The term 'flesh of the world' is used by Merleau-Ponty to describe a concept that did not formerly exist in Western philosophy (Cataldi 1993, 60). According to Merleau-Ponty (1968, 146), 'flesh of the world' is not matter (i.e. objectified stuff that makes up the non-human world), it is more like an element. Merleau-Ponty writes thus:

> To designate it, we should need the old term 'element,' in the sense it was used to speak of water, air, earth, and fire, that is, in the sense of a *general thing,* midway between the spatio-temporal individual and the idea, a sort of incarnate principle that brings a style of being wherever there is a fragment of being. (1968, 139)

Brook clarifies the notion of 'flesh of the world' as an element as follows:

> Flesh' is both me and the world - a 'texture' - and it is our ability to both see and be seen, to touch and be touched that both gives us that direct experience of the enfolded nature of flesh and presents us with an emblem of that enfolding. (2005, 359)

Flesh of the world is described by Merleau-Ponty as a kind of origin story – it preceded human, and other consciousness, and makes it possible. Cataldi describes 'flesh of the world' as a kind of mass, which is voluminous, dense, dark, and closed, which at some point created 'some distance on itself by folding over (and over…) upon itself and 'hollowing out' some clearing to make room… for an adherent Percipience', an ability to regard itself (1993, 60). Thus,

> by somewhat (and somehow!) distancing itself from its own occlusive Voluminosity, Flesh (in its formative or inaugural sense – as the generative Body of Beings) begins to touch, see, hear, smell, and taste itself; and eventually, begins to understand or become aware of itself. (Cataldi 1993, 61)

This awareness must arise in the form of humans and other sentient beings. This idea is significant because it sees perception as 'flesh' seeing itself, therefore humans (as perceiving beings), are not really separate from the objects they perceive.

This idea of reversibility – of being both perceiving and being perceptible and to touch and be touched – is central to understanding more about 'flesh', as described here:

> It is the coiling over of the visible upon the seeing body, of the tangible upon the touching body, which is attested in particular when the body sees itself, touches itself seeing and touching the things, such that, simultaneously, *as* tangible it descends among them, *as* touching it dominates them all and draws this relationship and even this double relationship from itself, by dehiscence or fission of its own mass. (Merleau-Ponty 1968, 146)

To illustrate this 'double aspect' of reversibility, Merleau-Ponty uses the example of one hand reaching over to touch the other and the other touching back: 'an ambiguous set-up in which both hands can alternate the rôles of 'touching' and being 'touched'' (Merleau-Ponty (1968, 106). Springgay elaborates on this, explaining that 'in this reaching out and crossing over, the hand touched (object) reverses or folds back on itself and becomes the touching subject, thus in the chiasm or the space of the fold, the body inserts itself between subject and object, interior and exterior' (2008, 24). According to Brook (2005, 360), an even better example of this 'dual aspect' of experience and reversibility is that of hyper-reflection. Brook explains hyper-reflection is the process where our thinking 'places us on the other side of the fold in our experience such that we are closed off from the unthought experience, but only because we are the other the same thing' (2005, 360).

> *The baby stirs. I sway my body, and my hand soothes her prior to conscious thought. She recognises she is safe and settles. I become conscious of what I am doing and suddenly I am outside my experience.*
>
> My intentional body and baby #1 11 months old, Perth, WA, July 2018

In the preceding excerpt, both the intentional nature of the body and hyper-reflection are present. The paradox of being both separate yet part of the same that is present in our experience of 'double sensations' is the same as that of our relationship with the 'flesh of the world'.

Of significance for thinking about embodiment, the notion of 'flesh of the world' is dependent on the sentient body in relationship with the sensible (and sometimes sentient) world. The stuff that can be perceived is already there, and includes me (I am perceptible), it is 'actualised but not created by human perception' (Cataldi 1993, 61), so in this way we are not separate from the rest of the world, but part of the same fabric/element. Describing this relationship, Merleau Ponty writes thus:

> …[My] body is made of the same flesh as the world (it is a perceived), and moreover that this flesh of my body is shared by the world, the world *reflects* it, encroaches upon it and it encroaches upon the world (the felt [senti] at the same time the culmination of subjectivity and the culmination of materiality), they are in a relation of transgression or of overlapping … (1968, 249 Italics in original)

Here, he goes further to stress the blurring of boundaries between subject and object:

> One can say that we perceive the things themselves, that we are the world that thinks itself—or that the world is at the heart of our flesh. In any case, once a body-world relationship is recognized, there is a ramification of my body and a ramification of the world and a correspondence between its inside and my outside, between my inside and its outside. (Merleau-Ponty 1968, 136)

This dynamic relationship between the body-subject and the rest of the world can be seen to break down the self/other and human/nature dualisms present in Cartesian thought.

The idea of 'flesh of the world' can be useful in conceptualising why yoga helped to reveal my inter-subjective relationship with the rest of the world. The excerpt below relates an experience that stands out in my memory as a point where yoga disclosed this connection to other humans.

Sometimes in my practice I reach the space where awareness, breath and body and pain and sweat are all I am; this is one of those times. I have completed three backbends, arms straining, legs steady, ribs opening under a band of too-tight muscle across my chest, and come into the counter pose - bent forward from my waist, face close to my outstretched legs, fingers linked around my feet. I can only see the dark space between my knee-caps but I can sense my teacher is readying to adjust me. He uses the weight of his upper body to make the adjustment. Through a sensation that is in equal parts pleasure and pain, of muscles releasing in my legs, I can feel his ribs expand with his breath against my own that are expanding and contracting to the shallow ujjayi breathing. My breath is loud in my ears, my forehead, damp with sweat touches my knees and rests there for the first time. I am contained within myself in an intimate, endless, loving space. I am contained by his ribs on mine, within the studio in the sound and heat of everyone's breath. There is no possibility I am not part of a greater whole; a phrase that both puzzles and fascinates me swims into my mind – 'now is the time to know all you do is sacred ... this is the time for you to deeply compute the impossibility that there is anything but grace' (Fleming 2003).

Yoga reveals the interconnected nature of our existence, Perth, WA, March 2015

The idea of connection continues in the excerpt below.

It's day one of our trip and I'm determined to keep up my yoga practice, so I set up my mat in our campsite next to the car under the salmon gums.

Yoga as a connected practice part 1, Cervantes, WA, February 2016

> *I face the rising sun and begin with an inhalation of breath. The grass under my mat feels unfamiliar and requires negotiation, I shift slightly left to avoid a small hill under my right foot. The pink and grey galahs above me are noisy and distracting, snapping off leaves and chucking them down around me. The air smells of eucalyptus and damp grass, which I have to periodically brush off my mat.*
>
> *I notice that the couple in the caravan next us are up and have begun praying on mats in the annex of their van. I feel a sense of connection and comfort, perhaps my practice is also a prayer of sorts. Outside the studio I don't say the Ashtanga opening prayer, but I always set an intention, and imagine my movement during practice carrying it into being.*
>
> Yoga as a connected practice part 2, Cervantes, WA, February 2016

Both of these excerpts show how embodied practices, such as caring for an infant and yoga, can help to reveal the inter-embodied nature of our existence in relation to other humans. The concept of 'flesh of the world' has exciting potential in relation to my research because it allows an understanding of humans and non-human nature as connected. In the excerpt below, I describe my embodied experience of this understanding:

> *As I walk I feel like I am dissolving into the beach. I breath in, take a step, my breath flows through me, I breathe out, it flows through the sand, the sky, the water under my toes. I'm melting into the sand, air, sky.*
>
> Melting into the beach, Cable Beach, Broome, WA, March 2016

In Chapter 7 I unpack this experience, along with others, to form an understanding of what kinds of embodied experiences have potential to facilitate connection to non-human nature.

2.6 Conclusion

In this chapter I introduced the notion of embodiment and argued that rejecting duality and reframing can support a shift in perspective on the self and others, helping to break unhealthy habits of thought. I suggested that developing a sense of the self as an embodied subject will enable a more connected relationship with the world. I explained how the practices of mindfulness and yoga, and using an embodied methodology, helped me develop a sense of myself as an embodied subject. I then utilised Merleau-Ponty's (1968) notion of 'flesh of the world' to work through how through developing a sense of own embodiment people might experience connection to others, both human and non-human. This has exciting potential for theorising, and actualising more connected relationships for non-human nature, which I explore further in parts 2 and 3. This Chapter also provides the context for my choice of the embodied methodology, sensory autoethnography, which I describe in the next chapter. By using an embodied methodology, I provide one example of how embodied methodologies can be used to provide alternative modes of knowledge – ones that include the wisdom of the body - than those more usual to planning research.

Chapter 3: Sensory Autoethnography
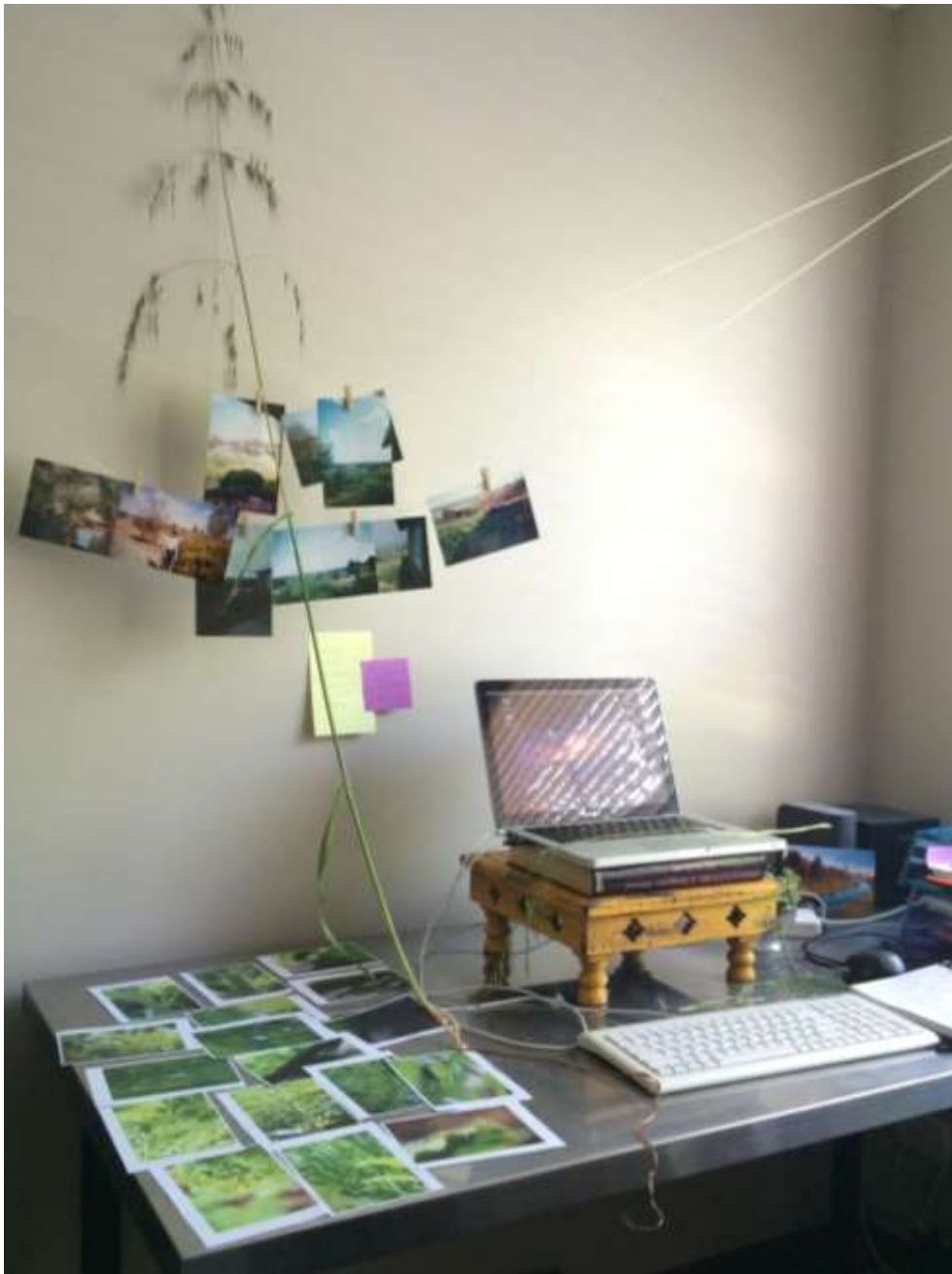
Figure 3.1: Using photographs and embodied writing during the process of data analysis (my desk), Perth, WA, 2014. Image by author.

As I cut up the pages of images of the Earthwise garden and arrange them in piles I am struck by a sensation that these images are not new, these are images I have been carrying with me, and now I have (re) produced them. This thought was accompanied by a sinking feeling - I even put my hands to my face to take a deep breath and breathed out 'oh no' with a crinkled face. Like – how did this happen? The frustration, disappointment, and perhaps anger? How frustrating, I thought this was a new project. Can I only ever produce the same images, over and over again and only ever be the same person – like being sucked in by a sense of inevitability or fate – all my choices will always lead me back to this. I stand up, ball my hands up in frustration and flex my arms down and backwards – a vestigial temper tantrum – indulging in the feeling of frustration, even anger and sadness. Then I put the images back in their piles - time to leave for yoga workshop. Thank God, I was am happy to flee the images.

Sensory autoethnographic research in progress – part 1, Perth, WA, October 2014

In addressing the research question *How can embodied methodologies inform approaches to planning that facilitate more connected human relationships with non-human nature?* the first research objective called for me to develop an embodied methodology to explore human relationships with non-human nature. Embodied methodologies emerged in response to the focus on the textual in the social sciences since the 1970s (Chadwick 2016). The turn to embodied methodologies reflects the desire to access insight into experience not available through analysis of language: 'flesh of the world, bodies and materiality … affect and emotion' (Chadwick 2016, 54). Embodied methodologies are those that try and access this knowledge. Fox argues that this provides an alternative to 'positivist, elitist conceptions of knowledge production and the academy. Instead, it provides a way to connect to and value various and diverse ways of knowing' (2015, 326). According to Chadwick, the field of embodied methodological approaches includes 'embodied reflexivity, various data collection strategies and experimental efforts to embody interpretation and writing' (2016, 56), although for her the problem of accessing, and communicating about, embodied experience remains a work in progress. Rather than finding better ways of talking about the body, embodied methodologies access the knowledge of the embodied subject and allow the body to speak (Chadwick 2016, 58). However, although there has been a recent upsurge in interest in embodied methodologies in the fields of urban issues, planning and human relationships with non-human nature (outlined in Sections 3.1 and 3.2 in this chapter), when I started this project in 2013 there was very little research in the field of planning using embodied methodologies. Because of this, I set out to develop a suitable methodology for use in planning research. In reviewing the field of embodied methodologies, I found that sensory ethnography (Pink 2009b; 2015) and autoethnography could provide insight into embodied experience. These methodologies require the researcher to pay attention to their embodied experience or, as described by Crang (2003) and Longhurst, Ho, and Johnston (2008), to deliberately use the body as a research 'tool' by using information provided by the senses. However, I see the description of Crang (2003) and Longhurst, Ho, and Johnston (2008) of the body as a tool as being too close to dualistic understandings of mind/body. Instead, utilising Merleau-Ponty's (1962/2005) idea of the lived body, I reframe this as the researcher undertaking research from the perspective of an embodied subject, integrating both sensory and cognitive understandings. The excerpt above, continued at the start of the next chapter, shows how this can look.

After exploring both sensory ethnography and autoethnography, I found that sensory ethnography deals directly with embodied experience through exploring the sensory

experience of both researchers and human subjects. However, as my project progressed, I realised I wanted to focus on my own experience as much as the experiences of others, and that I needed more guidance on using self as a research subject. Autoethnography provided guidance and allowed me to study embodied experience from the inside, and to utilise one of my strengths – writing as a means of exploring and communicating ideas. However, autoethnography lacked the attention to embodied experience explicit in sensory ethnography, as well as guidance on how to understand the embodied experience of others. I found that by combining autoethnography with Pink's (2015) ideas on research methods from sensory ethnography I was able to better meet my goal of developing an embodied research methodology suitable for planning. I am calling this 'sensory autoethnography', which is an approach to autoethnography that is influenced by sensory ethnography.

In this chapter, I first I explain the two methodologies I draw on in formulating sensory autoethnography, sensory ethnography, and autoethnography, and outline how each has been used in studies of relevance to planning. Following this I introduce my approach to autoethnography, which I call 'sensory autoethnography', in which I utilise the theorisation and methods from both autoethnography and sensory ethnography. This chapter provides the theoretical grounding for the methodology, while the following chapter provides more information on how research using this approach might look, by outlining my methods, what I did and how, and the settings of my research, in combination with an account of my personal journey over the course of this research.

3.1 Sensory ethnography

Pink (2009a) suggests sensory ethnography, offers one way in which to study embodied experience by paying attention specifically to sensory experience of the researcher and others. Pink (2009a, 46) explains that researchers using this method use their own sensory and emplaced experience to help them understand the experiences of others (Pink 2009a, 42). This means 'self-consciously and reflexively attending to the senses throughout the research process, that is during the planning, reviewing, fieldwork, and analysis and representational processes of a project' (Pink 2009a, 42). The imperative at the conclusion of the research is then to present the findings in a way that enables people to imagine themselves in the place of those being represented (Pink 2009a, 42). As noted by Pink (2009b, 164), this is similar to autoethnography in that sensory ethnographers 'seek

routes through which to develop experience-based empathetic understandings of what others might be experiencing and knowing' by participating themselves in the activities they are researching. In some cases, as mentioned above, Pink (2009b) claims that there is no distinction between ethnography focussing on sensory experience (used to help find out more about broader culture in a particular area), and autoethnography, except that the author is the sole person that 'data' is collected on. For example, although they cite autoethnography as their methodology, she puts the research on distance running by Allen Collinson and Hockey (2001) and Hockey (2006; 2012; 2004) in the category of sensory ethnography. In this section, I first introduce sensory ethnography. I then go on to talk more about the senses in relation to this methodology. After this I describe how sensory ethnography has been used in existing research relevant to my topic.

Pink's methodology forms part of the field of sensory (or sensuous) scholarship, which has been expanding since the 1980s in the fields of geography, ethnography and sociology among others. This field is now well established, and includes the journal *Senses and Society*, founded in 2006, which is an interdisciplinary journal exploring the senses and culture. The interest in the senses stems from the critique that the body as a site of knowledge had been overlooked. However, despite this surge in interest in embodied experience, Crang argues that the researcher's embodied presence is missing, the researcher instead becoming a 'ghostly absence' (2003, 499) in ethnographic texts. He suggests that it would be useful to pay attention to knowledge gained by the researcher through their body, which he terms 'haptic knowledges' (Crang 2003, 499). Longhurst, Ho, and Johnston (2008) took up this challenge in their research on food and found that 'using the body as an instrument of research', including paying attention to the full range of bodily responses (including those they might have preferred to not to experience or report on, such as gagging) offered significant insights into social experience. Sensory ethnography further addresses this lack by making the sensory experience of the research vital to the methodology, as it is through attention to the researcher's sensory experience, not just the subject's that knowledge is gained. Since I began this project in 2013, sensory ethnography has gained popularity, leading to its adoption across a wide range of contexts, as well as to it 'becoming an increasingly hybrid and interdisciplinary endeavour' (Calvey 2021, 350), placing my research in a burgeoning field of hybrid methodological endeavour.

Sensory ethnographers aim to explore embodied experience through the senses. The Western model of the senses, used by Pink (2009b), is based on that formulated by Aristotle

over 2000 years ago and is comprised of five senses: sight, taste, touch, smell, and hearing (Paterson 2009, 768). In her historical account of the senses across a variety of cultures, Classen (1993) shows that this model is culturally constructed. She, along with early proponents of sensuous scholarship, Howes (1991) and Stoller (1997), argues that the senses are important to understanding other cultures, but that this needs to be done on the 'sensory terms' of the culture in question. For example, as Stoller (1984) demonstrates through his study showing the importance of listening in Songhay culture, the Western privileging of the visual will not be useful in a culture which privileges sound/auditory. Even within studies of Western cultures, the five sense model can limit our understanding of experience, as there are potentially many more senses and many different ways of categorising the senses. It can even be argued that the notion of separate senses acts to makes us focus on each sense separately rather than on the whole embodied experience of moving bodies in the world (Lund 2005). Although Pink addresses this in her book *Doing Sensory Ethnography* (2009b) by outlining a view of the senses as interconnected in an embodied whole, it remains a potentially problematic aspect of the methodology for researchers.

Sensory ethnography has also been used to explore a wide variety of urban issues relevant to planning including: sustainability (Pink 2008); drinking and the night time economy (Duff and Moore 2014); inner city cycling (Jungnickel and Aldred 2013); seniors perceptions on their living environments in Singapore (Trivic 2021); 'the role of multisensory perception in urban cohabitations' (Briata 2020, 93); embodied experiences of air pollution in Salt Lake City, Utah in the context of leisure (such as walking, cycling or jogging) (Zajchowski and Rose 2018); and the construction of place by new arrivals in the city of Manchester, UK (Stevenson 2017). Additionally, in the field of planning, Caverley looks at vacant structures in Detroit, focusing 'on how articulations between embodied experiences and statutory norms enable efforts to locate, historicize, and expel buildings from the city's landscape'(2021, 1079). Sunderland et al. (2012) use sensory ethnography to explore the impacts of qualities of places on physical health. They demonstrate that this methodology allowed them to gain information about how children see their environment not available through traditional methods, such as insight into children's sensitivity to the 'openness, smell, safety, cleanliness, friendliness, [and] maintenance' of their environments and the importance of the linguistic diversity of the study area to the children's soundscapes. This information is used to provide an interesting comparison with knowledge on social determinants of health gained from GIS (geographic information system) and statistics (Sunderland et al. 2012, 1063). The project also had practical outcomes for planners and the community, including

allocation of funding based on the findings. Sensory ethnography has been used by Waitt and Knobel (2018, 3151) to explore 'embodied geographies of liveability' through the concept of 'territoriality' by looking how apartment dwellers used urban parks in New South Whales, Australia. In the field of transport planning, Nixon (2012) looked at the embodied experience of users of different modes of transport (walking, cycling and motor vehicle), and found that motor vehicle drivers are more removed from environment compared to cyclists and walkers, who come to know environment through their bodies. Also in the context of transport planning, van Duppen and Spierings (2013) conducted a study of cyclist commuters' embodied experiences in the Netherlands. They interviewed 15 participants using a 'ride along' interview method (adapted from the go-along method used by ethnographers) on their daily commute. The authors argue that by focusing on embodied experience they were able to provide better insight into commuter experience of different sections of the city passed through on their commute (specifically focussing on divisions and connections between different neighbourhoods) and that this understating could enable more effective promotion of cycling. In a departure from previous studies on embodiment and cycling, the authors focus on 'sensescapes' in the city, rather than the bodily experience of the cyclists (van Duppen and Spierings 2013, 234). This provided insight at a practical level, allowing policy makers to understand that cyclists divided their commuting trajectories according to multiple markers including sighting 'the yellow bridge' and the smell of coffee, rather than infrastructure barriers as policy makers had assumed. This diverse range of topics shows the versatility of embodied methodologies and the exciting potential for their use in planning study.

Recent research using sensory ethnography has also provided insights into relationships with non-human nature. Waitt, Voyer and Fontaine (2021) used sensory ethnography to explore recreational fishing and citizenship in Sydney, Australia. Markuksela and Valtonen (2019) used sensory ethnography to explore the sensory interactions of humans and non-humans (fish) in the context of match fishing in Finnish Lapland. Focussing on knowledge production, Sanderud puts forward the concept of 'mutual experiences' in which 'a researcher's sensory experiences during fieldwork may contribute to producing knowledge on children's embodied sensory experiences during play in a natural environment' (2020, 111). In 2020 the *Australian Journal of Anthropology* published a special issue *Sense-Making in a More-Than-Human World*, based on the premise that 'as we study with more-than-humans and learn from them, we entangle our lives in a contact zone where becoming is always becoming *with*' (Fijn and Kavesh 2022, 7). Fijn and Kavesh explain that the 7 articles in the special issue

explore how the notion of 'becoming-*with'* can be used to aid in the construction of 'a post-humanist analysis by combining sensory ethnography with multispecies anthropology' (2022, 7). These varied studies show the potential for embodied methodologies such as sensory ethnography to produce insights into human and non-human nature relationships.

 The recent upsurge of interest in the use of sensory ethnography to explore human and non-human relationships, places my research in a growing field of study. It is not surprising that sensory ethnography has gained popularity in relation to the study of human interactions with non-human nature; sensory ethnography is well suited to exploring relationships with non-human nature as engagement with non-human nature is overtly sensory (Pink 2008; Turner 2011). By this I mean that, like the long-distance runners described by Allen Collinson and Hockey (2001) who engage all their senses in navigating their routes and moderating and monitoring their performance, participants in activities with non-human nature, such as fishing (Waitt, Voyer and Fontaine 2021; Markuksela and Valtonen 2019) as gardening, have a heightened awareness of their senses. These activities require both physical engagement and judgement through the engagement of many senses. In addition to this, the more-than-human turn, as described by Fijn and Kavesh (2022, 7) demonstrates that we become-with in relation to the humans and non-humans around us, and that this relationship is understood through the embodied researcher. Furthermore, as an embodied, qualitative approach it is well suited to exploring human relationships with non-human nature, which, as Trigger and Head (2010) and Head and Muir (2006) noted after studying Australian gardeners' attitudes, are complex and contradictory.

3.2 Autoethnography

Autoethnography is a qualitative methodological approach in which the researcher's experience and voice is central to the research; it is the study of culture through the study of the self. Reed-Danahay describes auto-ethnography as 'a form of self-narrative that places the self within a social context. It is both a method and a text' (1997, 9). As method, autoethnography uses writing as a form of self and cultural enquiry. As texts,

> concrete action, dialogue, emotion, embodiment, spirituality and self-consciousness
> are featured, appearing as relational and institutional stories affected by history,

social structure, and culture, which themselves are revealed through action, feeling, thought and language (Ellis 1999, 673).

Ellis, Adams, and Bochner (2011) explain that autoethnography emerged in the 1980s in response to post-modernism and a resulting questioning of traditional social science research methodologies (e.g. ethnography's) claims to present truths about those studied. Instead, autoethnography acknowledges the subjectivity of the author, understanding that 'the ethnographer's writing self *cannot not* be present, there is *no* objective space outside the text' (Denzin 2014, 26 emphasis in original text). According to Muncey, for autoethnographers, there is 'no distinction between doing research and living a life' (2010, 3). Although the use of self as research subject is ubiquitous in autoethnographic research, Reed-Danahay (1997, 2) explains that there are actually three elements to autoethnography auto (self), culture (ethno), and graphy (research) which are emphasised differently according to the bent of the researcher. Autoethnography is described by Ellis, Adams and Bochner as 'an approach to research and writing that seeks to describe and systematically analyze (graphy) personal experience (auto) in order to understand cultural experience (ethno)' (Ellis, Adams, and Bochner 2011, 1). In this way, autoethnographic research can be seen as existing on a continuum from art to science (Wambura, Kathy-Ann, and Heewon 2010, 3), or on a continuum from 'evocative' to 'analytic' (Crawley 2012, 22).

Autoethnographers challenge traditional research approaches by rejecting the myth of the objective researcher and working from their lived experience. Autoethnography is part of the 'narrative turn', which seeks to allow new and multiple stories to emerge (Etherington 2004). The focus on personal experience emerged as part of the project of feminism, which has been an important influence on the development of autoethnography (Ellis and Bochner 2000). According to Tomms (1995, 9), 'a specific goal of feminism is to build theories from lived experiences'; in this way, feminist writers/researchers reject the idea of the researcher as neutral reporter of knowledge and become 'part of the project of bringing women into the world'. Cixous urges women to write from a personal, female, and embodied perspective:

> Woman must write herself: must write about women and bring women into writing from which they have been driven away as violently as from their bodies – for the same reason, by the same law, with the same fatal goal. Woman must put herself into the text – as into the world and into history – by her own movement (1976, 875).

Although the number of female writers has surely increased since Cixous wrote this in 1976, the project of bringing women into the world is a valuable and ongoing one. My personal experience of being throughout the 9 years I have been working on this project of being a researcher, sessional academic, and mother has highlighted for me that my personal experience is linked to the broader social context, and that (although by no means universal due to differences in location, race, class, ability, sexual orientation etc.) there are commonalities to the struggles mothers experience, which are still framed by the same structures of patriarchal, Western culture referred to by Tomms (1995) and Cixous (1976) that deny the wisdom of embodied experience. I see developing embodied methodologies, and challenging the paradigm of the researcher as disinterested observer, as part of the broader project of feminism in challenging the binaries that underpin Western culture including that of mind/body, reason/emotion and nature/culture.

Autoethnography is a relatively new methodology, and an experimental one, which provides a challenge to traditional forms of research such as ethnography in the Chicago School (Ellis, Adams, and Bochner 2011). As such it has been subject of some criticism. For example, Ellis, Adams, and Bochner write that autoethnography is judged by the standards of the more familiar fields of ethnography, or performance arts, and that this misconception has led to it being 'criticized for either being too artful and not scientific, or too scientific and not sufficiently artful' (2011, 283). They write thus:

> These criticisms erroneously position art and science at odds with each other, a condition that autoethnography seeks to correct. Autoethnography, as method, attempts to disrupt the binary of science and art. Autoethnographers believe research can be rigorous, theoretical, and analytical and emotional, therapeutic, and inclusive of personal and social phenomena (Ellis, Adams, and Bochner 2011, 283).

The authors provide a summary of these criticisms, but do not engage much with them; this appears to be part of their stance on dismissing the critics as making judgements based on a wrong reading of autoethnography. On looking at the sources cited by Ellis, Adams, and Bochner (2011), I found that some authors, such as Buzard (2003), and Delamont (2009, 59) are entirely dismissive of autoethnography, while others, such as Atkinson (2006) and Anderson(2010), believe it needs to be ushered back into the fold of traditional ethnography. For example, Atkinson (2006) argues that autoethnography elevates personal experience, privileging the internal life and transformation of the author over the broader context of society and politics. He believes 'the problem [arises] from a tendency to promote

75

ethnographic research on writing on the basis of its experiential value, its evocative qualities, and its personal commitments rather than its scholarly purpose, its theoretical bases, and its disciplinary contributions' (Atkinson 2006, 2003). However, he and Anderson (2010) believe this could be remedied by a renewed focus on the analytic element. Anderson goes as far as to propose a five point code for 'analytic autoethnography':

> (1) complete member researcher (CMR) status, (2) analytic reflexivity, (3) narrative visibility of the researcher's self, (4) dialogue with informants beyond the self, and (5) commitment to theoretical analysis (2010, 7).

More recently, Stanley argues that critical autoethnography consist of three components: First, thick description of data that is analysed inductively; second, personal narratives are situated in the broader cultural context taking into account power relations; third, and similarly to Ellis, Adams, and Bochner (2011; 2014, 20), the research 'seeks to right ethical wrongs' (Stanley 2020, 10).

There is a long history of autoethnographic-like research, the term first being used by Hayano (1979) who defined it as an ethnographic study of a person's own people from inside a culture[14]. There are a myriad of different definitions and approaches to autoethnography. For example, Ellis, Adams, and Bochner (2011, 5) include a number of different practices under the banner of autoethnography as follows: Indigenous/native ethnographies, written by an insider of a culture; narrative ethnographies, which are stories combining the ethnographer's experience with stories of others; reflexive ethnographies, which 'document ways a researcher changes as a result of doing fieldwork'; and reflexive, dyadic interviews, interactive interviews and layered accounts, which combine the authors' experiences with analysis without privileging one over the other. Similarly, in his book *Interpretive Auto-ethnography* in which he sets an agenda for an 'interpretive performance autoethnography', Denzin (2014) includes seven different definitions of autoethnography. A commonality of all approaches to autoethnography is altruism. For example, the aim 'to produce analytical, accessible texts that change us and the world we live in for the better' (Ellis, Adams, and Bochner 2011), or, as Denzin (2014, 20) suggests, 'move audiences to action'. I too hope my

---

[14] For a detailed account of the historic development of autoethnography see Ellis and Bochner (2000, 739).

work will help to improve planning practice and contribute to planning theory by bringing these ideas on embodiment into practice and academic thought.

One commonality of criticisms of autoethnography is that they are primarily aimed at autoethnographers on the 'evocative' end of the spectrum I described above. For example, Delamont makes a distinction between autoethnography, which she defines as research 'where there is no object except the author herself to study', and 'critical autobiographical reflection upon fieldwork' (2009, 51). However, for many autoethnographers who do not explicitly subscribe to 'analytic autoethnography', the self is nevertheless used with the intent of 'gaining cultural understanding' (Chang 2008, 127). Further, Adams, Boylorn and Tillmann describe the process of doing autoethnography as 'toggling between our experiences and larger relational and social contexts and then creating micro (personal), meso (relational), and macro (structural) analyses and critiques' (2021, 5). Arguing that trying to delineate between what is and is not autoethnography is unhelpful, Crawley explains the contribution of feminism:

> An epistemological shift away from androcentric, boundary-specific methods that enforce traditional binaries—rational over emotional, authoritative voices over voices of the oppressed, public over private, transcendental truths over everyday experiences - toward refusing binaries - thought as rational and emotional, multiple views and truths, everyday private and public worlds (2012, 22).

I agree with Crawley (2012) that, from a feminist standpoint, evocative and analytical elements of ethnography can be used fruitfully together, allowing the researcher to provide insight into their subject matter while acknowledging the embodied and subjective researcher.

Autoethnography, which makes the experience of the researcher the subject of the research, is another way to access, explore and communicate about embodied, sensory experience in great depth. I chose to use autoethnography because the centring of the self allows inside knowledge into embodied experience, which I am not claiming (as critic Atkinson (1997) suggests auto-ethnographers do) is a more authentic form of knowledge, but rather one that I felt would allow me to develop more useful insights for planning in this project. This is for two reasons. First, as I engaged with the topic, I began to feel that before I could usefully study the experience of others I needed to better understand some of the issues to do with the complexity of human and non-human nature relationships, which involved

understanding my own relationship with non-human nature and how this related to my cultural context and life experiences. Second, given that my interest was in embodied experience, I began to see that it would be difficult to get this information from others, which is probably why autoethnography is often used by those studying obviously embodied activities; such studies include the sensory experiences of karate from the perspective of a refugee (Abooali 2022), adventure sports (Humberstone 2013; Humberstone 2011; Humberstone 2015; Collins, Brown, and Humberstone 2018), the experience of older women in yoga (Humberstone and Cutler-Riddick 2015), and distance running (Hockey 2004; Allen-Collinson and Hockey 2001; Hockey 2006). It would be challenging to get inside another's embodied experience in a research project; it would require them feeling connected to their embodied self (See chapter 2 for more on this), and having the language, or other expressive means, to communicate their experience (See Chadwick (2016) for more on this), and the desire and time to document their often daily personal activities. Then there would be the gap between what they were trying to express and how I would interpret their expression of it, as it is difficult to eloquently express embodied experience! It takes time and practice to become an embodied writer (Anderson 2001), as well as a level of comfort expressing these slippery experiences. Certainly, my in-depth interviews revealed these problems with expression and interpretation. I expand further on my research approach in the next sections.

Autoethnography has been used to conduct research of relevance to planning including: the framing of race and crime (Waymer 2009); place and memory (Creagh 2014); gentrification (Schlichtman and Patch 2014); skating, gender and urban space (Schlichtman and Patch 2014); place and identity (Lyle 2020); planning in 'marginalized communities of color in Los Angeles (LA)' (Villanueva 2020, 157); 'colonialism, immigration, embodiment, and belonging' (Ortiz-Vilarelle 2021, 307); walking as a way of knowing and (re)connecting to the body (Amoroso 2021); and, embodied experience of eviction due to gentrification (Bloch ahead-of-print Feb 2022). Further, autoethnography has been used in investigating human and nature relationships by Henne (2010) in combination with ethnography on firewood certification in Chile, and to argue for a multispecies autoethnography using the example of raising chickens in the garden (Gillespie 2021).

3.3 My approach: Sensory Autoethnography

Above I introduced sensory ethnography and autoethnography, the two research methodologies I found most useful in exploring embodied experience. Both spoke to my desire to be an embodied researcher, but neither seemed quite the right fit. I found that by using autoethnography as a methodology, but drawing on Pink's (2005) ideas on sensory experience, I was able to satisfy my need for an embodied research method suited to exploring human relationships with non-human nature. I call this approach 'sensory autoethnography' for the sake of brevity. Sensory autoethnography is a composite methodology, in which I have drawn on autoethnography and sensory ethnography (Pink 2009b). In this project, I draw on my experience and understanding of culture, informed, compared and interrogated by my experience on the road trip and participant observation carried out at Earthwise, and the literature I read from my undergraduate days through to this PhD. This literature covers a broad range of disciplines including planning; urban studies; environmental humanities, environmental history, ethics, education and criticism; cultural studies, and philosophy. Although focussing on my own experience, I include the voices of participants at Earthwise, placing my voice in relation to others in the context of my research (Humberstone 2011, 499). In the following sub-sections I first explain the importance of embodiment to the process and product of sensory autoethnography, and I then explain how I communicate the findings of my autoethnographic research. Finally, I explain the potential for sensory autoethnography in planning research.

3.3.1 Embodiment in sensory autoethnography

Embodiment is central to researching and writing a sensory autoethnography. Literature on autoethnography has a lot of information on how an autoethnography should be read, but rather less on the research process (Chang 2008). This is perhaps because, as mentioned in the section on autoethnography above, the processes of living life, research, analysis and writing an autoethnography are one and the same. This integrated process allows self-questioning, reflexivity, and even re-writing of identity for the author (See Ronai (1995)). However, I found I wanted more insight into how to make embodiment central to this process.

I found Anderson's (2001) work on embodied writing helpful in illuminating what research making embodied experience central would look like. Like Pink's directive to pay attention to the senses in the planning, undertaking and reporting of sensory ethnographic research, Anderson (2001, 2) writes that the researcher 'collects, analyzes, and reports findings fully intending to invite readers to encounter the narrative accounts for themselves and from within their own bodies through a form of sympathetic resonance'. In this way, embodied writing confirms humans' embeddedness in the places/spaces within which they live (Anderson 2001, 2). The process of embodied writing, as part of sensory autoethnography, can reveal different insights than other methods:

> The discipline of embodied writing tends to put the researcher in touch with the creativity of the body …
>
> seem[ingly] to magnify the contents or results of research. It is not simply that embodied writing allows a more effective communication of results that would have existed anyway. Rather, the use of this form of research has everything to do with what is learned and understood (Jay Dufrechou [personal communication, July 11, 2001] quoted in Anderson 2001, 15).

Similarly, Downing discusses how an embodied writing process enhances her ability as a scholar, helping crystalise her understanding of the personal and theoretical issues she studies:

> When my writing attempts are not firmly anchored in embodiment, I have a sense of these things drifting around me. On these occasions, the process of hauling words onto the page to make meaning can be painful. By contrast, when I write from an immersion in my body and mind, when the words emerge from my feeling, cognitive, and intuitive states, they often feel effortless. When I let them roll out, the understandings that develop arrive in me as though they've been there all along (Downing 2015, 2).

For me, this difference comes from enquiry informed by the wisdom of the embodied subject, a concept I introduced in the previous chapter.

Drawing on sensory ethnography, in this project attention to the senses provides understanding of embodied experience. Despite the critiques of the five sense model described above in Section 3.2, as I am from a Western culture, and I am the object of study,

I have adopted the five sense model in my discussion throughout this thesis, with one modification – I replaced the sense of touch with that of haptic sensations. The idea of haptic sensations expands the definition of touch from the limited notion of skin contact with an object to include a range of internally and externally felt sensations associated with touch and movement (Paterson 2009). Gibson's ground-breaking book *The Senses Considered as Perceptual Systems* (1966) provided insight into touch that 'proposed that animals actively seek information through exploratory movements' (Covarrubias et al. 2017). This was a departure from previous 'stimulus-response' theory in which the body was understood as passive while the brain was active in processing information (Costall 2017, 225). Gibson wrote that '[t]he observer who is awake and alert does not wait passively for stimuli to impinge upon his receptors' (Gibson 1966/1968, 32 quoted in Costall 2017, 225). Gibson's understanding of the haptic system includes kinaesthesia (sense of movement), proprioception (sense of bodily position), and the vestibular system (sense of balance) (Paterson 2009, 769-771). Gibson's approach challenged the Cartesian idea of the body as a passive object and recognised that our experience is embodied.[15] His approach seems to be compatible with Merleau-Ponty's (Merleau-Ponty 1962/2005, 173) notion of the senses as united in our embodied interactions with the world, described in the previous chapter. Haptic perception and Merleau-Ponty's (1962/2005) ideas on inter-subjectivity could also offer a way to extend Lund's idea that looking at bodily movement in the 'spacio-temporal context' could uncover 'a sensual body, the moving body that does not separate the senses but unites them through the act of being part of the surroundings' (2005, 41). Here, 'flesh of the world' (Merleau-Ponty 1968) can help us to conceive ourselves and our surroundings as different manifestations of the same basic stuff.

3.3.2 Place/space in sensory autoethnography

As described in Chapter 1, a relational understanding of place provides insight into how humans and more-than-humans co-become in relation to each-other. Relational ideas of place have been used in relation to research methodologies in sensory ethnography (Pink 2009, 2015), ethnography (Rose 2007) and indigenous methodologies (e.g. Bawaka Country

---

[15] However, it is apparently widely misinterpreted to do the opposite (Costall 2017; Covarrubias et al. 2017).

et al. 2015; Bawaka Country including Wright et al. 2016). Bawaka Country including Wright et al. (2016, 465) describe the emplaced experience of research as expanding to incorporate researcher's bringing their research back into institutions and the broader world. They write that

> place/space may be understood as more than living with(in) the physical landscape, it has a certain mobility; it is embodied and thus travels with the academic researchers as they return home (Bawaka Country including Wright et al. 2016, 465).

Through the Indigenous conception of time as non-linear they suggest 'a view of place/space which is both dynamic, always shifting toward an emergent and imagined future, and coherent, being reproduced and sustained through the practices and ways of knowing of past dwellings' (Country et al. 2016, 465). Also drawing on relational ideas of place/space, but stressing the role of the researcher, Pink draws on Massey's idea of place as '*spatio-temporal* events' (Massey 2005: 130, original italics) comprised of people and their stories so far, their interactions with each other and their surroundings, including non-human nature in developing the idea of 'ethnographic places' (Pink 2015, 38). Pink proposes that ethnographic places are created by the researcher as they communicate the findings of their research,

> intentionally pulling together theory, experiential knowing, discourses, and more, into a unique configuration of trajectories and then taking them with her or him as she or he moves forward and comes to know and understand in new ways. The challenge for ethnographers is to do this in such a way that also invites our audiences to imagine themselves into the places of others, while simultaneously invoking theoretical and practical points of meaning and learning, and be self-conscious about their own learning (Pink 2015, 49).

According to Pink (2015), the researcher does this by drawing on their memory and imagination. Like place-events, these 'ethnographic places' (and therefore knowledge 'created' by researchers) are temporal and open and dependent on the audience, the method of dissemination, future research, and so on. Pink argues that 'the challenge is to do this in such a way that invites our audiences to imagine themselves into the place of others while simultaneously invoking theoretical and practical points of meaning and learning' (Pink 2015, 49).

3.3.3 Communicating the findings of sensory autoethnography

In communicating the findings of sensory autoethnography, I follow Pink's (2015) lead in aiming to invite others to understand the experience studied. In my thesis I combine vignettes written in an embodied, evocative style with more traditional academic analysis. I chose to include a substantial amount of excerpts of evocative autoethnograpic writing in the finished product of my research because I see this kind of writing (Ellis and Bochner 2000, 744) as the perfect tool to challenge traditional social science research methods, which are the same suite of qualitative methods used in planning. Ellis and Bochner (2000, 744) describe how evocative narratives challenge a number of academic conventions. I have arranged their prose in the table below to more clearly show how it does this. The first column shows the features of evocative narratives and the following two columns show the contrast between the two types of research.

Table 3.1: Evocative narratives compared with traditional methods

Features of evocative narratives	Evocative narratives compared with traditional methods	
	Evocative narratives	**Traditional methods (e.g. ethnography)**
Written in first person	Researcher as subject	Separation between researcher and subject
Takes single case as subject	Generalisation within single case	Generalising across cases
Writing style similar to fiction or autobiography	Blurred boundary between social sciences and literature	Distinct boundary between social sciences and literature
Writing is accesible	Reader as co-participant	Reader as passive receiver
Details of the author's private life are included	Highlights emotional experience	Portrays social performance of rational actors
Does not abstract and explain	Focus is on journey Is ok with uncertainty	Focus is on destination Explains events keeping up illusions of scientific mastery and control
Contains eposodic portrayal of the ebb and flow of relationship experiences	Dramatizes the motion of connected lives across the curve of time	Portrays social life in snapshots

Source: Table adapted from Ellis and Bochner (2000, 744)

Embodied, evocative autoethnographic writing as part of a sensory autoethnography provides a way into the theory and discussion about the issues that I do not believe could be gained in another way. In terms of communication to an audience, it allows for expression of embodied emotions and answering emotions in the reader (Anderson 2001), meaning it has the ability to powerfully affect the reader and bring to life social issues. However, in this thesis I combine evocative writing with sections of analysis in the hope of producing research that is more accessible to my discipline, planning, and therefore more useful.[16] This approach also seems more suited to the subject matter, as mine is not a dramatic story (as those in the field of evocative ethnography tend to be) where the value of the text might lie in its therapeutic value (Ellis 1999). It is a low-key story of everyday interactions with non-human others, written by me, who, because of my background, was constantly linking experience to reading I was doing for the thesis, making the integration of the academic and personal feel authentic to me.

3.3.4 Sensory autoethnography and planning

Embodied methodologies such as my approach, sensory autoethnography, have much to offer the discipline of planning. These methodologies offer a way to challenge the dominant rational discourse of planning by presenting alternative voices, or counter narratives, to the dominant ones by those marginalised by planning (e.g. children, women, people of other races, the poor, queer, and non-able bodied) (Jabareen 2018; Uitermark and Nicholls 2015; Sandercock and Lyssiotis 2003). Additionally, unlike the modernist notion of the planner (or researcher) as expert, these methodologies require that researchers acknowledge their subjectivity (Etherington 2004), and be reflexive (Bochner 2000). In her article on windsurfing, Humberstone (2011, 495) argues that 'autoethnography may provide methodologies for understanding and analysing connections between personal embodied nature-based experiences, culture and nature'. I expand on this, suggesting that by exploring and representing relationships with non-human nature from an embodied perspective, sensory autoethnography has the potential to present a different relationship with nature to

---

[16] Interestingly, Ellis says a lot of her students do this because it is a pragmatic approach, making it more likely thesis examination will be positive (Ellis and Bochner 2000).

that of the dominant planning discourses, potentially suggesting different ways of thinking about, and planning for, human and non-human nature relationships.

3.4 Conclusion

In this chapter I first introduced the concept of embodied methodologies. I then explained the methodologies of sensory ethnography and autoethnography, which I found promising. Neither was quite the right fit for my research, but using autoethnography combined with Pink's (2009, 2015) ideas on data collection and dissemination, I found an approach that would work to meet my goal to be an embodied researcher. I called this approach 'sensory autoethnography'. In the penultimate section of this chapter, I introduced sensory autoethnography and explained how embodiment is foregrounded by the process and product. I explained how a modified five sense model including haptic sensations can provide insight into embodied experience as part of the methodology. I then laid out the reasoning behind my chosen style of communicating the findings of sensory autoethnography. Finally, I explained that I see sensory autoethnography as having potential to allow planning researchers to gain different insights as compared to traditional methods into human and non-human nature relationships. In the following chapter I tell the story of my research journey, detailing the settings and methods used to conduct my sensory autoethnographic research as well as the insights I gained into conducting embodied research.

Part 2: Research Settings, Methods and Findings

Chapter 4: Research Journey and Methods
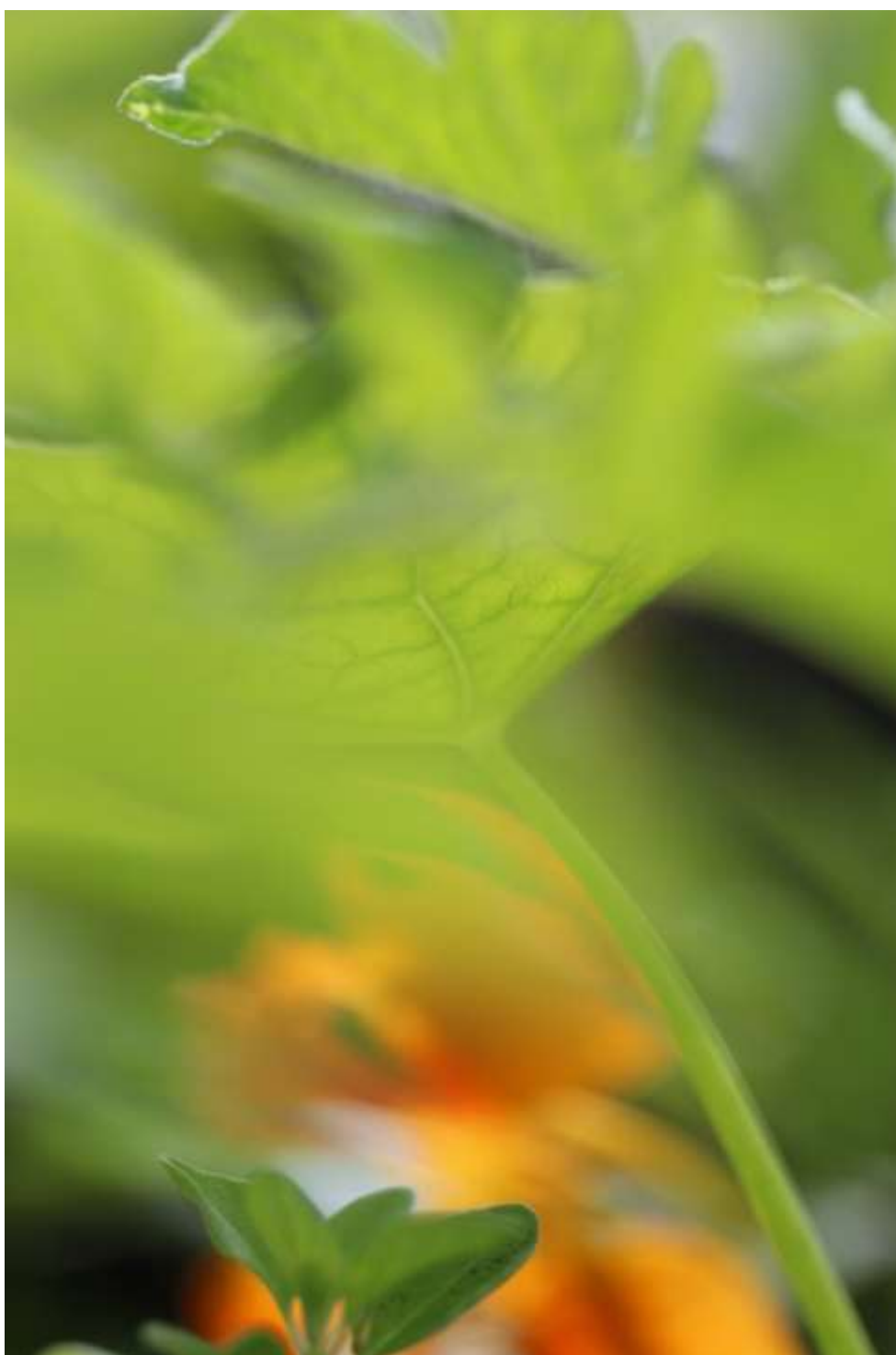
Figure 4.1 Nasturtiums at Earthwise , Subiaco, WA, 2014. Image by author.

I need to ground myself by doing a 3-minute breathing space meditation, I decide, before I become panicked. I move to the front of my chair, closed my eyes and bring my focus into myself. My mind is like it could fly away, legs are heavy, feet are unevenly balanced, with some toes tensed and pointing up, right on the outside of my right foot, hips sore deep inside the joint, my heart is racing, thoughts flit past 'PhD – what am I doing?! I'll never amount to anything. Nasturtiums. Why so many photographs of those. Maybe I can't do it. Yoga is soon can't be late. I'm already hungry – no snacking until after yoga.'

This is where I'm at – I try not to judge.

I bring my attention away from this to the feeling of my breathing inside my body, at my stomach, I notice the tension across my lower ribs and how shallowly my breath is drawing in – but even as I notice this I feel breath begin to adjust and myself return inwards and become calmer, then to encompass my whole body and feel the whole of me pulsing with life and my breath, and in a world filled with other things doing the same. I still don't really know what I should be doing, but I felt calmer.

I decide to start from images taken last week, then move to text, and then to images taken in the field-work, then back to text – or something like that. I begin to lay out the pile I took of the herb spiral trying to capture a feeling of something like reverence/awe/immersion/losing myself/junglesque feeling and warm, damp green light. I spread the images out and started to move them around. Throw some away; they were just not right – like (bad) nature photography for national geographic. Then I start arranging together those that capture this feeling the best. My mind shifts from an evaluation of the quality of images technically, to my response to them, to imagining other's response, to enjoying the ones I like. My favourites are a couple taken at very close range with one portion of a nasturtium flower in focus behind the surrounding leaves blurry warm, translucent, green.

Sensory autoethnographic research in progress – part 2, Perth, WA, October 2014

In this chapter I tell the story of my personal journey, intertwined with a description of the development and undertaking of this project. As well as describing the settings of the research and the methods I used, this chapter will help the reader navigate the rest of this thesis and to understand the context (both cultural and personal) of the vignettes of embodied writing that appear throughout. This project, initiated in 2013, will, by the time it is complete, have spanned nine years. It has been a constant thread through the changes in my life over this period which included taking a pro-active and more holistic approach to my own mental and physical health, moving interstate, and moving back, giving birth to, and raising, two children. From talking to other PhD students, I know that these sorts of endings, beginnings and transformations are not unusual; but in my case, these need to be included because of the autoethnographic nature of the PhD. However, I have focussed on the aspects of this story that relate most directly to the project's focus on embodiment and human relationships with non-human nature, and kept the details of personal relationships to a minimum, both out of respect for people involved, and because they are not directly relevant to my research question.

This chapter is one I would have loved to read as a student or researcher interested in embodied methodologies, because by talking about the details of what I did, the chapter helps to demystify the 'how' of sensory autoethnography as an embodied research method. This is important because as Chang (2008, 127) and Pink (2009b, 119) note about the methodologies of autoethnography and sensory ethnography respectively, methods of embodied research are not usually well explained. It also shows the messiness, intuitive nature, and potential for creativity involved in undertaking embodied methodologies (Pink 2009b, 119). I am not suggesting the chapter be used as a guide for others, but that reading the story of my research journey (and others like mine) could help empower others to find their own creative ways of undertaking embodied research methods, such as the photographic analysis described in the vignette above. This is particularly relevant because, as described in the previous chapter, sensory autoethnography is essentially a methodology I created from drawing on autoethnography and sensory ethnography, and one I suggest can be useful for planning research; therefore it is important to try and make it less 'methodologically nebulous' (Chang 2008, 127). As such, this chapter helps to make embodied methodologies accessible to planning researchers and practitioners.

The chapter is arranged in chronological order, with each part describing a portion of the entire research journey as follows:

4.1 The planning of the project, including identifying the overarching context for the project, the process of attaining candidacy, and how I made changes to my life-style that were related to the ideas from my PhD research (2013, Perth, WA).

4.2 The location of the first part of my research in an urban context, Earthwise community garden, and my approach to 'data collection' at Earthwise (2014 – 2015, Perth, Western Australia).

4.3 The analysis and interpretation of the data gathered at Earthwise outlining the early stages of analysis, how I used embodied writing as research, analysis and product, and how I used photography as research method and tool for analysis (2014, Perth, Western Australia).

4.4 The conception of the next part of the project on relationships with non-human nature outside the city (2014 – 2018, Perth, Western Australia and Darwin, Northern Teritory).

4.5 The second part of my research in the non-urban context on the road trip Perth to Darwin, providing the context for the trip and describing the journey we undertook, and outlining the data collection methods and data analysis process (2016 Perth, Western Australia and Darwin, Northern Teritory).

4.6 Relating the continuing process of analysis of my data and the writing up of the project and explaining how the embodied experience of becoming a mother informed my research (2017 – 2019, Darwin, Northern Territory; Perth, Western Australia; Sicily, Italy; and Koh Chang, Thailand).

4.1 Planning the project, attaining candidacy and making changes to my lifestyle, 2013, Perth, Western Australia

This section describes the journey from conceptualising the project proposal to beginning field work in a community garden over the year of 2013. First, I explain how my lived experience led me to become interested in embodiment and shaped the proposal. I then go on to describe why I came to see the inclusion of both urban and 'wild' settings as essential in exploring my topic, not only in the Perth, but also the global context of the Anthropocene as I discussed in the introductory chapter. Finally, I explain my focus on gardening, and in particular the choice of a community garden as the setting for my research in an urban setting.

In March 2013, I was accepted into the PhD program at Curtin University. Following the completion of my Honours thesis, which explored how public art influenced people's responses to non-human nature, I sought to further explore human relationships with non-human nature by focusing on embodied experience. The development of my ideas on the project grew in parallel to my lived experience and changing focus of my attention and actions in the world. I began making a conscious effort to change my lifestyle to one that focussed more on my physical and emotional health. The catalyst for this change was realising (or perhaps admitting) that I had issues with anxiety. The sense that something was wrong had been simmering away in my subconscious for a while, but emerged as fully developed thoughts during a holiday to Indonesia in the middle of 2013. The short story is that two things happened. The first was that I realised that my feelings of anxiety wouldn't simply be fixed by a holiday, and that this was something I wanted to deal with. Although I was highly functioning, anxiety was affecting my ability to enjoy and participate fully in my life. As I explored these issues, with the help of a counsellor, I realised that there wasn't a quick fix – my response had to be holistic. I became increasingly interested in leading a life that aligned more with my values. Although I had been aware for a while that, rather than focussing on worldly success, I wanted to focus on connections with other people (family, friends and community, but also the broader human world), and with non-human nature, I realised I had not given myself permission to take my wellbeing seriously, and this process provided me with the impetus to do so. The second was that I attended some classes at a nearby yoga studio. These happened to be Mysore classes, a physically intense form of yoga in which participants are taught one-on-one by an instructor a sequence of asanas (poses)

and then practise these daily at their own pace, with attention to the breath and bandhas (internal muscular locks of your abdomen). I wasn't sure if I loved or hated this kind of yoga, but I was hooked, and, in combination with the reading I was doing in preparation for submitting the candidacy for my PhD, it began a continuing process of reconnection with my body and sensory experience.

When I got back from this short trip to Indonesia in July 2013, as part of my newfound commitment to spending my energy on things I valued, I started volunteering at City Farm (a community garden near Perth City, WA). I was motivated by a desire to get back in touch with nature and my own physicality, and to be involved in and contribute to the community, fuelled by a feeling that I had surplus nurturing energy. Along with my yoga practice, this volunteering was a tangible manifestation of my resolve. I spent my time at City Farm in the nursery with the full-time staff member, helping her propagate seeds and raise seedlings for sale and planting in the garden. My personal involvement in a volunteer capacity at City Farm began to influence my ideas about my research project. Working in the nursery was calming, meditative, the tasks relaxing me into a sensuous experience of soil, seeds, and tiny plants. My own embodied experiences at City Farm caused me to become increasingly interested in the embodied interactions with non-human nature. They also led me to broaden the scope of my research from that of 'wilderness' areas that I had become interested in for my honours thesis, as described in the introduction, to include urban areas. My experiences at City Farm made me wonder if, rather than looking for connection to nature only in 'wild' settings such as Lake Ballard, which was the case study for my honours project, it might be equally interesting to think about our relationship to non-human nature in more mundane urban settings such as gardens or parks, where it is possible to interact with non-human nature in an embodied way as part of our everyday lives. The two settings of my autoethnographic research, described further below, reflect these two areas of interest.

I had intended to carry out the urban portion of my autoethnographic research while continuing to volunteer at Perth City Farm. I chose City Farm because, as well as the benefit of having established relationships there, I needed to bound the scope of exploration somehow. From my recent volunteering and childhood experiences, I already knew that gardening can provide a way for people like me, living in the city, to interact in an embodied way with non-human nature on a regular basis. However, I didn't have my own garden – just a paved courtyard with a row of magnolias along the back fence (and I was renting so I couldn't rip up the paving!). Therefore, it was not possible to do an autoethnographic project

on gardening at home. Like many people living in the city I needed to be involved in a community garden if I wanted to 'get my hands dirty'. I also wanted to explore the relationships of others to non-human nature, as my experience exists in a broader cultural context, and a community garden is an ideal place to do this. However, changes in the management and subsequently to the focus of City Farm, from being primarily a community space to one where it was of prime importance to make the farm productive, meant that I felt it would be better to try to find another urban community garden in which to pursue my research. The location I found, Earthwise community garden in Subiaco, is introduced below.

4.2 Researching nature in the urban context at Earthwise community garden, 2014 Perth, Western Australia

This section outlines the process of field work and volunteering at Earthwise community garden, which comprises the first part of my project looking at human and non-human nature relationships in an urban setting. In this section I first provide a description of the setting for my research at the Earthwise community garden and my involvement in it. Second, I outline my approach to field work at Earthwise and an account of the methods used, which were field notes, a journal, photography as record keeping, and in-depth interviews.

4.2.1 About Earthwise community garden and my involvement in it

I carried out the first part of my research at Earthwise community garden in Subiaco, WA. Subiaco is an established, well to do, leafy inner suburb, located 3.6 km from the GPO in Perth, the capital city of Western Australia, and accessible by train. Along with low- and medium-density residential development, Subiaco is home to a trendy main street-style strip of cafés, restaurants, entertainment venues and shops, as well as some civic, commercial, office and medical development. Earthwise is located a relaxed 10-minute walk from the train station, just off the main street, tucked between the local library, a primary school and a public park.

Figure 4.2: Earthwise viewed from the street, Subiaco, WA, February 2014. Image by author.

Figure 4.3: Part of the Earthwise garden, Subiaco, WA, February 2014. Image by author.

Earthwise is a not-for-profit organisation that aims to 'promote sustainable living practices through the principles of reducing consumption, re-using and recycling' (Earthwise n.d.-b). The part of the organisation that I was involved with was the community garden. Like City Farm, Earthwise was a place that allowed me to engage in an embodied way in non-human nature in the form of gardening. Additionally, as at City Farm, the community aspect meant I could study my own experience in relation to others. The Earthwise site consists of a hall and op-shop housed in a former church and set in a permaculture garden. All of these components are directed at encouraging people to change their lifestyle to consume less, but they also focus on social interaction and helping out people who are socially disadvantaged, aiming to create 'an open and interactive space that is safe and encouraging and offers a connecting point for people who may be short of confidence or short of cash' (Earthwise n.d.-b). The garden is accessible to the public at all hours.

The Earthwise organisation was established in 1991 by a group of people, including those still involved today, who were interested in recycling (Earthwise n.d.-a). Its initial function was as a recycling centre/op-shop. The permaculture garden, the part of Earthwise that I was involved in, 'was established in 1996 through a federal government scheme called LEAP' (Earthwise n.d.-a). Subsequent features were built by people working at Earthwise as part of the 'Work for the Dole' scheme (a project that requires unemployed people receiving government benefits to participate in unpaid work in order to continue receiving benefits) (Earthwise n.d.-a). Most of the work in the garden is done during the 'busy bee' sessions held every Friday, which are followed by lunch for volunteers. As well as the Friday 'busy bees', the paths are swept and plants hand watered (in the summer months) during the week by volunteers. In addition to the garden, Earthwise also runs a low-cost food centre and cheap lunch every Thursday and monthly music jam sessions. The organisation also runs and helps to host various workshops throughout the year. During my time at Earthwise I observed that, although it certainly has recycling as a focus, the current ethos appears to be about sustainability more generally (including social sustainability). It is also clear from working with one of the founders that her passion is recycling and reusing things – this includes reusing household or industrial objects, which could be for example turned into materials for making raised garden beds, and leftover food and other scraps, which can be used for worm fodder or compost.

Although Earthwise is not a religious organisation, its founders are connected to the Uniting Church and the Church owns the building that the Earthwise centre and op-shop are located

in, and the land that the gardens are located on. The church does not charge Earthwise for its use, but Earthwise pays all upkeep costs. The centre is available for hire, and Earthwise keeps the profits from this. As well as the funds from the venue hire, Earthwise uses money from op-shop sales, fundraising and regular grants it receives to help with repairs, to purchase materials and to support specific projects. The hall building on the property also houses TEAR, a Christian not-for-profit organisation that allocates and helps manage funding to aid organisations overseas and also has a local component related to social sustainability (TEAR n.d.). TEAR staff told me they chose to locate at Earthwise because they felt the ethos was a good match their organisation's values.

I participated in activities at Earthwise over a period of 10 months in 2014. My involvement at Earthwise began in January 2014 and lasted until December 2015 and included an initial period in which I formally interviewed other participants throughout 2014. As I noted in the previous chapter, in an autoethnographic project, the lived experience of the researcher is data, so there is not a discrete data collection phase, instead it is ongoing throughout the life of the project and can include memories preceding the project.

My participation at Earthwise mainly consisted of attending the Friday busy bees held weekly from 9-12, followed by a communal lunch for the workers. In addition to these busy bees, I sometimes came in on other days to water if requested by Peg, a founder of Earthwise and the heart and soul of the space, to work on the garden, or revisit the space during analysis of my data. The Friday busy bees are when the majority of the maintenance and improvements to the garden are carried out. Anyone can attend these and can participate in the weekly tasks, and regular attendees are welcome to initiate projects of their own. The garden operates in an egalitarian way – if someone has an idea, they are free to try it out (within reason – it would need to be in keeping with the ethos of the place, not destroy existing trees or infrastructure, use existing resources and be safe). Bigger projects involving buying materials or equipment, building or removing large trees would need agreement from the Earthwise committee. For this reason, Peg was more than happy for me to carry out a project or modify the garden as part of my research project. She was also happy to do so because there is always a shortage of committed long-term gardeners, so it can be challenging to get bigger tasks done.

Figure 4.4: The author helping to cut down a tree, Earthwise, WA, June 2014. Image by anonymous.

Throughout my time at Earthwise I observed or participated in a range of tasks:

Weekly tasks:

- Collecting coffee and paper to feed the worms
- Feeding the worms (with coffee, paper and scraps from the day-care next door, and every second week, from discarded fruit and vegetables from a nearby grocer)
- Hand watering
- Raking or sweeping paths

Other common tasks:

- Weeding
- Mulching
- Pruning
- Planting annuals
- Compost maintenance or making

On-off activities usually led or carried out by one person:

- Restructuring or restoring garden beds
- Repairing a dragon sculpture made by a local artist from recycled materials which was hanging in the Eucalyptus tree in the front section of the garden
- Making bird baths
- Making planters
- Planting succulent in pots for sale at markets
- Maintenance or installation of reticulation
- Demonstrations of worm farming or composting
- Removing unwanted trees

I spent a lot of my time at Earthwise on the restoration and restructuring of a section of garden bed in the back section of the garden. This was my project, in the sense that I planned and kept decision-making power over the project and was involved in all of the execution and maintenance of the space during my time there. I also purchased plants for the space. The project included designing the garden for the space, clearing the space of an invasive plant, a tree the Earthwise committee wanted to see removed, and many weeds, pruning, digging up tires that had been used as fill to raise the ground (these are

now thought to be polluting for ground intended for growing food), putting in place paths and borders for the beds, building a herb spiral, and planting a native garden.

4.2.2 My approach to 'data collection' at Earthwise

In carrying out my 'sensory autoethnographic' research, I drew on a variety of qualitative research methods from autoethnography, ethnography and sensory ethnography. In this section I describe the methods used to gather this data in turn as follows:

<u>Field notes</u>

Throughout the time I was involved at Earthwise, I kept field notes, both written and visual, where I recorded daily events. I chose to keep field notes because the recording of observations in the form of field notes and journals is an intrinsic part of ethnographic research (Angrosino 2007), allowing researchers to record descriptions of the 'settings, interactions and people present, as well as their own interpretation of what is going on' (Nicholls, Mills, and Kotecha 2014). The field notes also served the purpose of providing a basis for the embodied writing included in the thesis.

The field notes included:

- What activities were carried out by participants in my research (and when they arrived and departed)
- Detailed notes of the activities I was involved in or witnessed with attention to senses.

The following excerpt from my field notes is about the process of building a herb spiral from sections of discarded Jarrah tree trunk found in the garden. This excerpt provides an example of how my field notes looked, including showing how I tried to recall embodied, sensory experience, which I discuss further below.

Figure 4.5: 'My' garden before intervention, Earthwise, WA, March 2014. Image by author.

Figure 4.6: The herb spiral and some native planting in 'my' garden once established, Earthwise, WA, October 2014. Image by author.

> Field Notes June 2014
>
> The logs are heavy, and it takes me my whole body strength to put them in place. Most of the digging in I do by hand, then roll the logs in check for height then roll back out and dig or fill more. (Note again the texture of wood explored as lifting).
>
> Much of today was 'flow' time (Csikszentmihalyi 1991) (why this and not other activities?).
>
> No gloves – feeling of dirt, and I can tell the quality (texture, loamy smell) of the soil – rich and full of the decomposed wood and other organic matter.
>
> Then the uncomfortable feeling of it drying and pulling the skin tight and hardening under my nails. A relief to put my hand under running water and feel it wash away and the skin absorbing moisture, although I know when they are dry, they will feel tight and dry again.

When I was writing about my own experience in the field notes, I tried to recall my embodied experience of the activity. I used the five sense model introduced in Chapter 2 as a prompt to help me more fully describe my embodied experiences. As I was writing, I asked myself what I recalled about haptic sensations (including touch), taste, sight, sound and smell, that I could include to bring alive my visceral experiences in the garden. This initial writing sometimes formed the beginning of attempts at embodied writing. I found the process of writing field notes to be time consuming and challenging. Often after the physically challenging and embodied process of gardening, the task of detailing my time in the garden felt tedious. I also found myself unsure of whether the aspects I was writing about were those that were most important and wondered whether I was paying attention to the 'right' things as described in the journal entry below.

PhD journal entry on writing field notes, March 2013

Finding it really hard to write field notes. It takes soooo long to write them – only been 2 weeks so far I guess, but this week I was so tired on Friday that I went home and sat down to write my notes but then couldn't face it so went for a nap. Frankly I've been avoiding doing it, but also I was very exhausted and had some personal issues going on this weekend too. Maybe partly I am just tired and don't want to engage. But If I found it really interesting wouldn't I want to regardless? The idea of recounting everything word for word or action by action is so frustrating and time consuming, the more I write the more the details come back so the more I have still to write. By the time I get to the good bits I am so over it I don't want to write about them! But I have to. Maybe I should start with these instead? Apparently there are 2 ways to do anthropology – just focus on what's interesting or take really detailed field notes. Both equally valid. By the time I have spent a whole day in the garden I feel like I have already lived it and I don't want to write about it. Also, what to write about, what not to? Can't possible write everything.

Looking back at my field notes I notice that in the beginning of the project I spent a lot of time detailing social/political aspects of the day, which I often found either interesting or challenging or both, but which ultimately didn't fit the focus of my PhD (although a very interesting thesis could be done on the politics of environmental organisations!). The notes became more aligned with my research topic as I settled into the garden and progressed with the project in 'my' garden. I became less self-conscious about what I chose to write about and included more descriptions of sensory experience combined with reflection on that experience. These notes ended up forming a rich enough account that, combined with my memory of the process were used as the starting points for embodied writing.

Journal

I also kept a journal where, along with the more mundane aspects of organisation and planning of the project, I reflected on the research process and experimented with narrative styles and creative writing. The journal included:

- Notes, thoughts, and observations about the fieldwork and my role as a researcher
- Reflections on the methodology and data collection process
- Notes on fieldwork in relation to theory I was reading about
- Personal reflections on my life in parallel to the research and exploratory writing about ideas.
-

Downing (2015, 2) describes how the journal can offer a safe space for expressing and experimenting with ideas:

I turned to it to write responses to texts and journal articles I was interacting with, for exploring kernels of ideas, developing slender thoughts, delving into intuitive hunches and feeling states, experimenting with creativity through poetry, and wrestling with difficulty.

My journal provided an exploratory space to organise my project and to document my thought processes and developing ideas. For example, in the excerpt from my journal below from 2019 I write about my developing ideas on how embodiment is relevant to planning.

PhD journal entry on embodied planners, March 2013

Planners need to connect to their embodied selves – this would entail thinking about what it is to be a planner in a totally different way to prevailing culture. Love and connection to self is pre-curser to love and connection with others (love is a word used in feminist theory, e.g. bell hooks, Winnie Tomm, and I have also read one article on this concept in planning).

I found the journal to be an important part of the research process because it was useful for working through the academic literature and linking this to my research. Writing in my journal I felt less constrained by academic protocols and able to make bolder statements which I was able work on further if I thought they held promise. It also offered an important space where I could express the emotional aspects of research process, as well as how my

life and study intersected. For example, in the excerpt below I write about how the process of growing and changing as a person is mixed up with the research process.

PhD journal entry on embodied research, August 2013

One thing that's clear is that I am inseparable from my research process. My self-examination in other areas of my life is part of this, (but not officially…?) On this, I wrote myself a note last week in which I said:

If I am part of nature, then thinking about getting in touch with my own embodied experience, whole self, physical and in the moment self, etc., is actually the same as reconnecting with nature. Unless I can feel myself as a living thing and be aware of my surroundings, I can never connect with other parts of nature. Like the mind body thing – If I think of my mind as being the owner of my body (which I think I have done until recently) I can do what I like to my body to fulfil the wishes of my mind, but if I have a sense of myself –and I can't really express this properly - -- but as being a creature as a whole, with thoughts, feelings and physical stuff so intertwined/mingled I can't separate them, then I need to be much more compassionate to myself – in all respects. I don't mean this in a naf kind of my body is a temple blah blah blah way, but something else – I can't explain it yet. But something has been shifting in me, and I started to change the way I think about myself, without even noticing it. Anyway, the implication of this is that the two things I have been thinking about, are intimately connected – for me at least, I'm not sure how this relates to others.

I also found the journal useful as a space to start writing when working on the thesis itself felt too overwhelming.

Photography as record keeping

I had initially intended to incorporate visual anthropology techniques (see Pink 2001, 2007), but in practice I found it to be impractical to use photography in the garden (it's difficult to take photographs and be a useful participant in garden activities at the same time). I also felt

that in most situations it placed a barrier between the other participants and myself. I recorded this in my journal as follows:

PhD journal entry on using photography as method, March 2013

Taking pics - when to stop and do this? It interrupts the flow of work and what I am doing. Sometimes I just forget, other times I might not feel comfortable. When did I do it? Creeper – but just me and P1, and clearing garden bed, but seemed more social plus included P3 who I felt would be super-fine with doing it. How to proceed?

However, I did find images a useful prompt for remembering the activities of each day, and I did want to record the progress of my restoration of the garden bed. So I opted for using photography as a form of record keeping, and generally did so at the end of the session, or with the permission of participants who seemed to best understand the project, and who did not mind being photographed. Additionally, members of Earthwise used photography to document activities, including those I was involved in, and posted these on Facebook.

In depth interviews

Because my second research objective was to explore how people think and feel about, and behave towards, non-human nature, I chose to use in depth interviews to try to gain insight into participants' inner worlds as well as the social contexts they operate in (Yeo et al. 2014, 180).The inclusion of the perspectives of others in my research fits with my research approach, described in Chapter 3, in which I aimed to gain insight into culture (Chang 2008) through self-exploration, along with more traditional analysis and links to theory. This approach to gaining insight into culture through autoethnography can mean analysing the experience of others alongside the self (Humberstone 2011) in the broader cultural context.

I conducted six in-depth interviews between July and September of 2014, by which time I had been at Earthwise long enough to develop a rapport with the participants. Interviews were conducted at a location of the participants' choice - all participants suggested either
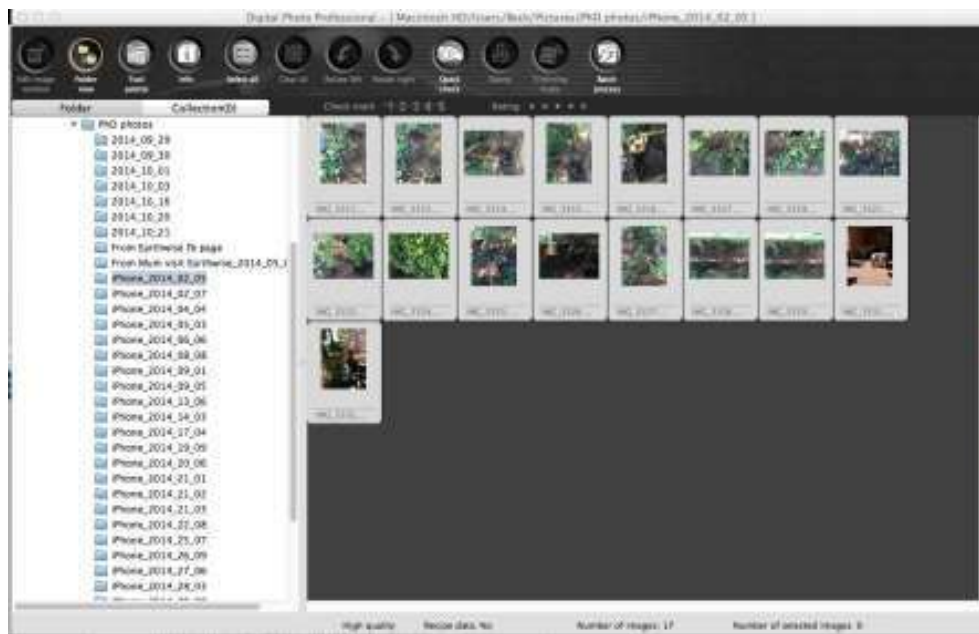
Figure 4.7: Images as record keeping, Perth, WA, 2014. Image by author.

Earthwise or a local coffee shop. The interviews were semi-structured, in that I aimed to cover the following three topics while remaining flexible and open to other themes:

Topic 1: Involvement in projects in urban nature settings

- What it mean to be involved in Earthwise? This may include practical involvement (for example: tasks undertaken, time commitments and relationships or community building), emotional/spiritual aspects, or aspects related to political or activist goals.

Topic 2: Relationships with nature

- How do participants see their relationship to nature? Both in general, and in regard to their involvement in Earthwise.

Topic 3: Embodied and sensory experience

- Establish what participants see as the importance of sensory experience to their work at Earthwise and to their relationship with non-human nature.

A full interview schedule is included in Appendix 1. During the interviews I aimed to be reflexive and responsive, employing active listening techniques to try to understand the speakers' meanings as well as the subtext of their statements (Yeo et al. 2014, 184). When it felt necessary, I asked probing questions as suggested by Yeo et al. (2014, 184) to encourage participants to expand on their responses, further explain or clarify a statement, understand the 'impacts, effects, or consequences', or, give more insight into their opinions and values (especially regarding nature). With the participants' permission, I audio-recorded the interviews using the voice memo function on my phone. During the interviews I took selected notes when I felt it did not interfere with the interview process (Halcomb and Davidson 2006, 42), which I then expanded on in my reflective notes. Immediately following each interview, I wrote reflective notes on how I went as an interviewer, and the major themes and concepts I picked up from the interview and any relationships between these and theory I immediately noted (Halcomb and Davidson 2006, 42). However, I did not return to analyse the interviews until early 2019, when I revisited them to add depth to Chapters 5 and 6, which explore relationships to non-human nature. I have described this process in Section 6 of this chapter.

4.3 Analysis and interpretation of the data collected during my time at Earthwise, 2014 – 2018, Perth, Western Australia and Darwin, NT

This section describes the process of the analysis and interpretation of the data I collected during my time at Earthwise, excluding the in-depth interviews, which are analysed later and address in section 6. This analysis took place alongside the research and writing up over the years 2014-2018. I adopt Chang's definition of data analysis from her book *Autoethnography as Method*. She describes the process of analysis and interpretation for autoethnographers as taking their experiences (data) and 'transforming them into text with culturally meaningful explanations' (2008, 126). However, Pink stresses that analysis is not separate from the embodied experience of the research process; as such, 'ethnographic places' that are the outcome of analysis and interpretation of ethnographic work 'are events that involve the strange combination and interweaving of memory, imagination, embodied experience, socialities, theory, power relations and more' (Pink 2009b, 120). Further, Chang (2008, 127), describes the analysis process as 'methodologically nebulous to describe' as it is not well documented in existing autoethnographic work, relies on the intuition of the researcher, and often happens simultaneously to data collection because the data is the researchers' lived experience, so it would be impossible not to bring an analytical and interpretive mind to it in the process. Pink (2009b) notes a similar lack of distinction between data collection and analysis for researchers using sensory ethnography. She also notes that it is uncommon for sensory ethnography researchers to document their analysis process. She says this 'implies that the analysis of experiential, imaginative, sensorial and emotional dimensions of ethnography is itself often an intuitive, messy and sometimes serendipitous task' (Pink 2009b). So, while the process of analysis I used can be 'understood as a way of knowing' happening throughout the 'knowledge production process' (Pink 2009b, 119-120), this is almost impossible to describe in a discrete 'analysis' section. It is also difficult to distinguish between analysis (sorting the data), and interpretation (linking it to a socio-cultural context) because the two often occur simultaneously and are difficult to describe as separate processes (Chang 2008, 127). Writing specifically of doctoral research, Throne writes that:

Procedures for data collection for self-as-subject research at the doctoral level can be a challenge to articulate due to the liminality and nuance between data collection and data analysis. More importantly, the delineation between data collection and analysis in self-as-subject research can also be blurred as analysis may commence within data collection and can be further complicated by researcher participant observations of self during these research phases (Gorichanaz, 2017) whereas in more conventional methods of research of human subjects at the doctoral level, data collection is closed prior to analyses, which allows systematic steps to be articulated within a doctoral research proposal.(2019, 14)

This was the case with my project, where interpretation, the process of linking my research together with the cultural context and theory, was ongoing throughout the project.

Although it is difficult to formally define the boundaries of the analysis of the data, in this section I describe what Pink describes as 'points in the research where there are particularly intense and systematic treatments of research materials – interview transcripts, video, photographs, notes, and memories and imaginaries' (2009b, 120), in which I tried to 'to impose an order on and deduce patterns' from my recorded experiences. Both Chang (2008) and Pink (2009b) note that it is not possible to set out a framework for analysis of autoethnography and sensory ethnography respectively. However, both offer some suggestions, which I drew on, along with the suggestions on carrying out autoethnography of Ellis (2000), and Ellis, Adams and Bochner (2011), the suggestions of Pink (2011) on using photographs, as well as my own intuition and imagination.

I have broken this section down into four subsections where I describe the major aspects of analysis and interpretation process of the data as follows: i) the early stages of analysis involving making sense of the data by coding by topics and themes, ii) the embodied writing as research, analysis and text, iii) and photography as research, analysis and text.

4.3.1 The early stages of analysis – making sense of the data by coding by topics and themes

First, I did a stocktake of the 'data' I had gathered; this comprised field notes (including practical things like the diagrams I used in planning 'my' garden) both written and

visual, a journal, interviews and reflective notes on these, and photographs. I also had some pieces of evocative autoethnographic writing in various stages of completeness. For example, a draft of the text that I open the thesis with follows:

Walking through the grass I run my hands through it, the seeds rustling of the seeds hitting my hands and each other. The outside of each is soft with two long bristles protruding; these tickle my palms, wrists and the backs of my hands. It's warm late spring and I feel lazy. Soon the grass will die and turn pale yellow/sand/cream and the stems will be dried and hollow and the seeds noisy in the wind. Come summer the dry grass will need to be cut to prevent fire.

But now, the grass is lush and vivid green and almost as tall as me. Sitting down I'm completely hidden in a circle of flattened grass. The best space is made by laying the grass down in the same direction, dropping and rolling, pushing the grass down from the base so it lays flat until the space is big enough. The sweet-earthy-grassy?-how do you describe the smell of grass? smell already surrounding me gets stronger as the grass is bruised. Lying in this space, the world is the grass and the sky. Rolling on my tummy, the world is all grass. From a distance the sloping field of grass looks like a continuous unbroken --- thing—sea-sky-expanse- but here in the grassy room I can see there are spaces between the blades, where they and each grows up from the damp earth —how?

The earth emanates damp and warmth at the dimly lit base of the grass. Today I'm by myself, but these spaces carved in the tall grass —something frame many of my summer interactions/what? I don't know. My friends and I talk about when we will move to the city in a haze of boredom and lethargy in other grass-rooms while picking apart these blades/stems/?of grass.

<div align="right">Draft of embodied evocative writing, Perth, WA, October 2014</div>

I then used various strategies to try to find some meaning in relation to my research question, my experiences and theory. One strategy I used in my analysis is what is called 'open coding' (Corbin and Strauss 2008, 163). This is described by Chang (2008, 128) as 'fracturing' the data. As suggested by Chang (2008, 132) I looked for repetition of subjects in relation to my ideas and activities in the data with the intent of finding themes. I also looked for cultural themes (Chang 2008, 132) in relation to my research question about human relationships with nature. I marked these in the text (in the case of field notes) or on each photo, using post-it notes in the case of photos. I could also have coded both text and photos digitally using software designed for coding such as NVivo; however, I found that working with hard copies rather than digital ones was much easier for me, especially with photographs, because it allowed me to physically experiment with different thematic arrangements. It was also feasible given the small dataset. Once I had the themes I reviewed the data relating to each theme, then I re-reviewed the data by set. I did this again, a few years later, when I had my second set of data on the trip Perth-Darwin, as described in part 5 of this chapter. Of course, as flagged by Chang (2008, 127), I had inevitably already started the process of analysis as I conducted my fieldwork, and some themes had already been nagging at me as I conducted my embodied research in parallel to my reading. Some, however, were new and unexpected.

Along with the coding the data by topic and searching for cultural themes, I used another strategy suggested by Chang (2008, 134) for autoethnographers, which is to 'connect the past with the present'. In the process of carrying out my research I have done considerable thinking about how my life to date has informed and developed my relationship with and understanding of non-human nature. I also made an effort to 'analyze relationships between self and others' (Chang 2008, 134), looking for people who share a common identity with me, and those who have 'different sets of values and identities' (Chang 2008, 134). The in-depth interviews, which I described previously, provided a useful insight into this. In reflecting on my changing understanding of human and nature experiences and those of people I interacted with, both personally, professionally and at Earthwise, along with my reading, I was able to reflect on 'communities of similarity and those of difference' (Chang 2008, 134).

This process left me with my data coded themes as follows:

- Sensory experience
- Guilt, non-belonging, and native plants
- Links to childhood/past experiences and sensation as a trigger for memory
- Positive emotions (awe, happiness, relaxation, joy)

- Attachment, possession through continued care/association, sense of stewardship

4.3.2 Embodied writing as research, analysis and text

I then selected the events from my field notes which seemed to relate the most to each theme. I worked back into my field notes, using 'emotional recall' (Ellis 1999, 675) to construct a piece of embodied, evocative, autoethnographic writing on the theme, using 'aesthetic and evocative' and 'thick' descriptions of personal and interpersonal experience (Ellis, Adams, and Bochner 2011, 4) to attempt to bring the reader into my embodied experience. Pink (2009b, 121) suggests using data, such as field notes and visual materials, as memory aids to find a way back into the space of the fieldwork; she suggests that 'research materials can be used as prompts that help to evoke the memories and imaginations of the research, thus enabling us to re-encounter the sensorial and emotional reality of research situations.' In a slightly different, but similar approach, Ellis (1999, 675) describes a technique called 'emotional recall' when writing auto ethnography, where she imagines being in the situation 'emotionally and physically'. Talking to a student in an autoethnographic paper, she suggests that 'if you can revisit the scene emotionally, then you remember other details' (1999, 675). She also argues that to write a good autoethnography, autoethnographers need to move between 'emotional recall' and emotional detachment (from inside to outside the experience) in order to produce the work yet analyse 'from a cultural perspective'. Similarly, Chang (2008) describes moving between the position of 'insider to outsider' in writing and analysis. Talking specifically about sensuous, or embodied, research, Stoller (1997, XI) suggests that ethnographers should switch back and forth between analysis and sensuous, which I understand to mean more instinctive, felt, scholarship. One of the ways I found I was able to tell if I found my way into a space of emotional recall was to check in with my embodied experience – were my bodily sensations mirroring the emotion in what I was writing about? For example, if I was writing about anxiety, did I feel my posture stiffen and my breathing quicken? If I was writing about awe, did I start to breathe more expansively and flex my toes? Luckily for me, I was not writing about experiences of trauma, as many evocative autoethnographers are; otherwise this embodied experience would be very unpleasant – effectively meaning the writer re-lived their painful experiences. This is also one of the reasons autoethnography can be therapeutic, and also a reason why autoethnography may not be suitable for everyone (see Ellis, Adams and Bochner (2011) for more on this).

I found the emotional recall technique helpful in writing about both my recent experiences and those that were linked to my research from my past. I combined this idea with that of Pink (2009b, 121) of using the research 'data'/artefacts as prompts. For example, in writing about my memories of playing in tall grass as a child (which opens chapter 1), prompted by the themes I discovered through writing and photographic enquiry, I took a piece of this same kind of grass to my study, where through my sensory interaction with it – the smell of the crushed stem, the softness of the casing of the seeds against my fingertips – I was transported back to my time in the country as a child. This included a physical and emotional recall of the sense of lethargy of lying in the sun, the feel of the damp earth, the smell of soil and crushed grass, and the ambivalence and boredom I felt about living in a small town after spending my early childhood in the city.

4.3.3 Photography as research method, analysis and text

I then used photography as a method to try to explore and better understand each theme. The process was not so much about the quality of the photographs, but what it was I paid attention to and found myself wanting to communicate in the photographs. I took photographs of the garden the days when there was no-one there, in the warmth of late spring afternoons. Being alone in the space of my garden and exploring it with camera in hand and my research question and the rest of my 'data' in mind produced a contemplative space where time seemed slow, and my mind wandered between my childhood experiences in nature, my experiences at Earthwise so far, and my current embodied enjoyment of being alone in the tranquil space. These photography sessions were a kind of analysis in themselves. I then did a second round of sorting of the printed photographs according to how they supported the existing themes. The use of the photographic sorting emphasised the role of childhood experience and memory and bought forward more clearly the positive emotions that resulted from spending time in the garden, such as happiness and awe. I then worked these new understandings back into my embodied writing, which is used mostly in Chapters 5 and 7. The pieces of evocative autoethnographic writing then became a new set of data which I reviewed again when I came to do the analysis of the road trip data.

4.4 Writing up and conceiving part 2 of the project, 2015, Perth, WA

This short section describes the conception of part two of the project and data analysis. The beginning of 2015 was marked by a time of personal upheaval, during which I took a leave of absence and focussed on teaching and myself, returning to my PhD in July 2015 after a holiday to visit friends in Darwin in the Northern Territory. While in Darwin, I conceived the idea that I should take a road trip up the coast from Perth to Darwin to explore my relationships with non-human nature in a non-urban setting to respond to the 'wilderness' aspect of my research. Although I grew up in the city, my earliest and some of my best memories are of places on the WA coast north of Perth - Kalbarri, Monkey Mia, and Exmouth. But I had not been past Exmouth and it had always been a dream of mine to undertake this trip.

In the latter part of the year, I worked on my background chapters, further exploring notions of 'nature' in the literature, as well as working out how my personal story connected to the research. As part of this process, I constructed a timeline using pastels, paint, and pencils on three layers of drawing and tracing paper. The first layer (a section of which is pictured below) showed the natural places/spaces where I felt connected with non-human nature throughout my life. Each place/space was represented by a green or orange line in paint or pastel. The width of the line illustrating the depth of sense of connectedness. The second layer mapped my changing attitudes towards nature over time, and more recently the literature I was engaging with. The final layer showed the personal events that might have helped shaped my attitudes to self and non-human nature. The resulting timeline was a three-metre-long representation of my relationship to self, nature, and the world, over the 30ish years of my life that snaked across the dining room walls of my house by Christmas Eve.

In my journal I wrote about this process:

Figure 4.8: A portion of one layer of the timeline (showing connections to natural places/spaces) each place/space represented by a shade of green or orange, Perth, WA, October 2014. Image by author.

PhD Journal entry on working out my own connection to natural places/spaces over time, Perth, December 2015

Fell asleep thinking about my PhD – imagining a timeline of serpentine lines representing the threads of my life. I realised this morning as I started working on it that the connections I make to places are strongest where I felt connection to non-human nature. These connections don't go away, they are still there when I return to these places. This morning I started recording significant personal events, these included people and mostly, recently, things to do with yoga et al. Then stuff associated with mind-body. Next I will note what theory I was reading and what ideas I was thinking about and see how all these layers fit together.

This process was an effective tool as part of autoethnographic analysis to 'connect the past with the present' (2008, 134).

4.5 Researching nature in the non-urban context of a road trip Perth, Western Australia – Darwin, Northern Territory, 2016

This section describes a road trip I undertook from Perth, Western Australia to Darwin, Northern Territory, over seven weeks in February - March 2016 to explore human relationships with non-human nature in a non-urban context. First, I set the context for the research by describing the places we visited on our journey for those unfamiliar with the Western Australia. I then go on to describe the data collection methods of field notes, journal and embodied writing. Finally, I outline the process of data analysis.

4.5.1 Context for the trip Perth - Darwin

In early 2016 I spent seven weeks driving 4000km up the coast from Perth to Darwin (from 12 February 2016 to 1 April 2016). When I set off my heart soared and my mind and my body felt light, the road ahead hinting at endless possibilities. The extreme heat and sparse population means that it is necessary to travel prepared with fuel, food, and especially with enough water, 5 litres per day per person, to survive desert conditions should something unexpected happen. My friend Lottie accompanied me on the trip. Occasionally I meet someone I know is a soul friend. These are people who can come and go in physical presence from my life, but with whom I remain connected regardless; they are people who see right into the heart of me and love me as I am. Such is Lottie: Lottie is from England and was staying in Australia on a working holiday with a friend in 2015. Imagining myself newly arrived in a strange land, I offered to take her on a road trip to see some of the beautiful beaches in south west WA. Eight hours of driving and talking later, without a pause to catch a breath, I knew Lottie was one of these soul friends. In the following months we spent lots of time together and I enjoyed seeing all my favourite local places through her eyes. Although I had intended, and wanted, to do the trip Perth to Darwin alone, I saw her eyes light up when I explained my plans, and I found myself asking her if she wanted to join me. She did! So you will find the occasional reference to her in my writing on the trip. Sharing the journey with her no doubt changed its course, and for the best. Seeing things through her eyes doubled the pleasure of them, or provided an interesting contrast to my own perceptions on the trip. In this section describe the route we took and include a map and photographs to provide some context. Further images are included throughout the thesis.

We left Perth and travelled north along the spectacular Indian Ocean coastline along the Great Ocean Drive through coastal dune systems viewed from the car as hills of green with white sand blow-outs that looked like marshmallow of sand thrown randomly on top. Our first stop was Cervantes, 200km north of Perth, a small coastal fishing town of around 500 people (Australian Bureau of Statistics 2016b) with white sand beaches, which we chose as an easy start to settle into the camping routine. We then drove along the North West Coastal Highway through Kalbarri to Kalbarri National Park, 500km north of Perth. The Kalbarri National Park, which is situated in traditional lands of the Nanda people and includes many sites of significance to the Indigenous people, covers 183,004ha and includes coastal sandstone cliffs that have been shaped by the ocean into fantastic spiky shapes, as well as rangelands and sandplains (Department of Parks and Wildlife 2015, 4). The National

Figure 4.9: Map showing the main stops on the road trip North from Perth, WA - Darwin, NT, 2016. (Google Earth 2022)

Park is dissected by the Murchison River, which has carved its way through red and white striped Tumblagooda Sandstone, 'deposited millions of years ago on tidal flats' creating the Murchison Gorge' (Department of Parks and Wildlife 2015, 31). The gorge is 80km long, its striped sides spectacular to view against the blue vast blue sky and surrounded by scrub with occasional sheoak and river gum trees growing at improbable angles among the rocks, The climate here, like Perth, is temperate, with a warm, semi-arid to arid Mediterranean climate, hot in February when we visited, reaching 40 degrees Celsius.

We then continued onwards to Monkey Mia, 850km north of Perth, located in the Shark Bay World Heritage site. The further north we drove, into this hot grassland region, the fewer people, and the higher the temperature. We drove for hours through the vast flat red landscape, passing only massive road trains, three carriages long, and stopped at a roadhouse where the proprietor told us it was 49 degrees Celsius in the shade. At the Monkey Mia Reserve we observed the local dolphin population through the Park's carefully orchestrated interaction sessions in the aqua waters of the white sand bay, explored the Francois Peron National Park, formerly a pastoral station (Parks and Wildlife Service 2017), and rested during the heat of the day in the arid climate.

We drove onwards, interrupted by an accidental three-day stay in the small coastal fishing and agricultural town of Carnarvon. Carnarvon is set on the Gascoyne River delta, 900km north of Perth, famed for its bananas, and home to approximately 5000 people (Australian Bureau of Statistics 2018). Our delay was due to an extremely windy night in a nearby coastal campsite, a cracked windscreen, and then a flat tire. We finally escaped our troubles and drove to Coral Bay, a small settlement of 200 people (Australian Bureau of Statistics 2016c), comprised mainly of tourist accommodation and facilities, 1100km north of Perth, where we stayed four days and explored the coast and Ningaloo Reef. Ningaloo Reef is a fringing reef, only a short distance from the shore, which means that we were able to swim and snorkel in the calm turquoise water from the shore to the reef. Coral Bay's aquamarine waters seasonally host whale sharks, humpback whales, nesting green, loggerhead and hawksbill turtles and a nursery to young black tip reef sharks as well as dolphins, dugongs and over 500 tropical fish species (Parks and Wildlife Service 2020). Here we snorkelled from the white sand beach and from a boat I swam with manta rays bigger and other sea creatures, on the outer reef. We then refuelled and bought supplies at Exmouth. Exmouth is a small town of about 2500 people (Australian Bureau of Statistics 2016d) (although this number triples with tourists in the winter months June to August (Shire of Exmouth 2020)), 1200km north of

Figure 4.10: Road train, near Carnarvon, WA, February 2016. Image by author.

Perth. We then drove on to the nearby Cape Range National Park. Here we were the only campers at our campsite behind the dunes on peach-coloured gravel. We largely ignored the Park's other attractions of the range and Yardie Creek Gorge, which I had visited some years before, and continued to explore the Ningaloo Reef, swimming off the shore in the clear aquamarine water at the white sand beaches among dolphins and tropical fish and lying low under our tarp during the searing midday heat of 38 degrees Celsius.

Carnarvon, Coral Bay, Exmouth and the Ningaloo Reef are covered by the Gnulli Native Title Claim (as yet undetermined on 13/11/2019), put forward by the traditional owners from the Yinggarda, Baiyungu and Thalanyji peoples. Gnulli means 'all of us' (Jones et al. 2009) [and] accounts for a complex dispersion and intermingling that has taken place throughout this region since the onset of colonisation' (Parks and Wildlife Service Department of Biodiversity, Conservation and Attractions 2019).

Next we passed through the Pilbara region, stopping overnight in the small mining town of Dampier, 1500km north of Perth, and visiting the Murujuga National Park. The Yaburara people are the traditional owners of the Dampier Archipelago (Department of Environment and Conservation 2013, 22). We drove onward along the North West Coastal Highway, stopping in the larger settlement of Port Hedland, of which the Kariyarra, Ngarla, and Njamal people are the traditional owners (Town of Port Hedland 2022), 1600km north of Perth, with its weird moonscape of salt lakes, red dirt, and massive mining equipment. Then we turned north east along the Great Northern Highway into the Kimberley region, to Broome 2300km north of Perth.

The Kimberley region is sub-tropical, with a distinct wet and dry season (Department of Primary Industries and Regional Development 2017). We arrived in the high humidity of the middle of the wet season and stopped first in Broome, a multicultural town of 16,000 people. The traditional owners of Broome and surrounding lands and waters that we visited are the Yawuru people. Broome's main industries are pearling and tourism (Broome Visitor's Centre 2020), but the town felt empty and relaxed in the wet season. We spent a week bathed in humidity and enjoyed the lush vegetation and beautiful coastline including morning yoga and walks on the seemingly endless white sand of Cable Beach (un-swimmable at this time of year due to the poisonous box jellyfish). We headed then east, inland through the small town of Fitzroy Crossing, home to about 1,200 people, on the traditional lands of the Bunuba people (Australian Institute of Aboriginal and Torres Strait Islander Studies 2020) and stopping overnight at Halls Creek, a small town of around 1000 people, the traditional

124

Figure 4.11: Cape Range National Park, WA, February 2016. Image by author.

custodians of which are the Jaru, Kija, Kukatja, Walmajarri, and Gooniyandi people (National Centre for Indigenous Genomics 2020). This drive contained some of what I found to be the most beautiful scenery of the trip – buttery coloured grass, red hills, and green trees, below gunmetal grey sky with low-hanging dense white clouds. The next day we drove across the Ord River and through the world heritage listed Purnululu National Park, of which the Jaru

and Kija people are currently in dispute over a claim of traditional ownership (AIATIS 2020), to Kununurra 3400km north east of Perth. This drive along hilly, narrow roads, over one-lane bridges also took us through spectacular scenery. The vistas were dramatic; around each corner we turned the landscape became more beautiful, with 3 metre tall grasses, green hills, ghost gums, and red rock ranges under low dramatic clouds and blue, blue sky.

We stayed in Kununurra for three weeks housesitting. Kununurra is a medium-sized town of around 5000 people (Australian Bureau of Statistics 2016e) set on the Ord River; its population is seasonal, with fewer people, and more crocodiles, in the wet season, when we arrived. The traditional owners of the land in and around Kununurra are the Miriwoong and Gajerrong people (MG Corporation 2020). Its main industries are mining, agriculture and tourism (Remplan 2020). The town is surrounded by mango, melon, and Indian Sandalwood plantations irrigated by the Ord River, as well as native scenery which includes savannah grasslands, eucalyptus trees, the magical looking boab tree and dramatic red rocks. The wet-season sky was magnificent, multi-coloured with low dark clouds that brought evening rain with spectacular lightning. We explored some nearby places including Mirima National Park, which contains beautiful orange sandstone rock formations, and Lake Argyle, a huge lake of about 1000km^2 created by the damming of the Ord River. In Kununurra we were warned to be careful by the water, and NOT TO SWIM, by locals and frequently placed safety warning signs, because of crocodiles. Both freshwater and saltwater crocodiles are found throughout the Pilbara and Kimberley regions, with saltwater crocodiles being particularly dangerous to humans (Department of Parks and Wildlife 2014). I also worked on my writing and, somewhat unwisely given the heat and extreme humidity, embarked on a fitness program of swimming, running and hiking, which I write about in Chapters 6 and 7. Finally, we crossed into the Northern Territory through the town of Katherine, where the 'the traditional lands of the Jawoyn, Dagoman, and Wardaman Aboriginal peoples converge' (Northern Territory 2022), and then north up to Darwin 4300 from Perth, the traditional land of the Larrakia people (City of Darwin 2021).

Figure 4.12: Lake Argyle, Kununurra, WA, March 2016. Image by author.

4.5.2 Data collection on the trip Perth - Darwin

On the trip I maintained a daily writing practice that included field notes, journaling and experimenting with embodied autoethnographic writing methods, which I have introduced in the previous chapter. My field notes comprised:

- Geographical information – where we travelled and stayed
- Daily activities both mundane (i.e. cooking, setting up camp, yoga) and exciting (e.g. bushwalking, snorkelling)

I continued to hold a 'commitment to understanding sensory experience' (Pink 2009b, 46). And keeping my question and methods in mind I focussed on relationships with non-human nature and my embodied experiences. For example this excerpt from my field notes documents the overwhelming physical sensations of the drive between Kalbarri and Monkey Mia:

Field Notes on driving Kalbarri – Monkey Mia, February 2016

Aircon broke, drove 80km per hour to avoid overheating the car.

The heat was incredible, like a physical wall of uncomfortable sensation pressing in on me, and through me. My whole body was damp with sweat.

The man at the Roadhouse told it was 49 degrees!

Made me feel better to know how hot it was, at least I had a reason to be hot.

Turned in to the coast and after a little while it started to cool down.

Being more comfortable with embodied writing by this stage, I found my notes took on a much more expressive, embodied tone, than those from the Earthwise period, and were more enjoyable to write. For example, describing a night in Exmouth:

The journal component consisted of:

> Field Notes on camping in Exmouth, February 2016
>
> In the night the stars and the moon are visible from the tent, it's so bright that to sleep I need to raise my arm to cover my eyes. The wind is cool through the flywire.

- Thoughts and feelings about the trip and my thesis
- Ideas about my research
- Linking ideas about the research with my life
- A record of my dreams

I wrote each day, mostly in the evenings and then worked back into my notes during my stay in Kununurra and further when we arrived in Darwin, to produce the embodied writing that is placed throughout this thesis.

The process of travelling, writing, keeping a daily yoga practice and being immersed in the landscape was a magical and almost surreal experience. The events of the past year left me feeling porous and open to wonder, as well as capable of intense feelings of all kinds. I felt myself grow, change and absorb ideas on almost a daily basis. The themes of nature from my childhood and my profession coalesced in moments of clarity and subsided back into normal thought. I felt physically and emotionally present all of this time. The writing helped anchor me and provided a non-judgmental expressive form of communicating about my experience. On this trip I started and finished what was for me a life-changing book called 'Women who run with the wolves: myths and stories of the wild woman archetype' (Estes 1992) which also talked about the notion of embodiment. I felt all the strands of my life as coherent complementary paths of exploration: my relationship with self/body, my relationships with others, and my relationship with non-human nature.

Lottie and I arrived in Darwin at the beginning of April in the muggy heat of the end of the wet season, marking the end of this portion of the journey.

4.5.3 Data analysis on the data collected on the trip Perth - Darwin

As with the data collection phase undertaken during my trip to Darwin, the analysis of this section of the project was much less anxiety-inducing and happened more organically. I felt more comfortable following my intuition, using my imagination and the 'mysterious' element of analysing and interpreting data described by Chang (2008). As with the data from Earthwise I used 'open coding' (Corbin and Strauss 2008, 163), breaking up the data into topics and themes. I also did another round of coding to see if the topics and themes from Earthwise were repeated. Once I had coded the writing I did on the trip, I revisited the data from Earthwise, looking for similarities and differences between the two sets. I found that there were similar themes, which are discussed in the following chapters, although the mode of experiencing these differed between the urban and non-urban sets of data. I also found some new themes that did not appear in the Earthwise data. As I had done for the Earthwise section, I then selected the stories that were the most relevant to my question and best encapsulated the themes I found. Next, I worked back into them to flesh them out using the technique of emotional recall described above. The themes from the analysis of the data from the road trip were:

- Sensory experience
- Appreciative inhabitation own body/sense of self as body subject
- Blurring of boundaries between self and other (non-human nature)
- Nature as challenging, unpleasant, sinister, or out of control
- Strong emotions - awe/sublime, joy, fear
- Sense of stewardship (mainly with reference to animals)

Although I did (of course!) take photographs on this journey I did not use them as a research tool. This was because of the issues I had already noted in section 4.3.3 above about photographs, mainly the issue of the photography process taking one out of the moment, and not having the opportunity to go back to the places I visited and explore at leisure. I was also much more confident in using writing as method, analysis and text, as described above. However I have included photographs throughout where I thought they would be useful in helping to allow the reader to better understand the experiences required, as well as to illustrate the context for each part of the research.

4.6 Analysis and writing up and embodied knowledge gained through growing and birthing and caring for two babies: 2017 - 2019 Darwin, Northern Territory; Perth, Western Australia; Sicily, Italy; Koh Chang, Thailand

This section describes the process of completing the project, over the four years that followed the trip. This includes the analysis and writing up processes, as well as the embodied knowledge gained through growing, birthing and caring for two children.

Although I didn't know it then, on the first weekend I arrived in Darwin in 2016, I met an Italian man who I would go on to marry and start a family with. After I arrived in Darwin I continued to work on my thesis, analysing and polishing up the writing I did on the trip, and working on a background chapter on how human and non-human nature relationships are seen in Australian culture, which ended up being incorporated into Chapters 5 and 6 . While in Darwin I visited Kakadu National Park and other beautiful 'natural' places, participated in dubious activities, like a crocodile cruise, and made lifelong friends with the coastline near my house. I decided to draw a line from April on the 'data collection', and keep the later experiences for me, although I ended up realising that lines are not so easily drawn in this kind of project. As you will see, my personal experience comes to the fore again in my writing in subsequent chapters from November 2017 onwards, when I became pregnant with my first child.

In February 2017, we moved back to Perth. This was another time of upheaval and I took another leave of absence which extended to maternity leave finishing in December of 2017. In August 2017 I gave birth to my first child, transforming my life. She is my heart outside of myself, and a constant joy. Becoming pregnant, having my daughter and caring for her caused a complete shift in mental, physical and emotional attention. In terms of this research project, it made me feel, rather than solely intellectualise, the importance of the idea of inter-embodiment and connectedness to other bodies. The first half of the year after the birth was difficult for me as, in a haze of sleep deprivation, I struggled to find a balance between caring for my daughter, family life, paid work, and my study. In addition, I had to come to terms with the change to my identity and attention being a mother brought on for me. I took another four-month leave of absence from my PhD. When I returned to my study, I worked on developing and writing about my ideas on embodiment, informed by my embodied

relationship with my daughter and feminist theory; and set about organising and re-structuring the PhD, working towards finishing. I also continued to use embodied writing to explore and relate how these ideas were developing in relation to my life with my daughter. The second half of the year was easier, I started to feel less tired and more clear-headed, and had worked out that my PhD and intellectual life still had an important place in my identity and my life.

In late 2018 I travelled with my family through Italy, Greece, Morocco and Thailand. For me this was to be a working holiday, and a continuation of my efforts to get my thesis done by my 2019 deadline. For the most part, the working holiday idea worked, although it was not without challenges. I also became pregnant with my second child in October, which meant that by the end of November I was stripped of my newly returned energy and, as with the last pregnancy, left feeling constantly exhausted and nauseous. My time working on the thesis was focussed on pulling together my ideas into a new thematic structure, continuing my analysis as I did this, by revisiting the themes I had come up with earlier, and linking these ideas together as I pulled together the chapters.

After the trip to Italy I was happy to be back in Western Australia. Being away filled me with renewed appreciation for my home – the open skies, sunshine, light, smells and textures, the well-ordered suburbs, wide roads, council-kept verges with street trees, and grassed parks with baby-friendly play equipment. Fittingly, my task on arriving home was to combine the literature review I had done on discourses on nature in Australia with my own autoethnographic research from my time at Earthwise and on the road Perth-Darwin, pulling these together in a themed chapter on the complex attitudes to non-human nature in my culture. I realised that this was the place to include the interview data I collected in 2014 at Earthwise. To do this I needed to complete the analysis of this data. First, I transcribed the interviews. I then used topic and analytical coding as described by Richards (2009, 115). When coding by topic I used the interview structure (described above) as well as keeping an eye out for new or sub-topics. I then moved on to analytical coding in which I flagged the most interesting passages, then asked 'why am I interested in that?' (Richards (2009, 113) to find themes, writing reflective memos as I went. In some cases, these themes matched the existing themes from my earlier analysis of the autoethnographic data, in others new themes were generated. The topics and themes generated were as follows:

Topics used to code the Earthwise interviews

- involvement in Earthwise - what
- involvement in Earthwise - motivation
- how do you see your relationship to nature?
- you are/not a part of nature?
- what nature is/not
- camping/visiting the bush
- permaculture
- gardening
- sensory experience
- my own garden

Themes from the coding of the Earthwise interviews

Social

- involvement in Earthwise for social reasons
- connection with people
- a place with like-minded people
- Earthwise inclusive and supports diversity

Morality

- gap between ideals and practice
- guilt
- grief
- we have a responsibility to care for nature
- environmentalism in others is ok but not for me
- other people's views/attitudes

Actions

- overuse of resources
- reducing waste through recycling/composting
- educating others

Gardening

- caring as part of gardening
- immersed in an activity/lose myself
- enjoyment of gardening
- enjoying the garden
- level of knowledge on gardening
- order/tidying
- keeping up appearances in suburbs

Sensory experience

- sensory experience and nature
- smell
- touch
- sound
- sight

What is nature?

- confused or contradictory feelings about whether part of nature/conditions under which I may/not be a part of nature?
- I am/not a part of nature
- nature outside city
- nature can be in an urban context
- animals/plants as nature
- natural places have bush and little built form
- humans are harmful to nature
- saving the earth
- nature is fragile
- impact on humans of harming nature
- nature and humans as part of ecosystems
- connection to nature
- lack of connection to nature
- contact with nature leads to connection with nature
- childhood experience/s with nature
- humans exploit nature
- Australian bush - sense of space and lack of people
- 'rightness' – the bush is how it should be
- creation/Christian ideas about nature
- urban experience vs others who live on land
- nature as having agency
- untouched wilderness
- nature as restorative / refreshing / energizing or relaxing
- nature is good for people

Now I am once again writing with a baby on my lap, this time my second child, and again dealing with the physical and mental strain that pregnancy and caring for a new baby entail. Working on editing my thesis with a newborn has been an opportunity to revisit the embodied insights I gained when working on the project when my first child was a baby. In retrospect, I think I imagined that doing the thesis and the changes I was making in my life (volunteering in the garden, yoga, etc.) would lead me on a path that would result in me becoming effortlessly connected to non-human nature and others, acting in 'right' ways and generally being an earth-mother type saint. I expected I would find and enact the answer to my research questions. This, as it happens is not the case. I use disposable nappies, because, despite the guilt I feel, using cloth ones may be the thing that tips me over the edge. I love our garden, but I have been too baby focussed and exhausted to want to do anything in it. Even yoga, my former constant friend, is now only an occasional visitor. I am strongly motivated to finish this project, but my reasons have shifted. From being what would probably be called a 'high achiever' and being highly motivated by external recognition, I now want to finish it to have something meaningful to show to my children, and for more pragmatic reasons. I feel very protective of my (limited!) energy and try to keep as much as I can for the things that are most important to me.

4.7 Conclusion

In this chapter I have laid out the story of my research journey, including the settings of my research, the methods I used, and the process of analysis and interpretation. This story was set out in chronological order, intertwined with the details of my life as I undertook this project. The intention is that this provides context for the vignettes that appear in the following chapters. The other purpose of this chapter is to provide those interested in 'embodied methodologies' with a detailed account of my methods, to help remedy the lack of methodological description in both sensory ethnography (Pink 2009b, 119) and autoethnography (Chang 2008, 127), as well as to answer Pink's (Pink 2009b, 1) call for researchers to explicitly describe their embodied methods. In the following chapters I present the findings of my research at Earthwise and the road trip Perth – Darwin.

Chapter 5: Relationships with non-human nature in the Earthwise community garden

Figure 5.1: The unruly creeper covering the furry shrub, Earthwise, Subiaco, WA, March 2014. Image by author.

I have some secateurs, but it's hard to separate the creeper from the shrub it is enveloping without damaging the shrub. I recognise the shrub as a native of some sort (I think from WA), with long rangy, disorganised branches sprouting from central point at the ground, covered in soft, skinny leaves making the branches seem covered in fur – the leaves on the older branches are soft grey-green and the new growth is red, then bright green. They are soft to touch, and I run my hand gently along the outside of the ends of the leaves and pull the branch down then let it spring back, like you might play with the ears of a dog

Pruning the creeper, Perth, WA, March 2014

In addressing my research question - *How can embodied methodologies inform approaches to planning and human relationships with non-human nature?* I first wanted to understand how people feel and think about, and behave towards, non-human nature in the cultural context of my research, Western Australia. I explored this across two settings: an urban setting, at Earthwise community garden, the subject of this chapter; and a 'wild' setting on a road trip Perth- Darwin covered in the next chapter. In this chapter, I relate the findings from the analysis of the field notes and six in-depth semi-structured interviews I generated by my time at Earthwise community garden, and use relevant literature to explore the emergent themes. Bringing these different components together in the process of analysis is helpful in building a more dynamic picture of relationships with non-human nature in the cultural context of my research, thereby helping me to gain 'cultural understanding' (Chang 2008, 127), a desired outcome of my work. This understanding has limitations, being constrained by the small number of participants in the interviews and observations carried out at Earthwise, as well as the participants' particular characteristics (age, gender, ethnicity, ability etc.); notably no Indigenous people were participants in the research. In providing context for my research, this chapter helps meet the 'continuing need for close analysis of nature-talk in any and all realms of society' (Castree 2004, 91). By focussing on the urban as an important site of understanding human and non-human nature relationships, I contribute to the burgeoning field of urban studies. The urban is an important area of study as more than half of the world's population, and 86% of Australians, live in urban areas (World Bank 2022)[17], with the worldwide urban population predicted to rise to 70% by 2050 (Seto Lab 2022).

The chapter is organised into five sections presenting the core themes gathered from my research: (1) that experiences in nature are emplaced, (2) that humans are a destructive part of nature, (3) that humans have a responsibility to care for non-human nature, (4) that plants in the Earthwise garden are seen as having agency, and that animals produce strong emotional responses, and (5) that, for myself and participants in my research at Earthwise, engaging in embodied, multi-sensory experiences in the garden produced positive emotions

---

[17] Worldwide, 56% of the population live in urban areas, with more developed countries having larger urban populations. For example, 75% of the population of OECD countries, 77% of Europe's population, and 83% of the North American population live in urban areas.

and resulted in feeling more connected to non-human nature. This chapter, along with the following Chapter 6, addresses the second research objective, exploring how people feel and think about, and behave towards, non-human nature in the cultural context of my research.

5.1 Experiences of nature are emplaced

When participants in the interviews at Earthwise talked about nature, they described places/spaces characterised by plants and animals, in which they have connected with, or could connect with, nature, through their lived experience. Participants in the interviews I conducted at Earthwise had difficulty articulating ideas about nature as a concept and instead talked about nature as being sited in specific places/spaces where interactions with non-human nature took place. The concept of nature as sited in specific locations was also favoured over nature as an abstract concept by participants in Davison's (2008, 1290) study of Australian environmentalists. Davison uses the term 'natural space' to capture the way participants talked about 'nature-as-thing and nature-as-essence', meaning nature as a set of processes bounded in specific locations, and nature as an essence (as in 'natural') (2008, 1283). The related terms Davison groups under this concept are: 'natural areas', 'natural places', 'natural environments', 'the natural world', 'wilderness', and 'the bush' (2008, 1283). Although Davison's (2008) article was published some time ago, it is unique in that it directly addresses how Australians see nature. The natural places/spaces mentioned by participants in my research were both urban and non-urban.

Urban natural places/spaces evoked in the interviews included private suburban gardens, the Earthwise community garden, parks, and built spaces with potted plants. For example, one participant described in detail her garden in the UK, saying that:

> I was a little bit abnormal because my vegetable garden was in the front of the house. Because that's the bit that got the most sunshine. So, we had a big square front drive and there's a little bit of grass down the side and I had three little square raised beds there. (P2, Earthwise, 2014)

Throughout the interview she talked about the different components of the place/space, including describing how the chickens behaved in the garden, and how she felt when 'losing' herself in the garden. Plants were important to participants as a way of distinguishing urban

natural places/spaces, with places/spaces with more plants being described as more natural (by three participants). As discussed by this participant, natural places/spaces are

> wherever, at any parks, national parks, verges, anywhere that's got stuff going on, I feel that's even in my tiny little back garden… down where I live, it's very tiny, but it's still, you still see an ecosystem (P2, Earthwise, 2014).

The café the interview took place in was not described as a natural place because

> I'm not one with the tree there, but I'm not underneath the tree as it were, and the air, not even any insects around, and so here I just feel that we're in a different place. (P2, Earthwise, 2014)

Plants were further described as important because

> plants attract the insects. I guess if that was all planted out there [area next to café], and it was planted round here, pot plants. I could say, 'Yeah nature,' but there's no plants here… (P2, Earthwise, 2014)

Birds were described as a significant feature of urban natural places/spaces. One participant equated the sound of birdsong to being in a garden:

> [Birds] making noises is quite evocative, and makes you feel quite peaceful. You think, I am in a garden, rather than I am listening to birdsong. (P2, Earthwise, 2014)

Birdsong was also an indication of the particular place/space she was in; the UK differed from Australia, and Earthwise was particularly special because it was the only location she had seen kookaburras):[18]

> I just love the kookaburras here… when they laugh, it freezes me up. (Laughs)… Occasionally, they'll be in the Earthwise area in the garden there. They're after the

---

[18] Kookaburras are not native to Western Australia. According to Abbot (2008, 24) were introduced in around 1897 by the Acclimatisation Committee 'to relieve the monotony of the bush silence' and because they are 'good friends to the agriculturalist, as they devour, besides snakes, numbers of noxious insects' (Acclimatisation Committee 1900, 3 quoted in Abbot 2008, 24). They are now seen by some as a threat to the smaller native animals (such as snakes, lizards and birds) that they feed on, for example Smith (2020).

141

worms, I suppose… and they just don't seem to have any fear. They come right close to you. It's amazing, amazing. (P1, Earthwise, 2014)

In the urban context, the places/spaces described align with what are described in planning as 'green spaces', which can be either formal, such as the Earthwise community garden, or informal, such as vacant lots. Formal green spaces include parks, gardens, remnant vegetation in reserves (Del Tredic 2010, Wolch, Byrne, and Newell 2014), as well as 'forests, green roofs, streams, and community gardens' (Wolch, Byrne, and Newell 2014). Informal green spaces are generally defined as containing spontaneous vegetation and include 'post-industrial land, vacant lots, infrastructure edges, railroad and river corridors, degraded wetlands, abandoned parks, successional woodlands' (Del Tredic 2010, 301), street verges (Rupprecht and Byrne 2014, 599), gaps and overgrown structures (Kim, Rupprecht and Furuya 2020). Informal greenspaces are not formally managed for recreation, conservation or agriculture, but contain 'spontaneous vegetation' (Rupprecht and Byrne 2014, 598; Sikorsi et al. 2021). However, a recent study, conducted by Afrad and Kawazoe (2020) on the mental health benefits of potted street gardens in Tangier, Morocco, as a form of informal green space, suggests a broader definition of informal green spaces is developing[19]. A final feature of informal green spaces (including the potted gardens in Tangier) is that they are liminal and contested (Rupprecht and Byrne 2014, 598). It is interesting to note in the urban context, for participants in this research, and in the definitions of greenspace noted above, connections to nature can be facilitated in a wide range of places, but that these natural places/spaces do not necessarily meet the criteria of urban greening movements such as re-wilding or 'bringing nature back' (Mata et al. 2020) that focus on native species and habitat creation (e.g. a garden that provides a connection to non-human nature for a person, may not necessarily increase biodiversity or provide habitat for native fauna).

When participants spoke about non-urban natural places/spaces, the umbrella terms of 'bush' and 'wilderness' were mentioned by four of the participants, while two of these talked about specific locations they visited regularly. These were the 'bush' and ocean at a fishing shack area north of Perth, and a family property up in the 'hills' in the 'bush' East of Perth. A

---

[19] This could be due to the recognition of benefits of green spaces for a growing urban population regardless of tenure. For example, a 2017 report by the World Bank on the importance of green space defines urban green space as 'all urban land covered by vegetation of any kind. This covers vegetation on private and public grounds, irrespective of size and function, and can also include small water bodies such as ponds, lakes or streams ("blue spaces")'.

further two participants talked about relationships with particular places that had taken place in the past. These relationships were with the 'Franklin River in the 1980s, described by the participant as 'natural untouched wilderness', private property next to State forest in Margaret River, and an uncle's farm visited during childhood. Despite the diversity of natural places/spaces mentioned by participants, for most participants it was apparent that spaces with little or no built form, with predominantly native vegetation, and fewer people were seen as more natural. The most natural kind of nature was described as having no built form, native vegetation, and no people (except, it is assumed, the person experiencing the nature!) and named as the 'bush' or 'wilderness', two terms that I elaborate on further below and in the next chapter. One participant located urban nature in 'Kings Park', a large park overlooking Perth city with a botanic garden and a large portion of remnant native vegetation with paths through it, dismissing the rest of the Perth as being un-natural:

> Nature and natural. None of this is bloody natural, is it? You know, it's far from nature. Suburbia. Kings Park is nature. (P3, Earthwise, 2014)

A second participant described Kings Park, and Lake Monger (a large park located 4 km from Perth city comprising a lake ringed with native and non-native vegetation, paths, and recreation facilities) as spaces where they could come the closest to experiencing nature in the city. This participant described the restorative value of the Australian bush, characterised by peacefulness, an absence of humans, and the presence of animals, in which he saw

> how the world was made right. (P4, Earthwise, 2014)

in contrast to 'so much wrong' in the world such as environmental disasters and war he witnessed in his work in international aid). The absence of humans in the Australian bush was described as a particularly important feature of natural places/spaces in Australia:

> I think the advantage we have here is that there is real space. Whereas you go to beautiful places ... even in Europe, but particularly, Asia. So, it might be spectacular. You might be walking around the-the mountains of Nepal. But there will always be people around. So, they'll be cutting branches to feed their animals or burn for firewood or whatever it is. You just kind of get the sense of space. (P4, Earthwise, 2014)

Another participant described walking in the bush and at the beach when staying at a remote beachside cabin as being in nature, while another described a trip on the Franklin River, in Tasmania, in the 1980s as

> natural untouched wilderness… you don't see that much anymore. (P5, Earthwise, 2014)

This kind of nature was somewhere they 'get away' to, when camping or out in the bush (i.e. their country property), characterised by native vegetation and an absence of development and humans. For one participant, recently arrived from the UK, the concept of the bush or the wilderness did not seem relevant. This may be because these constructs are particular to Australia and other colonised countries, where it is still believed that there is access to unmodified nature.

The view of 'real nature' as outside the city is seemingly in conflict with the diverse range of natural places/spaces mentioned by participants. However, according to Davison much environmental discourse contains these two contradictory discourses (Davison 2008, 1286). He draws on the ideas of Kay Milton (1999) to propose that

> while nature conservationists rely upon holistic understandings of humanity's location inside ecological systems, they are often motivated by experience of the sacred otherness of nature (Davison 2008, 1286).

Thus, the nature conservationists need the fiction of the untouched 'wilderness' in which to experience this. In my own case, I have always thought of urban spaces such as gardens, parks and beaches as being places to spend time interacting with non-human nature, however, on my journey north I mention waiting for the 'real scenery' of the red dirt of the interior of WA.

For me, this might be linked to a yearning to know the magical, forbidding land of the outback, or frontier, 'beyond the limits of established settlement… and therefore full of the freedom, promise, and danger, of such liminality' (Griffiths 2002, 223), two ideas discussed further in Chapter 6. It can also be related to the idea that, although I do seek connection to non-human nature in the city, I believe there is another, more natural, nature found in 'wilderness' places/spaces outside of the city. This view relates to that outlined above of four of the other participants in my research who mentioned the importance of 'wilderness' or 'bush'. The problematic concept of 'wilderness' is discussed further in Chapter 6.

Figure 5.2: Red dirt and wide open space, near Shark Bay, WA 2016. Image by author.

The emphasis participants placed on the relationship with particular natural places/spaces suggests the importance of contact with non-human nature in developing a sense of connection to non-human nature. The idea that spending time in natural places/spaces affects understandings of connection to nature was mentioned by most of the participants.

One participant made this particularly clear; when asked if she saw herself as part of nature, she replied:

> when I'm in the garden, I definitely feel part of nature... But sitting here now, I definitely don't. I just feel I want to protect it. But when I'm gardening, I do feel part of it. (P2, Earthwise, 2014)

When I asked for clarification, she proceeded to say she did not feel a part of nature in the high street café we were seated at:

> no, no, sitting here. I feel more protective of it [nature]. It's sort of like the other place, you know, it's this...Because I'm here, well, there is one tree over there, but I'm not underneath the tree as it were, and the air, not even any insects around, and so here I just feel that we're in a different place. (P2, Earthwise, 2014)

Two other participants mentioned feeling a connection to nature when in the 'bush', one mentioning walking by the ocean and in the 'bush', and the other to spending time at his 'bush' block. Another participant spoke about her views on connection to nature in a more general sense, she stated that:

People change when they have a connection to the nature around them. It can be something that they grow themselves, or it can be just in the bush… you can see the change in people when they live in a little unit, with maybe a veranda, or not even, just a window sill - And they just grow a little pot plant or herb or something… So, that connection with nature … And if you've got a courtyard that's purely a brick court yard with nothing growing in it, there's a different feel to having some sort of plant there. So, that's a real connection. (P1, Earthwise, 2014)

The connection stressed by the participant can be seen to relate to the biophilia hypothesis (Kellert and Wilson 2013), introduced in section 1.1.2, in that connections to the non-human world, including plants are seen to fulfill need for humans, but also result in caring practices for non-human nature. Kellert and Wilson, argue that 'the human inclination to affiliate with life and lifelike process' is 'inherent (that is, biologically based)', as well as 'likely to increase the possibility for achieving individual meaning and personal fulfillment' (2013, 21). This notion that humans are missing out something needed at a deep level was also expressed by another of the participants. Talking about the difference between how children today grow up compared to his youth as an 'outdoor kid', one participant described being,

privileged to have a couple of dirty big trees in the park over the road. So we were up and down those trees every afternoon after school. And there was a creek down the bottom of the park… We were down there with the frogs and the tadpoles. (P6, Earthwise, 2014)

In comparison, he described people today as lacking this contact with non-human nature

there's a sensory deprivation, if you like, community [wide] sensory deprivation. Which is intensified by spending hours and hours in front of a screen. (P6, Earthwise, 2014)

The lack of contact from nature was described by a second participant as leading to alienation from nature, which resulted in destructive actions:

you don't rob from the grandmother that you love - you rob and you break into houses of people that you're alienated from, so if we're alienated from nature, that's when we abuse it. We don't feel connected to it. (P1, Earthwise, 2014)

These twin imperatives for contact with nature (that humans need it, and that humans need it to feel motivated to do better in regard to respecting non-human nature) are reflected in

147

the agendas of urban greening movements including the biophilic cities (McDonald and Beatley 2021; Söderlund 2019; Tabb 2020), rewilding (Pettorelli, Durant, and du Toit 2019; Pettorelli et al. 2018; Tsing 2017), and bringing nature back (Mata et al. 2020). However, it is not just being in nature places/spaces that is important, but also being in relationship or co-becoming with them. (Djohari, Brown and Stolk 2018)

Using the lens of relational place/space offers insight into why more contact with non-human nature could help to develop connections to non-human nature. Spending time in specific natural places/spaces could result in an acceptance of the invitation offered by Suchet-Pearson, Wright and Burarrwanga

> to realise that human and more-than-human beings never are – not isolated, not static, not known – but only become as they constantly emerge together. And that this togetherness requires an attention to the ethical responsibilities of care that emerge when we live, think, act and attend as part of the world, rather than distinct from it (2013, 188).

Rose (2007), describes a process, whereby she learnt to pay 'embodied attention' to the world around her with the guidance of an Indigenous elder in the context of a specific place/space. I am not claiming that spending time gardening is a substitute for learning about Country from Indigenous teachers. However, I believe that Merleau-Ponty's notion of space as experienced by the 'lived body', does point to the importance of spending time in natural places/spaces in fostering a sense of connection to non-human nature, even if not informed by Indigenous understandings of Country. Merleau-Ponty stresses that our experience of the world is embodied; for him, 'consciousness is being-towards-the-thing through the intermediary of the body' (1962/2005, 160). As Couper explains, Merleau-Ponty conceives body and environment as a relational one in which 'the body-subject experiences the world and changes in response, primed to experience the world again – and so we develop 'habit', an understanding of how to, through the sedimentation of experience in our bodies' (2018, 289). Further, rather than being *in* space and time or *experiencing* space and time, Merleau-Ponty argues that 'I belong to them, my body combines with them and includes them' (1962/2005, 162). Through spending time in natural places/spaces human's embodied selves can be seen to form part of these spaces, challenging the division not only between body/mind but also between body/environment.

5.2 Belonging in nature

In this section I first discuss how participants saw themselves in relation to non-human nature. Participants had trouble addressing the question of whether they saw themselves as part of nature. There was a discord between the idea that humans should be part of nature, usually conceived in terms of ecosystems, and the idea that they were destructive to nature. I go on to discuss how the ongoing colonisation of Australia might affect understandings of whether humans are a part of nature, focusing on attitudes to native plants, which I argue are linked to belonging and identity, as well as caring for nature, through restoration or planting of native vegetation.

The term 'ecosystems' was mentioned by all interviewees in describing nature, either at a small scale (for example, the Earthwise garden), or a large scale (for example, the city), and even a global scale (for example, when talking about carbon emissions). This way of thinking can be described as an ecological view of human and non-human nature relationships. It represents an interconnected view of nature and humans supported by scientific evidence (Davison 2008, 1286). According to Rega (2020) there has been a recent resurgence in ecological approaches to planning in response to the climate change crisis. These include a renewed interest in the 'pioneers' of ecological planning, such as Ian McHarg (e.g. see Rega 2020, Daniels 2019). Ecological thinking is part of the modern environmental movement. Hay (2002, 16) dates this way of thinking to the publication of Rachel Carson's book *Silent Spring* in 1962, which exposed the negative effects of pesticide use in the US and showed how intimately human and non-human nature are connected. For land use planning, ecological discourse, drawing on science for legitimacy, supports a 'vision of the integrity of human and non-human life and the ecological value of 'nature' as a life-support system' (Whatmore and Boucher 1993, 169). Planning operating this way would not see a separation of people from nature into separate land uses, but rather all development informed by ecological principles (Whatmore and Boucher 1993, 169). In advocating that planning should be underpinned by an ecological rationality, Rega explains that

> interdependence, complexity, non-reducibility, self-organization, openness, adaptation, homeostasis, resilience, diversity and creation of order (negative entropy) are the emerging properties of ecosystems, and thus the constitutive principles of ecological rationality. (2020 s2.4)

Eco-systems thinking can be seen as conducive to more connected relationships with non-human nature.

The concept of eco-systems was also used as an expression of the way that participants felt connected, at an emotional and embodied level, when they spent time in natural places/spaces such as Earthwise. In the case of two participants, social and natural ecosystems were one and the same. For these participants, the idea of wild spaces as containing real nature seemed irrelevant. Although gardening was seen as beneficial for human and non-human nature relationships, the urban/wild nature framing was not present in their responses. For example, spending time in the garden or the bush, or even potting a plant for the windowsill, were all described as one and the same by one participant. This shows that in everyday life, not everyone conceptualises human and non-human nature as separate. It also points to the impossibility of generalising about relationships to non-human nature across Western cultures, and the need for further exploration in this area. It also shows that there is an ambivalence here, one that revealed itself when both participants also described humans as a malfunctioning, destructive element of ecosystems at a broader scale.

Humans as part of ecosystems was generally framed as problematic, even by those participants who spoke in terms of social/cultural ecosystems when defining nature. One participant, who saw herself as part of the eco-systems she spent time in, both in Australia and in the UK, described being acutely aware of how her actions affected the eco-systems she was a part of. She explained this using the example of the insects in her home:

> it's so easy to go 'oh insects, pssssh, go away' with chemicals; but that has repercussions beyond myself. (P2, Earthwise, 2014)

Another participant expressed a similar awareness as follows:

> well, it's hard because sometimes it's very embarrassing to nature, because if we feel like we're part of the story and yet we abuse it. That's when you feel like an abusive parent, or an abusive something in the system. (P1, Earthwise, 2014)

This participant used the analogy of child abuse: a parent-child relationship should be loving, nurturing and supportive of the child, but in an abusive relationship, the two are still intimately linked and the child still depends on the parent, but the role of the parent is destructive instead of being nurturing. In this analogy, nature is infantilised and ascribed little agency, while humans are tasked for caring for nature.

150

Guilt was implicit in the responses of all participants when talking about their relationship with nature and how they should behave in relation to it; guilt for failing to live up to their responsibilities to nature, and for the gap between their ideals and practice (depending on how the person framed their response). One participant mentioned feeling guilty in relation to their family's involvement in the resource industry. This guilt can be seen as arising from being complicit in, and benefitting from, the colonializing practice of resource extraction which takes place in Australia because of the ongoing structures of colonialization that frame Australia as a white possession (Moreton-Robinson 2015). Other participants mentioned guilt over the overuse of resources (such as fuel for driving or flying), which they acknowledged was contributing to climate change. Three participants also commented on the gap between their expectations of themselves and their actions, citing their failure to recycle, compost and avoid single use plastics as sources of guilt. One participant also mentioned a sense of grief:

> because I see how as a race, we're not doing that great; and grieving the loss of not just species, but the well-being of the planet.

This idea of the 'human race', was also implicit in the participants who saw humans as destructive, implying that all humans are given equal responsibility for being destructive, rather than highlighting the uneven nature of consumption and responsibility (Malm and Hornberg 2013). However, participants did not see themselves as entirely destructive; they saw their work at Earthwise as engendering a positive relationship with non-human nature ('saving the earth', 'helping the environment', educating others). The importance placed on these acts shows that participants are seeking a positive relationship with nature.

I wake up from a dream, lingering at the edges of my mind of planting perfectly formed delicate green native seedlings in welcoming loamy soil, excited about going to Earthwise.

Dreaming of native plants, Perth, WA, August 2014

The ongoing process of the colonisation of Australia influences the way that non-Indigenous Australians see their relationship with nature, although it is certainly not the only factor and non-Indigenous relationships to nature cannot be assumed to be consistent. There has been more written about this in the context of nature outside the city, which I discuss further in the next chapter, but the process of colonisation is also relevant at the level of the urban garden. Thus, when carrying out my autoethnographic research, the answer to question 'what is nature and do I feel a part of it?' is influenced by my particular cultural context as a white, city-dwelling, second-generation Australian, among other factors. In planning the planting of 'my garden' at Earthwise, I was anxious to plant only flora from Western Australia, and where possible, from the particular soil complex that Earthwise is located in. I suggest that my, and other non-Indigenous Australians', enthusiasm for native plants can be in part attributed to the influence that Australia's colonial history has had on relationships to nature for non-Indigenous Australians.

For migrants, like myself, a sense of belonging to Australia can be seen to rely on the denial that settler colonialism, which involves the violent dispossession of Indigenous people and their replacement with 'settlers', 'constitute[s] the underlying logic and structure of Australian society today' (Jackson, Porter, and Johnson 2018, 3). Moreton-Robinson (2015, 10) argues that 'for the majority of the population in Australia, belonging, home, and place are inextricably linked to dispossession'. This is explained by Schech and Haggis as follows,

> The resonance of migrancy is compounded by the twinning of the always having arrived with the wilful forgetting of the nature of that arrival—of colonial conquest and racism—such that a sense of belonging and being at home was always reliant on a tension between awareness of arrival and skating over the nature of that arrival and its consequences. (2000, 232)

In seeking connection to Australian nature, denial of the continuing process of settler colonialism could act to alleviate the uncomfortable reality of the past and present injustices suffered by Indigenous people. The importance of being 'alone' in both my own writing and participants interviews, noted in section 5.1, above and discussed further in Chapter 6, further speaks to the need to erase Indigenous people's historical and present connections to places/spaces in order to experience a sense of belonging. The question is then, if this is fully and consciously acknowledged – what now in terms of my thinking and gardening practices?

Attitudes to native plants can also be seen as linked to efforts to develop or bolster a sense of Australian identity. Of course, as pointed out by Setten and Skår's (2014) the idea of alien species is one determined by scientists and policy makers, who decide which plants are classified as alien and native. For Australia, native flora and fauna is classified by the Federal Government as that which existed prior to European settlement (Department of the Environnment and Water Resources 2007). Bennet, writing about both Australia and South Africa, links the Australian passion for natives to decolonisation, which he argues 'encouraged, even compelled, English-speakers of British ancestry living in the former dominions to abandon older imperial allegiances and symbols in favour of new ones rooted in national geographies and experiences' (2017, 43). The result of this was that people let go of 'an older, cosmopolitan, colonial natural value system and adopted more assertive ecological values emphasising the conservation of Indigenous natures and their symbolic cultivation in public and private gardens'. He goes on to argue that 'Indigenous nature, symbolised and cultivated in gardens, reflected the cultivation of a new nationhood that gave people ethical obligations, a sense of purpose, and the ability to feel a sense of connectedness and belonging to place' (2017, 44). However, Trigger and Head take a less positive view, linking racism to non-compromising position about using native plants. They question whether

> the debate about ecological belonging carry symbolic significance that overlaps with assumptions about where certain categories of people sit on a moral hierarchy of cultural belonging? Such categories may distinguish between those who assert descent from earlier generations of Aboriginal people or historical colonists (or both), more recent migrants, refugees, and so on. (Trigger and Head 2010, 234)

The native/non-native binary in lay-people's thinking may only be relevant to colonised countries such as Australia. For example Setten and Skår's (2014) study of invasive species in Norway showed that gardeners did not think about plants in terms of natives/non-natives and liked having a mixture of native and introduced species in their gardens. Similarly, for the one participant at Earthwise, from the UK, native vegetation was not mentioned.

On a personal level, my preference for natives may be linked to a desire to develop a sense of belonging to Australia. My attitude to belonging and not belonging is complex. On the one hand, I feel like Australia is my home and I feel a sense of peace when in natural places/spaces, for example, the 'bush'; however, I also feel a sense of guilt at being part of the settler colonial culture that has largely cleared Australia of its vegetation and continues

153

to overuse water and clear and graze land. This latter feeling was especially strong when I lived in the country and saw this degraded land daily. Consequently, I would like in some small way contribute to healing some of this damage. This can manifest in acts of caring for non-human nature through planting or restoring native vegetation. Freeman et al. (2012, 140) also frame gardening as part of a 'duty of care' to nature. Similar to my act of atonement, one participant in Freeman et al.'s study described gardening as 'an attempt to recreate what we destroyed' (2012, 140). Through the lens of plant relationships, Hall describes ecological restoration, with a focus on individual plants, as a way in which humans can gain understanding of plants as 'autonomous and intelligent' beings rather than as part of 'nature as an organic, homogenised whole – which by blanking individual personalities contributes to the backgrounding of nature' (2011, 169). My own foray into growing native plants certainly developed my understanding of the individual plants I chose, and I did sustain a relationship with them for a period of time, watching how they behaved in the space. However, my motivations for planting natives, and relationship with the garden was multi-layered, these issues of identity co-existing with connection at a plant-person level. Through the process of engaging with the literature used in this thesis, I am now also aware of the ways in which these attitudes relate to my position as a settler in Australia, and contribute to the problematic process of settler colonisation through legitimising my presence and sense of belonging.

5.3 Humans have a responsibility to care for non-human nature

I did not directly ask participants how they thought they should behave in relation to non-human nature, but participants all addressed this topic and in doing so revealed insights into how they viewed their relationship to non-human nature. The theme of both the interview responses and my autoethnographic research was that it is humanity's responsibility to care for non-human nature. This was framed as a sense of environmental responsibility, and a result of connection to nature. I also explore how other motivations for caring activities, such as a desire for control, order, or to maintain white ownership may co-exist.

In their study of domestic gardeners in New Zealand, Freeman et al. found that caring, 'as a broader environmental responsibility' (2012, 140), was a key concept for gardeners. For one participant in their study, gardening was seen as a means of restoration of nature previously destroyed (by urbanisation), for another a way of helping the environment at a larger scale by looking after their part of the domain. This view was echoed by a participant at Earthwise who saw his participation in Earthwise as 'helping the environment, our little corner of it'. Additionally, two participants at Earthwise expressed they felt a sense of responsibility towards nature at a broader scale. For both, this understanding was drawn from their Christian beliefs. One participant explained this as follows:

> I believe that the world is created, and [that] we were created as part of the world. So we have an intimate relationship with the rest of the created world, or nature, and a responsibility towards it… [Nature] is something that has been given to us. And we are responsible for it. Not to exploit it or to abuse it, but to care for it, and to use it appropriately. (P4, Earthwise, 2014)

For this participant, using nature appropriately meant a non-exploitative relationship. One more participant expressed that humans have a responsibility to protect and care for nature. This participant also framed nature as lacking agency and being vulnerable to the abuses of humans as discussed in section 5.2, above.

One participant viewed caring about the garden (e.g. worrying about whether the plants get enough water over summer, being upset that worms in the worm farm had died) as being a result of a connection to nature. For her, connection equated with care. Conversely, she saw a lack of care for nature as being a result of alienation from it. However, she believed that contact with nature resulted in connection, changing a person (in an unspecified way). After working in the Earthwise garden, I often stayed in my gardening clothes and did some tasks at home. This can be linked to the idea of developing a sense of caring through connecting to non-human nature through engaging in gardening practices; developing a sense of caring for the garden at Earthwise made me more aware of the tasks that could be done at home to care for the garden in my rental property.

Caring was also seen as a barrier to gardening by one participant, who believed that people were discouraged by their lack of skills, and they felt bad when things they planted died. She also believed that people renting were reluctant to do much in their gardens because they felt that things they planted might not survive once they vacated the property, so it was a

waste of time and energy; they also wanted to avoid making an emotional connection to something they would then have to leave behind. She attributed this to them 'not being able to see the bigger picture', that we are all part of an interconnected system. In practical terms, community gardens could be a good alternative for renters for this reason.

A garden is a highly cultured space, where, despite plants behaving independently once planted (Hall 2011), the type and form of non-human nature is heavily shaped by humans. In the context of the Earthwise community garden, caring and responsibility for non-human nature means recycling and reusing things, keeping the worms alive and healthy, selecting and keeping plants alive and healthy (in the hot sandy WA context this mainly means watering and building soil), but also the regular tasks of weeding, pruning and tidying. Becoming involved with Earthwise, and especially establishing 'my' garden, resulted in me feeling a sense of responsibility for the Earthwise garden as a whole. This was noticeable with regard to watering, which is typically a primary concern for Australian gardeners over the hot dry summers, when non-native plants will die very quickly if unwatered. I was concerned with establishing irrigation for the space and came in on non-standard days over hot periods to ensure it was watered. This concern with watering is reflected in Turner's (2011) study of seven community gardens in the Australian Capital Territory, with watering being the most common reason for participants to visit their gardens. She too links this to care, observing that 'people's attitudes to water seem to be driven by their relationship to the soil and how they feel they can best care for it' (Turner 2011, 520), stating:

> I'm stressing if there's an extended time when it's hot. That's why it's lovely in the summer when --- can come down and he waters - he especially waters the big trees and, uh ... because they have overhead sprinklers here, but it's often not enough, or doesn't go deep down, yeah, so ... It struggles. So, yeah, I definitely feel responsible. It's a stress when it's dry for such a long time. Because it took a long time for winter to come and they're not going to turn the water on here until September, so that'll be a while and that'll only be twice a week anyway. So, yeah. When it stops raining... I mean, I could feel it this week. I felt when it got up to 24. (P1, Earthwise, 2014)

The above quote from one in-depth interview shows a sense of environmental responsibility, as well as how caring involves attending to seasonal changes. For me, as exhibited in the quote below, there is a lesson in listening to the message sent by the coriander:

Me: I was listening to you talk about, um, you were just telling someone to cut off the seeds when things go to seed.

P1: Mm-hmm (affirmative)

Me: I was wondering why my coriander had gone to seed and then I realised, when you talked about heat, and I was like, 'Aw, it was actually kind of nice for a few days and, you know, got very hot, so they probably got a bit dry'.

P1: Mm-hmm (affirmative). So all the winter greens and the parsley and the basil and the coriander … The coriander's really good at it.

Me: Getting stressed?

P1: Getting stressed, yeah, or going to seed. So getting stressed, yeah. Yeah. Which is a pity, because it's good to have coriander all year round. (P1, Earthwise, 2014)

For Bawaka Country including Wright et al. (2016), ethical co-becoming with non-human nature involves listening to messages from the more-than-human world that comprises Places/spaces and 'attend with care'. Extending this to planning, Metzger suggests planners need to combine critical thinking with 'care for place' in producing more-than-human places. Building on Massey's ideas on 'geographies of responsibility' (2004), he stresses that one of the key issues in doing this is to

begin to consider how spatial planning could potentially come to function as a technology for extending rather than shrinking geographies of responsibility, to begin to learn to recognize in more inclusionary ways that who 'we' are is relationally constituted and dependent upon links that stretch far beyond ourselves both in time and space, to places and beings wholly Other to what we see as that which constitutes our proper selves. (2014, 1008)

This ethic of care is also built upon in more recent work in the field of planning by Steele who states that 'caring-with is about bearing witness, being present, reconciliation, and commitment to action' (2021, 133). Paying 'embodied attention' (Rose 2007) and 'attending' (Bawaka Country et al. 2015, 273) at the level of the garden could be a good place to start.

Another alternative or coexisting motivation for the tasks I associated above with caring, is a sense of expressing my identity, claiming ownership, and management and home-making

Figure 5.3: Native plants in 'my garden' (in garden bed in foreground), Earthwise, WA, August 2015. Image by author.

associated with maintaining colonising structures. In their study of gardeners in New Zealand, Freeman et al. (2012) found that a feeling a sense of 'ownership and identity' was valued by gardeners. When moving to a new house, most residents changed the garden to suit their tastes, with this being linked to an expression of ownership. The design of 'my' garden and selection of plants reflected my values and identity. In my field notes, I noted that 'I mostly picked varieties that I like and would probably plant in my own garden. I was restricted by my rule of keeping to species from the local area, and I needed them to be dieback resistant, as well as in some cases shade tolerant'. By selecting plants that I would plant in my own garden, I was making a space that in some way reflected me and my values, including those asserting my belonging to Australia. In my field notes I also frequently express feelings of ownership and pride in 'my' garden. I made sure to regularly weed the bed to give the 'running postman' groundcover room to grow and maintain the appearance of the garden, because (based on past experience there) I didn't trust some other volunteers to distinguish between the plants and the weeds. This action can be seen as a reflection of both ownership and caring. A contrasting interpretation of these acts, that problematises the notions of ownership and caring described above, is that they can also be seen as an expression of management and home-making that reinforce the white ownership of Australia (Moreton-

Robinson. 2015, 23). Moreton-Robinson (2015, 23) explains that through care-taking white ownership is continually re-inscribed. Through this process colonisation is an ongoing process which denies that urban Australia is constructed on Country (Rose 2012, Porter 2018, and Steele 2021). Although I am descended from later waves of immigration (post-WWI WWII and 1970s), the privilege of taking land is only granted on the basis that Australia was already stolen by previous settlers (Moreton-Robinson (2015). Therefore, through gardening practices on land not ceded by Indigenous owners I, and others reproduce the ongoing process of colonisation.

Gardens can also 'represent sites of interaction with nature in which both control (e.g. removal of self introduced weeds) and compromise (e.g. acceptance of the presence of less desirable species in the garden such as lawn daisies) are evidenced' (Freeman 2012, 137). Another potential motivator for some of the tasks I attribute to caring for nature, particularly weeding, pruning and tidying, is a drive to keep a garden in order, or even to 'dominate and distance' one's self from nature (Head and Muir 2006, 521). Reflecting in my field notes on my experience of my second experience of pruning I wrote:

> Field notes on pruning the garden, Earthwise, Perth, WA, October 2014
>
> It was such a nice sunny day and again like last week I so enjoyed having a non-messy, clearly delineated task to do. I think I quite like pruning, I like the idea of trimming back to encourage new growth, and I seem to like deciding what to cut and shaping the tree neatly.

In the above excerpt I express mild surprise at my enjoyment of the task, and in my further reflection, discomfort, because I don't want to be the kind of person who tries to dominate and control non-human others. However, Head and Muir offer an alternate explanation to domination and control; they claim that 'a more widespread motive [to keep an orderly garden] is to put order into human lives' (2006, 521). This sits well with my interpretation of my response, as I believe that my enjoyment of pruning and weeding is not so much about attitudes to nature as it is about feeling in control in general – a sense of 'getting your house in order' when so much of life is outside of my control. As tidying the house, or getting the house in order is calming for me, so are these kinds of ordering tasks in the garden. Head and Muir go on to explain that

> tidiness is valued for a complex set of reasons that include social respectability, a certain moral quality, and the stress occasioned by mess, the latter expressed with some weariness by the working mother who said of her backyard, as if of another child, 'I resented the mess and the constant need'. (2006, 521)

In a similar vein, one participant at Earthwise expressed a wish to get rid of the large eucalypt trees because of the mess caused by the seeds, which blocked the gutters, the cleaning of which had been a job that he had been responsible for.

The Earthwise community garden was open to the public, linked to the Uniting Church, and sometimes received government grants. This meant that the appearance of the garden was important to the Earthwise organisation, perhaps linked to 'social responsibility' and 'moral quality' (Head and Muir 2006, 521). The space also had to be seen by the local community as

Figure 5.4: Watering the herb spiral, Earthwise, WA, February 2015. Image by author.

an asset or we risked complaints to the Church or Council which could make life difficult. For example, my field notes record that:

> Field notes on weeding the garden, Earthwise, Perth, WA, March 2014
>
> I spent today weeding and tidying front section. Peg said that she doesn't really notice the front because cars always parked there, but that she came the other day when no-one here and noticed it looked really messy.

There were also restrictions on what we could do in the front space; for example, messy compost piles for composting large branches and grass clippings needed to be screened. This need to appease neighbours is reflected in one participant's experiences in her own garden in the UK, where she felt that her gardening practices did not fit in to the dominant suburban culture and she had to make sure that the vegetables visible in the front garden were well maintained, for example not letting them go to seed (which can be an important part of gardening practice for those who want to save their seeds rather than purchasing them each year). These alternative motivations, of desire for order in life, asserting ownership and identity, maintaining white ownership of Australia, and maintaining neat appearance for social reasons, do not negate the aspect of caring, but highlight the complexity of human and non-human nature relationships at the level of the garden.

5.4 Relationships with plants and animals in the garden

In this section I look at human relationships with plants and animals in the garden. As outlined in Chapter 4, the Earthwise garden was created to foster connections between people, between people and non-human nature, and educate volunteers and visitors on sustainability. Daily tasks in the garden were mostly associated with caring for plants, rather than animals (for example, we did not have chickens, feed native birds, or create garden spaces targeting birds or bees). The exception to this was the worms, who required weekly feeding. The worms' job was to break down food scraps into soil and produce worm juice

that was used to fertilise the plants. Drawing on the interviews and my own experience I discuss my findings in relation to plants, then animals. I argue that plants are described as possessing agency, seen as both positive and negative, which points to the potential for human-plant relationships in gardens to develop more connected relationships to non-human nature. I show how, in the context of the garden, animals are seen as charismatic and elicit strong emotional responses. I suggest this makes relationships with animals in urban nature spaces important for fostering connections to non-human nature. However, as not all strong emotional responses are positive, relationships with animals in the garden need further exploration.

5.4.1 Plants in the garden have agency

Despite the importance ascribed to plants by participants in the Earthwise garden, Brits and Gibson argue that in the context of an 'era of changing climates… plants are often considered of secondary importance to animal or even insect species, even though they are equally threatened by rising temperatures and changing ecologies and function' (2018, 10). Hall (2011), who follows Plumwood (1993) in looking at binaries, argues that the othering of non-humans, including plants, is used to justify domination over them. He suggests that not acknowledging plants as having agency underpins the 'occupation, appropriation, and commodification' of the plant kingdom and thus the wider natural world' (Hall 2011, 35). Building on this, Jefferson explains that 'this onto-epistemic ordering has become entrenched in reductive rationalist paradigms, through the drawing of distinctions between nature and culture, and between human and object' (2020, 22). Hall (2011, 35) attributes the capacity for dominion over nature to a lack of connection, which he argues 'serves to strengthen and deepen our capacity for destructive ecological behaviour'. Brits and Gibson (2018, 12) suggest that 'we need to develop strategies to think, speak, and write about plant life without falling into human–nature dyads, or without tumbling into reductive theoretical notions about relations between cognition and action, identity and value, subject and object.' The emergence of the field of 'critical plant studies'[20] (Brits and Gibson 2018, 11)

---

[20] According to Brits and Gibson (2018, 11) 'Critical Plant Studies' is an intellectual field located 'at the crossover of plants and philosophy, literature, and arts, with a focus on the non-human components of our world.'

163

contributes to the historical lack of attention paid to plants in theory about human and non-human nature relationships (Jefferson 2020; Brits and Gibson 2018; Hall 2011; Hitchings and Jones 2004).

Hitchings and Jones (2004, 6) ascribe the lack of significance given to plants to the more lively and obvious nature of animal agency, as well as to the post-structuralist turn in humanities which looks at language as a reflection on culture, and in which plants have been viewed through the lens of 'landscape', which groups plants along with other 'natural' elements into a single entity, effectively denying individual plants agency. They suggest that more might be learnt about plants through looking at them as individuals 'rather than considering plants as passive components to more aggregate visual experiences' (Hitchings and Jones 2004, 6). In order to study relationships with plants, Hitchings and Jones (2004) turn to embodied experience, conducting walk-along interviews with children in a botanic garden, and domestic gardeners in the UK. Similarly, in an attempt to understand more about plant geographies, Pitt (2015, 48) used autoethnographic methods, in particular 'walking, talking, doing and picturing'; although her research was aimed at understanding plants themselves, she found that she learned more about human attitudes to plants than plant behaviour. Of interest to my study was Pitt's (2015) finding that attention to human-plant relationships 'was valuable in understanding community gardens because it revealed how different plants receive different human attention, that not all are cared for and some are actively destroyed' (Pitt 2015, 54). One of the ways in which Head and Muir (2006) looked at gardening practices was how people constructed spatial boundaries. Boundaries of gardens and within gardens were used to separate native bush from domestic gardens, with, for example, exotic plants, including edible plants, being seen as acceptable in the garden portion of the property but not on the other side of the fence on the bush part of the property. Some gardeners felt so strongly about the righteousness of natives over other species that they admitted to killing neighbours' plants. Another segment of Head and Muir's (2006) study saw the bush as being 'good' and expressed liking for the bush, provided that it was in its place, which was not in the suburban garden. Interestingly these people expressed guilt over holding this view. At Earthwise I saw this play out in 'my garden'. While Peg and I worked to incorporate an established native creeper in the garden, despite it being in an inconvenient location, Peg actively worked to get volunteers to remove an established non-native creeper on the fence of 'my garden'. This was not just because of the native/alien distinction on Peg's part, as Earthwise is home to many non-native plants, but also because of the 'invasive' qualities of the plant, which was a succulent that self-propagated through dropped leaves, and

164

threatened to smother the more slow-growing, demure native vegetation (because of this quality it was almost impossible to remove, especially as it was tangled up in the other creeper). Invasiveness was also the reason for pulling up apple mint (I felt kind of bad pulling it: it was so healthy and lush, and I enjoyed sitting near it watching bees when I arrived early). Weeding is another obvious example of distinguishing between wanted and unwanted plants based on which plants are culturally accepted as 'good'. These plants (the creeper, mint, and weeds) were attributed agency by Peg – a desire and action to 'take over' the garden, that she perceived as negative.

According to Hall (2011), acknowledging plant agency is vital to developing better relationships with non-human nature. Seeing plants as having agency means seeing them as subjects rather than objects, an important step for challenging the human/nature binary and forming more connected relationships to non-human nature. The still prominent view of plants as passive arose in the enlightenment era where, 'any distinguishing characteristics that plants possess have been understood merely as functionalist and mechanistic adaptations to the environment' (Jefferson 2020, 18).[21] Pitt (2015) argues that humans struggle to understand plant agency because plants act and communicate in ways so different from humans in both type and timescale. Furthermore, according to Brits and Gibson 'we' [I assume they mean Western cultures] are constrained by an inability to imagine forms of intelligence that differs from that of humans,

> humans are so used to or conditioned 'to know' plants, and claim to understand the exceptionalism of human cognition, that it becomes difficult to step back and consider there might be a non-human intelligence outside human understanding. (2018, 20)

Citing recent scientific studies of plant intelligence, Jefferson writes that:

> Intelligence in plants may be understood as more distributed [i.e. not located in a brain] than in humans and animals, a fact that challenges the stereotypical association between intellect and individuality. Thus, while the ways in which plants

---

[21] Jefferson (2018, 20) argues that this view is still prominent in fields such as biology and law, despite recent research in 'disciplines ranging from molecular biology to anthropology to philosophy [, which] are rethinking the assumption that plants are mere inert objects, and that the differences between distinct kinds of vegetal life forms may be explained by mechanistic adaptation."

act as participants in their environments differ from the discretely embodied way that animals operate, evidence is mounting that the historical treatment of vegetal life as passive and inert is inappropriate. Therefore, taking plants seriously – and taking seriously the ways that human activities harm them – can provide the conceptual foundation for reimagining the ways that various living beings interrelate. (Jefferson 2020, 21)

Despite the difficulty ascribed to humans in understanding and acknowledging the agency of plants (Brits and Gibson 2018; Pitt 2015; Hall 2011)[22], I found that at Earthwise, plants were also attributed agency by some participants. For example, in referring to the same native creeper as an example of 'something that grows naturally by itself', Peg pointed out that it has 'grown over that log by itself, we didn't make it…' In another participant's case, plants are attributed agency, and even anthropomorphised, as described in the excerpt from my field notes below. I recorded in my field notes a conversation about the creeper in 'my garden', which is 'invasive', but excused from extinction because of its native status, in which I asked another participant in my research about whether the creeper will continue to smother the other plants:

Field notes on the inner lives of plants, Earthwise, Perth, WA, March 2014

He explained that the creeper is the first thing to grow back after fire (like wattle seeds are awakened by heat), so it goes nuts for a while, but as the other plants re-grow it settles down and finds its place in the forest.

He intersperses his explanation with plant-dialogue/stream of consciousness, like the inner voice of the plant. The inner voice of the plant seems to be high pitched and cartoonish.

---

[22] This difficulty exists in Western cultures: "Importantly, while these arguments [about plant agency and intelligence] have only recently emerged in contemporary scientific discourse, they have been implicit to the cosmologies of numerous human cultures for hundreds if not thousands of years" (Jefferson 2020, 21 my brackets).

Figure 5.5: native creeper smothering other plants, Earthwise, WA, 2014. Image by author.

This could be because, in the context of a garden, plants are readily observable as having agency: they grow, produce fruit, flowers and seeds, and live in relationship with other non-humans (bees, birds, soil microbes). However, they are also vulnerable: they rely on humans, for correct initial placement in a place they can thrive (soil, sun/shade), for water (for most of the year in Perth), and for approval to be allowed to continue to grow (for example, the mint planted by someone has become perceived as a pest). Hall describes this relationship as follows:

> Although human beings may influence the situation of sessile plants during restoration, restorative activity does not negate the fact that plants are continuously behaving autonomously and intelligently. Regardless of how they come to be fixed in the ground, once rooted, plants begin to grow, perceive, communicate, and plastically alter their forms – making reasoned decisions as they do so. (2011, 169)

Acknowledging plant agency involves some level of knowledge about their needs and behaviour, either formal or self-taught, although Pitt (2015, 53) found that for herself, and many respondents in her study, this was quite limited (for example, she and other

participants were unable to determine why a plant was unwell). I also found that my own understanding of plant needs and behaviour was quite limited, as was that many of the volunteers, and even Peg often said she wasn't 'an expert'. Through time spent with particular plants, I understood more about their needs, and it is possible that over time, and in developing an embodied relationship with particular plants or spaces, I would come to understand more about their way of being in the world. Perhaps, as Hall (2011) suggests, as a result of this, I, or others would come to understand humans as 'dependant ecological beings' connected to plants and other non-humans.

5.4.2 Animals in the garden have agency and elicit strong emotional responses

Interactions with animals provoked strong emotional responses from participants at Earthwise. Animals in the garden were also seen as having agency; similarly to plants, acknowledging animal agency is important in developing more connected and ethical relationships with animals (Lindgren and Öhman 2019). Animals were mentioned by three of

the participants. One participant spoke about insects. Two spoke about the pleasure of hearing birdsong and watching birds in the garden. One participant mentioned that part of the attraction of being in the 'bush' was being able to stand outside and see '... kangaroos hop by and birds'. Birds and insects were also mentioned as indicators (along with the presence of plants), by two participants, of being in a natural place/space.

Birds were seen as charismatic and purposeful, with interactions provoking positive emotional responses. Birds were described by 3 participants as being a positive aspect of natural places/spaces. As described in section 5.1, one participant found birdsong a relaxing and pleasurable aspect of being in a garden. She also described the thrill of seeing a Kookaburra at Earthwise. For this participant, interacting with birds was a positive aspect of being in a garden, with the birds being attributed agency. She explained that,

> …in the UK when I'm gardening, I quite often have a little red robin come and sit just near me looking for worms. Here it's little Willy Wagtails. And they put a show on… because they're interested in what you're digging up. They're interested in the worms or the insects, and things like that, and so they do interact with you. They see you as a source of food. (P2, Earthwise, 2014)

I also enjoyed encountering birds in the garden, although I did not see a Kookaburra in my time at Earthwise I frequently encountered an ibis, and the friendly willy wagtails. Kookaburras were a feature of my childhood, with my grandparents feeding magpies and a kookaburra in their gardens over a number of years with steak cut purposely for them (a practice that, according to Jones [2018] is still common in Australia today). I vividly recall the Kookaburra sitting on the hills hoist in my grandparents' garden, where my grandfather would feed her/him steak by hand. This was a pleasure for my grandparents who could tell the individual birds apart from one another and kept track of the birth or disappearance of magpies in the flock. Jones (2018) suggests that people in Australia feed birds for a complex set of reasons that include pleasure, education and atonement (for environmental damage caused, similar to the participants interviewed in section 5.2). He shows that interacting with birds through feeding also results from, and leads to, caring for non-human nature. Unlike in the rest of the world, official and dominant attitudes to bird feeding in Australia are disapproving, with people citing issues of dependency, disease, and feeding supporting

introduced species over native species (Jones 2018).[23] In Western Australia, feeding wild animals (including birds) without a licence has been made illegal under the Biodiversity Conservation Act 2016 and Biodiversity Conservation Regulations 2018.[24] Despite bird feeding being frowned upon (and in some parts of Australia, illegal) a large percentage of Australian households engaging in feeding (estimated between 30% and 60%) (Jones 2018, 44). The positive emotions experienced by participants, and the popularity of bird feeding noted in the research by Jones (2018) indicates that relationships with animals in urban natural places/spaces can foster more connected relationships to non-human nature.

Worms and insects were the other creatures that appeared in my research at Earthwise. One participant partly attributed their involvement in Earthwise to being 'fascinated with nature and bugs' but did not elaborate. Insects were mentioned in passing by three participants, as being indications of being in an urban natural place/space. Worms kept in worm farms provoked emotions of interest, admiration, and sense of responsibility (from 4 participants). Maggots and cockroaches encountered when feeding the worms provoked disgust (in me).

Worms were the only animals that were designated a space in the Earthwise garden, and were valued and ascribed agency. Peg often spoke about worms with admiration, appreciating the work they did breaking down food scraps and producing rich soil and worm wee to nourish plants. Speaking of Peg's love and appreciation of the worms, and expressing his own, another participant recounted:

> Yesterday she says, 'I've got something to show you'.
>
> And, and we go to ... (laughs) we go to the compost pile... and it gets very hot, so the worms don't like the extra heat, they can't take it. But then it, it cools down, and, after it's broken down. And the edges are cooler... and around our biggest compost pile, there was just this rich layers of worms just having a wild party, having a good time.

---

[23] Although dissemination of Jones' research in popular media may have influenced the narrative, for example Jones (2018, 2018a)

[24] A fact which has been publicised by some local Councils (e.g. City of Cockburn 2018; 2019).

It was just beautiful. And she talks about how the little kids, when she does ... school tours at [name deleted] or does a worm farm with the children in their own school... some of them are a bit precious and don't, at first, anyway... put their hands into it, and then some of those will, and others are right into it, and that's significant if, and they love... handling the worms and the, in the worm farm, broken down material. (P6, Earthwise, 2014)

Another participant spoke about caring for worms in the worm farm as a necessity, since the worms are stuck in the farms and reliant on humans to feed them. She framed this concern for their well-being indicating a connection to non-human nature. In her 'visceral geography' of Australian gardeners engaging in composting, Rankin (2019) found that gardeners expressed love and care for worms, as well as guilt or shame when they (unintentionally) harmed the worms.

I encountered cockroaches and maggots while tending to the worms. I found the worms themselves interesting, however I disliked feeding them because the scraps we fed them from the child care centre next door were often week-old and contained maggots in the strong-smelling decomposing food. The smell of the decomposing food and maggots sometimes found in the bins elicited disgust in me, as did the many large (up to 5cm long!) cockroaches that inhabited one of the larger worm farms. On my reaction to feeding the worms in my journal I wrote:

PhD Journal entry on cockroaches, Earthwise, Perth, WA, June 2014

Always flinch when opening up the wooden one – it houses a LOT of cockroaches that all scuttle to find a dark place when the lids lifted. I am always afraid one will panic and run up my arm instead of the other way (hasn't happened yet).

Rankin (2019, 58) also found that disgust was an emotion felt by gardeners in relation to the strong smell of decomposing food in composting and worm farms. Rankin (2019, 58) links this to social norms and concerns with hygiene and fear of illness. She found that for some participants in her research, the experience of disgust in relation to decomposing food acted

Figure 5.6: Worm farms, Earthwise, WA, March 2014. Image by author.

as a trigger to fine-tune composting practices, or to reflect on what food in landfill might look like (thus providing motivation to continue to compost). For me, this disgust led to avoidance of the task when I could. My strong emotional response to cockroaches and maggots shows that not all embodied interactions with non-human nature in the Earthwise garden were pleasant. On the cockroaches I note in my journal:

PhD Journal entry on worms and cockroaches, Earthwise, Perth, WA, June 2014

OMG – feeding the worms. So talking about nonhuman nature. Cockroaches, maggots and worms. I really get freaked out by cockroaches. Write about – maggots, smell, liquid and decomposing bread, fruit and veg from day-care + maggots. Smell!!!

Disgust, unlike the positive emotional responses described above to birds, is unlikely to foster positive relationships with non-human nature. Lorimer (2007) explains that disgust is a common reaction to insects, which she describes as holding 'feral charisma', in that they are compelling because of their otherness (for some this may result in awe, but more often in can 'negative affections ranging from a mild disgust to a phobic paranoia' (Lorimer 2007, 920)). Lorimer (2007, 920) writes that this is particularly apparent when insects are encountered en masse (like the cockroaches in the worm farms), as 'organisms that swarm in packs threaten the modern understanding of the bounded subject'. In doing so, they also act as a provocation to uncomplicated notions of more-than-human relationality (Hohti and MacLure 2021). Responses to insects, such as mine, also prompt further inquiry into how ethics of care extend to less desirable non-human others, such as insects that are considered pests, who, along with slugs and snails, are animals within the garden that are considered acceptable to kill (Ginn 2014; Pitt 2018; Hohti and MacLure 2022). Considering encounters with insects can also help to 'avoid 'too easy' inclusions of non-human animals in our human research paradigms, which risk making the 'more-than-human' apolitical and numb as an analytic' (Hohti and MacLure 2022).

Figure 5.7: Cockroaches in the worm farm, Earthwise, WA, March 2014. Image by author.

5.5 Embodied, sensory experience in the Earthwise community garden

Unlike the complex and troubled relationships described when participants *talked* about nature, descriptions of embodied, sensuous experience were mostly positive and demonstrated that participants felt a sense of connection to non-human nature while participating in these experiences in the garden. My research showed that sensory experience played an important role in connecting to non-human nature in the Earthwise garden, and that embodied experiences in the garden were coupled with positive emotions. Paying mindful attention to my body, and to non-human others, was a big part of what made me feel connected.

The garden was a space where I experienced positive emotions, such as happiness and calm, and a sense of connection to my own embodied experience and non-human nature, facilitated by sensuous engagement with non-human nature. The excerpt below is one such example showing my enjoyment of the multi-sensory experience of laying sawdust paths in the garden.

> *Laying the sawdust on the paths is an easy, fun job that will make the space look finished but will take almost no time. The texture of the sawdust is fluffy and it lightly floats around a little as I push it into shape. It smells deliciously of freshly cut wood and looks clean and bright next to the rest of the garden.*
>
> Laying sawdust paths in 'my' garden bed, Earthwise, Perth, WA, August, 2014

The following excerpt also shows this appreciation of the sensory experience of gardening, as well as its calming, meditative, quality.

> *The native groundcovers I planted are far less vigorous than the weeds,*
> *I'm worried that the weeds will completely overtake the space before the*
> *groundcover has a chance to get established. The weeds come out easily*
> *and the repetitive action is meditative and calming. Kneeling in the damp*
> *soil I pull up the weeds rhythmically with both hands, enjoying the smell of*
> *the freshly wet soil and bruised leaves, and the gritty texture of the sandy*
> *Perth soil. Along with the small sounds of soil shaken free of the roots of*
> *the plants I can hear the singing-commands from the day-care next door,*
> *and the kids playing sport on the oval – sounds I have come to associate*
> *with this space.*
>
> Weeding in 'my' garden bed, Earthwise, Perth, WA, September 2014

This excerpt describes an awareness of my own embodied actions in the garden, and attention to the non-human things I'm interacting with, experienced through the senses. During this experience my mind was alert and focussed on my embodied undertaking of the task in the present moment. I was also experiencing embodied immersion while in action, while carrying out tasks in the garden. I also experienced this when spending time just *being* in the space; I occasionally spent time meditating in the space when no-one was there, sitting or lying in a secluded spot in the shade doing a sounds and thoughts meditation, which means paying attention to each sound and thought without judgement. The smell of the eucalypt trees and the herb garden, and the pleasant warmth of the sawdust paths were added pleasures to this. These times were restorative and I felt connected to myself and to the wider world including non-human nature. This sensory experience afforded connections to nature and contibuted to my relationships with individual plants.

Gardening provided a positive experience for others as well, with Earthwise participants using words like 'refreshing', 'energising', 'relaxing' and 'restorative' to describe their time in the garden. For example, on one occasion a participant said she loved the new garden and had 'tarried there' earlier in the day because it was so nice. Another described the space as

Figure 5.8: The author getting the paths ready to lay the sawdust , WA, February 2014. Image by anonymous.

'a soothing, calming, healing space', where whatever troubles she had beforehand drop away when she is there. These attributes of 'relaxation and escape' were also noted by participants in Freeman et al.'s (2012, 139) study of gardeners in New Zealand. Two other participants describe spending time in the garden as bringing them the more indefinable quality of 'happiness'. These positive feelings point to the importance of sensuous interactions with non-human nature in the garden.

For me and the participants from Earthwise, pleasurable sensory experience resulted in happiness. For example, in my field notes on enjoying sitting in 'my garden' I mention enjoyment of the visual and tactile:

Field notes on sitting in the garden, Earthwise, WA, March 2014

I stop working and sit on tree trunk edged garden bed by the pond in the cool of the dappled shade. I'm worn out after all my creeper wrestling so I'm enjoying resting and being in the space without working on it. As I look around I notice how pretty and lush the space is looking. The tree trunk I'm sitting on has these really pretty organic worm-like etchings that are revealed now that the bark has peeled off. This complex texture is pleasant under my fingers, and I find myself running my fingers over them as I'm sipping my coffee...

Other participants talked about happiness coming from the enjoyment of sensory experiences such as making compost and the sight and smell of flowering trees in spring. One participant talking about her garden said she could 'lose herself' when in the garden and is 'never happier than when I'm up to my elbows in compost (*laughs*)'. For this participant, the smells and sounds of the garden were the primary sensory modes she enjoyed, while touch was unimportant as she always wore gloves. She described the sounds of the garden, including insects and birdsong as bringing a sense of peace. Comparing her experience of gardening in the UK to that in Australia, she described the smells of Australian gardens as

'more pungent, but in a nice way, lavender, eucalyptus, and sage, those sorts of strong scents'. Another participant said that,

> the connection [to nature] is with the senses. So smell is really strong. Like, [P2] and I are just like pigs in poo when we're with the compost - You know, because it smells so wonderful (P1, Earthwise, 2014)..

For her, touch was also central to her enjoyment of gardening, especially the textures of the different plants. She also described vision as being important, and made a distinction between looking from a distance, and looking at the garden up close while immersed in gardening activities. Another participant made a distinction between the enjoyment of 'getting your hands dirty' in the garden for recreation and relaxation that he was privileged to enjoy, compared to the sensory experience of people who made their living from the land. Existing research on community gardens has established a link between the embodied and multi-sensory experience of gardening and improved human and non-human nature relationships. Hawkes and Acott (2013, 1131) attribute the embodied practices of gardening to possibly being responsible for changing participants' attitudes to non-human nature, suggesting that these experiences 'may at least begin a personal internal dialogue, bringing people's attention to both the affects and effects of their interactions with nature'. Both Turner (2011) and Hawkes and Acott (2013) agree that more research is needed on the effect of connections formed through embodied gardening practices.

Haptic sensations, particularly touch, are prominent in my writing, for example, in the excerpt above '*I take my gloves off so I can enjoy the sensation of the rain and the soil*'; embodied memories from my childhood, which I introduce in the introduction in the excerpt 'tall grass' and expand on below were also primarily triggered by sense of touch. Montagu (1971) explains that touch, referring to the skin of the whole body, is the first sense to develop and is the foundation of human to human connection. He shows that loving touch, communicating 'affection and involvement' (Montagu 1971, 291) is essential to humans' healthy development, beginning in infancy, and continuing onwards. Drawing on Montagu, Rodaway (1994) posits that touch can be seen to encompass other senses – for example, hearing and smell – the smell touches the nose, sound touches the ear-drums. Touching is a form of communication, as Rodaway (1994, 41) writes, because 'touch is the most reciprocal of the senses, as to touch is always to be touched'. In relation to the idea of 'flesh of the world' (Merleau-Ponty 1968), touch is emblematic in that 'it always involves the presence, at once and the inseparability, of the body that we touch and our body with which we touch

179

Figure 5.9: Quiet enjoyment of the garden while resting, Earthwise, WA, March
2014. Image by author.

it' (Montagu 1971, 125). Considering our bodies in-touch with the world can help us to recognise our inter-embodiment and connection to others (Cataldi 1993, 127), as 'the act of touching inverts the subject object relationship, disrupting the boundaries between self and other' (Springgay 2008, 25). This may be why touch was so strongly associated with a feeling of connection.

As discussed above, participants at Earthwise related that spending time in natural places/spaces positively affects their understandings of being connected to nature. Two others mentioned childhood sensory experiences in natural places/spaces as impacting on their understanding of self as connected to nature. Childhood memory was also prominent in my writing, with sensations experienced in the garden recalling memories of embodied interactions of nature as a child. One example is provided in the following excerpt where I describe building a herb spiral.[25]

Stevenson's (2014) explanation of memory as being linked to our bodies, places, and other people rather than as a cognitive function can help to explain the importance of sensory experience to memory. Like the other theorists I refer to in my work, he too rejects the Cartesian split of mind from body, instead describing memory as emplaced, embodied and linked to others (situated intelligence, distributed cognition). He writes that walking through or interacting with a place can trigger memories of other similar places. For example, for me, building the herb spiral described above connected me back to a memory of myself as a child playing in the sand, similarly photographing and sitting in 'my' corner of the garden was the catalyst for writing the excerpt 'tall grass' that opened the introductory chapter, based on embodied memory of childhood experiences playing in the fields. The images of nasturtiums I wrote about in the introductory excerpt of embodied writing in Chapters 3 and 4 also related to childhood memories of my grandparents' garden. Engaging in sensory experiences in 'natural places' as a child may facilitate embodied memories of these spaces which help form a sense of connection to non-human nature, or which we can call on as adults if we lose our feeling of connection.

---

[25] In this excerpt on building the herb spiral, the childhood experience I refer to was of playing in builder's sand; although I understand that some would question whether piles of builders sand can be called non-human nature, but that is how I thought of these pile of sand belonging to the half-built houses on former grazing land; they were part of a broader experience of country life full of tactile interactions with not just building sites but fields, rocks, bush, muddy dams, streams and the river with a backdrop of endless sky, parched hills, dusty sheep, struggling trees, and cooler watery places where trees struggled less and English plants lent lushness.

> *As I pack the dirt in around the wood I noticed the sensation of the dirt –*
> *under my knees, cold, damp and firm, slightly rough texture through my*
> *jeans - cool, rough and firm, compacting underneath my palms, and*
> *working up under my nails… And suddenly I am back as a child playing*
> *on a large pile of builder's sand, there were many of these on my street,*
> *construction is slow in the country, and ours was a new subdivision, we*
> *were one of the first to build – I remembered the cool gritty feel of the*
> *sand under my cheek and on my bare toes as I lay face down, cheek*
> *turned to the side, toes and hands buried in the sand to keep me from*
> *slipping down the slope of the edge of the pile. Sitting on the top, sliding*
> *down the sides, making endless hollows and filling them in while chatting*
> *to a friend. No one around – boredom, laziness, attention to sensation, like*
> *sitting at the beach on the cusp of summer when under the warm sand*
> *your toes encounter the cold and hard and damp layer underneath.*
>
> Embodied memory of playing in the dirt, Perth, WA, June 2014

Gardening at Earthwise, where I participated in tasks involving multi-sensory, and especially tactile, engagement with plants and soil provided me with a space to connect with myself as a body subject. This shows that not only does possessing a sense of self as a body subject help us connect to others, but that time in nature can help develop this connection to self. The excerpt below about a day in the garden from the middle of my fieldwork in 2014 identifies my dawning realisation that it is through my body that I experience the world. The exhaustion I refer to is a result of the way I constantly pushed myself to work, study, and exercise, beyond the limits of what my mind-body could deal with, rather than listening to my embodied wisdom and doing less.

The multi-sensory nature of the activities I was immersed in brought me more into awareness of my embodied experience, developing my sense of self as a body subject. The excerpt

below, from my journal on constructing a herb spiral at Earthwise, shows again how the haptic experience of the activity encouraged me to be aware of my own embodiment.

> *I'm not sure what tree it is from, but the wood is heavy – it's light in colour and dense and difficult to lift. I'm aware of how easy it would be to strain my back doing this, and I make an effort to be conscious of engaging my muscles in my legs and core, and thinking about lifting before I do it. Experimentation shows that the easiest, and most fun, way to move them is to squat down, scoop up one side, turn them on their sides and roll them down the short slope.*
>
> Building the herb spiral continued, Earthwise, Perth, WA, June 2014

> *A thunderstorm is brewing and I am working swiftly to get the bed cleared and planted so the plants can benefit from the rain. I notice I'm feeling physically tired - I knew I would be better off resting instead of going to yoga this morning. But since I woke up at my usual time without my alarm, I couldn't resist. Now I can feel the strain in my fatigued leg and shoulder muscles as I work. My mind drifts off to thinking about the next task of planting the bed.*
>
> Planting the garden part 1, Earthwise, Perth, WA, August, 2014

The above excerpt shows how the active and physically demanding job of building the herb spiral bought to consciousness a sense of myself as a body-subject (consciousness of muscular movement, physical experimentation with moving the logs). Below, a further

183

Figure 5.10: Logs waiting to be moved to herb spiral, Earthwise, WA, June 2014.
Image by author.

section of the following excerpt describes the experience of arranging the logs into the shape of the herb spiral. Haptic sensations, particularly touch, are central to this description.

> *As we move the pieces into place I notice that the side of each piece has a different texture; I run my fingers over each. Some have a sharp-edged wavy pattern etched half a centimetre or so into them, I guess made by an insect burrowing between the bark and the trunk – up close it fills my vision like a mountain range and the lines turn into valleys carved into rock by water. Others are smoother pattern undisturbed by insects, where the bark has pulled from the tree and --- knobbly bits, then long smooth ridges, furrows, smoothed and turned grey by exposure to the weather*
>
> *As I pack the dirt in around the trunk I noticed the sensation of the dirt – under my knees, cold, damp and firm, slightly rough texture through my jeans - cool, rough and firm, compacting underneath my palms, and working up under my nails.*
>
> Building the herb spiral continued, Earthwise, Perth, WA, June 2014

I am not unique in finding multi-sensory experience, and in particular haptic sensation, especially through tactile contact with the earth, encourages a sense of my own embodiment. In her study on perceptions of nature on the island of Dominica, Yarde (2013) found that participants expressed the idea of awareness of the sense of their own embodiment most often in relation to contact with soil or water. For example, one participant spoke of how he loves 'go[ing] hiking and walk[ing] barefoot so I can feel the mud and earth between my toes (Male, 29, Bath Estate)' (Yarde 2013, 160). Yarde (2013, 160) notes that the way participants talk about sense of touch demonstrates that 'sensuous engagement with nature can produce awareness, not only of the natural world with which we engage, but also of our own embodiment as part of our relationship with nature'. Multi-

185

Figure 5.11: Herb spiral partly finished, WA, June 2014. Image by author.

sensory, and particularly haptic, experience is central to developing a sense of own embodiment and to times when we feel ourselves to be embodied subjects interacting with non-human nature. Additionally, as begins to be revealed here, the process of connection to embodied self, and the connection to non-human nature is not necessarily linear. Connection to embodied self can be developed through time spent immersed in non-human nature spaces. It is also non-linear in the sense that it is also possible to slip from viewing self as subject to viewing self as object and back again (Fredrickson and Harrison 2005, Fredrickson and Roberts 1997). For example, swimming in a natural place/space could be an activity where you feel mindfully connected to self and non-human nature, but seeing someone watching from the shore could trigger an awareness of self as object and this positive experience is disrupted.

5.6 Conclusion

In this chapter I addressed the second of my research objectives by exploring relationships with nature in the urban context focusing on the cultural context of my research, the Earthwise community garden in Subiaco, Western Australia. Through this, I provided context for my research question: 'How can embodied methodologies inform approaches to planning that facilitate more connected human relationships with non-human nature?' First, I showed that for participants at Earthwise, experiences in nature are emplaced, and that ideas on relational place/space can help to explain this. Second, I outlined how participants saw themselves as belonging, or not, in nature. Third, I discussed participant's views that humans have a responsibility to care for non-human nature. Fourth, I further explored human relationships with plants and animals in the garden finding that plants were considered to have agency, and animals produced strong emotional responses. Finally, I demonstrated how for myself and participants in my research at Earthwise, engaging in embodied, multi-sensory experiences in the garden produced mostly positive emotions, such as calm, happiness and peace, and resulted in feeling more connected to non-human nature. Focusing on embodied experience side-steps the more complex and troubled aspects of belonging and guilt, allowing connections to develop. My research suggests that focussing on embodied interactions with non-human nature at the level of a garden is a promising way to foster connections to non-human nature. For Planning, this flags the importance of thinking about how to plan for every-day interactions with non-human nature.

Conceptually this means re-framing how we think about nature as being outside the city and appearing free of human intervention ('wild'), and finding value in non-human nature spaces such as gardens. I follow up on these views of 'wild' nature in the next chapter. The findings outlined in this chapter also provided me with the impetus to solidify the focus of this study on embodied, multi-sensory, experiences in natural places/spaces, which I develop further in the next Chapter, 6, on the road trip Perth to Darwin and in part 3 of the thesis.

Chapter 6: Human relationships with non-human nature on the road trip Perth – Darwin

Figure 6.1: The road stretched out in front of us, Shark Bay, WA 2016. Image by author.

Finally, we are on the road! The preparation has been so protracted and I find myself filled with thoughts of people I've left behind, and certainly unable - yet - to switch off. I'm not sure the departure and the resulting change to the flow of the river of my life has sunk in.

This is the furthest North Lottie has been, but Indian Ocean Drive is more familiar to me, although I forgot how vibrantly green the scrub is and how vast the space seems, even though we have only just left the suburbs behind.

On the road Perth to Darwin, Cervantes, WA, February 2016

In this chapter I present the sensory autoethnographic data from the road trip Perth - Darwin where I explored natural places/spaces outside the city. In the previous chapter I showed that participants in my research at Earthwise (including me) conceived nature as emplaced. Although my research at Earthwise was conducted in an urban setting, for myself, and the other participants in my research, the 'bush', land outside the urban with little visible human disturbance, was frequently mentioned as a natural place/space, and equated with 'real' nature. This chapter continues the work of the previous chapter in responding to my second research objective 'understanding how people feel and think about, and behave towards non-human nature in the cultural context of my research, Western Australia, this time in a 'wild' setting.

This chapter is divided into two sections. In the first section 6.1 I discuss what I found out about how I and others think and feel about, and act towards, nature outside the city as a result of my trip Perth – Darwin. I found that 'real nature' is equated with the idea of 'wilderness'. I argue that, although this idea is problematic, its production through parks and reserves results in natural places/spaces that can allow meaningful connections to non-human nature. Next, I show how the myths of the Australian 'outback' and frontier point to disconnect and a desire for spiritual connections to non-human nature. I follow up on the themes of ecosystems, guilt and non-belonging and the influence of the ongoing process of colonialization from chapter 5, and show how these themes are also present in relation to 'wild' nature. In the next section 6.2 I focus on embodied experience showing how my time in 'wild' natural places/spaces resulted in feelings of connection to non-human nature. I discuss the presence of awe, developing the idea of the 'embodied sublime' to begin to theorise why this might lead to connection. I also show how feelings of fear and happiness manifested on the trip, and demonstrate that haptic experience is central to meaningful interactions in 'wild' natural places/spaces. Last, I show how interactions with animals are especially significant in 'wild' spaces. This section adds to the findings from the previous Chapter 5 in understanding how we think, feel, and talk, about non-human nature in the cultural context of my research, Western Australia.

6.1 Ideas about nature gathered on the road trip Perth - Darwin

In the previous chapter I discussed what I learnt about how I and participants in my research at Earthwise viewed nature. In this chapter I follow on from this in the context of 'wild' nature. I this section I first explain how I see 'real' nature as being wilderness, then discuss the concept of wilderness, and show how this conception of nature is common in Australian mythology. I focus on national parks and show how these spaces are both problematic and useful for human and non-human nature connections. I then introduce the concept of Australian nature as the 'outback' or last frontier and explain how this myth perpetuates white sovereignty and distances non-Indigenous Australians from connection to non-human nature, but also points to longing for connection. I then explore the themes of ecosystems thinking, guilt and European ideas about nature.

6.1.1 Real nature in Australia is 'wilderness'

Despite my intellectual understanding of the problems with dualistic understandings of nature (outlined in the introduction), and the fact that I find everyday connections to nature in my garden, local parks, and nearby bushland reserves, my writing from both Earthwise, and the road trip shows that I believe that 'real nature' can be found in 'wild' places/spaces, free from humans or human intervention, outside of the city. Other Participants in my research at Earthwise and I reported 'verification of wilderness through experiences of human absences' (Waitt and Lane 2007, 163). This was also detailed in Waitt and Lane's (2007) study of embodied experiences of 4WDers in the Kimberley, and in studies of recreation in the Australian bush (Harper 2017, 9). For example, in the excerpt I include in full later in this chapter on walking in Kalbarri Gorge National Park, February 2016, I write, 'how lucky I am to be alone here.' Additionally, while working on this chapter I have had moments of feeling like my experiences were not good enough (by which I mean extreme or authentic enough) for someone writing a PhD on this topic. I am not Val Plumwood to report on being almost eaten by a crocodile[1]; we were not undertaking Bear Grylls style survival[1], or even staying for long periods camping rough. This judgement about my experiences affirms the idea that I conflate nature with 'wilderness' and that as such, spending time with non-human nature is something out of everyday reach of the typical urban dweller. The

notion of wilderness can help to explain how this view of nature might influence relationships to non-human nature.

Cronon (1995, 2) famously wrote that 'wilderness' is a cultural creation; an assertion which led to the ongoing problematisation of the term (Jorgenson 2015, 483). Cronon (1995) argued that there is no such thing as an untouched, pristine, landscape, but that nature has been modified first by indigenous people, then by modern agriculture, and more recently by the human activities that ushered in the age of the Anthropocene (such as carbon emissions leading to climate change). He attributes the idea of wilderness to a 'fantasy' of urban dwellers, who are disconnected from the origins of the food and materials they consume,

> only people whose relation to the land was already alienated could hold up wilderness as a model for human life in nature, for the romantic ideology of wilderness leaves precisely nowhere for human beings actually to make their living from the land (Cronon 1995, 11).

Wilderness continues Western binary logic separating humans form nature, and only placing value on 'virgin' or untouched places, leaving those already damaged open to further exploitation (Plumwood 1998, 658). Furthermore, as Jorgenson (2015, 487) writes, 'the idea of the wild without people leads us to undervalue the wild where people in fact are—the sparrow in the urban garden or the butterfly in the agricultural field'. This 'Wilderness' is also problematic because it places humans in one category implied to be destructive to non-humans (whereas Indigenous peoples' philosophies and practices have provided an ongoing sustainable relationship with non-human nature) (Cronon 1995, 155).

In Australia, according to Lester (2005, 24):

> the elevation of 'wilderness' in Australia followed a less explicit path than it did in the United States, despite a common foundation for both nations' form of environmentalism — that is, a 'first-order goal' to defend wilderness. (Hay, 2002: 12)

Through an analysis of news media and policy, Lester (2005) demonstrates how the term gained traction throughout the 1960s and 1970s, gaining significant political power by the 1980s:

> Books, films, photographic ephemera poured out of the movement during the late 1970s and early 1980s … The Greens made wilderness a commodity whose

commercial nakedness they clothed in the Romantic aesthetic borrowed from Piguenit and refined by the wilderness photographers who followed in Truchanas' footsteps. (Pybus and Flanagan 1990: 161 quoted in Lester 2005, 124)

Plumwood argues that the Australian environmental movement 'replaced the imperialistic concept that denigrated wilderness by an American-centred concept that honoured it, but did not rethink its construction as absence, emptiness of virginity' (1998, 658). More recently, Rose argues, 'questions of 'wilderness' take us way beyond terminology, pressing us to consider underlying social and ecological ethics' (2012, 10). The concept of 'wilderness' arises from either the erasure of Indigenous peoples' 50,000 plus years of care for Country and ongoing association with it (Giblett 2011; Rose 2012; Jackson Porter and Johnson 2018), or aligning Indigenous people with nature 'and frozen in time' (Jackson, Porter, and Johnson 2018, 205). Like in the US, definitions of wilderness in Australia have relied on the land being remote, unspoiled and unoccupied (Giblett 2011, 101). Wright explains that since 1770 when Cook laid claim to the East Coast of Australia for England, 'the whole of the continent was classified under English law as 'Waste Land of the Crown. Wilderness, waste or desert were by definition unoccupied and ownerless areas' (1991, 3). According to Jackson, Porter, and Johnson, 'waste was also intrinsically related to the future: it had potential for improvement, cultivation and civilisation, a moral right and duty that colonisers took very seriously' (2017, 63). The myth (Hills 1991, 16) of an unoccupied Australia meant that the wilderness was open to exploration, mining, agriculture and pastoral uses (primarily sheep and cattle) (Wright 1991). By constructing settlements and establishing pastoral or agricultural uses in the wilderness it was tamed (Giblett 2011, 106). With the use of European pastoral methods, the wilderness was also transformed from 'flourishing country' (Rose 2012, 10) to unproductive, dry, saline land as cattle and sheep compacted the land, used up the water resources (Reynolds 2006). Or as Rose (2012, 10) explains, in Indigenous terms (turning the concept on its head) – 'wild country', where 'lawlessness' prevails, leaving ecosystems damaged by 'people and cattle running amok'. Wild country is the 'end result of Whitefellas remaking the country to conform to their vision of landscape and economy, through both wilful and negligent destruction of the ecological integrity of the former life of the place.' Rose writes thus:

In Aboriginal pastoral English the wild is that which is running lawless; quiet, in contrast, is in communication, in relationship. In the context of country, the term 'quiet' speaks to a broader domain of lawfulness. Quiet country exists where life

> flows through many species, and where recursions of mutual benefit form loops of
> entangled and emplaced connections. Quiet country expresses the very heart of how
> the living world really works. (2012, 10)

From this perspective, remaining areas of wilderness, or 'quiet country' are those not urbanised or damaged by European farming methods, but do not preclude the presence of humans.

Reflecting on my desire to alone in 'wild' places that 'look like no one ever set foot in them' in my writing, it is uncomfortable to acknowledge that this longing reflects a dualistic notion of humans/nature, as well as a settler colonial mind-set. Although I am aware that Australia was occupied by Indigenous people long before white invasion, I seem to have been able to put this aside in my mind in constructing 'wilderness' this way, or to hold it in the back of my mind as an unpleasant reality that didn't intrude on my present moment experience. In this way, my own desire to experience 'wild nature' buys into and supports the continuing process of settler colonialism in Australia. For me and others who hold these views a starting point is to acknowledge them. Writing about Kakadu National Park, Palmer suggests that visitors need to 'rethink their own identity in relation to the land and the place of this identity within the context of wider social relationships' (2004, 124) of traditional ownership. Palmer suggests doing to could unsettle colonial thinking and 'negotiate a respectful relationship' (2004, 124) with the traditional owners. Since becoming pregnant with my first child, I have not spent much time alone when I wasn't working on this thesis, so I'm not sure how the reading I've done since arriving in Darwin (when I started the reading that is now included in this chapter) to the present day, will change how I feel in practice in visiting 'wild' places, although it has certainly problematised my thinking.

The concept of wilderness appears in the institutionalised discourses of management of natural places/spaces in Australia and WA. Australia, unlike the EU and America, conservation is a state rather than National responsibility, so definitions and legislation differs from state to state[26]. However, all are framed by the International Union for Conservation of Nature (IUCN) protected area categories. The IUCN comprised of

---

[26] . At a national level, the Environmental Protection and Biodiversity Act 1999 establishes Commonwealth Reserves. The Act establishes both marine and terrestrial reserves. These are managed by the Director of National Parks (Department of Agriculture 2020b).

government and non-government bodies: 'It provides public, private and non-governmental organisations with the knowledge and tools that enable human progress, economic development and nature conservation to take place together' (IUCN n.d.). The IUCN categorises natural places/spaces into seven management categories, with wilderness areas are defined as

> protected areas that are usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition. (IUCN n.d.)

In wilderness areas, protection is foregrounded, while with National Parks, the protection of nature and natural processes is combined with opportunities for human visitation (IUCN n.d.). Both categories emphasise the absence of evidence of human modification to the landscape [27]. Also at the Commonwealth level, the Commonwealth's National Wilderness Inventory bases their assessments of wilderness on a continuum of human modification on the attributes of 'remoteness' and 'naturalness' (Department of Agriculture 2003), echoing the features of the 'bush' or 'wilderness' spaces mentioned by participants in Chapter 4.

On the road trip, most of my interactions with 'wild' nature took place in nature reserves or national parks as defined above by the IUCN. Wild nature has been preserved in nature reserves and national parks since the late 1800s, influenced by romantic and scientific views on nature which valued 'wild' nature for its biological values and aesthetic values (Frawley 1992), and reflects a 'colonial ordering of space' (Jackson, Porter, and Johnson 2018, 30). Furthermore, National parks (and the private 'bush' properties mentioned by participants in

---

[27] On paper at least, recent governance increased recognition of Indigenous connections to the land. Western Australia, in 2012, the Conservation and Land Management Act 1984 was amended to include a new management objective relating to Aboriginal cultural heritage, and provisions relating to joint management and cultural activities. The Reconciliation Action Plan 2013-2015 was also released in 2012; the stated aims of the plan are to recognise Aboriginal peoples as traditional custodians, promote equality, and foster partnerships and increased employment of Aboriginal people (Department of Sustainability 2012). In the Northern Territory (NT), where I ended my road trip, the Aboriginal Land Rights (Northern Territory) Act 1976 allows for land to be granted inalienably to Aboriginal peoples. According to the Central Land Council (2007) 85% of the NT coastline has been recognised as belonging to Indigenous peoples, along with 50% of the interior. Native title claims also apply to large portions of the remaining land (these do not grant ownership). Land ownership is held by Aboriginal Land Trusts who cannot make decisions without direction from the Aboriginal Land Council who is responsible for consulting with traditional owners (Central Land Council 2007). Significant wilderness areas in the NT, such as Kakadu National Park, are owned by Aboriginal peoples, but leased to the NT government and co-managed by the government and Aboriginal interests (Central Land Council 2007).

the previous chapter), are sited on land that 'was stolen from its traditional owners through colonialist appropriation of lands' (Jackson, Porter, and Johnson 2018, 30). The parcelling of 'nature' into national parks and reserves is a reflection of the way that planning discourse and practice in the 20th century have centred on conservation, expressed in planning through the system of zoning that spatially separates people from nature by assigning uses such as urban/rural/conservation to parcels of land (Whatmore and Boucher 1993, 169). The authors explain that the conservation discourse has two 'strands' - one that values nature for its scientific values (e.g. biodiversity), and the other that values nature for its aesthetic value, mirroring the motivations for the creation of national parks described by Frawley (1992). Conservation discourse frames humans as destructive to nature, and best kept separate from it. I have internalised this discourse, and this regulated my behaviour on the trip. For example, I was careful to stick to the trails, so as not to unnecessarily damage the landscape. I didn't fish, or take shells or pick wildflowers. This behaviour can be attributed to a sense of responsibility, because like those in Head and Muir's (2006) writing I want to 'do good' by nature, seeing myself as having a sense of duty or care for it, an idea I discussed in more depth in the previous chapter.

Despite the dualistic conceptions of humans and nature that underpin the formation of national parks and reserves, spending time in these places can help visitors to feel more connected to non-human nature and natural places/spaces (Kastenholz et al. 2020; Ryan 2010; Pramova 2022). According to Davison (2008), who studied environmentalists' attitudes to nature, profound experiences of connection with nature rely on access to 'wilderness' spaces. National parks meet the needs of those described in Davison's (2008) study to spend restorative time in nature experiencing 'sacred otherness' because they combine relative accessibility (i.e. at a minimum roads or 4wd tracks) with the appearance of 'wild' nature. National parks act to contain 'wild' nature in allocated geographic spaces separated from other uses, maintain the appearance of wilderness, but also allow and even encourage limited access. Specifically, in Western Australian National Parks, the protection of nature and natural processes is combined with opportunities for 'environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities' (IUCN n.d.). According to Pearce, Strickland-Munro, and Moore (2017, 375), who studied visitor responses to the Kimberley region in WA, experiences of awe, which could promote connection to non-human nature, also rely on access to 'wilderness' comprised of 'vast physical landscapes, geological aspects and other aesthetic qualities'. These attributes are

found in national parks and Reserves, and this points to National Parks being one way in which people can experience connection to nature.

However, the conflation of 'real nature' with wilderness, available in National Parks and Reserves is problematic from a social justice perspective, not only because, as discussed above, it denies ongoing Indigenous connection to the land (Jackson, Johnson and Porter 2017, Rose 2012, Waitt and Lane 2007), but also because most people in Australia live in urban areas (World Bank 2022). On the road trip our ability to be in 'wild' nature was reliant on access to technology and equipment. We needed our car and camping equipment as well as the presence of tracks and roads to give us access to visit the spaces. This makes 'wilderness' experiences available only to those who have at least enough money for a car or transport as well as the luxury of time off work to go. This aligns with Harpers (2017) review of studies on bush-based recreation showed that most who participate in these activities are affluent city dwellers. Other barriers include age, ability (excludes those dependant on others for mobility such as young, old or disabled people), and gender (may be unsafe, or perceived as unsafe, for women travelling alone, or outdoor activities may be perceived as too difficult for women [Harper 2017]). These barriers indicate the importance of exploring connections to non-human nature in mundane, every-day, settings too.

Although the notion that I, and other non-Indigenous Australians can find connection to 'wilderness' natural places/spaces appears positive, it is problematic in the Australian context in terms of how it relates to Indigenous people's ongoing relationship to places. For example, writing about Kakadu National Part in the NT, Palmer (2007) cites the discomfort of Indigenous landowners with bushwalkers accessing sacred sites, and ignorance, or wilful disregard of Indigenous people's preferences that sacred sites not be viewed. Indigenous landowners also question whether it is possible to care for places if 'they are unable to properly communicate with the sentient landscape' (Palmer 2004, 122). There is also the concern that, through coming to a sense of ownerships or attachment to place, non-indigenous people are carrying out colonising practices. Can my own sense of connection or belonging be construed as positive if it is part of the ongoing colonisation of Australia? Embodied notions and practices may provide some ways forward to connection, but do not negate these issues.

To summarise the above, the continued use/word of the concept of 'wilderness' in the Australian context is problematic for two main reasons, first, it is dualistic in that it sets humans outside of nature, and second it is problematic in relation to Indigenous people, in

199

that it continues the logic of settler colonialism. Learning from Indigenous Australian's practices and philosophies, for example, through engaging with the notion of place/space as relational could provide a way for non-Indigenous Australians to conceptualise humans as a part of nature. The concept of place/space introduced in Chapter 1, makes 'wilderness' an impossibility, because by entering 'wilderness' humans becomes the co-producer of place/space along with the other beings and objects. Further, place/space as described by Suchet-Pearson, Wright and Burarrwanga (2013, 16) conceives time as non-linear, with the relationships and obligations of humans stretching across the past, present and future, further confounding the idea of humans and nature as separate. The notion of co-becoming described by Suchet-Pearson, Wright and Burarrwanga also implies an ethic of responsibility;

> human and more-than-human beings never are – not isolated, not static, not known – but only become as they constantly emerge together. And that this togetherness requires an attention to the ethical responsibilities of care that emerge when we live, think, act and attend as part of the world, rather than distinct from it (2013, 188).

Humans are positioned as required to care for Country '*as* Country', rather than *in* Country (Suchet-Pearson, Wright and Burarrwanga 2013, 188 my italics). For planning, reframing responsibility towards caring for Country can be done by learning from Indigenous Australians. However, as pointed out by Porter, Hurst and Grandinetti (2020) it is important that this is not done in such a way that Indigenous people are viewed as a 'quaint repository of static 'wisdom' which can be enrolled (by non-Indigenous scientists, who are always cast as culturally and political neutral) in the service of science-informed policy' (Porter, Hurst and Grandinetti 2020, 232). Rather, the challenge for planning and related disciplines is that 'Indigenous thinking must be seen not just as a well of ideas to draw from but a body of thinking that is living and practiced by peoples with whom we all share reciprocal duties as citizens of shared territories' (Todd 2016a, 17, original emphasis, quoted in Porter, Hurst and Grandinetti 2020, 232). Although this chapter is focussed on non-urban areas, this opportunity for planning to learn from Indigenous people is not limited to non-urban areas; this would risk repeating the limiting narrative that indigenous interests are limited to 'connectedness to place and ecosystems [which] stands in the way of working towards the multiplicity of environmentalisms that will be required to deal with anthropogenic climate change' (van Holstein and Head 2018, 51).

6.1.2 Australian nature is the outback or frontier

In the previous chapter, I professed a longing for 'the red dirt and wide open spaces of my dream world'- a romanticised image of the 'outback', or interior, of Western Australia as 'wilderness' that attracts tourists (Waitt and Lane 2007). However, I was without question a visitor in the desert, passing through, unable to survive without my well-equipped (if worryingly old) 4WD, and with the lushness of the wet season in Darwin firmly my final destination. Of a stop on the road from the coast inland of Broome on the way to Halls Creek that took us inland east before we turned north to Darwin I wrote:

> *I want to take photos so we stop at a rest stop, and I get out and take some of the red hills and straggly trees. It looks unreal, like a painting - something about the colours and the light. It's so overwhelmingly hot, with no shade, that I can't stay long and Lottie doesn't leave the car.*
>
> Driving Broome - Halls Creek, WA, March 2016

As the above excerpt shows, I am ill-equipped for spending much time in this 'real' Australian nature of the interior of WA. In fact, despite my fascination with the interior of Australia, of the two routes to Darwin we stuck to the coast where we could, as a more hospitable and familiar option. The attachment to the coast is a feature of Australian culture. Most Australians live in cities along the coast, leaving the majority of the continent unoccupied by White Australians, many of whom, according to Carrol (1982, 234) perceive the interior, or 'outback' as being unknowable and hostile, at the extreme, 'an unthinkable desert land that is pure horror'. This combination of longing but non-belonging has been explored in literature on the myth of the 'outback'.

201

Figure 6.2: Driving Broome - Halls Creek, WA 2016. Image by author.

The 'outback' is another myth about nature, which, unlike the 'wilderness' is exclusively Australian. The outback refers to the interior of Australia beyond the frontier of white settlement. The frontier in Australia is an irregular pastoral, agricultural and mining frontier beginning at coastal settlements and moving toward the interior (Giblett 2011; Griffiths 2002; Reynolds 2006). Australia was seen as 'a land of absences' and the landscape was used to make up for a lack of (white) history and cultural identity (Ikin 1988, 253). This perceived emptiness relies on the denial of Indigenous history (Jackson, Porter, and Johnson 2018; Steele 2010, 38). However, despite the myth of 'terra nullius', Indigenous history and presence have never been successfully erased, but remain an uneasy presence in the white unconscious. The guilt of invasion and 'doubts about the legitimacy of the European settlement of Australia' are 'the emotional burden of Australian settlement; they are the recurrent, inescapable shadows and spectres of the colonial experience' (Griffiths and Robin 1997, 3). Or as Wright (1991, 30) writes, 'these two strands - the love of the land we have invaded, and the guilt of the invasion - have become part of me. It is a haunted country'. Tacey (1995, Kindle LOC 1737) describes the denial of black history as being a problem of the national psyche - the landscape is the unconscious which white Australians have repressed, yet it continues to haunt us.

This unease translates into White representations of the landscape, but also, according to Tacey (1995, Kindle Loc 1769) provides insight into the often unconscious longing for connection to the land harboured by White Australians. Steele (2010, 36) argues that 'early representations of the Aboriginal as an un-historied "embodiment of the malevolence of the harsh Australian environment" were conflated into a timeless, demonic landscape that threatened and fascinated white Australians'. For example, in Lawrence's 1923 novel *Kangaroo*, the protagonist, English poet Somers, ventures into the West Australian bush in the light of the full moon and is overcome with 'icy terror', not just because of the 'weird, white, dead trees' and the 'hollow distance of the bush', but because of 'a presence' (Lawrence 1923, Kindle Loc 131). Later,

> [h]e schemed as to what it would be. It must be the spirit of the place, something fully evoked tonight, perhaps provoked, by the unnatural West-Australian moon, the roused spirit of the bush. He felt like it was watching, and waiting. Following with certainty, just behind his back. It might have reached a long black arm and gripped him. But no, it wanted to wait. It was not tired of watching its victim. An alien people

> - a victim. It was biding its time with terrible ageless watchfulness, waiting for a far off end, watching the myriad intruding white men (Lawrence 1923, Kindle Loc 136).

The unsettling or uncanny nature of the landscape is also present in stories such as Joan Lindsay's 1957 novel and Peter Weir's 1975 movie *Picnic at Hanging Rock* and Patrick White's 1957 Novel, *Voss*. Keesey (1998, 33) argues that 'the national uncanny is a figure for the return of what a country has repressed in order to establish its identity as master; it is the all-too-familiar threat of dispossession by strangers, of self-estrangement'. For Tacey (1995, Kindle Loc 1769), the stories also contain the theme of sacrifice; he argues that this occurs because of an unconscious longing to develop a meaningful relationship with the land. Lacking a constructive way to do this, the comingling of people and land takes place at a symbolic level 'earth-sacrifice' stories such as these. This points to the need for more constructive ways to develop relationships to non-human nature in the Australian context.

6.1.3 Following up themes from Earthwise: ecosystems thinking, guilt and European ideas about nature

When analysing my autoethnographic data from the road trip, I found that the idea of ecosystems, a dominant theme in the previous chapter, was only present in very abstract, *'felt'* (Davidson and Milligan 2004, 523), 'I am a part of the universe', kind of a way. In fact, I did not very often cross into scientific rational analytical thinking that characterises the discipline and profession of planning, keeping more to recording and thinking about my embodied emotional experience in nature. The lack of emphasis on the concept of ecosystems could reflect the autoethnographic nature of the project (my own world-view doesn't utilise this concept) or could be attributed to the methodology of 'sensory autoethnography', in that the attention to embodiment can offer a way of obtaining different data to other methods as it circumvents the rational approach favoured by planning. Despite the lack of reference to the concept of ecosystems, the theme flagged in the previous chapter of humans as a malignant part of nature, and guilt associated with this, did appear.

However, while in the previous chapter I mentioned that a sense of implicit guilt was always present in my thoughts in the city about my relationship to nature, this was not always the case on the road trip. This could be because, as mentioned above, my focus was on my embodied experience rather than scientific thinking. Additionally, it could be because many

of the places we stayed looked like undisturbed ('wilderness'), or had minimal modifications for camping, so it was easy to pretend I was not part of the damaging human presence on the planet. On this Cronon (1995, 12) writes that

> to the extent that we live in an urban-industrial civilization but at the same time pretend to ourselves that our real home is in the wilderness, to just that extent we give ourselves permission to evade responsibility for the lives we actually lead.

Another factor could be the unfamiliarity of the scenery; for example, as shown in the excerpt below, when we reached Kununurra, 3000 km from Perth, I was unable to tell which plants were native or what undisturbed bush there would look like, in the same way I would in my local area.

> *I am going for a walk again in the large piece of discarded bush down the road. I assume it will be developed later on as an extension of the subdivision our house is in. I'm not familiar with this kind of bush, so I can't tell if it's 'degraded' bushland or old-growth. Probably the former. Regardless it's beautiful and lush to my eyes.*
>
> Walking in the bush Kununurra, WA, March 2016

However, as I gained more knowledge about the places I visited, I also engaged more with thinking about environmental issues. For example, in Kununurra, I gained first-hand understanding of the impact of cane toads on native wildlife. Cane toads, native to Central and South America and introduced in Queensland to control a beetle that was damaging sugar cane fields (Department of Agriculture 2020a), are a major environmental pest in Queensland, New South Wales, the Northern Territory and north of Western Australia. I was already aware that they were a pest, but hearing a local talk about how she saw fewer native animals, such as lizards, each year due to cane toads as she showed me around her property, made me aware of the loss of biodiversity in Kununurra in a more visceral way.

Figure 6.3: Degraded bushland, Kununurra, WA 2016. Image by author.

There were some instances that I felt myself as part of a society that is damaging to non-human nature. The massive scale of human modification to the landscape for mining in the Pilbara invoked a sense of unease about Western Australia's exploitation of natural resources. But at the same time, I was aware of myself as part of the problem – even the issue of the petrol used in the road trip (by us and anyone else visiting these remote places) contributing to global warming is, of course, problematic. Passing though vast cattle stations on our way north invoked a sense of guilt, because of my awareness of how cattle grazing has damaged the land. These cattle stations in the rangelands cover an unimaginably vast area, with around 400 pastoral leases covering almost 900 000km^2 of Western Australia (Department of Agriculture 2020a). The awareness of how pastoral and farming practices have damaged the interior of WA has long been in the Australian consciousness according to Griffiths who explains that as early as the late 1800s there was an awareness that in a short space of time, 'in grazing the outside country, a precious, non-renewable resource had been unwittingly raided' (2002, 235). For me, as I mentioned in the introduction, learning about the ecological damage done to the interior of WA was part of my schooling, and contributes to my sense of guilt about White occupation of Australia. Like participants in my research at Earthwise discussed in the previous chapter, this guilt is compounded by a gap between actions and expectations, inaction and hypocrisy, as I consume Australian products including meat.

As I touched on above, and discussed in the previous chapter in the context of my time at Earthwise, my relationship with nature is influenced by particular cultural context as a White, urban dwelling, second generation Australian. The influence of my European background on my perceptions of the aesthetics of nature is present in my autoethnographic writing. Talking about the drive between Halls Creek and Kununurra in the excerpt below, I show how my notions of beauty are influenced by notions of the English picturesque. This nostalgia for the UK countryside is common in White Australian thinking, where over 30% of the population report UK ancestry [28], and reflected in Australian planning and landscaping in urban spaces (Seddon 2004, Head and Muir 2006), which until recently sought to replicate European landscapes (Frawley 1992). This historical tendency to mimic European landscaping may have hindered the ability of immigrants to Australia to connect to non-human nature in the

---

[28] In 2016, 25% of the Australian population reported English ancestry and 6.7% reported Scottish ancestry (Australian Bureau of Statistics 2016a).

Australian context, as in their daily lives contact with native plants was limited. For planning, it can point to the importance of plant choices in urban areas.

> *It's hilly and we drive on narrow roads, over one lane bridges, through dramatic vistas. Each corner we turn the landscape becomes more beautiful, I'm fascinated by the tall grasses, green hills, ghost gums, and red rock ranges. Above are low dramatic clouds and blue, blue sky. This segment of the drive is one of the most beautiful we've done. It's not as alien and awe inspiring as the red dirt and black trees between Exmouth and Dampier, it's a more easily absorbed kind of beauty. Lottie comments that it's almost English with the grass lining the roads and lush greenery. I wonder if that's why I find it so fascinating, some kind of longing for the green pastures of my sort-of ancestral home imprinted on me through a childhood of reading story-books and novels set in these landscapes. Never mind that I only saw the moors for the first time in my mid-twenties; hedgerows, hedgehogs and rolling hills have long existed in my imaginary landscape.*
>
> Driving Halls Creek to Kununurra, February 2016

Figure 6.4: Easily absorbed beauty driving Halls Creek to Kununurra, February 2016. Image by author.

6.2 Embodied, sensory, experiences in wilderness places/spaces evoked strong emotional responses

Despite the problematics around the notion of 'wilderness' described earlier in section 6.1.1, my experiences on the trip had a positive effect on my relationship to non-human nature, making me feel more connected to a greater whole. As with gardening at Earthwise (discussed in Chapter 5), embodied, sensory experiences in natural places/spaces on the road trip resulted in positive feelings such as joy, happiness, calm, and awe. However, I also experienced feelings of fear and apprehension not felt at Earthwise. I am not alone in experiencing strong affect in 'wilderness' places/spaces, studies of visitors' experiences of indicate that strong emotional responses are common (Farber and Hall 2017; Woods and Moscardo 2003; Buckley 2021; Pramova et al. 2021). Additionally, strong emotional responses and sensory experience in 'wilderness areas' are linked to attachment to place (Kastenholz et al. 2020; Ryan 2010; Pramova 2022).

In this section I unpack the embodied, sensory experiences that resulted in strong emotional responses. In this section I first discuss the feelings of joy, happiness and calm I experienced. Next, I show how I felt awe when in 'wild' nature places. Following this I explore the more uncomfortable feelings of fear and apprehension. After this I explain how encounters with animals were especially significant. This section, along with section 5.7 in the previous chapter on Earthwise, provide an important stepping stone to my ideas on how we can become more connected to non-human nature discussed in the following part 3 of the thesis.

6.2.1 Joy, happiness and calm

On many occasions, time spent in 'wild' nature resulted in feelings of joy, happiness and calm. This can be linked to mindful, pleasurable, embodied interactions with non-human nature. Embodied, multi-sensory experience resulted in feelings of pleasure, joy, happiness and calm as well as a sense of being connected to the world. Sensory experience was central to feeling happy and connected on the road trip. This is captured in the excerpt below, where

I write about the joyful, connected experience of sitting in the rain, in Dampier where, according to the locals we spoke to, 'it never rains':

> *The rain falls fat and fast on my bare skin and upturned face, eyes closed, fingers woven through the matted roots of the grass and into the soil. I look at Lottie, we laugh, look to the dog, who belongs to no-one and everyone according to old mate; she is belly down on the wet grass with us, damp nose to my shin.*
>
> It never rains in Dampier, WA, February 2016

Times when I was moving mindfully in natural places/spaces were often times I noted feeling connected to non-human nature. For example, the excerpt below of running in the bush in Kununurra after heavy rains shows the joyful experience of multi-sensory immersion and especially haptic sensations

> *The terrain ahead changes, it is dark grey mud in wide ridge, the tops are cracked curling edges, the divots are full of water. The cracks are deceptive, the mud's not dry at all - it's wet and slippery. I'm sinking in the mud. I'm laughing and slipping and running all up and over the mud trying to find firm footing, my shoes are heavy with mud and I'm panting and laughing and flying in my mind. I'm alive and in my body and the air, the mud smells rich and looks beautiful, shiny, slick, and fine. As I run it flicks up and over me.*
>
> Running in the bush, Kununurra, WA, 13 March 2016

Figure 6.5: Running in slippery mud with Rani, Kununurra, WA 2016. Image by author.

In this excerpt I am completely immersed in the moment and the sensory experience of navigating the muddy terrain kinaesthetically, and enjoying the tactile and olfactory sensations of the mud. The emotion captured here is of happiness, or even joy, and of being alive and 'in my body and the air', my descriptor for a feeling of one-ness with the moment (air, self). This follows from the importance of touch, a component of haptic sensations, related in the previous chapter. It seems that the scale of the natural places/spaces I was in might reflect this shift in emphasis. After my time in Earthwise, a space not much bigger than a suburban lot, my experiences on the road trip took place in vast 'wild' spaces, and often had movement, in the form of walking or running through these spaces, at their heart.

> *I walk to the beach inhaling the smell of salt, exhaling sleepiness, swinging my arms. I pick my way through the fine white sand through tide lines of seaweed and small shells and arrange my toes along the shore-line in anticipation of the next small wave. The water is warm, and despite our expectation of extreme heat as we drive north, the air is cool and damp.*
>
> Beach walk, Cervantes, WA, February 2016

Like gardening, as I discussed in the previous chapter, paying attention to haptic sensations while moving in 'wild' natural places/spaces also helped to bring awareness to myself as an embodied subject as described in the excerpt below:

> *I'm enjoying the way I need to balance as I clamber over the rocks, reaching to climb, and the texture of the smooth stone under my fingers.*
>
> Looking for a swimming hole part 1, Kalbarri, WA, February 2016

Figure 6.6: Looking for a swimming hole, Kalbarri, WA 2016. Image by author.

> *Sometimes I leap from one to the other over the small puddles of water.*
> *Small puddles of water are not what I'm after... I decided to try the other*
> *direction, clambering back over the rocks I head right along the river bed,*
> *changing levels to stay on passable terrain.*
>
> Looking for a swimming hole part 2, Kalbarri, WA, February 2016

6.2.2 Awe

One of the emotions that I most often expressed in my notes and autoethnographic writing on the road trip Perth-Darwin was awe. I describe a sense of awe in a number of situations in 'wild' places on my trip – observing animals in the wild, big skies, sweeping beaches, starry skies, endless horizons, soaring gorge walls. Awe, in my descriptions such as the excerpt below of the beach at dawn, is associated with aesthetic beauty, vastness and perfection. Perfection was a sense that things were right exactly the way they were. For example, the excerpt above demonstrates this awareness of self as embodied subject, as well as the pleasure I gained from mindfully moving over the rocks. I follow up this discussion on movement in the following Chapter 7.

> *At the crest of the hill I can see the moon and a single star hanging over*
> *the reef on the horizon, the still water from the reef to shore reflecting*
> *back fragmented moonlight. To the east, orange hints at sunrise. Above*
> *the sky is still black and flung across with stars. It's perfect,*
> *overwhelming, awe-inspiring.*
>
> Awe inspiring vista, Cape Range National Park, WA, February 2016

Figure 6.7: Sunrise and star and the moon at dawn, Exmouth, WA, March 2016.
Image by author.

Experiences or places that I found awe inspiring were those that were so beautiful, perfect, majestic and huge that they were almost too much for me to understand, as described in the excerpt below, of the dramatic and powerful sky preceding a thunderstorm.

> *On the track in the bush area, the sky is blue grey and heavy with the promise of thunderstorm, the dense clouds in reflected sunset are purple and apricot. I've never seen sky like this, it's hard to comprehend.*
>
> Stormy sky, Kununurra, March 2016

This challenge to my comprehension was felt as almost, or actually, overwhelming. For example:

> *Suddenly there are two Manta Rays underneath us, dark and huge, they're swimming towards each-other, huge and impossibly graceful they meet and sweep up and backwards in a slow backflip, white underbellies and gills revealed. Two fish hug the belly of one. So beautiful, awe inspiring, I have to remind myself to breathe.*
>
> Swimming with manta rays, Coral Bay, Monday 22 February 2016

During these experiences I felt small and insignificant in the face of the power and beauty of non-human nature, but also connected to a greater whole to which I and the awe-inspiring things both belonged. Therefore, it was not just the place that was perfect, but also me and

my being in it and a part of it. Thus, the feeling of awe was often accompanied by a sense of connection to myself and non-human nature.

There is not a fixed definition of awe, and the concept of awe relating to nature experiences is often used in overlapping ways with the similar concepts of peak experiences, and transcendent experiences (Pearce, Strickland-Munro, and Moore 2017). Further, awe is a complex concept in that it can encompass either positive or negative experiences (Keltner and Haidt 2003). Keltner and Haidt (2003) put forward a hypothesis for a prototype awe experience based on their literature review encompassing religion, sociology, philosophy, and psychology to posit that the emotion of awe is comprised of vastness and accommodation. Vastness is 'anything that is experienced as being much larger than the self or the self's ordinary level of experience or frames of reference' (Keltner and Haidt 2003, 303). For example, the huge manta rays described in the excerpt above, who were literally huge, but also challenging because closeness to sea-creatures in the wild is out of the normal range of my experience. Accommodation is a need in a person for 'adjusting mental structures that cannot assimilate a new experience' (Keltner and Haidt 2003, 303). Success in adjusting can mean an awe-inspiring experience is perceived as positive, such as my recollection of swimming with manta rays, and result in feelings of enlightenment, where a failure to accommodate could mean the experience is perceived as negative and result in terror (Keltner and Haidt 2003, 303). Aiming to test the prototype suggested by Keltner and Haidt (2003), Shiota, Keltner, and Mossman (2007) conducted three studies on awe in 60 undergraduate students, looking at what inspires awe, what feeling arose from awe-inspiring experiences, and 'the effects of dispositional and experimentally elicited awe on the content of the self-concept' (2007, 961). Of relevance to my description of awe, above, they found that 'the experience of awe is associated with a sense of the smallness of the self and the presence of something greater than the self, as well as some disengagement from awareness of the self' (2007, 961). The authors found it also had 'an impact on the content of the self-concept, increasing one's sense of the self as part of a greater whole - a self-concept that de-emphasises the individual self' (Shiota, Keltner, and Mossman 2007, 960). They also found that some people are especially prone to experiencing awe. These people are particularly 'comfortable revising their own mental structures, or acknowledging that currently held mental structures are not adequate to the occasion' (Shiota, Keltner, and Mossman 2007, 961). (Shiota, Keltner, and Mossman add that 'dispositional awe-proneness facilitates definition of the self as part of something greater than the self' (2007, 958), which I propose

could mean that dispositionally awe-prone people might be doubly more likely to feel connection to others/non-human nature as a result of feeling awe.

An embodied sublime

The sublime might offer insight into why awe is associated with feelings of connection to non-human nature. According to Janowitz (2012, 55), speaking or writing about awe 'derive[s] from what we can call the idiom of sublimity – a way of talking and writing about what happens when we are faced with things or concepts that are too large, too deep, too big, too tiny, too vague – in short, overwhelming.' The concept of the sublime is used

> [w]henever experience slips out of conventional understanding, whenever the power of an object or event is such that words fail and points of comparison disappear, then we resort to the feeling of the sublime. As such, the sublime marks the limits of reason and expression together with a sense of what might lie beyond these limits (Shaw 2006, 2).

Because of its relationship to awe, the sublime shows promise for exploring connections to non-human nature. However, the Romantic discourse of the sublime is based on dualistic notions of humans and nature (Hamilton 1983; Murphy 2012; Pipkin 1998). Despite these dualisms, the sublime holds the potential for 'admiration, reverence, and respect' (Burke 1757/1998, xciv). Alternative ideas on the sublime respond to these critiques, and theorise how the sublime could be reclaimed as a concept that acknowledges the embodied subject in direct relationship with non-human nature. In this sub-section I first introduce the ideas on the sublime of two prominent Romantic authors, Burke (1757/1998) and Kant (Kant 1790/2007), highlighting the dualistic nature of these. I then introduce the notion of a feminist, ecological, or embodied sublime that may provide the opportunity to promote connections to non-human nature.

The Romantic sublime was 'an aesthetic, philosophical, and psychological term vigorously debated in intellectual and artistic circles, where it was used to describe the grandeur of religious, literary, and visual experiences' (Janowitz 2012, 55). English philosopher Edmund Burke's treatise on aesthetics *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and the Beautiful*, published in 1757 is one of the most significant texts on the Romantic sublime. Burke (1757/1998) wrote that objects that provoked feelings of terror, if kept at a suitable distance, produced sublime feeling - a feeling of delightful terror. Nature is the key source of sublime experiences for Burke; however, according to Pipkin (1998, 604)

the defining feature of Burke's ideas on the sublime, the transformation of terror to delight, relies on 'the materiality of the sublime's source' being 'erased, forgotten or repressed', through distance from the sublime object. Murphy (2013, 59) argues that the transformation of horror to pleasure in Burke's sublime requires not just distance, but a feeling of triumph over nature after having come through a dangerous experience unharmed. He describes this as a masculine sublime. This is because most examples of writing on the sublime in the Romantic era are the result of men thrill-seeking through exposure to dangerous situations in nature (such as crossing the Alps), resulting in feelings of mastery of self and nature. The masculine nature of the sublime is evident in the writings of Burke (1757/1998, clxxv), for whom, the sublime and the beautiful are mutually exclusive. Pipkin (1998, 605-606) explains that for Burke, the beautiful was aligned with the feminine and the sublime with the masculine, and women were denied the capacity for experiencing the sublime.

Another influential writer on the sublime was the German philosopher Immanuel Kant (1724–1804). In his book *Critique of Judgment*, published in 1790, Kant divides the sublime into two forms: the dynamically sublime (things which threaten to overwhelm us by force), and the mathematically sublime (things which are huge in relation to us) (Kant 1790/2007, 247). The mathematically sublime refers to our ability to comprehend overwhelming or infinite in nature, for example, the earth as a whole, or outer space (Kant 1790/2007, 257). While the dynamically sublime in nature refers to the capacity to overcome the 'might' of nature through reason when confronting that which we wish to resist, but do not feel equal to resisting, and therefore fear:

> Bold, overhanging, and, as it were, threatening rocks, thunderclouds piled up the vault of heaven, borne along with flashes and peals, volcanos in all their violence of destruction, hurricanes leaving desolation in their track, the boundless ocean rising with rebellious force, the high waterfall of some mighty river (Kant 1790/2007, 261).'

So, for Kant, nature itself is not sublime. It is the human capacity for reason which is sublime; the sublime is a 'triumph of rational over sensible being' (Crowther 1989, 166), in which, through our cognitive ability to understand and put into language our experience we realise we are independent from, and superior to, the phenomenal world (i.e. non-human nature). The problem with this as Hamilton (1983, 55) writes is that:

> We are no longer at home in the world constituted by our experience when we are enjoying the feeling of being able to think the romantic sublime beyond it. This joyful

220

feeling of self-aggrandizement defines itself in relation to the unhappy consciousness of no longer belonging to the phenomenal world.

As such, the Kantian sublime also places humans outside of, and superior to, nature. As with Burke, the Kantian sublime also makes the distinction between the sublime and the beautiful, aligning the sublime with the masculine and deep and profound experience and the beautiful with the feminine and shallow and fleeting experience (Shaw 2006, 10). Ideas of the sublime based on both Burke and Kant thereby set up unhelpful dualisms between culture/nature, mind/body, reason/emotion and masculine/feminine.

The concept of an embodied sublime avoids these dualisms and might provide insight into why awe-inspiring experiences are associated with feeling connected to non-human nature. I use the term 'embodied sublime' to describe how embodied experiences of awe in natural places/spaces can 'jolt us momentarily out of a perspective constructed by reason and language' (Hitt 1999, 616), resulting in a felt experience of being connected to a greater whole. This term is drawn from the literature on alternatives to the sublime. Pipkin (1998) describes an embodied 'feminine' or 'materialist' sublime found (mainly but not exclusively) in women's writing from the Romantic era which 'transforms moments of fear and anxiety into feelings of commiseration or identification with the natural world, resulting in a moment of personal defiance, empowerment, or self-realisation'. Similarly, Mellor (2012, 3-4) identifies a 'feminine' sublime in which romantic writers (again, not necessarily female) avoid binaries and see their relationship with others and nature as one with an 'ethic of care' (she cites this term from Carol Gilligan 1995). Further, following her analysis of the role of gender in the sublime, Freeman proposes a politics of the feminine sublime which would entail 'a position of respect in response to an incalculable otherness' (1995, 11). Building on these ideas, Hitt (1999, 611) theorises an 'ecological sublime', which would mean encountering non-human nature as 'wholly other', and feeling awe, admiration, and respect. But unlike the sublime described by Burke the feelings like 'admiration, reverence, and respect' (Burke 1757/1998, xciv), would not be transformed by language. Hitt (1999, 611) explains that this is difficult because the unfathomable otherness of nature unnerves us, and the idea that we are somehow part of this alien entity shocks us. Hence we devise ways to circumvent, deny, escape, or overcome it' (i.e. by making it sensible through language). An ecological sublime relies on the idea that there can be a felt experience beyond language. Hitt (1999, 613) argues that an ecological sublime experience can make humans aware that nature is 'wholly other' and does not share our concerns, as well as making us aware of our own mortality and

vulnerability. I draw on these ideas on an embodied sublime in the next chapter as I further unpack why awe is associated with connection to non-human nature.

6.2.3 Fear

Given that my thesis is on connections to nature, it is tempting to stick to describing positive experiences. Even awe, although uncomfortable, is usually, at least in my writing, a pleasurable experience. However, my data reveals ambivalent and unpleasant feelings in response to my time in 'wild' natural places/spaces too. The most common of these were on the spectrum of fear: trepidation, fear, anxiety and panic. In these experiences there is a sense that I might be in danger. Nature is an active force, and one that may be dangerous. It is outside of my control, unlike in my experiences in the garden, which appear pretty much in my control.

In the excerpt below I describe an uncomfortable experience of getting lost on my evening run after I take a different route to my usual one.

It's going to rain, the air is heavy with it, lightening a white stripe from above my head to the floor on the horizon. It's past sunset and into falling night now as I emerge from the bush into the gravel clearing. It's not familiar, and illuminated by lightning, in the middle of the clearing is a burnt out car body, I can't see a path through the grass to the lights.

This isn't great.

I consider walking through the grass, as tall as me, to the lights, but I can hear things in it rustling, and my legs are bare. This seems unwise. I look for alternate paths. A bat flies overhead, lightning flashes, the sky is brilliant.

Lost part 2, Kununurra, March 2016

> *I don't feel at all confident I can retrace my path - I have no sense of direction and it's getting dark with no moon to help me out. I decide to make as much ground as I can while I can still see in the dusk, and break into a run. It's dark in this part, the shiny mud and trees overhead seem more treacherous and less beautiful, another bat flies low overhead, and another, and suddenly underfoot, dark jumping shapes across the path - cane toads - yuk. It's all very Tim Burton.*
>
> *I can hear my breathing, shallow, chest tight, and I make an effort to control my breath, calm and deep into my belly, walk quickly, be alert for forks in the path, what do I recognise?*
>
> *I can hear creatures in the bush beside the path, see movement out of the corner of my eye. OK, I'm not scared...? But what lives there...?*
>
> Lost part 2, Kununurra, March 2016

I describe an embodied sensation of fear – chest tight, breathing shallow. A sense of nature as dangerous, as well as a sense of aversion to the cane toads. Bats, which I usually like, are described as sinister. There is a sense that I am not in control of my experience. Nature is

> *I don't want to get out of the water, but I've got no idea about the time, and I started to wonder if I've been gone too long - maybe Lottie is worried? How long did I say I'd be? I decide to head back at a brisk pace. Even damp from the water it's seriously hot! I drink all my water and head back along the river across the rocks. And, despite my flippant attitude to long hikes to Lottie, by the time I reach the car at 11:30 my legs are aching from the uphill climb and I am seriously hot.*
>
> Returning from the swimming hole , Kalbarri, WA, February 2016

described as dangerous, the weather as threatening. This sense of not being fully in control is also present in the next excerpt of climbing in Kalbarri, I do not feel fear but start to experience a twinge of panic after I drink all my water and head back, worried that I am under-equipped, too hot, not well adapted to the climate etc.

In the excerpt below I also exhibit a sense of panic as it is clear I am out of my element, vulnerable, and potentially in danger. Although I am a strong swimmer, I had a visceral awareness of how easy I could be overwhelmed by the ocean as a powerful and relentless force. This feeling recalls the experiences of being dunked by the waves. Swimming turns from a fun, exhilarating, experience to one where I am completely overpowered by the ocean and unable to breathe. In this instant I realise how fragile I am and how easy it would be to drown. These kinds of experiences remind me that nature *is* an active and powerful force.

> *It's choppy and the current is against me - I have trouble getting away from the boat. I do but the chop is getting water in my snorkel, it reminds me of why I hated snorkelling as a child. I swim a bit further but can't stop the water coming in salty and cold in my throat. I start freaking out that each new breath I take will be of water. I stop and try to shake it off, but I'm getting panicky, having trouble breathing, even sans snorkel. I tell myself to calm, I tread water, feeling the current against my legs and the waves hitting my shoulders and try to collect myself. I note the beginning of panic attack, I gain some control, I look around but I can't see the group, just water. This doesn't help.*
>
> Snorkelling off the tour boat, Coral Bay, WA, February 2016

Then, as described below in the excerpt on walking in the bush in Kununurra, there is a slightly different sense of fear, which is more associated with the feeling of awe. I feel a sense of threat at the approaching storm. I have a vivid recollection of the embodied feeling of the suffocating humidity and prickling threat of the impending storm. And a pleasurable

sensation of being small in the face of the elements, the big-ness of sky, and the power of the thunder and lightning.

> *I take my time, walking slowly, but the air is pregnant with rain that will come after dusk and I'm already dripping with sweat. I check my phone, 99% humidity - no surprise. The bush is beautiful and slightly sinister at dusk under a low blue-black sky, rolling thunder and flashes of lightening.*
>
> Walk at dusk, Kununurra, 17 March 2016

Another incident involving fear involves Rani, a dog I was house-sitting in Kununurra. I liked Rani, her enjoyment of our walks was a pleasure to me; I liked watching her run and sniff at everything. But I was well aware since we met that she had her own agenda (I think asserting her role as pack leader). She was a domestic animal, but not fully domesticated – she was a rescue dog and her owners mostly kept her outside as a guard dog. I was told that she was friendly and good with their two children, but I was warned to keep her on a lead when walking her if there were other dogs as 'she was not good with other dogs'. It turned out that my control over her was tenuous, as described in the excerpt below about walking in the bush in Kununurra:

> *I'm up early and it's a yoga rest day so I decide to take dog for a walk in the bush.*
>
> Dog fight part 1, Kununurra, March 2016

The morning is beautiful, just light, dew on the trees, and huge spider webs stretched out between them. The dog is being her usual doggy self -

sniffing the plants, kicking up the red dirt, running ahead and back gleefully. I'm feeling light and content, enjoying the quality of the morning, idly looking at the plants and the sky in turn, and enjoying the sensation of the soft red dirt.

Around the corner and another dog approaches. I call Rani back but she's not listening, I call harder and speed up to catch her, but she's not paying any attention. This dog is bigger than her, white Pitbull crossed with something with a more slobbery face. I'm not so afraid of the other dog, but what the owner warned me mine will do. She's not listening and I'm running after her now.

The guys walking the other dog says 'Nah he's fine, don't worry'.

I'm worried about her' I say, 'she not good with other dogs'. I try to get her on her lead, but she and the other dog are circling, her hackles are up. Then it's on.

I wonder if Rani could kill this other dog, she looks like she wants to. I'm mortified, how to explain this to the dog owner?!

I'm yelling at Rani, he's yelling and grabs a stick and hits his dog with it. 'Hit her' I'm yelling ' it's her she won't let go!'

He's hitting both dogs and I'm yelling and they are savage and scary. I think it's her who's the instigator and the one wanting to do the damage - his dog is just fighting back.

I don't know what to do, I can't see her stopping...

I lunge in from behind her and grab her collar and I'm dragging her back by the choke chain. I don't know how she can breathe, but she's not letting go.

Dog fight part 2, Kununurra, March 2016

> *I'm yelling at her and choking her and she's trying to rip out this other dog's throat and I can see blood and I'm using all my strength to drag her back by this chain. It's bruising my hand and my legs are shaking and I can feel hysteria building.*
>
> *I'm hitting her with my other fist, trying to knock her away I grab her face and try to pry her jaws off this other dog, he's dragging his dog back by the tail and finally she lets go and both are snarling and trying to re-engage.*
>
> *My whole body is shaking, my legs are streaked in mud and blood and I'm crying - still using all my strength to hold her back. His dog doesn't have a collar or a lead and he is struggling to hold him.*
>
> *I throw him Rani's lead, 'maybe you can use this as a collar'.*
>
> *'Yep, ok. You ok?' To me.*
>
> *Yep, I'm ok. I'm sorry, my dog...'*
>
> *He's laughing and panting 'Nah, it's just dogs isn't it' he says.*
>
> *I'm hysterical - shaking and crying and walk my dog home using a stick through the collar; she is looking happy and enthused about life.*
>
> Dog fight part 3, Kununurra, March 2016

Later the owner told me she had a history of attacking other dogs and would do so at any opportunity. Rani was definitely a subject with agency: in this incident she was 'wild' out of control, savage, and scary. When she attacked the other dog, she was totally focussed on the other dog (both were completely engaged with each other), with no interest in attacking humans. This incident left me with a strong sense of her as her own creature with a life apart from humans and a reason for existing in and of herself. This sense of the dog's agency is clearly illustrated by her actions, even if begrudged by me. The puzzling (to me) response of

the other dog owner was one of someone who had clearly accepted that which I had not - that dogs have their own set of instinctual behaviours, desires and rules that don't correspond to my need to be a conscientious house-sitting dog minder. The aftermath of this event was that my adrenalin left me feeling intensely alive and connected to the world, and then totally drained, and that I regarded Rani with wariness – how could she be so friendly and obedient one second and turn into a ferocious dog-killing dog the next? Also, unfortunately for her, Rani was no longer allowed off her lead, ever! Because regardless of man's casual reaction, I couldn't let her attack any other dogs on my watch. Writing about fear in wild animal encounters, Craig suggests that

> by facing other animals we render them any less strange or terrifying (or lovable or loyal or comprehensible or anything else). There is no segue from fear to a moral principle, no clear-cut pathway to a reformed or refined form of life in which animal kin suddenly emerge or appear harmoniously entwined (2021, 9).

This is an interesting reflection; although I make the link between recognition of animal agency, and a tendency to think of animals in other than instrumental ways (Lindgren 2019), fear outside of awe (discussed above) is not an emotion I was able to place neatly within the discussion in this thesis.

Feelings of fear or panic never happened in the garden, indicating that, in my experience, nature in the city is tame, safe, where nature outside the city is wild, out of control. In this way 'wild' nature experiences can offer something urban ones can't. When urban dwellers encounter weather, plants and animals that are not tame, this put us out of our comfort zone, and unsettles the comfortable feeling of being the master of our environment. These experiences might act to reveal nature as a subject worthy of respect.

6.2.4 Animal Encounters in 'wild' natural places/spaces

Encounters with animals on the road trip are highlighted in my writing, with animal encounters comprising many of my 'peak' experiences of nature experiences. Unlike in the previous chapter on Earthwise, where plants comprised an important part of nature relationships, in my experience on the road trip I repeatedly use the term 'landscapes', seeing nature as backdrop to human experience, rather than describing relationships with individual

Figure 6.8: Rani after the dog fight, Kununurra, WA 2016. Image by author.

plants. As described in the previous chapter, this reflects the current tendency of the social sciences to group plants and rocks and so on into 'landscapes' and focus on the cultural and linguistic analysis of these (Hitchings and Jones 2004, 5). Animals, however, appear in my writing as individuals with agency. It is worth noting that although they were not the only animals that I encountered, those that appear in my writing are large and charismatic (for example, the many and varied insects and birds, and the more commonplaces cows and kangaroos do not get a mention). My encounters were also not particularly scary (unlike in Plumwood's encounter with a crocodile, nobody bit me). My interactions with these animals resulted in recognition that they, like humans, are sentient beings with agency. However, they are 'wholly other' to us, thus these encounters required a shift in consciousness to accommodate the paradox of same/connected but different/other (Keltner and Haidt 2003, 303). This recognition led to a feeling that animals are worth of respect and appreciation. In this section I relate and explore an encounter with dolphins at Monkey Mia uncovering the themes of a conservation approach underpinned by ecological discourse, anthropomorphisation, awe, and the importance of embodiment, especially haptic sensations.

Monkey Mia reserve is located in Western Australia in the Shark Bay World Heritage Area, in the Francois Peron National Park, which 'is known for its contrasting red cliffs, white beaches and blue waters, has a fascinating pastoral history, and offers a wilderness experience to four-wheel-drivers' (Parks and Wildlife Service 2017). The reserve is most famous for the dolphins who have been visiting the beach to interact with humans since the 1960s, mainly to be fed (Parks and Wildlife Service n.d.). Since the 1980s, scientists have been studying these easily accessible dolphins, resulting in regulations on the interactions and feeding of dolphins since 1995 (Parks and Wildlife Service n.d.). The area in which we stayed does not look at all like wilderness, there is camp ground, visitors centre, and modern resort/restaurant complex adjacent to the beach. However, it was the only site on our trip where tactile interactions with 'wild' animals was sanctioned. It was also the site of one of my significant embodied memories from childhood of an embodied and immersive experience, literally immersed in the water in my purple frilly swimsuit, all senses engaged, interacting with wild animals. Because of this I was keen to revisit the site, and to show it to Lottie, who I knew would love to see the dolphins. The experience, described in the excerpt below is very different to the memories from my childhood; it is much more structured, with visitors restricted to a few set supervised 'dolphin interactions' each day.

The experience I describe can be seen as reflecting a 'stewardship' of nature discourse in that it is highly regulated and focuses on the conservation of nature. This is not necessarily a bad thing, as the former unregulated interactions led to dolphins dying. There are many other examples of stupidity and carelessness, such as the dolphin selfie incident in 2017 (Bale 2017), or the tour guide's description of tourists blocking turtles from surfacing by swimming ahead of them to take pictures, showing that at least some people do need to be monitored. The current human-dolphin relationship at Monkey Mia seems to be based on a sense of caring and stewardship, as described in the previous chapter, informed by scientific research. The current regulation of dolphin interactions has involved picking a few (those already used to it) to keep interacting with and trying to minimise contact with the others. This has apparently resulted in a lower calf mortality rate (Parks and Wildlife Service n.d.). Conservation discourse (Frawley 1992, 225), which stems from an ecological view of nature, separates out remaining wilderness from damaged or 'fallen' landscapes (Cronon 1995) and aims to protect it from damage by people. In this case, the dolphins selected to be fed are part of the fallen landscape, seen as an acceptable sacrifice to allow human-dolphin interactions to continue. This is supposedly to educate people, and for scientific study, but surely also as part of a strategy to attract tourists to the region and raise funds for Department of Biodiversity Conservation and Attractions.

The relationship of the park workers with the dolphins was familiar and caring, despite the way they used the impersonal language of science to explain the history and management of the dolphins. I got a sense that they have developed a relationship with them. They communicate this sense of friendliness to the audience, either deliberately, or unconsciously, by anthropomorphising them, using terms you would use to describe human activities, although they switch between this and scientific language depending on the topic. For example, when talking about death of calves and gang rape practices of groups of male dolphins they switched back to impersonal language, presumably to minimise the emotional impact on the audience. Caporael and Heyes (1997, 60) argue that anthropomorphising animals can be viewed as negative, because it is seen as misunderstanding animal behaviour by attributing human motivations to it, thereby holding us back from a true understanding of animals (for example, the guides felt they needed to explain that the dolphins are not smiling – it is how their faces look.) However they make a compelling argument that it is more likely to have a positive effect on human and non-human nature relationships because 'it tends to elevate human perception into a state of *being-cognition* (one of Abraham Maslow's terms) in which wild animals are viewed for themselves rather than as something to be used,

231

We are instructed to move from the jetty and line up at the water's edge, strictly no toes in the water, as this signals to the dolphins that feeding time will start. Lined up next to Lottie I shift my weight from my heels to my toes, squidging them into the cool damp sand at the tide-line.

A woman with a microphone, I assume her to be a marine biologist, with a deep tan and tattoos of sea creatures including an octopus on her thigh and a school of fish behind her left ear, stands in the shallows and talks about what they have discovered about dolphins from the research that has been undertaken at Monkey Mia. She tells us that these dolphins are the only know dolphins in the world to use sea sponges as a tool to fish in the shallows! She then talks about the history of the site and explains about how the overfeeding of the dolphins led to many problems: calves dying due to their mothers spending too much time in the shallows, malnutrition, and aggressive behaviour by resident male dolphins. To ensure the dolphins still need to hunt and that the mothers will take their calves to deeper water where they have room to feed and can be taught to hunt, they now only feed selected dolphins at set times and limit the feeding to a small portion of their daily fish intake. She speaks in a matter of fact tone, but I feel awful to think that the high mortality rate among calves was caused by tourists like me as a child, not out of cruelty, but by a lack of knowledge about how dolphins are.

After some time she tells us she has received a signal from the volunteers saying the buckets of fish are ready.

She goes through more rules for the interaction:

'Don't to hold the fish up so they have to jump for it - it hurts the dolphin's necks, don't touch them, they are wild, they could bite, they're not smiling - it's just how their faces look.'

'Volunteers will be picked, 3 per bucket, they will be shown how to feed the dolphin, they will take a picture, and then they will return to water's edge.'

Dolphins: Monkey Mia, February 2016

Figure 6.9: Tourists at water's edge for the dolphin encounter, Monkey Mia, WA 2016. Image by author.

or something to be afraid of, or to be reacted to in some other human way' (Caporael and Heyes 1997, 76). Milton (2002) supports this, explaining that anthropomorphising helps to individualise animals, making it easier for humans to feel care for them. Caporael and Heyes believe anthropomorphising can lead to positive environmental action because it 'connects values to action' (1997, 77). This is supported by Lorimer who found that charismatic animals acted as a point of connection for diverse conservation interests, and when used as a flagship species offered 'an acceptable vessel for the public display of affection towards the non-human in an epistemic community in which this would normally be anathema' (2007, 929), this affection translated into financial resources which could be used in conservation for the flagship species, but also related (less charismatic) species. Lorimer argues that 'an environmental ethics of non-human charisma is relational, ethological, and affective' (2007, 920). More recently, Maguire, Kannis-Dymand, Mulgrew, Schaffer and Peake (2020) found a correlation between anthropomorphisation of dolphins and empathy. The guide's anthropomorphising ascribes dolphins as subjects with agency, even if it assumes motivations or emotions not held by the animals. It is possible that in this way the guides' language helps visitors to be able to relate to the dolphins, and perhaps see them as having agency, leading to humans feeling a sense of care.

These animals are wild, in that they come to the beach and interact with humans of their own free will, but their interactions with these humans are highly regulated by the guides, who represent the institutionalised conservation attitude to nature. The highly regulated nature of this experience is an interesting contrast to the fisherman and tour-operator we spoke to in Exmouth who described many interactions with dolphins, whales, rays and sharks to me. In response to my questions about the rules laid down when I went on a manta ray swim in Coral Bay described earlier in this chapter (don't touch the animals, don't get in the way of the animals) he was dismissive, saying that the rays know what they are about – if they don't want people around they will just swim away, easily out-distancing them. He described that the rays are curious and like to play, including mirroring people when swimming. He also said he has been swimming with humpback whales for years, describing them as huge, beautiful creatures that choose to swim alongside his small boat. He stressed that they were always gentle, not bumping it, except for once when he accidentally moored in between a male and female whale during breeding season. His attitude seemed to give credit to the animals for knowing what they wanted, and also to himself for knowing how to interact with them. This acknowledgement of animal agency is similar to that of the owner of the dog Rani attacked, who shrugged shoulders at a dog fight, seeing it as part of dog

234

nature. It interested me that the fisherman felt strongly about the magic of the sea creatures, but also expressed no qualms about killing them when fishing. Perhaps this is tied up together with the idea of animal agency, with him viewing it as battle of wills with fish as a subject to be respected (but also eaten). This shows a disjuncture between understandings of 'wild' nature of those whose livelihoods depend on it, and city dwellers. Here Cronon's (1995) argument that the 'wilderness' is an idea of city-folk, who do not connect their consumption of natural products such as food and building supplies with their source, is relevant. I, and others, eat fish without really thinking about where they came from, or how they were caught; yet fantasise about a wilderness in which humans don't intervene.

Close encounters with wild animals can be awe-inspiring and help the participants to recognise animals as having agency. In their study of visitors to the Kimberley, Pearce, Strickland-Munro, and Moore, found that 'being able to see, hear and even touch fauna were also significant contributors to their awe-inspiring experiences' (2017, 21).

PhD Journal on animal encounters, Monkey Mia, February 2016

Felt so carefree and happy. Dolphins are like a drug, they seem to fill me with wellbeing. I can't get enough. Then Lottie and I saw a sea turtle! So amazing, patterned like the ocean, with flippers! And a head that it stuck up to breath. We were so excited! After a while we saw another one. Also all the dolphins. And earlier we saw emus - A big one and 3 little ones! Big one was jumping to get seeds from the tree.

Studies of human interactions with dolphins and other cetaceans (whales and porpoises) show that positive emotion and wellbeing are often reported to result (See Yerbury and Boyd 2018 for one such study and an overview of this field). DeMares (2000) who used a phenomenological approach to study 'peak experiences' resulting from encounters with cetaceans, found that awe was one of the emotions felt during encounters with these creatures. In the excerpt below I express awe at seeing a dolphin in the 'wild'.

235

Figure 6.10: Dolphins swimming past me, Monkey Mia, WA 2016. Image by author.

> *It's such a beautiful night - the moon is just over half full, the whole milky-way stretches above, and the light reflects off the ocean above corrugated sand visible in the shallows. A dolphin swims up alongside me, fishing near the shore (I know this from the dolphin education talks, otherwise I might think it was interested in me). How amazing to be alone here in this beauty, near this creature. I lie on the sand and spread my arms wide and up over my head, bending my wrists back so my fingers can dig into the cool, damp sand.*
>
> Night walk, Monkey Mia, February 2016

Capturing the intensity of encounters with cetaceans, a tour guide on the boat described how on a whale tour, a girl gripped his arm tight and wept as they watched the whales and their calves swim past, immersed in their sounds. Experiences of being able to touch 'wild' animals could be especially significant. Pearce, Strickland-Munro, and Moore report that experiences with animals such as whales, dolphins, turtles and sharks 'were described as not only involving excitement at seeing these charismatic species, especially if it was for the first time, but in a number of instances the experience was predicated on being able to interact and touch the animals' (2017, 13). The desire for interaction with animals, preferably tactile, is confirmed in studies of tourism (Farber and Hall 2017; Yerbury and Boyd 2018; Maguire, Kannis-Dymand, Mulgrew, Schaffer and Peake 2020) and zoos (Povey and Rios 2002; Luebke, Watters, Packer, Miller and Powell 2016; Luebke 2018) Certainly, the number of eager people lined up at the beach at Monkey Mia waiting for a chance to touch the dolphins attest to the importance placed on this kind of interaction. Although I didn't touch any of the wild animals I met on the road trip, two of my most special moments interacting with non-human nature were swimming with dolphins first as a child at Monkey Mia, and second in a chance encounter with a dolphin on a late night swim off the jetty at Rockingham beach as a young adult. Both experiences of touching dolphins in the wild were intense and meaningful to me. Especially significant was the fact that they chose to enter into the encounter, to approach me and allowed me to touch them. The reciprocity of dolphin-human encounters is reported to especially significant in encouraging framings of humans and animals as ageatic and as kin (Yerbury and Boyd 2018). I encountered them as completely other, almost frightening up

237

close, obviously more powerful physically than me, and more in their element than me, but also as intelligent and intentional – subjects with agency. It is suggested that the recognition of both agency and difference can act to allow humans to reflect on their relationship with non-human animals (Lindgren 2019). The importance of recognising animals as subjects with agency, as noted in Chapter 5 regarding plants, is that it encourages an ethical (rather than instrumental) relationship with them (Lindgren 2019). By participating in these close encounters, city-folk like myself gain some embodied knowledge of 'wild' animals, perhaps encouraging us to view them as beings with agency, potentially leading to more connected relationships. The importance placed on touch points to the significance of haptic experience, discussed further below and in the next chapter.

6.3 Conclusion

The road trip Perth to Darwin allowed me to build on the understanding of human and non-human nature relationships in Australia that began, as described in the previous chapter in an urban context at Earthwise. This chapter reflects the analysis of the autoethnographic data from the road trip along with further exploration of the themes using relevant literature. It explored some of the prevailing myths about Australian nature that I identified in my analysis: that of the wilderness and the outback or frontier. Despite the dualistic ideas underpinning these, I found that my sense of connection to non-human nature benefited from 'wild' nature experiences. This is because I, and others, rely on visiting the mythical 'wilderness' to experience feelings of restoration and connection to self and non-human nature. I also extended my discussion from the previous chapter on the themes of ecosystems thinking, guilt and European ideas about nature. This chapter showed that, like in garden, explored in the previous chapter, embodied, sensory experiences are important to fostering connections to non-human nature in non-urban natural places/spaces. The themes of awe and fear were found to be notable in the nonurban context. Encounters with animals were significant, provoking strong emotional responses. Further, my research on the road trip showed that movement, as a component of haptic experience, explored in the previous chapter, was particularly important to connected experiences in natural places/spaces. In the following Chapter 7, I bring together the findings from both Earthwise and the road trip to theorise how embodied, sensory experiences that produce strong emotions in natural places/spaces might help us connect with non-human nature.

Part 3: 'Embodied Immersive Experiences' and Conclusions

Chapter 7: 'Embodied immersive experiences' in natural places/spaces

Figure 7.1: Crab and stingray at the shore at dusk, Monkey Mia, WA 2016. Image by author.

After a day of feeling out of sorts I decide to go for a walk. I think I will walk until the turn of the bay, but beyond the point the beach keeps going. It's such a beautiful night - the moon is just over half full, the whole Milky Way stretches above, and the light reflects off the ocean above corrugated sand visible in the shallows. A dolphin swims up alongside me, fishing near the shore. How amazing to be alone here in this beauty, near this creature. I lie on the sand and spread my arms wide and up over my head, bending my wrists back so my fingers can dig into the cool, damp sand. In the stillness I can hear the rustle of creatures in the seaweed as well as the wind, waves and birdcalls. A crab scuttles sideways along the tide line. I let my breath out and feel some of the tension I've been holding release.

An embodied immersive experience, Monkey Mia, WA, February 2016

In this penultimate chapter I identify four qualities common to my and others' experiences at Earthwise, and my experiences on the Perth to Darwin road trip, of connection to non-human nature. These are immersion in the moment, sensory immersion, mindful movement, and strong emotional response. I call experiences in natural places/spaces that possess these qualities 'embodied immersive experiences'. I argue that having 'embodied immersive experiences' in natural places/spaces can foster more connected relationships to non-human nature. Although establishing causality is outside the scope of my study, I discuss why and how each quality might help to foster connection to non-human nature. The discussion I provide in this chapter shows the potential of 'embodied immersive experiences' for fostering connections to non-human nature. The ideas on 'embodied immersive experiences' in natural places/spaces and connection to non-human nature that I bring together in this chapter could offer planners one path towards reimagining planning practice in the Anthropocene.

In this chapter I work with two 'embodied immersive experiences' in natural places/spaces, one from the road trip Perth to Darwin, and one from the Earthwise garden. I refer back to these excerpts throughout this chapter. After presenting these two excerpts, I refer to my own and Earthwise participants' experiences in showing how each of the four elements of embodied immersive experience looked for me and others. Drawing on relevant theory, I argue that as part of 'embodied immersive experiences' in natural places/spaces, sensory immersion can facilitate connection by developing 'embodied reflexive empathy', which comes from recognising human connections to non-human nature. I suggest that immersion in the moment can also aid connection by developing empathy and compassion, dissolving boundaries between self and others and helping to recognise that non-human others have agency. Next, explore out how mindful movement could help develop kinetic empathy developing a sense of a 'we' that comprises the self and the natural place/space. Following this, I explain how strong emotional responses such as joy and awe were experienced during 'embodied immersive experiences'. I argue that these emotions can result from a felt sense of connection and at the same time they may also help to develop or strengthen a sense of connection. Further, accommodating awesome experiences can lead to a sense of self as part of a greater whole and recognising non-human nature as having agency. I conclude by arguing that 'embodied immersive experiences' in both urban and 'wild' natural places/spaces may provide a direction for planners in finding pathways to helping foster connections with non-human nature.

7.1 The four elements of 'embodied immersive experiences'

At the crest of the hill I'm knocked out of my internal dialogue by the vista. It's beautiful! The beach stretches in an arc as far as I can see in both directions and the sand to the water is a vast, multi-coloured surface, reflecting the light. It invites life-affirming hard-pelt running, rolling around, melting into.

I'm awed, amazed, overwhelmed by it and by being alive in this place.

I don't run, because I have my heavy bag with me, but I turn it into a backpack and head down the slope arms open wide. I want to dissolve into the landscape. How impossible it is that this place exists and that I'm in it.

I get to the flat sand and rather than walking towards my car I walk the other way. I think I will probably regret this when I'm sunburnt and thirsty, but I can't make myself care - the edge of the horizon calls to me.

I walk in long strides, feeling the muscles in my legs stretch as I walk, the sand firm and damp underfoot. Flocks of small birds scuttle in and out with the tide, flinging themselves in the air as I get to close and alighting further down the coast on repeat. The sound of the waves is low and rhythmic.

I am walking in a fast pace in rhythm with the music in my earphones, legs strong, arms swinging.

I am not struggling to be mindful; all I am is music, body and breath, and as I walk I feel like I am dissolving into the beach. I breathe in, take a step, my breath flows through me, I breathe out, it flows through the sand, the sky, the water under my toes. I'm melting into the sand, air, sky.

Melting into the beach, Cable Beach, Broome, WA, March 2016

Figure 7.2: View from the crest of the hill, Cable Beach, Broome, WA, March 2016.
Image by author.

The excerpt above describes an 'embodied immersive experience' in a natural place/space, Cable Beach, encountered on the road trip and trip an illustrates the importance of sensory immersion to experiencing connection to myself as a body-subject and the beach. The walk is recounted through all my senses as follows:

Visual: *the vast, multi-coloured surface, reflecting the light*

Smell & taste: *salt*

Sound: *waves*

Haptic: *I walk in long strides, feeling the muscles in my legs stretch as I walk, the sand firm and damp underfoot*

The strong emotions of joy and awe are also present. Cable Beach is a sweeping white sand beach over 20km long. The vastness, beauty and multi-sensory aspects of the beach seemed to demand immersion. As I reach the crest of the dune at Cable Beach, I describe being 'knocked out of my internal dialogue by the vista'. However, a 'dramatic vista', or 'perfect, overwhelming, awe-inspiring' place such as those I described in the previous chapter on the road trip, is not required to facilitate connection. As described in Chapter 5, more mundane experiences in the Earthwise garden also resulted in feelings of connection. The below excerpt describes planting the native portion of 'my garden' at Earthwise, a connected experience which I began writing about in Chapter 2:

The screeching of cockatoos breaks the stillness. It starts to rain – the plump heavy drops I imagined. I take my gloves off so I can enjoy the sensation of the rain and the soil as I'm doing the planting. Getting the plants out of the pots is difficult, some are quite root-bound, and I hope they survive the ordeal - I'm feeling super-attached to them already, after picking them out on Wednesday, they look so lovely and delicate but also healthy. The rain continues and the parts of me not covered by my rain jacket are soaked and my clothes are sticking to my cooling skin. I'm enjoying the smell of the newly wet earth and feeling of the rain on my head and face.

Planting the garden bed at Earthwise, Perth, WA, August 2014

Figure 7.3: Planting in the rain, Earthwise, WA, August 2014. Image by anonymous.

In this excerpt I recount my experience through the senses as follows:

Visual: *they look so lovely and delicate but also healthy*

Smell: *of the newly wet earth*

Sound: *The screeching of cockatoos breaks the stillness*

Haptic: *Feeling of the rain on my head and face*

I take my gloves off so I can enjoy the sensation of the rain and the soil

The parts of me not covered by my rain jacket are soaked and my clothes are sticking to my cooling skin

As well as the presence of the multi-sensory immersion in the moment, this excerpt contains the emotions of awe at the perfection of the delicate plants, and happiness. During these connected experiences, in both the garden and on the road trip, I was experiencing natural places/spaces unselfconsciously as a body-subject, fully engaged in the present moment. Before unpacking each of the listed elements in the sections that follow, I present a diagram that shows the emplaced nature of these experiences:

The diagram below (figure 7.4) shows the body subject in natural places/spaces having an embodied immersive experience. I elaborate on the legend to the diagram as follows:

- The grid represents 'flesh of the world' (Merleau-Ponty 1968). Although it is arguably simplistic to represent "flesh" like this, I believe it is helpful in illustrating the notion discussed in Chapter 2, that humans and non-humans arise from the same 'flesh of the world'.
- The dotted line around the shaded area represents particular natural places/spaces as described in Section 1.1.3 using the relational notion of place put forward by Bawaka Country including Wright et al. (2016). The border of the circle is represented by a dotted line to show that bounding area is not possible, and boundaries are fluid and permeable. Since my research focuses on embodied human experience, the boundary represents is how the space is perceived by the human (e.g. a natural place/space could be Earthwise). However, natural places/spaces could be defined in different ways: for example, territories of a particular animal, or ecosystems (the diagram shows that one natural place/space without humans to depict this). As
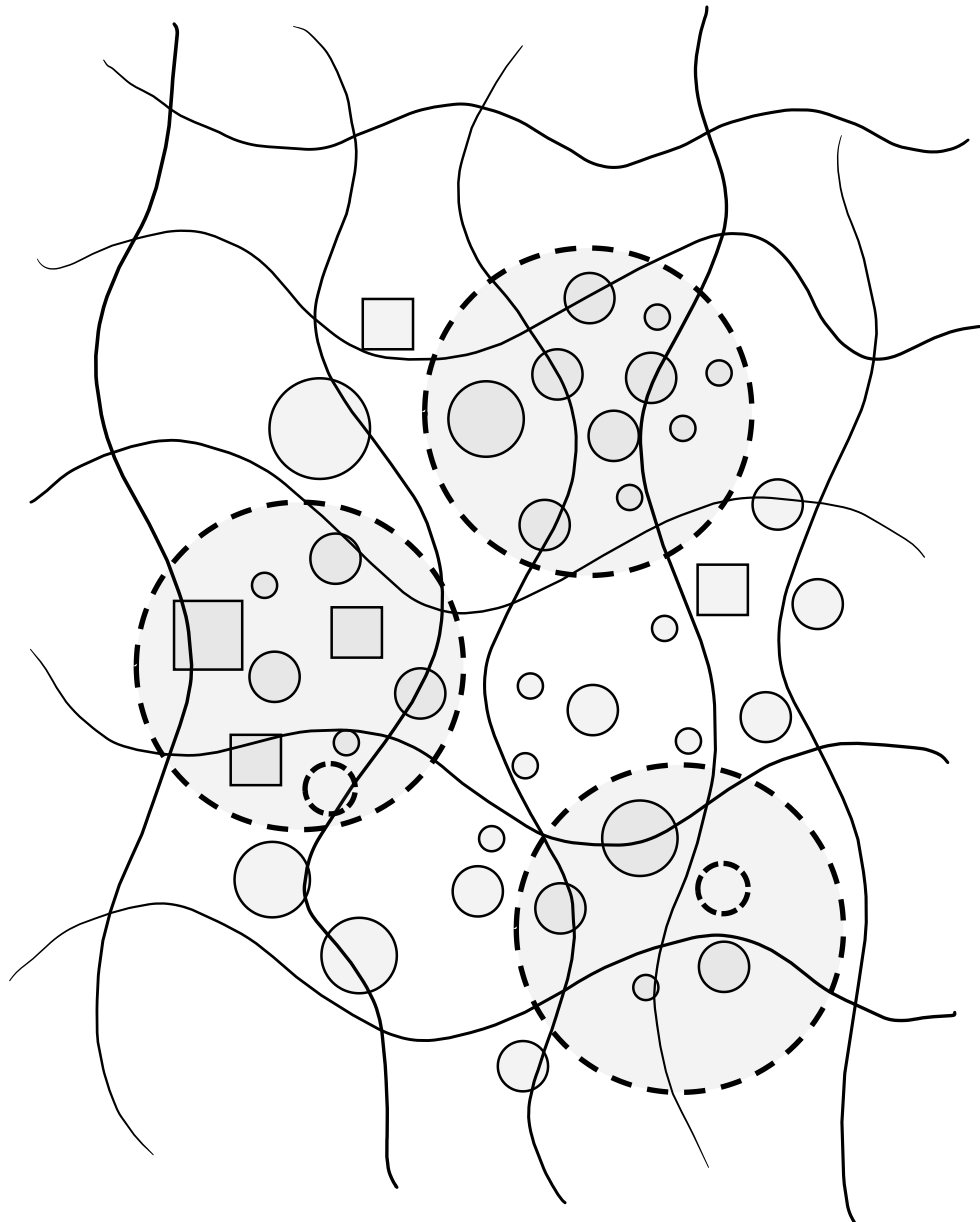
My depiction of 'Flesh of the world' (Merleau-Ponty 1968)

Natural places/spaces

Animals, plants, soil, wind, water, rocks etc.

Built form

Body subject

Figure 7.4: 'Embodied immersive experiences' in natural places/spaces. Image by author.

illustrated on the diagram above, natural places/spaces can be those with, or without, built form.

- Although this was not able to be depicted, natural places/spaces are also comprised by links across spaces and time to other places/spaces as a result of the beings and objects that comprise the space place (e.g. the migratory bird, the researcher who writes about it and sends that writing into the world) (Bawaka Country et al 2016, 461). Further Bawaka Country including Wright et al. (2016) describe this in relation to Indigenous understandings of time and reciprocal relationships with the non-human world being non-linear. This is described in relation to the Indigenous culture, which does not apply to me. However, I see it relating to the influence of childhood experiences in my connections to natural places/spaces – in that the natural places/spaces become part of me. Therefore, revisiting natural places/spaces over time can strengthen connection to non-human nature (I revisit this in section 8.3).

- For the body subjects depicted, the four elements of embodied immersive experience are all present. However, there is no causality implied; for example, I am not speculating that the 3 body related elements (immersion in the moment, sensory immersion, and mindful movement) lead to strong emotional response, which leads to connection, because this takes away from the potential to imagine bodies (mind-bodies) themselves forming the connection.

7.2 Immersion in the moment

Common to all experiences of connection described in Chapters 5 and 6 was immersion in the moment. During the connected experiences in the garden and on the road trip, I was experiencing natural places/spaces as a body-subject. My mind and body were effortlessly engaged in the present moment, my mind felt clear and light, and I was aware of my bodily sensations and feelings, as well as the world around me. This can be described as mindfulness, introduced in Chapter 2, defined as 'the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment' (Kabat-Zinn 2015). Immersion was not directly addressed in my interviews at Earthwise; however, one participant at Earthwise addressed this concept using the term 'lose myself' in reference to her gardening. I found that this sense of

immersion in the moment was more apparent in new tasks which surprised my senses, and those that were physically demanding, or creative (as opposed to, say, watering which can be a task where I find it easy to check-out mentally). The concept of flow (Csikszentmihalyi 2014, 230), introduced in Chapter 2, stressing the importance of challenge to maintaining attention, helps to explain why tasks that were challenging were often also noted by me as connected experiences. The excerpt below from my field notes describes a day in the garden working on putting in place logs to make the borders of a garden bed, a task that I identified as being 'mostly flow time'.

Field Notes on building garden beds, Earthwise, Perth, WA, August 2014

So tired now! Lifting logs, digging. Legs, feet arms, neck and hands are where I feel it. I really threw myself whole body into it – which I remember from being a child is the most fun way to do stuff like that. When you don't worry about getting grubby or scratching yourself. The logs are heavy and it takes me my whole body strength to put them in place. I do most of the digging in by hand, then roll the logs in check for height then roll back out and dig or fill more.

Much of today was 'flow' time, I was immersed in the job and not thinking of anything else.

No gloves – enjoying the feeling of dirt, and I can tell the quality of the soil – rich and full of the decomposed wood and other organic matter.

The notes don't say much about how I recognised the day as flow time; however, the description matches the characteristics of flow tasks described by Csikszentmihalyi: 'clear

goals, optimal challenges, and clear, immediate feedback' (2014, 230).[29] I had a clear goal, which was to build the garden bed; the tiredness I describe was because that the physical aspect of the job was at the edge of my level of ability; and the task of arranging the logs into shape provided constant feedback (we followed a trial-and-error process). At the same time, I argue that the concept of mindfulness explains why connected experiences were not restricted to challenging experiences, because, done mindfully, any activity could become a flow activity: the need for challenge is negated by attention to present moment as a mode of being. Being in a natural space made it easier for me to be immersed in the moment. I notice that I am more likely to observe mindfully when in natural places/spaces. At home, I can be absent-minded (leave a room already thinking of the next thing etc.); however, if I set out for a bush-walk or to do some gardening, I am likely to be aware of haptic sensations, sounds, smells, visual elements, as well as of myself as an embodied subject in the present moment.

The concept of mindfulness can be used in combination with Merleau-Ponty's (1968) ideas on 'flesh' to understand how 'embodied immersive experiences' in natural places/spaces might lead to connection. Because the experiences take place in natural places/spaces, nature becomes a co-participant in the experiences, and a part of the body-subject as they experience the world in this receptive state. During the connected experiences in the garden and on the road trip, there was no need to notice my thoughts come and go as prescribed by mindfulness practice, because my whole mind and body were grounded in the present moment (as opposed to thinking, analysing, judging). These experiences can partially be understood as a state of mindfulness: lived moments in which I possessed 'a lucid awareness of what is occurring within the phenomenological field' (Khoury et al. 2017). Studies of the effect of mindfulness complement Merleau-Ponty's (1968) concept of flesh, by showing that

---

[29] The first component of 'flow', the setting of goals acts to 'structure experience by channelling attention rather than being ends in themselves' (Csikszentmihalyi 2014, 232). The second, optimal challenges, refers to 'a balance between perceived challenges and perceived skills' (Csikszentmihalyi 2014, 232) – the task must be difficult enough to maintain the need for complete attention, but not outside a person's perceived ability. The third – 'clear and immediate feedback' (Csikszentmihalyi 2014, 232) means that the activity provides constant information on how well the person is doing, removing the need for questioning or doubt. Ashanta yoga is perfectly structured to be a 'flow' activity: It is hard! You work to the edge of your ability (or are supposed to), you can always deepen each pose. The body is variable, so the level of challenge is also variable. If/when it becomes easy you/the teacher adds a new pose, so it is, again, hard (until you complete 3 levels, which few ever do). Your body provides constant feedback and you mostly know how to adjust in response.

there is no real division between mind/body/world. This is explained by Khoury et al. as follows:

> Consciousness is embodied, involving a two-way reciprocal relationship between the brain and the body. Furthermore… that consciousness is embedded in an environmental context. Consciousness therefore cuts across the brain-body-world divisions rather than being simply located in the head. (2017, 1166)

Mindfulness can help to reveal this to practitioners. In their fascinating study of an experienced Buddhist mindfulness practitioner, Ataria, Dor-Ziderman, and Berkovich-Ohana (2015) describe how long-term mindfulness meditation has allowed the subject to dissolve the boundaries between self/world at will. They place his experience within the framework of 'flesh', noting that the subject's sense of feeling at home in the state of dissolved self/world boundaries could be explained by a sense of returning to the basic essence of flesh – realising we are all objects among objects of the same stuff, but at the same time, subjects (Ataria, Dor-Ziderman, and Berkovich-Ohana 2015, 145). Although his ease at alternating between states is unusual, even among experienced practitioners (Ataria, Dor-Ziderman, and Berkovich-Ohana 2015), a sense of dissolving boundaries is not an uncommon experience in moments of mindful attention (e.g. the Cable Beach excerpt included above). Extending these ideas, 'embodied immersive experiences' in natural places/spaces can involve a blurring of boundaries between self and non-human others that can lead to feeling connection.

Spending time engaged in 'embodied immersive experiences' in natural places/spaces may foster connections to non-human nature by helping to develop empathy to non-human nature. Barrable et al. (2021) found that children's connectedness to nature increased after mindfulness activities in nature reserves, and suggested that increased empathy could also result from these activities. Long term practice of mindfulness has also been shown to develop the traits of empathy and compassion (Karremans and Kapan 2017, 110). Developing empathy and compassion to self (such as that needed to see self as embodied subject rather than judged object) and others, including non-human others, can help lead to feelings of connectedness and care. For example, Schultz (2000) studied the relationship between connectedness (using 'inclusion of others in self' and 'inclusion of nature in self' scales mentioned in the introduction) to nature and 'perspective taking' on care and concern for nature. In the study on perspective taking, participants were asked to take on the perspective of an animal being harmed by pollution (using photos of animal). The author found that

254

perspective taking increased participants' concern for environmental issues, and also their reported connection to nature.[30] He proposed that empathy was the factor that led to this increased concern and connection. Similarly, Van Gordon, Shonin, and Richardson write that mindfulness can result in 'realizing the depth of our connectedness to nature and extending the self concept to include nature can strengthen our moral and ethical concern for nature fostering nature connectedness through compassion' (2018, 1657).

Another way in which 'embodied immersive experiences' in nature spaces might help connection is through really *seeing* the other, and recognising that the other has agency. One of the features of experiences of attention to the moment is that it is effortless to pay attention to and notice details of the other. This noticing happens through all five senses as described above. This experience of observing is described as one of five facets of mindfulness by Baer et al., who developed a questionnaire to measure mindfulness. Observing mostly refers to noting internal sensations and feelings, however, the following refer to sensory perception of surroundings:

- I pay attention to sensations, such as the wind in my hair or sun on my face
- I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- I notice the smells and aromas of things.
- I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow. (Baer et al. 2006, 34)

Barbero and Picket found that observing, one of five facets of mindfulness developed by Baer et al. (2006), was correlated with greater sense of connection to nature, and suggest that this faculty might act to 'uniquely function to intensify experiences one has with nature through greater attention to environmental stimuli' (Barbero and Picket 2016, 141). As discussed in Chapter 5, in an urban setting, plants were a defining feature of natural places/spaces. Our mindful interactions during gardening practices, where through our senses we get to know individual plants, can result in recognising them as non-human beings with agency. Although not using the term mindfulness, Morse (2015b, 178) found that a significant aspect of participants' connected experiences on rafting trips on the Franklin River was a sense of

---

[30] A potential problem I see with empathy as a route for connection to nature is that given the environmental problems we now face, feeling empathetically is often painful. As such, we might actually avoid feeling empathy to avoid pain.

'being alive to the present'. He found that paying attention to their own sensuous experience on rafting trips on the Franklin River resulted in participants seeing the environment surrounding them as having agency, and as such, 'intrinsic worth'. Similarly, in the 'wild' natural places/spaces I describe in Chapter 6, I recount an embodied awareness of my surroundings that reflects the aspects of 'observing' (Baer et al. 2006) described above. This awareness also extends to noting the details of the non-human animals I encountered. These encounters were felt to be particularly significant and this was correlated with me feeling that the animals had agency. Thus, the act of being mindfully aware, including seeing the other, can result in intensity of experience and seeing others from non-human nature as subjects with agency which can in turn lead to a sense of connection.

Being in a natural place/space that appeared free from other humans also seemed to facilitate feelings of immersion in the present moment and connection to non-human nature. The importance of being alone, both at Earthwise and on the road trip, is either implicit in my writing, or, as with the excerpt below on swimming in the Kalbarri Gorge, explicit: 'The orange rock walls stretch above me on both sides, and the sky is achingly blue. How lucky I am to be alone here'. Notwithstanding the problematic aspects of being alone in 'wilderness' areas discussed in Chapter 6, being alone in nature also seemed to facilitate greater feelings of connection to nature in both Earthwise and on the road trip. This could be attributed to my personality type, but it could also be, at least in part, a common feature of connected experiences. At Earthwise, a participant who found being on his bush block relaxing and restorative attributed this to the space being quiet and free of people:

> … it's the space, I guess... and the quiet. Well, not necessarily quiet but the... sense of peace. (P3, Earthwise, 2014)

To emphasise the importance of this he told me that when he talked to his family about selling the bush block to stop dividing their time between city and country they said:

> Absolutely no way. We need to be here. We need to have this space and we need to be here in the bush. (P3, Earthwise, 2014)

In his study of river rafters, Morse (2015a) reported that participants partly attributed the lack of everyday distractions over a period of days as contributing to their ability to connect to non-human nature. Being alone is also a common feature of experiences in nature provoking feelings of awe (Pearce, Strickland-Munro, and Moore 2017, 375; Keltner and

Haidt 2003, 300). Pearce, Strickland-Munro, and Moore (2017, 375), who studied awe in visitor experience of the Kimberley region in Western Australia, describe something similar that they call 'reflective moments', facilitated by the lack of people in the 'wild', that form part of awe-inspiring experiences. In these reflective moments, people reported seeing themselves as connected to non-human nature in a way that they might not every day (Pearce, Strickland-Munro, and Moore 2017, 375). Participants in Ballew and Otomo's (2018) study also reported being alone as an important feature of experiences of absorption in nature. The absence of humans may allow for more attention to be paid to non-humans. The absence of humans could also make it is easier to be mindful (Nhat 2008, 17). Similarly, being away from other humans is likely to make it easier to become absorbed in the surroundings (Ballew and Omoto 2018), which is linked to feeling positive affect such as awe (Keltner and Haidt 2003) (It is less likely we will feel awe at a beautiful sunset if we are chatting to a friend, or thinking about your grocery list, or concerned with how you look (re chapter 2 on embodied subject-ness)). Likewise, being away from other humans would make it easier to enter into a flow state (Csikszentmihalyi 2014) in natural places/spaces.

7.3 Sensory immersion

I have baby on my lap; it's hot and her plump, firm thighs stick damply to mine. She is whingey so I distract her with a pad of large post-it notes. Then I am distracted by her joyful baby-ness. She is the perfect example of openness to the world and being tuned for relationships (Abram 1997, ix); seeking to connect, making contact and touching, she is determined to figure out the world by putting all things, living and non-living (for example - her dress, the arm of her baby playmate, all toys, the seatbelt, my hair...) in her mouth. It takes some problem solving to figure out how to get such a large flat object as a post-it note in her mouth, but after a while she scrunches it in her strong, chubby, fist and gets a corner between her gums.

Baby demonstrates sensory relationship to the world: Perth, WA, December 2017

We experience through the sensing body, 'the eyes, the skin, the tongue, ears and nostrils – all are gates where our body receives the nourishment of otherness' (Abram 1997, ix). In this section I build on my analysis in Chapters 2, 5 and 6 to show how multi-sensory experiences with non-human nature comprise one element of times that I, and participants in my research at Earthwise, felt connected to non-human nature. Here I separate out the references to the different senses in the modified five-sense model I have adopted (see Chapter 2 for more on this) to structure the discussion that follows. However, as I expand on later, the experience through the senses is of embodied immersion in natural places/spaces united in the body-subject.

Vision was referred to in both the Earthwise and road trip chapters – both inspiring pleasure and at times a sense of awe. At Earthwise I spent a long time in the garden with my camera, and writing in my journal, trying to capture the feeling of awe I had for the lush green growing things I had planted on the herb spiral that had grown junglesque in miniature and started to bear fruit and flowers. On the road trip I frequently refer to feeling awe at the beauty of the scenery (discussed in section on affect). On the road trip, vision seemed to be given more prominence, because of the striking nature of the scenery, and because my intent was different – to explore, look at, enjoy, whereas gardening involved other motivations as described in chapter, such as caring. One participant at Earthwise also attributed a difference in the act looking at nature from a distance, and looking at nature up close while immersed in gardening.

> Of course there are the different times of the year, you see a deciduous tree, in the winter, is always the kind of quiet - almost a kind of bleak time, especially in a European garden. But here, the fig tree's lost all its leaves and other trees have lost their leaves… the big trees can often look like they're all looking a bit sad and then, you know, that spring when it blossoms and you've got the almond tree blossoming and then they drop… like the Jacaranda drops its flowers. And it just looks amazing, so it looks beautiful in the tree and then there's this lovely carpet. And, to me it's attractive and it's ... it's just a beautiful carpet (P1, Earthwise, 2014).

Smell features in both excerpts and was described as an important sensory aspect of gardening by participants at Earthwise. As mentioned in chapter 5, the smell of compost in particular held appeal for two of the participants at Earthwise. Smell also has the effect of powerfully recalling particular places. My garden at Earthwise had a particular smell of Eucalypt, sawdust and damp earth. In Broome, on the road trip the unfamiliar terrain had a

258

damp, sea-salty smell. As described in Chapter 5, a participant in my research at Earthwise talking of Australia compared to the UK described nature in Australia as smelling more pungent. Describing the pleasure of smell, one participant said:

> When the orange blossom comes - the citrus blossom comes - it's just magical … just a wonderful smell. And it makes you smile. (P1, Earthwise, 2014)

Taste is only referred to in one of the excerpts above and was not mentioned by participants at Earthwise. This could be because, as Tilley (2006) argues, I and others lack vocabulary to talk about the sensory aspects of gardening, and that often these are part of the unconscious rather than conscious the importance of gardening. Taste is not always present in my recounting of experiences with non-human nature, unless I am dealing with edible plants. This, at present as I draft this chapter, *is* my primary mode of experiencing nature.

The lettuce and rocket I planted earlier this year from last year's seed are growing daily, looking lush and wild (due to my haphazard planting technique of chucking them in still in the seed pods…). We are eating bowls and bowls of salad and they respond to this pruning by growing and growing. I am in the habit of picking and eating the leaves straight from the garden, wet from the rain as I pass by on my way to the mailbox. Sometimes my eldest child and I pretend to be horses and munch it from the plant, giggling. The littlest one is the same height as the lettuce and pulls handfuls straight from the bed. The taste is different from the stuff at the shops – the rocket is more peppery, even overwhelmingly so, and the lettuce more bitter, but also more tasty.

Sensory experience of tasty greens, Perth, WA, June 2020

Figure 7.5: Handfuls of lettuce from the garden, Perth, WA, June 2020. Image by author.

But of course, taste is not the only sense here – there is the haptic sensation of movement – squatting down, pulling the baby out of the lettuce, the feel of the plants, cold and wet with dew, some furred with tiny spikes, some smooth and some frilly, the sound of giggling, the smell of the wet soil, and the satisfying junglesque look of the front garden enjoying the winter rain.

Sound is another sense that for me was part of the unconscious rather than conscious aspects of gardening, as Tilley (2006) describes. With the exception of startling or loud sounds, like the screeching of the cockatoos, described above, sound formed more of an unacknowledged background noticed consciously only in times of stillness:

> *I lean up against the tree trunk and enjoy the space and the out-of-season tropical taste of the banana. In the pause I notice the sound of the day-care is the constant backdrop to the space – children playing, and loudest the staff singing instruction to the children – Declan seems to be troublesome (as usual) 'Dec-lan come to me, De-clan, it's time to wee' and more – getting increasingly more annoyed and less tuneful.*
>
> Sounds at Earthwise, Perth, WA, November, 2015

Earthwise had a constant backdrop of human sounds - kids playing, at the day-care and the school, as well as non-human sounds such as leaves moving in the wind, birds in the branches above where I worked, cicadas and bees. In experiences outside the city, sound is often present in its absence. For example, I recently I visited some friends living on a bush block in a small town south west of Perth. When I had been shown the house I stepped outside, took a deep breath and rolled my shoulders back, I noticed that the absence of the suburban noises that background my daily life - the train, cars, sirens, ice-cream van, neighbours - and I noticed the microcosm of smaller sounds that exploded from the clarity of the silence: rustling leaves of different kinds, cicadas, bird calls. I literally felt the tension in my body ease in response as I let my breath out. On the road trip, sound is mentioned infrequently, usually

in terms of silence or as background, like the crashing of waves, experienced as calming and enjoyable.

Haptic experience was one of the most prominent features of my writing, and is the sense I see as being most linked to immersive-ness; this is because haptic perception encompasses our whole sensing body and as we move through our surroundings and position ourselves in relation to them. In the natural places/spaces I spent time in, one element of haptic sensations involved noticing the relationship of my body in relation to the world around me in terms of how I moved through spaces. I follow this up as a separate element of 'embodied immersive experiences' in section 7.1.5 below. Another haptic element involved noticing my own responses through the sensations in my body and patterns of my breath to the natural places/spaces I was in. A further element involved sense of touch – the feel of the different textures of the plants, soil, sand, rain, water, and air on my skin. As discussed in Chapter 5, touch was also mentioned by some participants at Earthwise, with the texture of the different plants and compost being found to be pleasurable. There is little research directly in to touch and connection to nature (Rikard and White 2021). However, sense of touch by bare feet in sand was found by Rickard and White (2021) to be central to feelings of connection to nature at the beach. Using the example of digging for yams, Bawaka Country including Wright et al. explain how they see sensory experience as building connection to non-human nature as follows:

> Digging in the sand is a sensory experience; it is also engagement with the sand. This engagement is what allows someone to hear the sand's language and develop an understanding of its unique material presence, its patterns and place/space. In this way embodied engagement fosters knowing – specifically, a form of knowing that is based on a recognition (perhaps conceptual, perhaps sensory) of more-than-human agency. (2016, 463)

Merleau Ponty's ideas on intertwining can also help explain why 'embodied immersive activities' in natural places/spaces might result in connection to non-human nature. It is through the senses united in our mind-body that we come in to contact with non-human nature and through these embodied interactions we develop relationships with non-human nature. These embodied relationships could help us develop what Finlay (2005, 285) calls 'reflexive embodied empathy'. She puts forward a vision of reflexive embodied empathy using Merleau Ponty's ideas on 'flesh of the world'. She conceptualises three layers of reflexivity: first, 'connecting of', which she describes as tuning into 'another's bodily way of

262

being through using their own embodied reactions'; second 'acting-into', in which she conceives empathy as 'imaginative self-transposal' which 'calls attention to the way existences (beings) are intertwined in a dynamic of doubling and mirroring'; third, 'merging-with', in which she draws on Merleau-Ponty's notion of 'reciprocal insertion and intertwining' of others in oneself and of one in them (Merleau-Ponty, 1968, 138), where self-understanding and other-understanding unite in mutual transformation' (Finlay 2005, 271). Through this process of reflexive empathy, an awareness of the inter-embodied nature of the world can be developed. I posit that in 'embodied immersive experiences' the inter-embodied nature of existence is easier to grasp, and *feel* to be true. This could lead to what Finlay describes as 'a subtle shift from an awareness of the Other's body as linked to mine to an appreciation of the 'we,' where world and body are understood to be intertwined with one another' (2005, 284). During 'embodied immersive experiences' in natural places/spaces, this 'we' includes non-human nature.

7.4 Mindful movement

Earlier in this chapter I laid out multi-sensory immersion as felt through the different senses. In this section I build on the section on haptic experience, drawing attention to the role of movement in developing connection. I argue that mindfully moving through natural places/spaces can lead to connection by developing kinetic empathy and facilitating mindfulness. Further, as I discussed in section 7.1.3, by spending time moving in natural places/spaces we become a part of the particular part of the 'flesh of the world', connecting us to non-human nature.

Mindful movement was a feature of my connected experiences during my time at Earthwise and on the road trip. Throughout the excerpts included in Chapters 5 and 6 (sections 5.7 and 6.2.1) I describe how I adjusted my gait to the lay of the land I moved through in a variety of ways – kneeling on a slope to weed, climbing over rocks, ducking under trees, making myself narrow to avoid spikey plants, doing yoga on sand, and running through mud. The following passage, from the excerpt included in full in section 7.1 above, describes more explicitly a sense of one-ness with the place I walked in, fostered by the rhythm of mindful walking.

> *I am walking in a fast pace in rhythm with the music, legs strong, arms swinging. I am not struggling to be mindful; all I am is music, body and breath, and as I walk I feel like I am dissolving into the beach. I breath in, take a step, my breath flows through me, I breathe out, it flows through the sand, the sky, the water under my toes. I'm melting into the sand, air, sky.*
>
> Melting into the beach, again, Cable Beach, Broome, WA, March 2016

Movement could be contributing to fostering feelings of connection. Describing her experience of walking in Kakadu National Park in the Northern Territory, Plumwood stresses the relationship between the moving body and connection to non-human nature:

> The intense, intimate and physical bond of knowledge with the earth to be gained by walking opens up a form of conversation with the earth's great body which can only be entered into through the answering effort of our own human bodies'. (Plumwood and Shannon 2012, 31)

For her, the practice of walking in this way is almost a spiritual practice[31], grounded in embodied experience that allows non-human nature to be encountered as a subject with agency. Similarly, Ryan, writing on bushwalking South West WA suggests the embodied experience of walking

---

[31] For Humberstone, like Plumwood (2012), movement can be connected to the spiritual. She posits that 'committed windsurfers as other committed lifestyle or alternative/nature-based practitioners experience activities through their senses and express emotions on occasion something akin to a religious or sacred experience which is articulated as 'spiritual' through their bodily practices in nature' (Humberstone 2011, 506). Although I do not have the scope to pursue spirituality here, as noted in the previous chapter, Tacey (1995) describes White Australians as having a thirst for spiritual connection to Australian nature. Movement in natural places/spaces as part of 'embodied immersive experiences' might be one way to begin to develop this.

264

has the potential to engender closeness of contact, multi-sensory bodily embrace with an environment, and an embodied sense of place through a participatory, rather than a visually speculative aesthetic (Ryan 2010, 17).

Walking barefoot, as described in the excerpt above (Melting into the beach, again, Cable Beach, Broome, WA, March 2016) provides the extra sensory dimension of directly touching the earth. Participants in Rickard and White's (2021) study of barefoot walking on the beach reported that walking barefoot made them feel more connected to non-human nature. As noted by one participant in the study,

> being barefoot on the beach is like second nature, it felt so natural and I felt so connected to myself and the ocean. (Rickard and White 2021, 984)

Kabat-Zinn describes this communion between body and the earth as follows: 'Walking barefoot, our feet kiss the earth with every step, and the earth kisses right back, and we feel it' (Kabat-Zinn 2013, 392). Writing about adventure sports, Humberstone (2011) also places importance on movement in forming connections to non-human nature. She writes about a windsurfing experience as follows:

> I feel the water rushing past my feet and legs. The wind in my hair.

> I sense the wind shifts in strength and direction and move my body in anticipation to the wind and the waves. I feel the power of the wind and the ability of my body to work with the wind and the waves. The delight and sensation when surfing down a small wave with the sail beautifully balanced by the wind.

> Seeing the sea birds and the fish jump delight further.

> The smell of salt and mud.

> The small seal that made its home on the tiny pebble spit. (2011, 502)

She explains it this way: 'This narrative, for me, tells how the physical movement is central to my experiencing of the elements, the birds, mammals and fish' (2011, 502). She suggests that in the embodied movements of nature-based sports, practitioners come to know nature through their bodies, leading to connection to non-human nature.

265

The act of deliberate mindful movement - paying attention to how the body moves through a natural space - can foster connection. For example, in the excerpt above I describe an awareness of my body in 'feeling the muscles in my legs stretch as I walk, the sand firm and damp underfoot'. According to Lund (2005), it is moving mindfully through the landscape that can lead to connection. She explains that walkers can be seen as

> [m]easuring the body to a type of surroundings where a special kind of bodily awareness is required through which the body changes its shape. As Gabriella phrased it for me on a later occasion: 'you... feel that you melt in with the landscape'. And, when the summit is reached a new perspective has emerged and an altered 'perception indicates a [change in] *direction*' (Merleau-Ponty 2002:13); continuity comes into sight. (Lund 2005, 37)

Drawing on Merleau-Ponty, she is saying that the landscape and the walker are one – existing only in relation to the other. Lund argues that

> walking thus mediates relations of continuity between the walker and the landscape. It is not that the body is compared with the landscape, but it is *realised* as landscape 'continuous with the animate and articulate world of Mind'. (Lund 2005, 37)

Echoing Gabriela, above, in my own writing I say: 'I'm melting into the sand, air, sky', and that the landscape calls to be 'dissolved into'. Using Merleau-Ponty's ideas, this is literally true – I am attempting to articulate a recognition of the same-ness of me and the rest of the 'flesh of the world'. Similarly, writing about both windsurfing and cycling, Humberstone (2013) argues that a sense of 'one-ness' with nature might be encouraged through mindful engagement in physical practices in nature.

Kinetic empathy, developed through spending time moving in natural places/spaces, might be the mechanism through which connection leads to actions that can help to address the problems of the Anthropocene. Humberstone (2011, 2013, 2015), argues that participants engaging with nature in adventure-based sporting activities might develop a 'kinetic empathy', a term coined by Thrift (2008). Thorpe and Rinehart (2010) provide an explorative discussion of how Thrift's non-representation theory might be applied to studying adventure sports. Along with Humberstone, they suggest thus:

> The distinct and unique interactions of practice, objects, time, space, nature and affect... enhance (some) participants' capacity (or potential capacity) to feel for

266

others.' Potentially 'prompt(ing) some participants to experience 'kinetic empathy' – a 'kinesthetic awareness' that is 'both the means by which the body experiences itself kinesthetically and also the means by which it apprehends other bodies' – more readily? (Thorpe and Rinehart 2010, 1277)

They propose that kinetic empathy might lead people to develop more of an ecological consciousness and to act in the world in a more environmentally sound or socially just way. They draw on the idea of a 'politics of affect', introduced by Thrift (2008) in his book on non-representational theory. Thrift theorises that we are primed to match the emotions of others through imitation (by mirroring and one step further to pre-empting/mind-reading). He explains that this is pre-cognitive – we are not aware we are doing it – and that the result of this can be to feel empathy:

> In turn, imitation leads to other affective states such as empathy, not only because the self-other divide can be seen to be remarkably porous but because across it constantly flow all kinds of emotional signals. But this is a kinetic empathy, of the kind often pointed to in dance, a kinaesthetic awareness/imitation which is both the means by which the body experiences itself kinaesthetically and also the means by which it apprehends other bodies. (Thrift 2008, 237)

The example cited in Humberstone's (2011) work is of human connections to other humans (surfers helping surfers in developing countries), although she speculates that this empathetic connection to others could also extend to non-human nature, eventually leading to action in the world. This idea of kinetic empathy is raised again as being a fruitful area of inquiry for those interested in relationships between humans and nature in a more recent publication by Collins, Brown, and Humberstone (2018), but is not expanded on further.

7.5 Strong emotional response

Common to my and others' experiences at Earthwise, and my experiences of the road trip, were that connected experiences provoked a range of strong emotional responses. These affective responses included the emotions of awe, fear and happiness. These emotions were experienced by my embodied self, as noted above and in chapter 2. For example, the embodied emotion of awe might provoke a sharp breath in, holding and an expansive breath

out, or an opening of the shoulders, turning to a companion, meeting eyes, sharing a moment; or ducking my face hiding the prickling of tears, feeling humbled. While the experiences in natural places/spaces on the road trip (such as swimming in a gorge walled by sandstone millions of years old) were amazing, affect did not only occur in 'wild' natural places/spaces; they were also present for me and other participants in the more every-day setting of the Earthwise garden.

For me awe was easily identified on the road trip; the spectacular scenery and wildlife, along with my receptive state, resulted in frequent experiences of awe. I had to reflect and look for less obvious indicators of awe as I went through the data from Earthwise. For me, awe in this setting turned out to be quieter, and was most associated with experiences like watching plants I nurtured from seedlings grow and thrive and produce flowers and seeds It is more similar to the awe felt with my children, at how perfect they are. The lesson my children have taught me has been revelatory in that if I think they are perfect, somewhere underneath all the calcification of life, I can believe that I remain perfect too in my core, as do all others. This realisation has enabled me to feel more connected to others. Awe is often linked to feeling a sense of happiness, joy or peace and relaxation.

As I described in the previous chapter, on the road trip I also experienced fear and the related, but less intense, emotions of panic, anxiety and trepidation. Sometimes these emotions were linked to awe, in that I was experiencing a sense of threat from the wild 'nature spaces' I was in. For example, the thunderstorms in Kununurra were both beautiful and scary. At other times it seemed to spring from a sense that things were outside of my control (literally in the case of the dog, Rani, introduced in section 6.2.3) or that I was not properly equipped to face them, for example when walking in Kalbarri Gorge (also see section 6.2.3). All fear-type experiences however, had a commonality of inspiring a sense of respect for non-human nature. Fear did not appear in my experiences at Earthwise garden, although some of the awe-related fear of storms was experienced in the town of Kununurra – essentially a suburban setting.

Feelings of enjoyment, happiness, peacefulness, and relaxation were descriptors used by me and other participants at Earthwise in relation to their gardening experiences. On the road trip I experienced joy, happiness and peace, and relaxation. On the road trip, a sense of peace is often associated with the tension releasing from the body (e.g. '*I let my breath out and feel some of the tension I've been holding release')* and a sense of letting go: letting go of not only physical tension, but also letting go of expectations, worry, striving, and also of self-

268

identification. This was often associated with the emotion of awe. These experiences made me feel small; the vastness of the sky, beaches, and desert made me aware of myself as insignificant in the 'grand scheme' of things. Happiness or joy resulted from pleasurable sensorial experiences on both the road trip and Earthwise. At Earthwise, multi-sensory experience, particularly haptic experience was explicitly linked to feeling happiness for participants, as was immersion in and attention to the present moment. For example, speaking of making compost one participant said:

> It's a therapy, it just feels good... Having your hands in the soil and the compost is a whole different bunch of sensations through your skin... and that's a nice thing. So, it's a reminder of, reflecting on it, it's a reminder that all this earth is here (laughs). (P6, Earthwise, 2014)

As noted in chapter 5, two other participants also described feeling happiest when 'up to their elbows in compost'. There are times when I noted enjoyment of tasks (building the herb spiral, weeding), but also times when focussed attention and a feeling of peace can be equated with happiness, as with another participant who said she could 'lose herself' in the garden' (in other words the flow state [Csikszentmihalyi 1991]). Many experiences I and other participants at Earthwise mention enjoying in the garden were tasks such as pruning, weeding, and planting a garden, where on the road trip my time in natural places/spaces was more me focussed (e.g. yoga, walking, deliberately going to look at spectacular natural features). However, other participants and I did spend time happily just sitting in the garden space.

Joy and the related feelings of happiness and peace were a feature of 'embodied immersive experiences'. It is possible that positive emotions, such as joy, could lead to connection to non-human nature. In positive psychology, positive emotions are theorised to lead to social connections to others (Fredrickson 2001); this could be extended to include the non-human (Carter 2011). Carter suggests that

> cultivated positive emotions can expand individual awareness of their connections to Earth's living systems, increase their capacity to creatively and effectively address environmental problems, and help them recognise that wellbeing and environmental health go hand in hand. (2011, 65)

However, in my data, happiness could also be a result of connected experiences, rather than, or as well as, the cause of them. As discussed above, happiness can be seen to result from the perspective of self as part of a greater whole gained from awe-inspiring experience. It also resulted from the sensory pleasure of interacting with non-human nature. Further it may be that the emotion of happiness may result from the act of engaging in an 'immersive embodied experience' in a nature space due to the aspects of mindfulness, absorption, or flow. For Csikszentmihalyi (2014) happiness can be equated with a flow state, where action and awareness merge. Although it is only afterwards a person would reflect, perhaps making a comment like 'wow that was fun!' During the experience we would be totally immersed in the moment. Similarly for Ballew and Otomo (2018), absorption in nature is correlated with feelings of happiness. A mindful life is also equated with a happy life (Kabat-Zinn 2015). Thus, the correlation discussed above between mindfulness and flow or absorption and connection could also account for how 'embodied immersive experiences' in natural places/spaces lead to positive emotions.

Accommodating awesome experiences can lead to a sense of self as part of a greater whole, and seeing non-human nature as having agency. Accommodation, described in the previous chapter 6 as 'adjusting mental structures that cannot assimilate a new experience' (Keltner and Haidt 2003, 303), can be seen as a key to understanding why awe-inspiring experiences could be positive for human – non-human nature connection.[32] For example, my amazement at being alive in the magical Cable Beach described in the excerpt above on walking at this beach was assimilated, and a shift resulted in which I saw myself as

---

32 There are some innate qualities that make it more likely that an individual will experience immersion in the moment. The concepts that come up in Csikszentmihalyi's (2014) work of 'autotelic' personalities, and in awe-prone-ness (Shiota, Keltner, and Mossman 2007) and absorption proneness (Ballew and Omoto 2018) are innate qualities a person possesses that make them more likely to experience flow, absorption, and be mindful by nature. Thispossibly makes these people more likely to reconnect to body and experience connection to non-human nature. Nakamura and Csikszentmihalyi (2014, 245) explain that a mediating factor to how likely it is a person will experience flow is personality type: some people exhibit an 'autotelic personality', where they are motivated to participate in tasks by intrinsic rather than extrinsic rewards. These people may have a greater capacity to experience flow states. Another factor he mentions is absorption, 'a trait construct used to measure hypnotic susceptibility, and conceptually related to openness to experience'. In relation to experiences in nature, Ballew and Omoto (2018, 33) describe absorption as being 'fully involved and captivated by the features of nature' and attribute it to being a 'key mechanism responsible for nature's emotional effects'. Additionally, Keltner and Haidt (2003) also found that personality also mediated how likely it was people can experience awe (those who are more able to adjust their mental structures to new information. In sum there are some innate qualities that can make it more likely that people can experience 'flow' states in nature as well as experience feelings of awe, and become absorbed in natural places. This should be noted as a limitation of any attempt to facilitate connection, but is not the focus of my research.

Figure 7.6: Cable Beach, Broome, WA 2016. Image by author.

'dissolving into' the beach. It follows that awe inspiring experiences could be the gateway to a shift in human's understandings of their relationships to non-human nature. Yan et al. (2018), Ballew and Omoto (2018), and Pearce, Strickland-Munro, and Moore (2017) all suggest that connection to non-human nature can result from experiencing awe.

The idea of an embodied sublime, introduced in Chapter 6, can help to explain why awe inspiring experiences were correlated with feeling connection to non-human nature. The felt nature of the experience (outside of language) allows the recognition of non-human nature as 'wholly other', but also part of a larger whole that the body-subject also belongs to. This understanding was present in my awe-inspiring experiences on the road trip, for example, my response to the manta rays described in chapter 6 was to acknowledge them as other (Freeman 1995, 11), but as having agency. This paradox is also described by Morse (2015b) who studied participants' experiences of nature on rafting trips on the Franklin River and found that one theme common to participants' experiences was 'a feeling of humility' (2015b, 117). This 'a feeling of humility', consisted of four related ideas:

1.   A sense that 'things' might become 'something',
2.   A tension between vulnerability and comfort,
3.   An intertwining with the more-than-human world, and
4.   An imminent paradox. (Morse 2015b, 117)

These four qualities reflect much of my experiences of awe described in chapter 6. The first point, 'a sense that 'things' might become 'something'' refers to an idea that the entities encountered within nature were part of something bigger and that this bigger picture was not necessarily human-centred. The second and third refer to a feeling of being both dwarfed by the other of non-human nature, and at the same time taking comfort in realising that one is part of a bigger whole. One participant, Vickie, is quoted as saying this:

> But at the same time that you feel small, a part of something bigger, so you feel diminished. At the same time, you're also aware that you're part of that system and there's something comfortable about that'. (Morse 2015b, 116)

Morse refers to the final quality of an 'imminent paradox':

> That one can perceive something as the other, in its alterity (otherness), and also be a part of that other… These two perceptions are intimately connected, and yet paradoxical: we cannot really be a part of the world and be separate from it at the

272

same time. Nevertheless, the imminent perception that we might be either may affect our experience of the surrounding world, making us more aware that we are *in the world.* (2014, 50)

He uses Merleau-Ponty's notion of *chiasma,* the intertwining of mind and body-subject, and self and world, to explain this paradox of being apart from, yet inextricably a part of the world. 'Embodied immersive experiences' in natural places/spaces can facilitate embodied sublime experiences, which can result in an embodied, felt, understanding of non-human others as both 'other' but part of the same flesh of the world.

Awe can also be associated with feelings of happiness and peace. In the road trip section a sense of peace is often associated with the tension releasing from the body (e.g. '*I let my breath out and feel some of the tension I've been holding release'*) and a sense of letting go. I let go of not only physical tension, but also of expectations, worry, striving, self-identification. This was often associated with the emotion of awe described in chapter 6 and above at non-human nature (e.g. *'how amazing to be alone here in this beauty, near this creature'*). These experiences made me feel small; the vastness of the sky, beaches, and desert made me aware of myself as insignificant in the 'grand scheme' of things. This reflects the findings of Shiota, Keltner, and Mossman (2007, 961) on the effect of awe-inspiring experiences making people feel diminished in the face of 'something greater than the self', as well as increasing sense of self as a part of a 'greater whole'. In his study of cetacean encounters, DeMares (2000, 99) also found that 'a highly significant personal experience with a dolphin or whale elicits in the human a sense of *harmony, connectedness,* and *aliveness* (awe, elation, deep joy and/or unconditional love)'. As discussed in chapter 6, encounters with wild animals were considered to be especially awe inspiring, as the recognition of another consciousness interacting of their own volition with us in amongst this 'wild' beauty acted to especially de-centre the self. For DeMares, encounters with cetaceans were also linked to the idea of reconnection: 'In realizing such qualities through an encounter with a wild animal, the percipients seem to reconnect with elements that are lacking either in their own lives or in society' (2000, 99) The theme of reconnection also appeared in Davison's study of environmentalists, who reported that time in 'wild' nature resulted in reconnection to self, using phrases such as 'getting back to themselves', and 'recharging' (Davison 2008, 1292). Sense of connection to self was identified in Chapter 2 as being key to the ability to connect with others including non-human nature. For me, the result of this sense of connection and feeling like I was part of a greater whole was a sense of calm, because it

273

resulted in feeling my own concerns were less important (reducing the emphasis on self and shifting to a broader perspective (Shiota, Keltner, and Mossman 2007, 961)), and also that I had a place in the larger universe and as such everything was as it is meant to be.

7.6 Conclusion

In this chapter I identified four commonalties across my and others' experiences at Earthwise, and my own experiences on the road trip Perth-Darwin, to the times I felt connected to non-human nature: immersion in the moment, sensory immersion, mindful movement, and strong emotional response. I called experiences in natural places/spaces that possess these qualities 'embodied immersive experiences' and argued that these experiences in both urban and 'wild' natural places/spaces can lead to more connected relationships with non-human nature. Through a discussion of each element, I showed that 'embodied immersive experiences' can help us develop more connected relationships to non-human nature by helping us develop empathy for others, including non-human nature, through the mechanism of 'kinetic empathy' (Thrift 2008). These experiences can also show us that nature is not an object, but a subject that is 'lively, active and forceful' (Yarde 2013, 160). Further, drawing on Merleau-Ponty's notion of 'flesh of the world', I suggested that through spending time in natural places/spaces we literally become comprised of them, and them of us. Importantly, the receptive, open state offered by 'embodied immersive experiences' can help us feel that this is true. In this way 'embodied immersive experiences' provide the potential to understand ourselves to be part of the 'flesh of the world' (Merleau-Ponty 1968), connected to human and non-human others. These insights can help us to reject the old binary view of humans and nature in favour of one that sees us and non-human nature as one, and to find new ways of acting with care in the context of the Anthropocene.

My research demonstrated that people wanting to connect with non-human nature can have 'embodied immersive experiences' across a variety of natural places/spaces. However, the qualities of these experiences will differ. For those of us who live in cities or suburbs, urban natural places/spaces, such as gardens, can offer more sustained, every-day, embodied interactions with non-human nature, allowing us to get to know non-human others, particularly plants, as subjects with agency. For most Australians, who are urban dwellers, it is not possible to build an ongoing relationship with non-humans in 'wild' nature. However, even occasional 'wild' experiences might offer different, although not necessarily better,

274

gateways to experiencing connections to nature than urban experiences. Awe-inspiring experiences, and particularly embodied sublime experiences were more prevalent for me in 'wild' natural places/spaces, leading to viewing non-human nature as having agency. The opportunity to interact with animals in the 'wild' resulted in particularly intense feelings for me. Fear, both as part of awe-inspiring experiences, and from being not fully in control of my experiences, is another route to seeing non-human nature as having agency and inspiring respect offered by 'embodied immersive experiences' in 'wild' natural places/spaces. Concluding his paper on river rafting experiences, Morse (2015b, 179) suggests that experiences of paying attention to the other in the 'wild' can be bought back into our everyday lives. He doesn't expand on this, but I extend this idea by saying that the act of noticing and seeing the other as a subject might be bought back into every-day practices. Further, the emotional residue of the intense embodied emotions such as awe might also colour the way we interact with non-human nature in every-day urban spaces.

The analysis presented in this chapter is a step towards addressing my third research objective. By pulling together the findings of my research to identify a particular type of experience that can foster better relationships with non-human nature, I provide direction for planners to consider in working towards of challenging current binary approaches to human and non-human nature. The ideas discussed on 'flesh of the world' and the 'embodied sublime' in the context of 'embodied immersive experiences' also demonstrate protentional for developing non-binary ways of thinking about non-human nature in the context of planning. My original research contribution is to bundle the four elements of 'embodied immersive experiences' together into a distinct means to fostering connection to non-human nature in natural places/places.

Chapter 8: Conclusion

Figure 8.1: Tender new shoots of the wild asparagus, Sicily, Italy 2018. Image by author.

Most of the 'weeds' that fill the fields and roadsides in Sicily are edible: wild asparagus, wild fennel, and their symbiotic mushrooms, carduna (artichoke leaves), chicory, and many other bitter greens I can't remember the names of. Today we are picking wild asparagus on the abandoned land next to a friend's farm. Wild asparagus are the tender new shoots of an extremely prickly low-lying bush that grow in abundance in this part of Sicily. They are tougher and more bitterthan their tame counterparts, but still delicious.

Negotiating the steep rocky terraced hills takes constant attention. I need to be careful about placing my feet on the stable parts of the terrace and not on the slippery rocks, and not getting distracted by eyeing off the next possible asparagus bush. Focused on the task, I find my field of vision narrows to the level of the asparagus; ignoring the vista of the hills and volcano, I trail from one bush to the next along the hillside. The task is meditative and rewarding. It's a beautiful day, cool, but sunny. I can hear the sound of cowbells. The air smells of citrus. There are many ladybirds. Unfamiliar white and grey marbled rocks that I think are granite.

To see if there are any asparagus you have to push the mature plant aside, revealing the light green shoots. They are so spiky that I quickly realise you can't do this with your hands, and emulate the others, pushing the sturdy, spiky bush to one side with my booted foot. Then I carefully snap off the shoots, trying unsuccessfully not to be scratched, but ending up with red stripes on the backs of my hands and the delicate skin inside my wrists. My friend tells me that in a few weeks more shoots will pop up in place of these.

Picking wild asparagus, Sicily, Italy, October 2018

Pushing aside the spikey old growth and uncovering the tender new shoots of the asparagus is a good metaphor for what I uncovered about my own, and others', relationships to non-human nature. Pushing aside the tough old growth is the act of rejecting dualistic attitudes, such as those present in the planning system in Western Australia. The tender new shoots are the connected experiences I uncovered over the two parts of this research journey. These are the fragile non-dualistic relationships with non-human nature that can be nurtured. The frequent new growth of the asparagus is a reminder that there are many opportunities to find or renew these.

My research question on beginning this project was: How can embodied methodologies inform approaches to planning that facilitate more connected human relationships with non-human nature? I addressed the problem by using a composite embodied methodology I called 'sensory autoethnography'. The methodology challenges the problem at the heart of the disconnect from non-human nature - dualistic understandings of human and non-human nature relationships - by focusing on embodied experience in natural places/spaces. In conducting this research, I responded to the following objectives:

1. Develop an embodied methodology to explore human relationships with non-human nature.
2. Explore how people feel and think about, and behave towards, non-human nature in the cultural context of my research.
3. Suggest ways planning can challenge current binaries in planning thinking and action and develop more connected relationships to non-human nature.

In this chapter, at the conclusion of this project, I return to my research question and objectives, and show how my research addresses these. In doing so, I return to the problem I outlined at the beginning of the thesis and explain how my findings speak to the problem of the separation between humans and non-human nature in the Anglo-Saxon culture that underpins the planning system in Western Australia. As I explained in the introduction, this problem is framed in the context of the age of the Anthropocene, a proposed new geological epoch in which humans have dramatically, and adversely, changed the world in which we live through activities like deforestation and burning fossil fuels (Crutzen 2005, 2002, Steffens et al. 2011). I am writing this during the Coronavirus (COVID-19) pandemic, a crisis that makes the need to rethink how we live in the Anthropocene even more urgent than when I began this project nine years ago. COVID-19 is an infectious disease that causes respiratory symptoms, for which there is no officially accepted treatment or cure (WHO 2020). The

pandemic has seen 508,041,253 confirmed cases and 6,224,220 deaths worldwide as at 26 April 2022 (WHO 2022). Although the origin of the disease has not been confirmed, the WHO working group investigating the origin confirm it is a zootonic disease (meaning it was passed from animals to humans) (WHO 2021). Recently, in Demark, a mutated version of the disease was found to be infecting both farmed minks and the humans that worked with them (WHO 2020). This current pandemic as well as the past experiences of HIV/AIDs and SARS showed that infectious diseases are linked to human interactions with their environment (Morse et al. 2012), in particular 'from human encroachment into wildlife habitats, enabling diseases that originate in animal populations to cross the human-animal barrier' (Chin et al. 2020, 1). The impact that the current COVID-19 crisis has had, and continues to have, highlights that human and non-human relationships matter. The pandemic also acts as a reminder of both how much many humans in Western cultures are damaging the world, and how much power these humans have to change things. During the lockdown periods of the pandemic, pollution dropped between 20% and 30% for major polluters such as China, Europe and America, mainly through a reduction in mobility and associated use of fossil fuels (Muhammad, Long, and Salman 2020). At a local scale, suppliers of seeds and seedlings in my neighbourhood sold out as people re-discovered both the necessity and pleasure of gardening. The age of the Anthropocene calls for many humans to rethink how they live and interact with the non-human world. Planners are uniquely well placed to help address these problems, because planning allocates how people use land and where they can come into contact with non-human nature. As Steele writes in her recent book on planning for 'wild cities', 'we need creative and transformative planning ideas, concepts, and theories to inform and be informed by creative and transformative planning practice' (2021, 105). I offer my research to this movement on alternative approaches to planning.

In this concluding chapter, I respond to each of the objectives that led the research, outlining the original contributions of my research and suggesting directions for further research and practice. In section 8.1, I explain how utilising the embodied methodology of sensory autoethnography to explore human relationships with non-human nature can enable an alternate mode of knowledge to than 'traditional' planning approaches, illustrating the potential for embodied methodologies, such as sensory autoethnography, to challenge mind/body, reason/emotion and body/environment binaries present in planning. I further outline the potential for development of embodied researchers and planners. In Section 8.2, I summarise the major findings of my sensory autoethnographic exploration of how some people feel and think about, and behave towards, non-human nature, in the cultural context

of my research, finding that relationships with non-human nature are complex, but that emplaced and embodied experiences offer potential to develop connection. In section 8.3, I revisit the concept of 'embodied immersive experiences', an original finding of my research, which I argue can suggest ways to challenge the human/nature, human/environment binaries embedded in planning, and develop more connected relationships to non-human nature.

8.1 The embodied methodology of sensory autoethnography

My first research objective required me to utilise embodied methodologies to explore human relationships with non-human nature. In undertaking this research, I used the embodied methodology of 'sensory autoethnography', a new approach I created by drawing on the existing methodologies of sensory ethnography and autoethnography. I adopted the focus on individual experience from autoethnography and utilised the senses as a route to gaining insight into embodied experience demanded by sensory ethnography. Sensory autoethnographers engage the senses as experienced by themselves as embodied subjects as a route to understanding their own experience in the context of their culture. The methods I have demonstrated throughout this thesis provide an example of how embodied research can look. In particular, my discussion in Chapter 4 on how I carried out the project provides interested researchers and practitioners with a detailed account of how I conducted the project, which can help to make these methods more accessible, and inspire others to utilise creative embodied techniques in carrying out research. These methods could be used to explore issues such as what people value about places or how they navigate urban areas.

Employing the methodology of sensory autoethnography allowed me to gain insight into human and non-human nature relationships through my embodied experience. The findings of my research, that 'embodied immersive experiences' in natural places/spaces aided my, and others, sense of connection to non-human nature, provides an exciting direction for further research into how planning can assist us to meet the challenges of living in the Anthropocene. Using the embodied methodology of sensory autoethnography demonstrated how embodied research methods can challenge the binaries that are embedded in planning and planning research. First, use of the methodology challenged the mind/body, human/nature and body/environment binaries by focusing on the experience of my and others' 'lived bodies' (Merleau-Ponty 1962/2005) in direct relationship with natural

281

places/spaces. This is important because, drawing on Merleau-Ponty's notion of 'flesh of the world', I have shown in this thesis that our relationships with places *are* embodied. As such, planning can gain significant insights into the relationship between people and places by engaging sensory autoethnography, informing a more nuanced understanding of planning issues. Second, my choice to write in the first person and to include excerpts of evocative, embodied writing challenges the traditional binaries of researcher/subject social sciences/literature, allowing the reader to be a co-participant (Ellis and Bochner 2000) by entering into the narratives using imagination and empathy. By using evocative (Ellis 1999) and embodied writing (Anderson 2001), I have demonstrated an alternative way in which researchers and planners could explore and communicate about the issues they research or work with. Anderson (2001) argues that embodied writing provides an alternative to traditional scientific reporting, helping scientists to better understand their research. Planners, who, like scientists, generally take a rational approach (Baum 2015), could benefit from writing and reading embodied research. This is because such writing provides insight into the embodied and emotional aspects of their own and others' experiences, which is missing from 'traditional' approaches. Third, as I outlined in Chapter 2, by demanding I pay attention to, and write about, my embodied experience, the methodology of sensory autoethnography has helped me challenge the notion of body as an object, contributing to my seeing myself as an embodied subject. Thus, utilising sensory autoethnography has helped me in developing myself as an embodied researcher.

My research suggests that researchers and planners could improve human relationships with non-human nature by working towards an embodied research and planning practice. Embodied researchers and planners could work on unlearning the modernist notion, discussed in the introduction, that planners are detached rational experts. Instead, embodied researchers and planners would seek to inform their work with the understanding that they are planning for a 'we' that includes themselves, other people and non-humans comprising the part of the 'flesh of the world'. By developing their sense of self as body-subject and nurturing their connection to non-human nature through 'embodied immersive experiences' in natural places/spaces, embodied researchers and planners could be better equipped to act from a position of connection. In this way embodied researchers and planners' actions would be underpinned by the aim of fostering human and non-human connections. This is an exciting avenue for further research. Questions for exploration are: What does an embodied researcher or planner feel like? How do they act? What could embodied research and planning practice bring to planning institutions, and how might

embodied researchers and planners challenge binaries in planning and help others connect with non-human nature?

Embodied researchers and planners would listen to their own embodied knowledge. This means allowing emotions, instinctual feeling and messages from the body (for example, tension) to inform their practice. Embodied researchers and planners would also seek to use mindfulness in their daily practice to be aware of the ways that emotions (especially repressed negative emotions) might influence their practice (Ferreira 2013). Further, they would consciously dismantle barriers created by their official capacity as 'expert' planners, such as using inaccessible language (jargon), and aim to instead foster connection with others. They would seek to gain other types of knowledge than scientific/rational, including local embodied and Indigenous knowledge, to inform planning research and decision making. As I mentioned in Section 8.1 above, embodied research methodologies, such as sensory autoethnography (which can, like my research, also include the voices and experiences of others), or sensory ethnography (see Sunderland et. al. 2012) can be used to gain these alternate modes of knowledge. Embodied planners would also seek to maintain and deepen their feeling of connectedness to non-human nature through engaging in 'embodied immersive experiences' in natural places/spaces.

Planning educators could practice embodied teaching methods and teach planning students how to be embodied researcher and planners. According to Gunder, during planning education, a student will experience changes to their identity as they internalise 'traditions, beliefs, knowledges, and values' (2004, 306). Gunder (2004) further asserts the planning educator has a large impact on the student's construction of their identity as a planner. Therefore, planning educators both directly and indirectly pass on their beliefs about what planning is and how it should be conducted (Gunder 2004). This means that including embodiment in the planning student's curriculum could be influential on their identity as a planner. An embodied educator would seek to pass on skills, including body-awareness, mindfulness and reflexivity, which could help the student to maintain and develop their sense of an embodied subject with agency, and retain this creative drive. Embodied research and planning could be taught by people who are also working towards being embodied practitioners and educators; this means that, like embodied researchers, they pay attention to the wisdom of their bodies, and meet students as embodied subjects. For most, including myself, this would be a work in progress.

8.2 How people feel and think about, and behave towards, non-human nature

At the outset of this project I used existing literature to explore my feeling that disconnection from non-human nature is an issue among Australians enculturated as I am. This addressed my second research objective, to explore how people feel and think about, and behave towards, non-human nature in the cultural context of my research. I found that overall, the literature presented in Chapters 1, 5 and 6 supported this assumption. Exploring this further through my sensory autoethnographic research at Earthwise and on the road trip provided additional insight into the problem of disconnection from non-human nature. I found that relationships to non-human nature, of myself and the other participants in my research at Earthwise, are complex. Participants held firm ideas about how they should behave in relation to non-human nature, which was framed as a sense of environmental responsibility requiring them to care for non-human nature. However, I found that other motivations for caring activities, such as a desire for control, order, or to maintain ownership may co-exist with a sense of environmental responsibility.

Ambivalence was present in both my own and Earthwise participants' relationships with non-human nature, with both a view of self as outside of nature, and a view of self as part of nature being held in tension. The responses from participants at Earthwise, as well as reflection on my own experience, suggested that this ambivalence springs in part from a difficulty reconciling an intellectual understanding that humans are a part of ecosystems, and therefore nature, with evidence that humans are destructive to nature. If humans are part of nature, it means they are self-destructive, which at least on the face of it is irrational. The analysis of the interviews at Earthwise showed that feelings of disconnect sprang from guilt arising from a gap between expectations of how people should behave (e.g. recycle, avoid creating carbon emissions) and actual behaviour. Drawing on the research of Head and Muir's (2004, 2006) among others, I further placed my personal feelings of guilt and non-belonging within the broader context of Australia as a settler colonial country, and my own position as an urban dwelling, 30-something, white, second generation Australian of Anglo-Saxon/European descent. I argue that the presence of feelings of disconnection, guilt, and non-belonging support the importance of my research in the cultural context of Western Australia. At the same time, the ambivalence discussed shows an awareness of the problem, which makes this research timely.

In the context of the Earthwise garden, I found that plants are described as possessing agency, pointing to the potential for human-plant relationships in gardens to develop a sense of non-humans as subjects, leading to more connected relationships to non-human nature. Plants in 'wild' urban nature places/spaces were mostly backgrounded as 'landscape'. I suggest that this because plants are an assumed feature of non-urban spaces, or because in the context of my research, the visits were relatively fleeting and did not include caring activities that would allow more intimate relationships to develop. In the context of the garden, animals that were seen as charismatic and elicited strong emotional responses. This was also the case on the road trip; however, an additional theme of peak experiences characterised by awe were present, the embodied sublime was introduced as a concept to help unpack the significance of these. I suggest this makes relationships with animals in both 'wild' and urban nature spaces important for fostering connections to non-human nature. However, as not all strong emotional responses are positive, these relationships are complicated and ambiguous, and may not always facilitate connection, this complexity could warrant further research.

The analysis of the data collected at Earthwise and on the road trip also offered two insights into how connections to non-human nature can be improved. The first insight, which emerged in the urban context at Earthwise, concerns the critical importance of place: participants' (including my own) understanding of self in relation to non-human nature was affected by where they were. That is, being in a natural place/space made it more likely that they felt themselves to be a part of nature. This is theorised using Merleau-Ponty's notion of 'flesh of the world' (1968, 249), which provides an understanding of the body as part of the same fabric, or element, that comprises the places/spaces time is spent in. The notion that the 'world is at the heart of our flesh' (Merleau-Ponty 1968, 136) makes relevant the spaces humans inhabit: time spent in natural places/spaces allows the body to become part of a place/space, and it of a body. The relational understanding of place/space offered by Bawaka Country including Wright et al. (2016) provides a compatible understanding of humans to co-becoming with places/spaces. Planning researchers and practitioners could attend to the ideas of 'flesh of the world' and Indigenous understandings of place/space to aid in challenging the binaries of human/nature, human/environment present in planning. Both urban and non-urban natural places/places were found to hold the potential to develop this felt connection to non-human nature.

For participants in my research, gardening activities and time spent in the urban place/space of the Earthwise garden facilitated positive experiences and feelings of connection to non-human nature. Interviews conducted with participants at Earthwise, and my own experience on the road trip suggests that 'wild' places/spaces are also important in developing connections to non-human nature. 'Wild' places/spaces facilitated 'peak experiences', and experiences of non-human nature as 'awesome'. These experiences resulted in feelings of connection that involved an understanding of self as part of a larger whole encompassing human and non-human nature. However, non-Indigenous people's connections to places/spaces through embodied interactions, particularly in 'wilderness' areas, are problematised where these conflict with Indigenous owners enduring connections to Country.

Urban natural places/spaces are especially important for renters or people without access to their own garden. They allow sustained interactions with non-human others, and differ from parks and reserves in that humans can modify them and engage in every-day practices of care for non-humans. Hall (2011, 162) suggests that caring, or 'working towards the flourishing of plants' can help to develop a sense of connection to non-humans. Opportunities to practise caring at an embodied person-to-plant or person-to-animal scale such as those provided in gardens can be an important part of developing connections to the non-human world. Authors such as Ash (2006), De La Bellacasa (2017) and Steele (2021) provide a thought-provoking entry point into caring in cities as a response to the Anthropocene that provide an excellent starting point for further research.

For planning, this highlights the importance of thinking about how to plan for both urban and 'wild' places/spaces. The importance of urban places/spaces calls for planners to challenge the human/nature binary of nature being outside the city and appearing free of human intervention ('wild'), and place greater value on natural places/spaces such as gardens. However, it is important to approach this in a way that doesn't result in doing away with the conservation of 'wild' places/spaces. By this I mean that the problems with 'wilderness' as a concept, and the acknowledgement of 'hybrid nature cultures' (Harvey 1996), should not mean we stop protecting 'wild' places from development. Instead, it should mean these are not held up as the only 'real' nature. As outlined in Section 6.1, the relative remoteness of most 'wild' natural places/spaces also points to issues of access and equity, meaning that urban experiences are important. For example, children rely on adults to arrange transport to 'wild' places/spaces, so there should be alternatives where people can connect to nature

that are more easily accessible to the majority of Australians, who are urban dwellers. Researchers and planners could also consider whether there is a way to facilitate 'peak' or awe-inspiring experiences in more every-day settings. Working with the idea of an embodied sublime, introduced in Chapter 6, might help in thinking this through.

The second insight was that embodied experience presents a productive scale of focus for looking at connections to non-human nature because it negates the more complex and troubled aspects that characterise relationships with non-human nature in the cultural context of my research. In contrast to the way participants talked about themselves in relation to nature, which showed ambivalence and complexity, embodied experiences in natural places/spaces at Earthwise were described as positive. Similarly, for myself at Earthwise and on the road trip from Perth to Darwin I found that the times I was immersed in my embodied experience through the senses resulted in feelings of connection to non-human nature. At the end of my field work I had found that the relationships between myself and other participants at Earthwise with non-human nature were complex; that there was a discomfort with how humans behaved that led to a sense of disconnect, but also that embodied interactions with nature showed promise for forging connections with non-human nature.

8.3 'Embodied immersive experiences' in natural places/spaces

An original finding of my research is that 'embodied immersive experiences' in natural places/spaces are a distinct means to foster connection to non-human nature. Through my research I found that 'embodied immersive experiences' in natural places/spaces comprise four elements: immersion in the moment, sensory immersion, mindful movement, and strong emotional response. Importantly, these experiences are emplaced, and arise through embodied interactions with specific natural places/spaces that, viewed relationally, comprise the body-subject, non-human entities, earth, water, air etc. This original contribution responds to the third research objective – 'embodied immersive experiences' could help provide suggestions for challenging the human/nature, human/environment binaries embedded in planning, and develop more connected relationships to non-human nature.

The four elements of immersive embodied experience are as follows:

287

Sensory immersion refers to experiencing natural places/spaces as a body subject through the senses. It is through the senses united in the 'lived body' (Merleau-Ponty 1964) that we experience the world, and the multi-sensual nature of 'embodied immersive experiences' in natural places/spaces demands attention to the connection of self to the broader natural world.

Immersion in the moment is when the mind and body are fully aware of the present moment. Mindfulness provides insight into how paying directed attention to the present moment facilitates *seeing* (noticing/paying attention to/recognising what is there) the other, as well as helping with experiencing self as body subject. Similarly, the concept of flow shows how particular kinds of activities in natural places/spaces can induce present moment attention, which feels good, encouraging continued participation in flow activities in nature spaces.

Mindful movement refers to moving as a body subject through natural places/spaces with present moment attention. Mindful movement in natural places/spaces can lead to connection to non-human nature by developing kinetic empathy (Thrift 2008) and facilitating mindfulness, which improves empathy and attention to others, including non-humans. Mindful movement in natural places/spaces, such as gardening, walking or adventure sports can also help to develop sense of self as a body-subject.

Strong emotional response, in the form of awe, happiness and peacefulness, and fear, among others, is also an important feature of embodied immersive experiences. Awe and fear can lead to recognising non-human as 'wholly other' and possessing agency (as subjects, not objects). These emotions can also lead to feeling small in the face of vastness of universe but connected to that bigger whole. Happiness and peacefulness resulting from embodied immersive experiences can spring from, and also lead to, feelings of connection and one-ness resulting from recognising that we are inseparable from the natural places/spaces we are in. Notably, strong emotional responses were relevant to my encounters with both animals in both urban and non-urban settings.

Empathy, theorised in various ways, was as a common factor across three components of embodied immersive experiences (immersion in the moment, sensory immersion, and mindful movement) that I suggest might aid connection to non-human nature. The felt

understanding of the inseparable relationship between humans and the rest of the 'flesh of the world' (Merleau-Ponty 1968), was another. Finally, the strong emotional responses that these experiences provoked may lead to more connected relationships with non-human nature where the self is seen as part of a greater whole, providing a potential starting point for thinking about new ways of planning in the Anthropocene.

The potential exists for planning researchers and practitioners to work further with the idea of embodied immersive experiences seeking ways to challenge binaries in planning thinking and action and facilitate more connected relationships with non-human nature. For researchers, further exploration into embodied experiences in natural places/spaces could help in thinking through the practical application of this for planning. In particular, research using embodied methodologies targeting a broader range of people, and in a broader range of settings, could provide additional insights. An important consideration for those interested in facilitating 'embodied immersive experiences' in the context of settler colonial societies such as Australia, is that even well-meant attempts at improving relationships or access to nature can reinforce the structures of colonisation (Porter 2020, 232). Rather than erasing or co-opting (Porter 2020, 232) Indigenous knowledges, embodied methodological approaches and attempts to facilitate 'embodied immersive experiences' in natural places/spaces could be carried out in conversation with Indigenous research methodologies and knowledges.

Give the affective impact of animal encounters, further exploration of the concept in relation to human-animal relationships could also be fruitful. Here the work of Wolch (1996) is useful in reimagining animals as subjects who we are intimately connected with. Gruen's later ideas on 'entangled empathy' (2015, 51) also provide a useful way of thinking about how we are already in relation with non-human animals. Gruen argues that attention to the 'particularity of individual animal lives and the very different sorts of relationships we are in with them' is required:

> Entangled empathy with other animals involves reflecting on proximity and distance. To do it well we have to try to understand the individual's species-typical behaviours and her individual personality over a period of time. Very often this is not easy to do without expertise and observation (2015, 51).

Natural places/spaces that plan for non-human animals in urban areas can allow humans to interact with non-humans more regularly, enabling more appropriate empathetic responses. The existing movement of rewilding, described in the introduction, can be a useful starting

point, notwithstanding the critiques regarding its erasure of Indigenous people's ongoing connections with the land (Jorgensen 2015; Ward 2020), and political and ethical challenges (Lorimer et al. 2015, 550; von Essen and Allen 2016, 82; Ward 2020), the implications of which would need to be considered. Further pursing the idea of 'bringing nature back' (Mata et al. 2020), which suggest solutions to these issues, could be an additional avenue. It is also notable that qualities of greenspace that would be considered most desirable (biodiverse, providing habitat) by greening movements such as rewilding and 'bringing nature back' were not noted as particularly important in urban spaces by participants in my research, indicating that planners could work on providing spaces that aid human connection to non-human nature that also provide benefits to non-human animals.

For those considering how to facilitate immersive embodied experiences, my research suggests that there is value in having immersive embodied experiences at all stages of life, but that childhood experiences can be especially important. In Chapter 5, on gardening at Earthwise, I discussed how sensory experiences in nature are recalled through embodied memory. This theme also appeared in Chapter 6 on the road trip, and in part motivated the location of my research, as embodied memories of childhood experiences made me feel connected to the locations I visited as a child. There is research to show the importance of memory of childhood experience to better realtionships with non-human nature. For example, Chawla (1999) asked adult environmentalists what led them to become environmentalists; one key factor was time spent in nature as children, which participants described memories of in rich detail. Also in agreeance with these findings, talking to adults about their experiences as children, Beery and Jørgensen (2018), found that adults were able to recall detailed sensory experiences of childhood time spent in nature, such as this extract from an interview:

> … we had a small cave and it smelled like rock … And when you got up on top you felt a breeze from the ocean … When we went down to the beach, you had different kinds of smells, you had both the trees and the seawater, I can feel all smells. (Beery and Jørgensen 2018, 19)

They found that sensory engagement with nature as children was linked to a sense of connectedness to nature as adults. Recent research by Cleary et al. (2018) who surveyed 1000 residents of Melbourne, Australia, also found that childhood experience in nature was correlated with connectedness to nature. However, Cleary's (2018) research showed that while childhood experiences are important, time in nature at any age will help form

290

connections to non-human nature. The value of childhood experiences could be explained by seeing these experiences through Merleau-Ponty's (1968) ideas on 'flesh of the world', which sees humans as comprising and comprised of places/spaces. Taking myself as an example, during my embodied, connected, experience as a child at Monkey Mia in the water with dolphins (mentioned in chapter 6), the place/space formed part of me. Retaining the sediment of these embodied connections, even if not active, helps me in seeking to connect with non-human nature as an adult. For planners, this shows the importance of considering how to facilitate easily accessible 'embodied immersive experiences' for all age-groups, and of conserving natural places/spaces that allow re-visitation throughout a person's lifespan.

Practical ideas on how to do this exist in the field of nature-based play. Consideration would need to be given to whether existing opportunities could facilitate 'embodied immersive experiences'. Following a study of an eco-tourism site (a 'wilderness' site) in Queensland, King, García-Rosell, and Noakes suggest providing play-based opportunities for children in eco-tourism areas, that 'offer the possibility to engage autonomously and spontaneously with the natural environment' (2020, 198). Additionally, they argue that 'it is important that children have the opportunity to create their stories out of their encounter with nature, but also to share them with other children and adults too' (King, García-Rosell, and Noakes 2020, 198). This has resonance with embodied methodologies – finding creative ways to share knowledge (children's embodied experiences being equally valid as adults), and 'stories created by children can challenge adults' assumptions about nature and thus, lead them into new ways of understanding and relating to nature' (King, García-Rosell, and Noakes 2020, 198). In Western Australia, the Nature Play WA organisation promotes 'child-led play in the outdoors (nature play) enriches childhood with movement, with imagination, with friendship, and with all the sensory wonder that nature brings' (2022). Nature Play WA conducts research runs nature-play programs and provides advocacy for outdoor play (2022). They also provide case studies of existing nature play space (2022a). Practitioners looking to facilitate 'embodied immersive experiences' could look to use and build on, these resources. An interesting research possibility, as noted above, is looking at the interface between rewilding or auto-rewilding and child focussed spaces that facilitate immersive embodied experiences.

Figure 8.2: The author as a child playing in a natural place/space, Tasmania, approx. 1986. Image by anonymous.

> *I consider skipping it this year; I'm almost too tired - the demands of life,*
> *including caring for two small children, work, and this project, has left me*
> *operating in survival mode - but I summon some energy and announce,*
>
> *'It's time to plant the broad beans!'*
>
> *The girls are bouncing with excitement, and this year they already know*
> *what to do. They set about organising the seedling punnets, the eldest*
> *one's fairy voice is firm and instructive – she tells me my job is to fill the*
> *punnets. The littlest one helps me fill them with damp, rich smelling*
> *potting mix. Then I watch them push the wrinkled flat kidney-shaped*
> *beans into the soil with small, capable, hands, making sure that a seed*
> *ends up in each of the six segments of the punnet. The littlest one tries to*
> *eat a dried bean, but quickly, crinkly faced, spits it out, it's not as delicious*
> *as the fresh green ones she likes to eat straight from the plant...*
>
> *A few weeks later the beans are bursting out of their punnets and ready to*
> *be planted in the garden.*
>
> Planting broad beans, Perth, WA, March 2022

8.5 Concluding comments

I began this research nine years ago by asking: *How can embodied methodologies inform approaches to planning and human relationships with non-human nature?* Through use of the original composite embodied methodology, sensory autoethnography, I demonstrated the potential for the body as a locus of experience in developing connections to non-human nature. I found that embodied methodologies have the potential to challenge the binaries of mind/body, reason/emotion and body/environment present in planning. As a result of my embodied research, the original concept of 'embodied immersive experiences' emerged. I suggest 'embodied immersive experiences' might help planning researchers and practitioners in findings ways to develop more connected relationships to non-human

293

nature. Following from this research, the potential exists for further application of embodied methodologies in planning. I also propose that additional exploration into becoming embodied planning researchers and practitioners could be carried out. Finally, planning researchers and practitioners could further explore the potential for theorising and facilitating 'embodied immersive experience's in natural places/spaces in finding ways to develop human connections to non-human nature.

At the conclusion of this project, I reflect on the passage I opened this chapter with; I find myself thinking that although, as I stated, there are many opportunities to find, or renew, connections with non-human nature, and with embodied self, the structures of many Western institutions, such as planning in Australia, don't facilitate these. Certainly, one of the opportunities planners could consider as a result of my research is how to make natural places/spaces and 'embodied immersive experiences' more accessible, but this is not the whole picture. I return to considering some of the earliest reading I did in pursuing this project, and remind myself, and the reader, that the project of challenging binary thinking with the intent of addressing the current context of the Anthropocene needs to be thought of in the context of the broader political and cultural systems. The same systems that objectify and exploit nature, do the same for women, Indigenous people, etc. (Plumwood 1993; Salleh 2017). The capitalist system benefits from the labour (and or land) of these groups, who are largely excluded from the profits of it (Salleh 2017). In the context of my personal experience, this includes the undervalued, unpaid, embodied work of caring for other humans, required to keep the system running, which is mainly carried out by women. In thinking about how to address lack of connection to nature, I suggest consideration needs to be given to the larger web within which individual actions take place. In the Australian context, this means addressing the role of planning in the continuing project of colonisation (Jackson, Porter, and Johnson's 2018).

Figure 8.3: Broad bean seedlings ready to be planted in the garden, Perth, WA, March 2022. Image by author.

References

Abooali, Soolmaz. "Exploring the Somatic Dimension for Sport-Based Interventions: A
  Refugee's Autoethnography." *Sport in society* (forthcoming): 1-17.
  https://doi.org/10.1080/17430437.2022.2017814.

Abram, David. 1997. The Spell of the Sensuous: Perception and Language in a More-Than-
  Human World. New York: Vintage Books.

Afrad, A., and Y. Kawazoe. 2020. "Can Interaction with Informal Urban Green Space Reduce
  Depression Levels? An Analysis of Potted Street Gardens in Tangier, Morocco."
  Public health (London) 186: 83-86. https://doi.org/10.1016/j.puhe.2020.06.034.

AIATIS. 2020. "Drill on Behalf of the Purnululu Native Title Claim Group V State of Western
  Australia [2020] Fca 1510." https://aiatsis.gov.au/ntpd-resource/2058.

Allen-Collinson, Jacquelyn, and John Hockey. 2001. 'Runners' Tales: Autoethnography,
  Injury and Narrative.' *Auto/Biography* IX (1&2): 95–106.
  http://hdl.handle.net/10036/18175.

Allen-Collinson, Jacquelyn, and John Hockey. 2015. 'From a Certain Point of View: Sensory
  Phenomenological Envisionings of Running Space and Place.' *Journal of
  Contemporary Ethnography* 44 (1): 63–83. doi:10.1177/0891241613505866.

Anderson, Leon. 2010. 'Analytic Autoethnography.' In *Sage Qualitative Research Methods*.
  Vol. 2. Edited by Paul Atkinson and Sara Delamont, 374–395. Thousand Oaks, CA.:
  Sage. doi:10.4135/9780857028211.

Anderson, Rosemarie. 2001. 'Embodied Writing and Reflections on Embodiment.' *Journal of
  Transpersonal Psychology* 33 (2): 83–98.

Arthur, Sue, Martin Mitchell, Jane Lewis, and Carol McNaughton Nicholls. 2014. 'Designing
  Fieldwork.' In *Qualitative Research Practice: A Guide for Social Science Students
  and Researchers*. Edited by Jane Ritchie, Jane Lewis, Carol McNaughton Nicholls,
  and Rachel Ormston, 148–176. Los Angeles, CA: Sage.

Ataria, Yochai, Yair Dor-Ziderman, and Aviva Berkovich-Ohana. 2015. 'How Does It Feel to
  Lack a Sense of Boundaries? A Case Study of a Long-term Mindfulness Meditator.'
  Consciousness and Cognition 37: 133–147. doi:10.1016/j.concog.2015.09.002.

Atkinson, Paul. 1997. 'Narrative Turn or Blind Alley?' *Qualitative Health Research* 7 (3): 325–344. doi:10.1177/104973239700700302.

Atkinson, Paul. 2006. 'Rescuing Autoethnography.' *Journal of Contemporary Ethnography* 35 (4): 400–404. doi:10.1177/0891241606286980.

Australian Bureau of Statistics. 2016a. '2016 Census QuickStats Australia: Ancestry, top responses.' accessed 7 December.

Australian Bureau of Statistics. 2016b. '2016 Census QuickStats Cervantes.' accessed November 29. https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC50278?opendocument.

Australian Bureau of Statistics. 2016c. '2016 Census QuickStats Coral Bay.' accessed 29 November. https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC50337.

Australian Bureau of Statistics. 2016d. '2016 Census QuickStats Exmouth.' accessed 29 November https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC50496.

Australian Bureau of Statistics. 2016e. '2016 Census QuickStats Kununurra.' accessed November 29. https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC50792#:~:text=In%20the%202016%20Census%2C%20there,up%2022.9%25%20of%20the%20population.&text=The%20median%20age%20of%20people,State%20Suburbs)%20was%2033%20years.

Australian Bureau of Statistics. 2018. 'Population and People, 2018, Carnarvon (S) (LGA) (51540) Western Australia.' accessed Nobvember 29. https://itt.abs.gov.au/itt/r.jsp?RegionSummary&region=51540&dataset=ABS_REGIONAL_LGA2018&geoconcept=LGA_2018&maplayerid=LGA2018&measure=MEASURE&datasetASGS=ABS_REGIONAL_ASGS2016&datasetLGA=ABS_REGIONAL_LGA2018&regionLGA=LGA_2018&regionASGS=ASGS_2016.

Australian Institute of Aboriginal and Torres Strait Islander Studies. 2020. 'Bunuba Dawangarri Aboriginal Corporation RNTBC.' accessed 2020. https://nativetitle.org.au/find/pbc/7813.

Baer, Ruth A., Gregory T. Smith, Jaclyn Hopkins, Jennifer Krietemeyer, and Leslie Toney. 2006. 'Using Self-Report Assessment Methods to Explore Facets of Mindfulness.' *Assessment* 13 (1): 27–45. doi:10.1177/1073191105283504.

Bale, Rachel. 2017. 'Another Baby Dolphin Killed By Selfie-Seeking Tourists.' National Geographic, accessed 2020. https://www.nationalgeographic.com/news/2017/01/wildlife-watch-baby-dolphin-killed-tourists-argentina/.

Ballew, Matthew T., and Allen M. Omoto. 2018. 'Absorption: How Nature Experiences Promote Awe and Other Positive Emotions.' *Ecopsychology* 10 (1): 26–35. doi:10.1089/eco.2017.0044.

Bannon, Bryan E. 2011. 'Flesh and Nature: Understanding Merleau-Ponty's Relational Ontology.' *Research in Phenomenology* 41 (3): 327–357. doi:10.1163/156916411X594431.

Barbaro, Nicole, and Scott M. Pickett. 2016. 'Mindfully Green: Examining the Effect of Connectedness to Nature on the Relationship between Mindfulness and Engagement in Pro-environmental Behavior.' *Personality and Individual Differences* 93: 137–142. doi:10.1016/j.paid.2015.05.026.

Bartky, Sandra Lee. 1990. Femininity and Domination: Studies in the Phenomenology of Oppression. New York: Routledge.

Baum, Howell. 2015. 'Planning with Half a Mind: Why Planners Resist Emotion.' *Planning Theory & Practice* 16 (4): 498–516. doi:10.1080/14649357.2015.1071870.

Country, Bawaka, Sarah Wright, Sandie Suchet-Pearson, Kate Lloyd, Laklak Burarrwanga, Ritjilili Ganambarr, Merrkiyawuy Ganambarr-Stubbs, Banbapuy Ganambarr, and Djawundil Maymuru. 2015. "Working with and Learning from Country: Decentring Human Author-Ity." *Cultural geographies* 22 (2): 269-283. https://doi.org/10.1177/1474474014539248.

Country, Bawaka, Sarah Wright, Sandie Suchet-Pearson, Kate Lloyd, Laklak Burarrwanga, Ritjilili Ganambarr, Merrkiyawuy Ganambarr-Stubbs, Banbapuy Ganambarr, Djawundil Maymuru, and Jill Sweeney. 2016. "Co-Becoming Bawaka: Towards a Relational Understanding of Place/Space." *Progress in human geography* 40 (4): 455-475. https://doi.org/10.1177/0309132515589437.

Beauregard, R. A. 2008. 'Postmodernism and Planning.' In *Political Economy, Diversity and Pragmatism*. Vol. 2 of *Critical Essays in Planning Theory*. Edited by Jean Hillier and Patsey Healey, 233–248. Aldershot, Hampshire, England: Ashgate.

Beery, Thomas, and Kari Anne Jørgensen. 2018. 'Children in Nature: Sensory Engagement and the Experience of Biodiversity.' *Environmental Education Research* 24 (1): 13–25. doi:10.1080/13504622.2016.1250149.

Bennett, Brett M. 2017. 'Decolonisation, Environmentalism and Nationalism in Australia and South Africa.' *Itinerario* 41 (1): 27–50. doi:10.1017/S0165115317000079.

BGV Global Limited. 2020. 'Man vs. Wild.' accessed 8 December. https://www.beargrylls.com/pages/television.

Bochner, Arthur P. 2000. 'Criteria against Ourselves.' *Qualitative Inquiry* 6 (2): 266–272. doi:10.1177/107780040000600209.

Borkovec, Thomas D. 2002. 'Life in the Future Versus Life in the Present.' *Clinical Psychology: Science and Practice* 9 (1): 76–80. doi:10.1093/clipsy.9.1.76.

Brady, Emily. 2012. 'Reassessing Aesthetic Appreciation of Nature in the Kantian Sublime.' *Journal of Aesthetic Education* 46 (1): 91–109. doi:10.5406/jaesteduc.46.1.0091.

Brandt, Keri. 2006. 'Intelligent Bodies: Embodied Subjectivity Human-Horse Communication.' In *Body/Embodiment: Symbolic Interaction and the Sociology of the Body*. Edited by Dennis D. Waskul and Phillip Vannini, 141–152. Aldershot, Hampshire, England: Ashgate.

Britton, Cathryn. 1998. 'Feeling Let Down: Breastfeeding.' In *The Body in Everyday Life*. Edited by Sarah Nettleton and Jonathan Watson, 65–81. London: Routledge.

Brook, Isis. 2005. 'Can Merleau-Ponty's Notion of 'Flesh' Inform or even Transform Environmental Thinking?' *Environmental Values* 14 (3): 353–362. doi:10.3197/096327105774434468.

Broome Visitor's Centre. 2020. 'Nyamba Buru Yawuru.' accessed 2 December

Buck, Holly Jean. 2015. 'On the Possibilities of a Charming Anthropocene.' *Annals of the Association of American Geographers* 105 (2): 369–377. doi:10.1080/00045608.2014.973005.

Buckley, Ralf. 2021. "Is Adventure Tourism Therapeutic?" *Tourism recreation research* 46 (4): 553-557. https://doi.org/10.1080/02508281.2021.1931775.

Bullington, Jennifer. 2013. *The Expression of the Psychosomatic Body from a Phenomenological Perspective*. Dordrecht, Netherlands: Springer. doi:10.1007/978-94-007-6498-9.

Burke, Edmund. 1998. A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful. Edited by Adam Phillips. Oxford: Oxford University Press.

Buzard, James. 2003. 'On Auto-Ethnographic Authority.' *The Yale Journal of Criticism* 16 (1): 61–91. doi:10.1353/yale.2003.0002.

Caporael, Linnda R., and Cecilia M. Heyes. 1997. 'Why anthropomorphize? Folk psychology and other storiews 59 (1997).' *Anthropomorphism, anecdotes, and animals* 59.

Carroll, John, ed. 1982. *Intruders in the Bush: The Australian Quest for Identity*. Melbourne: Oxford University Press.

Carter, David M. 2011. 'Recognizing the Role of Positive Emotions in Fostering Environmentally Responsible Behaviors.' *Ecopsychology* 3 (1): 65–69. doi:10.1089/eco.2010.0071.

Castree, Noel. 2004. 'Nature is Dead! Long Live Nature!' *Environment and Planning A* 36: 191–194. doi:10.1068/a36209.

Cataldi, Sue L. 1993. Emotion, Depth, and Flesh: A Study of Sensitive Space: Reflections on Merleau-Ponty's Philosophy of Embodiment. Albany, NY: State University of New York Press.

Central Land Council. 2007. 'The Land Rights and + changes made simple.' accessed 9 December. https://www.clc.org.au/files/pdf/alra.pdf.

Chadwick, Rachelle. 2016. 'Embodied Methodologies: Challenges, Reflections and Strategies.' *Qualitative Research* 17 (1): 54–74. doi:10.1177/1468794116656035.

Chakrabarty, Dipesh. 2009. 'The Climate of History: Four Theses.' *Critical Inquiry* 35 (2): 197–222. doi:10.1086/596640.

Chang, Heewon. 2008. *Autoethnography as Method*. Walnut Creek, CA: Left Coast.
300

Chawla, Louise. 1999. 'Life Paths into Effective Environmental Action.' *Journal of Environmental Education* 31 (1): 15–26. doi:10.1080/00958969909598628.

Chin, Anne, Xuefeng Cui, Lindsey Gillson, Donald Nelson, Mark P. Taylor, Veerle Vanacker, and Emilie Wang. 2020. 'Anthropocene in an Age of Pandemics.' *Anthropocene* 30: 100247. doi:10.1016/j.ancene.2020.100247.

City of Cockburn. 2019. "Gluten-Free Quackers at City of Cockburn Lakes." https://www.cockburn.wa.gov.au/City-and-Council/Events-and-News/Latest-News/Offence-in-WA-to-feed-native-fauna,-including-bird.

City of Cockburn. 2018. "Offence in Wa to Feed Native Fauna, Including Birds." https://www.cockburn.wa.gov.au/City-and-Council/Events-and-News/Latest-News/Offence-in-WA-to-feed-native-fauna,-including-bird.

City of Darwin. 2021. "Indigenous History." https://www.darwin.nt.gov.au/community/about-darwin/history#:~:text=The%20traditional%20owners%20of%20Darwin%20are%20the%20Larrakia%20(saltwater)%20people.

Cixous, Hélène, Keith Cohen, and Paula Cohen. 1976. 'The Laugh of the Medusa.' *Signs* 1 (4): 875–893. doi:10.1086/493306.

Clarke, Melissa. 2002. 'Ontology, Ethics, and 'Sentir': Properly Situating Merleau-Ponty.' *Environmental Values* 11 (2): 211–225. www.jstor.org/stable/30301884

Classen, Constance. 1993. Worlds of Sense: Exploring the Senses in History and across Cultures. London: Routledge.

Cleary, Anne, Kelly S. Fielding, Zoe Murray, and Anne Roiko. 2018. 'Predictors of Nature Connection among Urban Residents: Assessing the Role of Childhood and Adult Nature Experiences.' *Environment and Behavior* 52 (6): 579–610. doi:10.1177/0013916518811431.

Costall, Alan. 2017. '1966 and All That: James Gibson and Bottom-Down Theory.' *Ecological Psychology* 29 (3): 221–230. doi:10.1080/10407413.2017.1330121.

Couper, Pauline R. 2018. 'The Embodied Spatialities of Being in Nature: Encountering the Nature/Culture Binary in Green/Blue Space.' *Cultural Geographies* 25 (2): 285–299. doi:10.1177/1474474017732978.

Covarrubias, Pablo, Ángel Andrés Jiménez, Felipe Cabrera, and Alan Costall. 2017. 'The Senses Considered as Perceptual Systems: The Revolutionary Ideas of Gibson's 1966 Book, 50 Years Later - Part 1.' *Ecological Psychology* 29 (2): 69–71. doi:10.1080/10407413.2017.1297680.

Crang, Mike. 2003. 'Qualitative Methods: Touchy, Feely, Look-See?' *Progress in Human Geography* 27 (4): 494–504. doi:10.1191/0309132503ph445pr.

Crawley, Sara L. 2012. 'Autoethnography as Feminist Self-Interview.' In *The* Sage *Handbook of Interview Research: The Complexity of the Craft*. Edited by Jaber F. Gubrium, James A. Holstein, Amir B. Marvasti and Karyn D. McKinney, 143–159. Thousand Oaks, CA: Sage.

Creagh, Robyn Ann. 2014. 'Memory and Urban Place: A Visual Enquiry.' Ph.D. Thesis, Curtin University. http://link.library.curtin.edu.au/p?cur_dspace_dc20.500.11937/1920.

Cronon, William. 1995. 'The Trouble with Wilderness; or, Getting Back to the Wrong Nature.' In *Uncommon Ground: Rethinking the Human Place in Nature*. Edited by William Cronon, 69–90. New York: W. W. Norton.

Crowther, Paul. 1989. *The Kantian Sublime: From Morality to Art*. Oxford: Clarendon.

Crutzen, Paul J. 2002. 'Geology of Mankind.' *Nature* 415 (6867): 23. doi:10.1038/415023a.

Crutzen, Paul J. 2005. 'Human Impact on Climate Has Made This the 'Anthropocene Age'. *New Perspectives Quarterly* 22 (2): 14–16. doi:10.1111/j.1540-5842.2005.00739.x.

Csikszentmihalyi, Mihaly. 1991. *Flow: The Psychology of Optimal Experience*. Harper Perennial ed. New York: Harper Collins.

Csikszentmihalyi, Mihaly. 2014. Flow and the Foundations of Positive Psychology: The Collected Works of Mihaly Csikszentmihalyi. Dordrecht, Netherlands: Springer.

Davidoff, Paul. 1965. 'Advocacy and Pluralism in Planning.' *Journal of the American Institute of Planners* 31 (4): 331–338. doi:10.1080/01944366508978187.

Davidson, Joyce, and Christine Milligan. 2004. 'Embodying Emotion Sensing Space: Introducing Emotional Geographies.' *Social & Cultural Geography* 5 (4): 523–532. doi:10.1080/1464936042000317677.

Davison, A. 2008. 'The Trouble with Nature: Ambivalence in the Lives of Urban Australian Environmentalists.' *Geoforum* 39 (3): 1284–1295. doi:10.1016/j.geoforum.2007.06.011.

de Beauvoir, Simone. (1949) 2011. *The Second Sex*. New York: Random House.

De La Bellacasa, Maria Puig. 2017. *Matters of Care: Speculative Ethics in More than Human Worlds*: University of Minnesota Press.

Del Tredic, Peter. 2010. 'Spontaneous Urban Vegetation: Reflections of Change in a Globalized World.' *Nature and Culture*. 5 (3): 299–315. doi:10.3167/nc.2010.050305.

Delamont, Sara. 2009. 'The Only Honest Thing: Autoethnography, Reflexivity and Small Crises in Fieldwork.' *Ethnography and Education* 4 (1): 51–63. doi:10.1080/17457820802703507.

Department of Environment and Conservation. 2013. 'Murujuga National Park Management Plan 78' Department of Environment and Conservation. https://www.dpaw.wa.gov.au/images/documents/parks/management-plans/decarchive/murujuga-national-park-management-web-final.pdf.

DeMares, Ryan. 2000. 'Human Peak Experience Triggered by Encounters with Cetaceans.' *Anthrozoös* 13 (2): 89–103. doi:10.2752/089279300786999914.

Denzin, Norman K. 2014. *Interpretive Autoethnography*. 2nd ed. Thousand Oaks, CA: Sage.

Department of Agriculture, Water and the Environment. 2003. 'National Wilderness Inventory.' accessed 7 December. https://www.environment.gov.au/node/20118.

Department of Agriculture, Water and the Environment. 2020a. 'Cane Toads (Bufo marinus).' accessed 9 December. https://www.environment.gov.au/biodiversity/invasive-species/feral-animals-australia/cane-toads.

Department of Agriculture, Water and the Environment. 2020b. 'The Director of National Parks.' Government of Western Australia, accessed 7 December. https://www.environment.gov.au/topics/national-parks/parks-australia/director-national-parks.

Department of Parks and Wildlife. 2014. 'Crocodiles.' accessed 2 December. https://parks.dpaw.wa.gov.au/sites/default/files/imce/DPaW%20Crocodile%20Brochure.pdf.

Department of Parks and Wildlife. 2015. Kalbarri National Park 'nature's window' management plan 83. Perth.

Department of Primary Industries and Regional Development. 2017. 'Kimberly.'
Government of Western Australia,, accessed 2 December.
http://www.drd.wa.gov.au/regions/Pages/Kimberley.aspx.

Department of Sustainability, Water, Popultiona and Communities. 2012. Reconciliation
Action Plan 2013–2015. Canberra.

Department of the Environnment and Water Resources. 2007. Australia's Native
Vegetation: A summary of Australia's Major Vegetation Groups. Canberra.

Collins, Di, Heather Brown, and Barbara Humberstone. 2018. 'Three Women's Co-
autoethnography of Lifelong Adventures in Nature.' In *International Handbook of
Women and Outdoor Learning*. Edited by Tonia Gray and Denise Mitten, 489–502.
Cham, Switzerland: Palgrave Macmillan. doi:10.1007/978-3-319-53550-0_32.

Downing, Brenda. 2015. 'Ways of Coming to Knowing through Embodied Methodologies.'
Outskirts 32: N_A. https://link.library.curtin.edu.au/gw?url=https://www-
proquest-com.dbgw.lis.curtin.edu.au/docview/1708562314?accountid=10382.

Draper, Jan. 2014. 'Embodied practice: rediscovering the 'heart' of nursing.' *J Adv Nurs* 70
(10):2235-2244. doi: 10.1111/jan.12406.

Duff, Cameron, and David Moore. 2014. 'Going Out, Getting About: Atmospheres of
Mobility in Melbourne's Night-Time Economy.' *Social & Cultural Geography*: 1–16.
doi:10.1080/14649365.2014.979864.

Earthwise. n.d.-a. 'About Earthwise.'

Earthwise. n.d.-b. 'Earthwise Community.' Accessed December 12, 2019.
http://earthwisewa.org/index.html.

Ellis, Carolyn, and Arthur P. Bochner. 2000. 'Autoethnography, Personal Narrative, and
Personal Reflexivity.' In *The Handbook of Qualitative Research*. Edited by Norman
K. Denzin and Yvonna S. Lincoln, 2nd ed., 733–768. Thousand Oaks, CA: Sage.

Ellis, Carolyn. 1999. 'Heartful Autoethnography.' *Qualitative Health Research* 9 (5): 669–
683. doi:10.1177/104973299129122153.

Ellis, Carolyn. 2000. 'Creating Criteria: An Ethnographic Short Story.' *Qualitative Inquiry* 6
(2): 273–277. doi:10.1177/107780040000600210.

Ellis, Carolyn, Tony E. Adams, and Arthur P. Bochner. 2011. 'Autoethnography: An Overview.' *Historical Social Research/Historische Sozialforschung* 36, (4 [138]): 273–90. http://www.jstor.org/stable/23032294.

Escobar, Arturo. 1996. 'Construction Nature: Elements for a Post-structuralist Political Ecology.' *Futures* 28 (4): 325–343. doi:10.1016/0016-3287(96)00011-0.

Estes, Clarissa Pinkola. 1992. Women Who Run with the Wolves: Myths and Stories of the Wild Woman Archetype. New York: Ballantine Books.

Etherington, Kim. 2004. Becoming a Reflexive Researcher: Using Our Selves in Research. London: Jessica Kingsley.

Farber, Mary E., and Troy E. Hall. 2007. "Emotion and Environment: Visitors' Extraordinary Experiences Along the Dalton Highway in Alaska." *Journal of Leisure Research* 39 (2): 248-270. https://doi.org/10.1080/00222216.2007.11950107.

Ferreira, Antonio. 2013. 'Emotions in planning practice: a critical review and a suggestion for future developments based on mindfulness.' *The Town Planning Review* 84 (6):703-719.

Finlay, Linda. 2005. ''Reflexive Embodied Empathy': A Phenomenology of Participant-Researcher Intersubjectivity.' *The Humanistic Psychologist* 33 (4): 271–292. doi:10.1207/s15473333thp3304_4.

Fleming, Erin. 2003. Savasana. MP3 Audio. Yogadeva.

Fox, Madeline. 2015. 'Embodied Methodologies, Participation, and the Art of Research.' *Social and Personality Psychology Compass* 9 (7): 321–332. doi:10.1111/spc3.12182.

Frawley, Kevin. 1992. 'A Green Vision: The Evolution of Australian Environmentalism.' In *Inventing Places: Studies in Cultural Geography*. Edited by Kay Anderson and Fay Gale, 213–234. Melbourne: Longman Cheshire.

Fredrickson, B. L. 2001. 'The Role of Positive Emotions in Positive Psychology: The Broaden-and-Build Theory of Positive Emotions.' *The American Psychologist* 56 (3): 218–226. doi:10.1037//0003-066x.56.3.218.

Fredrickson, Barbara L., and Kristen Harrison. 2005. 'Throwing Like a Girl: Self-Objectification Predicts Adolescent Girls' Motor Performance.' *Journal of Sport and Social Issues* 29 (1): 79–101. doi:10.1177/0193723504269878.

305

Fredrickson, Barbara L., and Tomi-Ann Roberts. 1997. 'Objectification Theory: Toward
Understanding Women's Lived Experiences and Mental Health Risks.' *Psychology of Women Quarterly* 21: 173–206. doi:10.1111/j.1471-6402.1997.tb00108.x.

Freeman, Barbara Claire. 1995. *The Feminine Sublime: Gender and Excess in Women's Fiction*. Berkeley, CA: University of California Press.

Freeman, Claire, Katharine J. M. Dickinson, Stefan Porter, and Yolanda van Heezik. 2012. ''My Garden is an Expression of Me': Exploring Householders' Relationships with their Gardens.' *Journal of Environmental Psychology* 32 (2): 135–143. doi:10.1016/j.jenvp.2012.01.005.

Gandy, Matthew. 2005. 'Cyborg Urbanization: Complexity and Monstrosity in the Contemporary City.' *International Journal of Urban and Regional Research* 29 (1): 26–49. doi:10.1111/j.1468-2427.2005.00568.x.

Gandy, Matthew. 2006. 'Urban Nature and the Ecological Imaginary.' In *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*. Edited by Erik Swyngedouw, Maria Kaika and Nikolas C. Heynen, 62–72. London: Routledge.

Giblett, Rodney James. 2011. *People and Places of Nature and Culture*. Bristol, UK: Intellect. http://ECU.eblib.com.au/patron/FullRecord.aspx?p=685158.

Gibson, James J. 1966. *The Senses Considered as Perceptual Systems*. Boston: Houghton Mifflin.

Gormley, Antony. 2012. 'Antony Gormley: Inside Australia.' Accessed May 24, 2020. http://www.antonygormley.com/sculpture/chronology-item-view/id/2366/page/216#p1.

Grabow, Stephen, and Allan Heskin. 1973. 'Foundations for a Radical Concept of Planning.' *Journal of the American Institute of Planners* 39 (2): 106–114. doi:10.1080/01944367308977664.

Griffiths, Tom. 2002. 'The Outside Country.' In *Words for Country: Landscape and Language in Australia*. Edited by Tim Bonyhady and Tom Griffiths, 222–244. Sydney: UNSW Press.

Griffiths, Tom, and Libby Robin, eds. 1997. *Ecology and Empire: Environmental History of Settler Societies*. Melbourne: Melbourne University Press.

Gruen, Lori author. 2015. Entangled empathy : an alternative ethic for our relationships with animals / Lori Gruen: New York : Lantern Books.

Gunder, Michael. 2004. 'Shaping the Planner's Ego-Ideal: A Lacanian Interpretation of Planning Education.' *Journal of Planning Education and Research* 23 (3):299-311. doi: 10.1177/0739456x03261284.

Halcomb, Elizabeth J., and Patricia M. Davidson. 2006. 'Is Verbatim Transcription of Interview Data Always Necessary?' *Applied Nursing Research* 19 (1): 38–42. doi:10.1016/j.apnr.2005.06.001.

Hall, Ralph P. 2011. *Plants as Persons: A Philosophical Botany*. New York: State University of New York Press.

Hamilton, Paul. 1983. *Coleridge's Poetics*. Stanford, CA: Stanford University Press.

Haraway, Donna. 1987. 'A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s.' *Australian Feminist Studies* 2 (4): 1–42. doi:10.1080/08164649.1987.9961538.

Harper, Melissa. 2017. "Locating Histories of Bush-Based Recreation in Australia." *History compass* 15 (4): n/a. https://doi.org/10.1111/hic3.12377.

Harvey, David. 1996. *Justice, Nature, and the Geography of Difference*. Cambridge, MA: Blackwell.

Hawkes, Frances M., and Timothy G. Acott. 2013. 'People, Environment and Place: The Function and Significance of Human Hybrid Relationships at an Allotment in South East England.' *Local Environment* 18 (10): 1117–1133. doi:10.1080/13549839.2013.787590.

Hay, Peter. 2002. Main Currents in Western Environmental Thought. Sydney: UNSW Press.

Head, Lesley. 2016. Hope and Grief in the Anthropocene: Re-conceptualising Human-Nature Relations. Abingdon, Oxford: Routledge.

Head, Lesley, and Pat Muir. 2004. 'Nativeness, Invasiveness, and Nation in Australian Plants.' *Geographical Review* 94 (2): 199–217. doi:10.1111/j.1931-0846.2004.tb00167.x.

Head, Lesley, and Pat Muir. 2006. 'Suburban Life and the Boundaries of Nature: Resilience and Rupture in Australian Backyard Gardens.' *Transactions of the Institute of British Geographers* 31 (4): 505–524. doi:10.2307/4639992.

Head, Lesley. 2011. More Than Human, More Than Nature: Plunging into the River. *Griffith Review* 31: 37-43.

Healey, P. 1997. Collaborative planning: shaping places in fragmented societies. Vancouver: UBC Press.

Henne, Adam. 2010. 'Green Lungs: Good Firewood, Healthy Air, and Embodied Forest Politics.' *Environment and Planning* A 42 (9): 2078–2092. doi:10.1068/a42265.

Heynen, Nik. 2014. 'Urban Political Ecology I: The Urban Century.' *Progress in Human Geography* 38 (4): 598–604. doi:10.1177/0309132513500443.

Hillier, Jean. 1998. 'Paradise Proclaimed? Towards a Theoretical Understanding of Representations of Nature in Land Use Planning Decision-making.' *Ethics, Place & Environment* 1 (1): 77–91. doi:10.1080/1366879X.1998.11644217.

Impett, Emily A., Jennifer J. Daubenmier and Allegra L. Hirschman. 2006. 'Minding the Body: Yoga, Embodiment, and Well-Being.' *Sexuality Research and Social Policy* 3 (4): 39–48. doi:10.1525/srsp.2006.3.4.39.

Hitchings, Russell, and Verity Jones. 2004. 'Living with Plants and the Exploration of Botanical Encounter within Human Geographic Research Practice.' *Ethics, Place & Environment* 7 (1-2): 3–18. doi:10.1080/1366879042000264741.

Hitt, Christopher. 1999. 'Toward an Ecological Sublime.' *New Literary History* 30 (3): 603–623.

Hockey, John. 2004. Knowing the Route: Distance Runners' Mundane Knowledge. *Sociology of Sport Online*. Accessed January 20, 2015.

Hockey, John. 2006. 'Sensing the Run: The Senses and Distance Running.' *The Senses and Society* 1 (2): 138–201. doi:10.2752/174589206778055565.

Hockey, John. 2012. 'Knowing the 'Going': The Sensory Evaluation of Distance Running.' *Qualitative Research in Sport, Exercise and Health* 5 (1): 127–141. doi:10.1080/2159676X.2012.693531.

Hooks, Bell. 2000. Feminism Is for Everybody: Passionate Politics. London: Pluto.

Houston, Donna. 2013. 'Crisis Is Where We Live: Environmental Justice for the Anthropocene.' *Globalizations* 10 (3): 439–450. doi:10.1080/14747731.2013.787771.

Houston, Donna, Jean Hillier, Diana MacCallum, Wendy Steele, and Jason Byrne. 2017. 'Make Kin, Not Cities!: Multispecies Entanglements and 'Becoming-World' in Planning Theory.' *Planning Theory*: 17 (2): 190–212. doi:10.1177/1473095216688042.

Howes, David. 1991. 'Sense and Non-sense in Contemporary Ethno/graphic Practice and Theory.' *Culture XI* (1-2): 65–76.

Humberstone, Barbara. 2011. 'Embodiment and Social and Environmental Action in Nature-Based Sport: Spiritual Spaces.' *Leisure Studies* 30 (4): 495–512. doi:10.1080/02614367.2011.602421.

Humberstone, Barbara. 2013. 'Adventurous Activities, Embodiment and Nature: Spiritual, Sensual and Sustainable? Embodying Environmental Justice.' *Motriz: Revista de Educacao Fisica* 19 (3): 565–571. doi:10.1590/S1980-65742013000300006.

Humberstone, Barbara. 2015. 'Embodiment, Nature and Wellbeing.' In *Experiencing the Outdoors: Enhancing Strategies for Wellbeing*. Edited by Margaret Robertson, Ruth Lawrence and Gregory Heath, 61–72. Rotterdam: Sense.

Humberstone, Barbara, and Carol Cutler-Riddick. 2015. 'Older Women, Embodiment and Yoga Practice.' *Ageing & Society* 35 (6): 1221–1241. doi: 10.1017/S0144000X1400018X.

Ikin, Van. 1988. 'Dreams, Visions, Utopias.' *Australian Literary Studies* 13 (4): 253–66.

Inckle, Kay. 2010. 'Telling Tales?: Using Ethnographic Fictions to Speak Embodied 'Truth'.' *Qualitative Research* 10 (1): 27–47. doi:10.1177/1468794109348681.

Ingold, Tim. 2000. The Perception of the Environment: Essays on Livelihood, Dwelling and Skill. New York: Routledge.

IUCN (International Union for Conservation of Nature). n.d. 'Protected Areas.' IUCN. Accessed January 22, 2020. https://www.iucn.org/theme/protected-areas.

Ives, Christopher D., Matteo Giusti, Joern Fischer, David J. Abson, Kathleen Klaniecki, Christian Dorninger, Josefine Laudan, Stephan Barthel, Paivi Abernethy, Berta Martín-López, Christopher M. Raymond, Dave Kendal, and Henrik von Wehrden. 2017. 'Human–Nature Connection: A Multidisciplinary Review.' *Current Opinion in Environmental Sustainability* 26–27: 106-113. doi:10.1016/j.cosust.2017.05.005.

Janowitz, Anne. 2012. 'Sublime.' In *A Handbook of Romanticism Studies*. Edited by Joel
    Faflak and Julia M. Wright, 55–67. Oxford: Blackwell. 10.1002/9781444356038.

Jabareen, Yosef. 2018. 'The Routledge Handbook of Planning Theory'. In *Handbook of
    Planning Theory*, edited by M. Gunder, Ali Madanipour and Vanessa Watson,
    289-301. London: Routledge.

Jones, Ann. 2018. "Darryl Jones' Journey from Ecology Expert to Evangelistic Bird Feeder."
    ABC News. https://www.abc.net.au/news/2018-02-05/this-ecologist-will-make-
    you-feel-better-about-feeding-birds/9383686.

Jones, Darryl. 2018a. "Yes, It's Ok to Feed Wild Birds in Your Garden – as Long as It's the
    Right Food." ABC News.

Jungnickel, Katrina, and Rachel Aldred. 2013. 'Cycling's Sensory Strategies: How Cyclists
    Mediate their Exposure to the Urban Environment.' *Mobilities* 9 (2): 238–255.
    doi:10.1080/17450101.2013.796772.

Kabat-Zinn, Jon. 2013. 'In Touch with Your Skin.' *Mindfulness* 4 (4): 392–393.
    doi:10.1007/s12671-013-0251-5.

Kabat-Zinn, Jon. 2015. 'Mindfulness.' *Mindfulness* 6 (6): 1481–1483. doi:10.1007/s12671-
    015-0456-x.

Kant, Immanuel. 2007. *Critique of Judgement*. Translated by James Creed Meredith,
    revised, edited, and introduced by Nicholas Walker. Oxford: Oxford University
    Press.

Karremans, Johan C., and Gesa Kappen. 2017. 'Mindful Presence: Its Functions and
    Consequences in Romantic Relationships.' In *Mindfulness in Social Psychology*.
    Edited by Johan C. Karremans and Esther K. Papies, 109–123. London: Taylor &
    Francis.

Kastenholz, Elisabeth, Carlos Peixeira Marques, and Maria João Carneiro. 2020. "Place
    Attachment through Sensory-Rich, Emotion-Generating Place Experiences in Rural
    Tourism." *Journal of Destination Marketing & Management* 17: 100455.
    https://doi.org/https://doi.org/10.1016/j.jdmm.2020.100455.

Kim, Minseo, Christoph D. D. Rupprecht, and Katsunori Furuya. 2020. "Typology and
    Perception of Informal Green Space in Urban Interstices: A Case Study of Ichikawa

City, Japan." *IRSPSD International* 8 (1): 4-20.
https://doi.org/10.14246/irspsd.8.1_4.

ild*Literature Interpretation Theory* 8 (3-4): 331–346. doi:10.1080/10436929808580207.

Keltner, Dacher, and Jonathan Haidt. 2003. 'Approaching Awe, a Moral, Spiritual, and
Aesthetic Emotion.' *Cognition and Emotion* 17 (2): 297–314.
doi:10.1080/02699930302297.

Khoury, Bassam, Bärbel Knäuper, Francesco Pagnini, Natalie Trent, Alberto Chiesa, and
Kimberly Carrière. 2017. 'Embodied Mindfulness.' *Mindfulness* 8 (5): 1160–1171.
doi:10.1007/s12671-017-0700-7.

Latour, Bruno. 2013. 'Telling Friends from Foes in the Time of the Anthropocene.' In *The
Anthropocene and the Global Environment Crisis: Rethinking Modernity in a New
Epoch*. Edited by Clive Hamilton, François Gemenne and Christophe Bonneuil,
145–155. London: Routledge.

Leder, Drew. 1990. *The Absent Body*. Chicago: University of Chicago Press.

Leder, Drew. 1998. 'A Tale of Two Bodies: The Cartesian Corpse and the Lived Body.' In
Body and Flesh: A Philosophical Reader. Edited by Donn Welton, 117–129. Oxford:
Blackwell.

Lewis, Simon L, and Mark A Maslin. 2015a. 'A Transparent Framework for Defining the
Anthropocene Epoch.' *The Anthropocene Review* 2 (2): 128–146.
doi:10.1177/2053019615588792.

Lewis, Simon L., and Mark A. Maslin. 2015b. 'Defining the Anthropocene.' *Nature* 519
(7542): 171–180. doi:10.1038/nature14258.

Libby, Lester. 2005. "Wilderness and the Loaded Language of News." *Media international
Australia incorporating Culture & policy* (115): 123-134.

Lindgren, Nicklas, and Johan Öhman. 2019. "A Posthuman Approach to Human-Animal
Relationships: Advocating Critical Pluralism." *Environmental Education Research*
25 (8): 1200-1215. https://doi.org/10.1080/13504622.2018.1450848.

Loftus, Alex. 2012. *Everyday Environmentalism Creating an Urban Political Ecology*.
Minneapolis, Min: University of Minnesota Press.
https://ebookcentral.proquest.com/lib/curtin/detail.action?pq-
origsite=primo&docID=902552.

Longhurst, Robyn, Elsie Ho, and Lynda Johnston. 2008. 'Using 'the Body' as an 'Instrument of Research': Kimch'i and Pavlova.' *Area* 40 (2): 208–217. doi:10.1111/j.1475-4762.2008.00805.x.

Luebke, Jerry F., Jason V. Watters, Jan Packer, Lance J. Miller, and David M. Powell. 2016. "Zoo Visitors' Affective Responses to Observing Animal Behaviors." *Visitor Studies* 19 (1): 60-76. https://doi.org/10.1080/10645578.2016.1144028.

Lund, Katrín. 2005. 'Seeing in Motion and the Touching Eye: Walking over Scotland's Mountains.' *Etnofoor* 18 (1): 27–42. http://www.jstor.org/stable/25758084.

Lupton, Deborah. 2013. 'Infant Embodiment and Interembodiment: A Review of Sociocultural Perspectives.' *Childhood: A Global Journal of Child Research* 20 (1): 37–50. doi:10.1177/0907568212447244.

Mahlo, Leeann, and Marika Tiggemann. 2016. 'Yoga and Positive Body Image: A Test of the Embodiment Model.' *Body Image* 18: 135–142. doi:10.1016/j.bodyim.2016.06.008.

Malecki, Jennifer, Paul Rhodes, and Jane Ussher. 2018. 'Childhood Trauma and Anorexia Nervosa: From Body Image to Embodiment.' *Health Care for Women International* 39 (8): 936–951. doi:10.1080/07399332.2018.1492268.

Malm, Andreas, and Alf Hornborg. 2014. 'The Geology of Mankind?: A Critique of the Anthropocene Narrative.' *The Anthropocene Review* 1 (1): 62–69. doi:10.1177/2053019613516291.

Mata, Luis, Cristina E. Ramalho, Jade Kennedy, Kirsten M. Parris, Leonie Valentine, Maddison Miller, Sarah Bekessy, Sarrah Hurley, Zena Cumpston, and Davide Geneletti. 2020. "Bringing Nature Back into Cities." *People and nature (Hoboken, N.J.)* 2 (2): 350-368. https://doi.org/10.1002/pan3.10088.

Mata, Luis, Georgia E. Garrard, Fiona Fidler, Christopher D. Ives, Cecily Maller, Joab Wilson, Freya Thomas, and Sarah A. Bekessy. 2019. "Punching above Their Weight: The Ecological and Social Benefits of Pop-up Parks." *Frontiers in ecology and the environment* 17 (6): 341-347. https://doi.org/10.1002/fee.2060.

Mayer, F. Stephan, and Cynthia McPherson Frantz. 2004. 'The Connectedness to Nature Scale: A Measure of Individuals' Feeling in Community with Nature.' *Journal of Environmental Psychology* 24 (4): 503–515. doi:10.1016/j.jenvp.2004.10.001.

Mayer, F. Stephan, Cynthia McPherson Frantz, Emma Bruehlman-Senecal, and Kyffin
     Dolliver. 2009. 'Why Is Nature Beneficial?: The Role of Connectedness to Nature.'
     Environment and Behavior 41 (5):607-643. doi: 10.1177/0013916508319745.

McDonald, Robert author. 2021. *Biophilic Cities for an Urban Century : Why Nature Is
     Essential for the Success of Cities / Robert Mcdonald, Timothy Beatley.* 1st 2021..
     ed. Cham, Switzerland : Palgrave Macmillan.

Mellor, Anne K. 2012. 'Thoughts on Romanticism and Gender.' *European Romantic Review*
     23 (3): 343–348. doi:10.1080/10509585.2012.674266.

Merleau-Ponty, Maurice. (1962) 2005. *The Phenomenology of Perception*. Translated by
     Colin Smith. London: Taylor and Francis.
     http://ebookcentral.proquest.com/lib/curtin/detail.action?docID=237354.

Merleau-Ponty, Maurice. 1964. The Primacy of Perception and Other Essays on
     Phenomenological Psychology, the Philosophy of Art, History and Politics. Edited
     by James M. Edie. Evanston, IL: Northwestern University Press.

Merleau-Ponty, Maurice. 1968. *The Visible and the Invisible*. Edited by Claude Lefort,
     translated by Alphonso Lingis. Evanston, IL: Northwestern University Press.

Milton, K. 2002. *Loving Nature: Towards an Ecology of Emotion* London: Routledge.

Montagu, Ashley. 1971. *Touching: The Significance of Human Skin*. New York: Columbia
     University Press.

MG Corporation. 2020. 'About.' https://www.mgcorp.com.au/about/.

Morley, James. 2001. 'Inspiration and Expiration: Yoga Practice Through Merleau-Ponty's
     Phenomenology of the Body.' *Philosophy East and West* 51 (1): 73–82.
     doi:10.1353/pew.2001.0013.

Morse, Marcus. 2014. 'A Quality of Interrelating: Describing a Form of Meaningful
     Experience on a Wilderness River Journey.' *Journal of Adventure Education and
     Outdoor Learning* 14 (1): 42–55. doi:10.1080/14729679.2013.769713.

Morse, Marcus. 2015a. 'Being Alive to the Present: Perceiving Meaning on a Wilderness
     River Journey.' *Journal of Adventure Education and Outdoor Learning* 15 (2): 168–
     180. doi:10.1080/14729679.2014.908401.

Morse, Marcus. 2015b. 'Paying Attention to Perceptual Experience Within Nature.' In
     Experiencing the Outdoors: Enhancing Strategies for Wellbeing. Edited by

313

Margaret Robertson, Ruth Lawrence and Gregory Heath, 113–122. Rotterdam, Netherlands: Sense.

Morse, Stephen S., Jonna A. K. Mazet, Mark Woolhouse, Colin R. Parrish, Dennis Carroll, William B. Karesh, Carlos Zambrana-Torrelio, W. Ian Lipkin, and Peter Daszak. 2012. 'Prediction and Prevention of the Next Pandemic Zoonosis.' *Lancet* 380: 1956–1965. doi:10.1016/S0140-6736(12)61684-5.

Muncey, Tessa. 2010. *Creating Autoethnographies*. London: Sage. http://methods.sagepub.com.dbgw.lis.curtin.edu.au/book/creating-autoethnographies.

Murphy, Patrick D. 2013. *Transversal Ecocritical Praxis: Theoretical Arguments, Literary Analysis, and Cultural Critique*. https://ebookcentral.proquest.com/lib/curtin/detail.action?docID=1222023&pq-origsite=primo.

Murphy, Patrick D. 2012. 'An Ecological Feminist Revisioning of The Masculinist Sublime.' *Revista canaria de estudios ingleses* 64 (2012):79-64.

Nakamura, Jeanne, and Mihaly Csikszentmihalyi. 2014. 'The Concept of Flow.' In *Flow and the Foundations of Positive Psychology: The Collected Works of Mihaly Csikszentmihalyi*. Edited by Mihaly Csikszentmihalyi, 239-263. Dordrecht, Netherlands: Springer.

Nature Play WA. 2022. 'What We Do.' https://www.natureplaywa.org.au/what-we-do/.

Nature Play WA. 2022a. 'Nature Play Wa Case Studies.' https://www.natureplaywa.org.au/nature-play-case-studies/.

National centre for Indigenous genomics. 2020. 'Halls Creek.' http://ncig-archive.anu.edu.au/biogs/IG00157b.htm#:~:text=Place%20Halls%20Creek&text=The%20traditional%20owners%20of%20the,%2C%20Kija%2C%20Gooniyandi%20and%20Walmajarri.

Nhat, Hanh. 2008. The Miracle of Mindfulness: The Classic Guide to Meditation by the World's Most Revered Master. London: Rider.

Nicholls, Carol McNaughton, Lisa Mills, and Mehul Kotecha. 2014. 'Observation.' In *Qualitative Research Practice: A Guide for Social Science Students and*

Researchers. Edited by Jane Ritchie, Jane Lewis, Carol McNaughton Nicholls, and Rachel Ormston. Los Angeles, CA.: Sage.

Nixon, Denver V. 2012. 'A Sense of Momentum: Mobility Practices and Dis/Embodied Landscapes of Energy Use.' *Environment and Planning* A 44 (7): 1661–1678. doi:10.1068/a44452.

Northern Territory. 2022. "Aboriginal Culture around Katherine." https://northernterritory.com/katherine-and-surrounds/see-and-do/art-and-culture/aboriginal-culture#:~:text=Marking%20the%20point%20where%20the,and%20it%20remains%20so%20today.

Palmer, Lisa. 2004. "Bushwalking in Kakadu: A Study of Cultural Borderlands." *Social & Cultural Geography* 5 (1): 109-127. https://doi.org/10.1080/1464936042000181344.

Palmer, Lisa. 2007. "Interpreting `Nature': The Politics of Engaging with Kakadu as an Aboriginal Place." *Cultural Geographies* 14 (2): 255-273. https://doi.org/http://dx.doi.org/10.1177/1474474007075359.

Parks and Wildlife Service. 2017. 'Francois Peron National Park.' Department of Biodiversity Conservation and Attractions. https://parks.dpaw.wa.gov.au/park/francois-peron.

Parks and Wildlife Service. n.d. 'Dolphin History.' Parks and Wildlife Service, accessed 22 January. https://www.sharkbay.org/place/monkey-mia/dolphin-history/.

Parks and Wildlife Service Department of Biodiversity, Conservation and Attractions. 2019. Nyinggulu (Ningaloo) coastal reserves Red Bluff to Winderabandi draft joint management plan. edited by Conservation and parks commission. Kensington.

Patel, Raj. 2013. 'Misanthropocene?' *Earth Island Journal*, March 4, 2013. https://www.earthisland.org/journal/index.php/magazine/entry/misanthropocene.

Paterson, Mark. 2009. 'Haptic Geographies: Ethnography, Haptic Knowledges and Sensuous Dispositions.' *Progress in Human Geography* 33 (6): 766–788. doi:10.1177/0309132509103155.

Pearce, Joanna, Jennifer Strickland-Munro, and Susan A. Moore. 2017. 'What Fosters Awe-Inspiring Experiences in Nature-Based Tourism Destinations?' *Journal of Sustainable Tourism* 25 (3): 362–378. doi:10.1080/09669582.2016.1213270.

Peet, Dick, Paul Robbins, and Michael Watts, eds. 2011. *Global Political Ecology*. London: Routledge.

Perkins, Helen E. 2010. 'Measuring Love and Care for Nature.' *Journal of Environmental Psychology* 30 (4):455–463. doi:10.1016/j.jenvp.2010.05.004.

Pettorelli, Nathalie, Jos Barlow, Philip A. Stephens, Sarah M. Durant, Ben Connor, Henrike Schulte to Bühne, Christopher J. Sandom, Jonathan Wentworth, Johan T. Toit, and Martin Nuñez. 2018. "Making Rewilding Fit for Policy." *The Journal of applied ecology* 55 (3): 1114-1125. https://doi.org/10.1111/1365-2664.13082.

Pettorelli, Nathalie, Sarah M. Durant, and Johan T. du Toit. 2019. "Rewilding: A Captivating, Controversial, Twenty-First-Century Concept to Address Ecological Degradation in a Changing World." In *Rewilding*, edited by Johan T. du Toit, Nathalie Pettorelli and Sarah M. Durant, 1-11. Cambridge: Cambridge University Press. https://doi.org/DOI: 10.1017/9781108560962.001.

Pink, Sarah. 2008. 'Sense and Sustainability: The Case of the Slow City Movement.' *Local Environment* 13 (2): 95–106. doi:10.1080/13549830701581895.

Pink, Sarah. 2009. *Doing Sensory Ethnography*. London: Sage. http://methods.sagepub.com.dbgw.lis.curtin.edu.au/book/doing-sensory-ethnography.

Pink, Sarah. 2011. 'Images, Senses and Applications: Engaging Visual Anthropology.' *Visual Anthropology* 24 (5): 437–454. doi:10.1080/08949468.2011.604611.

Pipkin, John. 1998. 'The Material Sublime of Women Romantic Poets.' *Studies in English Literature, 1500-1900* 38 (4): 597.

Pitt, Hannah. 2015. 'On Showing and Being Shown Plants: A Guide to Methods for More-Than-Human Geography.' *Area* 47 (1): 48–55. doi: 10.1111/area.12145.

Plumwood, Val. 1993. *Feminism and the Mastery of Nature*. London: Routledge.

Plumwood, Val. 2002. Environmental Culture: The Ecological Crisis of Reason. London: Routledge.

Plumwood, Val. 1998. "Wilderness Scepticism and Dualism." In *The Great New Wilderness Debate*, edited by J Baird, Michael Callicott and P Nelson, 652-691. Athens: University of Georgia Press.

Plumwood, Val, and Lorraine Shannon. 2012. *The Eye of the Crocodile*. Canberra, ACT, Australia: Australian National University E Press.

Povey, Karen D., and José Rios. 2002. "Using Interpretive Animals to Deliver Affective Messages in Zoos." *Journal of Interpretation Research* 7 (2): 19-28. https://doi.org/10.1177/109258720200700203.

Pramova, Emilia, Bruno Locatelli, Merelyn Valdivia-Díaz, Améline Vallet, Yésica Quispe Conde, Houria Djoudi, Matthew J. Colloff, François Bousquet, Jacques Tassin, and Claudia Munera Roldan. 2022. "Sensing, Feeling, Thinking: Relating to Nature with the Body, Heart and Mind." *People and nature (Hoboken, N.J.)* 4 (2): 351-364. https://doi.org/10.1002/pan3.10286.

Rani, N., and P. Rao. 1994. 'Body Awareness and Yoga Training.' *Perceptual and Motor Skills* 79 (3): 1103. doi:10.2466/pms.1994.79.3.1103.

Reed-Danahay, Deborah E. 1997. Auto/Ethnography: Rewriting the Self and the Social. Oxford: Berg.

Remplan. 2020. 'Wyndham/East Kimberly Economy Profile ', accessed 2 December. https://www.economyprofile.com.au/wyndhameastkimberley/industries.

Reuter, Martina. 1999. 'Merleau-Ponty's Notion of Pre-Reflective Intentionality.' *Synthese* 118 (1): 69–88. doi:10.1023/A:1005144911619.

Reynolds, Henry. 2006. The Other Side of the Frontier: Aboriginal Resistance to the European Invasion of Australia. Sydney: UNSW Press.

Richards, Lyn. 2009. *Handling Qualitative Data: A Practical Guide*. 2nd ed. London: Sage.

Rickard, Sophie C., and Mathew P. White. 2021. "Barefoot Walking, Nature Connectedness and Psychological Restoration: The Importance of Stimulating the Sense of Touch for Feeling Closer to the Natural World." *Landscape research* 46 (7): 975-991. https://doi.org/10.1080/01426397.2021.1928034.

Robbins, Paul. 2004. Political Ecology, Critical Introductions to Geography. Oxford: Blackwell.

Rodaway, Paul. 1994. Sensuous Geographies: Body, Sense, and Place. London: Routledge.

Ronai, Carol Rambo. 1995. 'Multiple Reflections of Child Sex Abuse: An Argument for a
Layered Account.' *Journal of Contemporary Ethnography* 23 (4): 395–426.
doi:10.1177/089124195023004001.

Rose, Deborah Bird. 2012. 'Why I Don't Speak of Wilderness.' *EarthSong Journal:
Perspectives in Ecology, Spirituality and Education* 2 (4): 9–11. https://search-
informit-com-
au.dbgw.lis.curtin.edu.au/documentSummary;dn=821535944513387;res=IELHSS.

Rupprecht, Christoph D. D., and Jason A. Byrne. 2014. 'Informal Urban Greenspace: A
Typology and Trilingual Systematic Review of its Role for Urban Residents and
Trends in the Literature.' *Urban Forestry and Urban Greening* 13 (4): 597–611.
doi:10.1016/j.ufug.2014.09.002.

Ryan, John Charles. 2010. "Not a Bush Flaneur? The Convergent Topographies of
Recreational Bushwalking, Floristic Appreciation and Human Embodiment in the
Southwest of Western Australia." *Colloquy: Monash University Postgraduate
Journal,* (20): 5-32. https://www.monash.edu/arts.

Salleh, Ariel. 2017. *Ecofeminism as Politics: Nature, Marx, and the Postmodern.* Vol. 2.
London Zed Books.

Sandercock, Leonie. 1998a. *Making the Invisible Visible: A Multicultural Planning History*.
Berkeley, CA: University of California Press.

Sandercock, Leonie. 1998b. 'Towards Cosmopolis: Utopia as a Construction Site.' In
Readings in Planning Theory. Edited by Scott Campbell and Susan Fainstein, 403–
412. Oxford: Blackwell.

Sandercock, Leonie, and Peter Lyssiotis. 2003. *Cosmopolis II: Mongrel Cities in the 21st
Century*. London: Continuum.

Sandilands, Catriona. 1999. *The Good-Natured Feminist: Ecofeminism and the Quest for
Democracy*. Minneapolis, Min: University of Minnesota Press.

Schech, Sussanne, and Jane Haggis. 2000. "Migrancy, Whiteness and the Settler Self in
Contemporary Australia." In *Race, Colour and Identity in Australia and New
Zealand*, edited by John Docker and Gerhard Fischer, Sydney: UNSW Press.

Scherini, Rebecca. 2012. 'The Role of Public Art in Addressing Human and Nature
Separation: A Case study of Antony Gormley's 'Inside Australia', Lake Ballard,

Western Australia.' Honours Thesis, School of Design and Built Environment, Curtin University.

Scherini, R. 2014. Exploring Relationships with Non-human Nature in Planning: The Potential of Embodied Research Methodologies. In Where do we go from here? The Fifteenth Humanities Graduate Research Conference, 12-14 Nov 2014, Curtin University, Perth, Australia.

Schlichtman, John Joe, and Jason Patch. 2014. 'Gentrifier? Who, Me? Interrogating the Gentrifier in the Mirror.' *International Journal of Urban and Regional Research* 38 (4): 1491–1508. doi:10.1111/1468-2427.12067.

Schultz, P. Wesley. 2000. 'New Environmental Theories: Empathizing with Nature: The Effects of Perspective Taking on Concern for Environmental Issues.' *Journal of Social Issues* 56 (3): 391–406. doi:10.1111/0022-4537.00174.

Schultz, P. Wesley. 2002. 'Inclusion with Nature: The Psychology of Human-Nature Relations.' In *Psychology of Sustainable Development*. Edited by Peter Schmuck and Wesley P. Schultz, 61–78. Boston, MA: Springer US.

Schultz, P. Wesley, Chris Shriver, Jennifer J. Tabanico, and Azar M. Khazian. 2004. 'Implicit Connections with Nature.' *Journal of Environmental Psychology* 24 (1): 31–42. doi:10.1016/S0272-4944(03)00022-7.

Seddon, G. 2004. Sense of Place: A Response to an Environment, the Swan Coastal Plain, Western Australia. Melbourne: Bloomings.

Setten, Gunhild, and Margrete Skår. 2014. 'Politicising Plants: Dwelling and Invasive Alien Species in Domestic Gardens in Norway, Norsk Geografisk Tidsskrift.' *Norwegian Journal of Geography* 68 (1): 22–33. doi:10.1080/00291951.2013.870599.

Shaw, Philip. 2006. *The Sublime*. New York: Routledge.

Sikorski, Piotr, Beata Gawryszewska, Daria Sikorska, Jarosław Chormański, Axel Schwerk, Agata Jojczyk, Wojciech Ciężkowski et al. 2021. "The Value of Doing Nothing – How Informal Green Spaces Can Provide Comparable Ecosystem Services to Cultivated Urban Parks." *Ecosystem services* 50: 101339. https://doi.org/10.1016/j.ecoser.2021.101339.

Shiota, Michelle N., Dacher Keltner, and Amanda Mossman. 2007. 'The Nature of Awe: Elicitors, Appraisals, and Effects on Self-concept.' *Cognition and Emotion* 21 (5): 944–963. doi:10.1080/02699930600923668.

Shire of Exmouth. 2020. 'About us.' accessed 2 December. https://www.exmouth.wa.gov.au/council/about-us/about-exmouth.aspx.

Snowber, Celeste. 2016. Embodied Inquiry: Writing, Living and Being through the Body: Rotterdam, Netherlands: Sense.

Söderlund, Jana. 2019. "Biophilic Design: The Stories of the Pioneers of the Social Movement." In, edited 35-141. Cham: Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-29813-5_3.

Söderlund, Jana. 2019a. "The Emergence of a New Social Movement: Biophilic Design." In, edited 1-11. Cham: Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-29813-5_1.

Soper, Kate. 1995. What is Nature?: Culture, Politics and the Non-human. Oxford: Blackwell.

Springgay, Stephanie. 2008. Body Knowledge and Curriculum: Pedagogies of Touch in Youth and Visual Culture. New York: Peter Lang.

Steele, Kathleen. 2010. 'Fear and Loathing in the Australian Bush: Gothic Landscapes in *Bush Studies* and *Picnic at Hanging Rock*.' *Colloquy* 20: 33–56. https://search-informit-com-au.dbgw.lis.curtin.edu.au/documentSummary;dn=608390849368075;res=IELLCC.

Steele, Wendy author. 2021. Planning wild cities : human-nature relationships in the urban age: New York: Routledge.

Steffen, Will, Jaques Grinevald, Paul Crutzen, and John McNeill. 2011. 'The Anthropocene: Conceptual and Historical Perspectives.' *Philosophical Transactions of the Royal Society A* 369: 842–867. doi:10.1098/rsta.2010.0327.

Stevenson, Andrew. 2014. 'We Came Here to Remember: Using Participatory Sensory Ethnography to Explore Memory as Emplaced, Embodied Practice.' *Qualitative Research in Psychology* 11 (4): 335–349. doi:10.1080/14780887.2014.908990.

Stoller, Paul. 1984. 'Sound in Songhay Cultural Experience.' *American Ethnologist* 11 (3): 559–570. doi:10.1525/ae.1984.11.3.02a00090.

Stoller, Paul. 1997. *Sensuous Scholarship*. Philadelphia: University of Pennsylvania Press

Suchet-Pearson, Sandie, Sarah Wright, Kate Lloyd, and Laklak Burarrwanga. 2013. "Caring as Country: Towards an Ontology of Co-Becoming in Natural Resource Management: Caring as Country." *Asia Pacific viewpoint* 54 (2): 185-197. https://doi.org/10.1111/apv.12018.

Sunderland, N., H. Bristed, O. Gudes, J. Boddy, and M. Da Silva. 2012. 'What Does It Feel Like to Live Here? Exploring Sensory Ethnography as a Collaborative Methodology for Investigating Social Determinants of Health in Place.' *Health Place* 18 (5): 1056–1067. doi:10.1016/j.healthplace.2012.05.007.

Swyngedouw, Erik. 2010. 'The Trouble with Nature: 'Ecology as the New Opium for the Masses'.' In *Ashgate Research Companion to Planning Theory: Conceptual Challenges for Spatial Planning*. Edited by Jean Hillier and Patsy Healey, 501 Farnham, Surrey, England: Ashgate.

Swyngedouw, Erik. 2006. 'Metabolic Urbanization: The Making of Cyborg Cities.' In *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*. Edited by E. Swyngedouw, Maria Kaika and Nikolas C. Heynen, 21–40. London: Routledge.

Swyngedouw, Erik, Maria Kaika, and Nikolas C. Heynen, eds. 2006a. *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*. London: Routledge.

Swyngedouw, Erik., Maria Kaika, and Nikolas C. Heynen. 2006b. 'Urban Political Ecology: Politicizing the Production of Urban Natures.' In *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*. Edited by Erik Swyngedouw, Maria Kaika and Nikolas C. Heynen, 1–20. London: Routledge.

Tabb, Phillip James. 2021. *Biophilic Urbanism: Designing Resilient Communities for the Future.* Milton: Milton: Taylor & Francis Group. https://doi.org/10.4324/9781003034896

Tacey, David J. 1995. *Edge of the Sacred: Transformation in Australia*. North Blackburn, Victoria: Harper Collins.

TEAR. n.d. 'Tearfund.' Accessed October 30, 2020. http://www.tear.org.au/about.

Thorpe, Holly, and Robert Rinehart. 2010. 'Alternative Sport and Affect: Non-representational Theory Examined.' *Sport in Society* 13 (7-8): 1268–1291. doi:10.1080/17430431003780278.

Thrift, Nigel. 2008. Non-Representational Theory: Space, Politics, Affect. Abingdon, Oxford: Routledge.

Tilley, Christopher. 2006. 'The Sensory Dimensions of Gardening.' *The Senses and Society* 1 (3): 311–330. doi:10.2752/174589206778476252.

Trachsel, Mary. 2019. "Befriending Your Food: Pigs and People Coming of Age in the Anthropocene." *Social sciences (Basel)* 8 (4): 106. https://doi.org/10.3390/socsci8040106.

Tomm, Winnie. 1995. *Bodied Mindfulness: Women's Spirits, Bodies and Places*. Waterloo, ON: Wilfrid Laurier University Press.

Town of Port Hedland. 2022. "Reconciliation." https://www.porthedland.wa.gov.au/our-community/community/reconciliation.aspx#:~:text=The%20Town%20of%20Port%20Hedland,past%20and%20present%20and%20emerging.

Trigger, David S., and Lesley Head. 2010. 'Restored Nature, Familiar Culture: Contesting Visions for Preferred Environments in Australian Cities.' *Nature and Culture* 5 (3): 231–250. doi:10.3167/nc.2010.050302.

Tuinamuana, Katarina, and Joanne Yoo. 2020. "Reading Autoethnography: The Impact of Writing through the Body." *Qualitative report* 25 (4): 999-1008.

Turner, Bethaney. 2011. 'Embodied Connections: Sustainability, Food Systems and Community Gardens.' *Local Environment* 16 (6): 509–522. doi:10.1080/13549839.2011.569537.

Tsing, Anna. 2017. "The Buck, the Bull, and the Dream of the Stag: Some Unexpected Weeds of the Anthropocene." *Suomen antropologi : Suomen Antropologisen Seuran julkaisu = Antropologi i Finland : Antropologiska sällskapet i Finland* 42 (1): 3-21.

Uitermark, Justus, and Walter Nicholls. 2015. "Planning for Social Justice: Strategies, Dilemmas, Tradeoffs." *Planning Theory* 16 (1): 32-50. https://doi.org/10.1177/1473095215559027.

van Duppen, Jan, and Bas Spierings. 2013. 'Retracing Trajectories: The Embodied Experience of Cycling, Urban Sensescapes and the Commute between 'Neighbourhood' and 'City' in Utrecht, NL.' *Journal of Transport Geography* 30: 234–243. doi:10.1016/j.jtrangeo.2013.02.006.

Waitt, Gordon, and Ruth Lane. 2007. 'Four-wheel Drivescapes: Embodied Understandings of the Kimberley.' *Journal of Rural Studies* 23 (2): 156–169. doi:1016/j.jrurstud.2006.07.001.

Wambura, Ngunjiri Faith, Hernandez Kathy-Ann, and Chang Heewon. 2010. 'Living Autoethnography: Connecting Life and Research.' *Journal of Research Practice* 6 (1): 1–17. http://jrp.icaap.org/index.php/jrp/article/view/241/186.

Waymer, Damion. 2009. 'Walking in Fear: An Autoethnographic Account of Media Framing of Inner-City Crime.' *Journal of Communication Inquiry* 33 (2): 169–184. doi:10.1177/0196859908329628.

Weiss, Gail. 1999. Body Images: Embodiment as Intercorporeality. New York: Routledge.

Whatmore, Sarah, and Susan Boucher. 1993. 'Bargaining with Nature: The Discourse and Practice of 'Environmental Planning Gain.' *Transactions of the Institute of British Geographers* 18 (2): 166–178. doi:10.2307/622360.

WHO (World Health Organisation). 2020. 'Coronavirus.' Accessed September, 30, 2020. https://www.who.int/health-topics/coronavirus#tab=tab_1.

WHO (World Health Organisation). 2022. 'WHO Coronavirus Disease (COVID-19) Dashboard.' https://covid19.who.int/.

WHO.(World Health Organisation). 2021. 'Origins of the SARS-CoV-2 virus.' WHO, accessed 18 January 2021. https://www.who.int/health-topics/coronavirus/origins-of-the-virus.

Wilkinson, Cathy. 2012. 'Social-Ecological Resilience: Insights and Issues for Planning Theory.' *Planning Theory* 11 (2): 148–169. doi:10.1177/1473095211426274.

Wolch, Jennifer. 1996. 'Zoöpolis.' *Capitalism, Nature, Socialism* 7: 21–47. doi: 10.1080/10455759609358677.

Wolch, Jennifer R., Jason Byrne, and Joshua P. Newell. 2014. 'Urban Green Space, Public Health, and Environmental Justice: The Challenge of Making Cities 'Just Green

Enough'.' *Landscape and Urban Planning* 125: 234–245. doi:10.1016/j.landurbplan.2014.01.017.

Wolfe, Cary. 2010. *What Is Posthumanism? / Cary Wolfe.* Minneapolis: Minneapolis : University of Minnesota Press.

Wright, Judith. 1991. *Born of the Conquerors: Selected Essays*. Canberra: Aboriginal Studies Press.

Yan, Yang, Hu Jing, Jing Fengjie, and Nguyen Bang. 2018. 'From Awe to Ecological Behavior: The Mediating Role of Connectedness to Nature.' *Sustainability* 10 (7): 2477. doi:10.3390/su10072477.

Yarde, Thérèse N. 2013. 'Sensing the Natural in the Caribbean's Nature Island.' *The Senses and Society* 8 (2): 149–164. doi:10.2752/174589313X13589681980731.

Yeo, Alice, Robin Legard, Jill Keegan, Kit Ward, Carol McNaughton Nicholls, and Jane Lewis. 2014. 'In-Depth Interviews.' In *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Edited by Jane Ritchie, Jane Lewis, Carol McNaughton Nicholls, and Rachel Ormston, 177–210. Los Angeles, CA: Sage.

Young, Iris Marion. 2005. 'Throwing Like a Girl: A Phenomonology of Feminine Body, Comportment, Mobility and Spatiality.' In *On Female Body Experience: Throwing Like a Girl and Other Essays*, Edited by Iris Marion Young, 27–45. Oxford: Oxford University Press. https://ebookcentral.proquest.com/lib/curtin/detail.action?docID=3052002.

Woods, Barbara, and Gianna Moscardo. 2003. "Enhancing Wildlife Education through Mindfulness." *Aust. J. environ. educ* 19 (2): 97-108. https://doi.org/10.1017/S0814062600001506.

Zajchowski, Chris A. B., and Jeff Rose. 2018. 'Sensitive Leisure: Writing the Lived Experience of Air Pollution.' *Leisure Sciences* 42 (1): 1–14. doi:10.1080/01490400.2018.1448026.

Zalasiewicz, Jan. 2015. 'Epochs: Disputed Start Dates for Anthropocene.' *Nature* 520: 436. doi: 10.1038/520436b.

Zimmer, Anna. 2010. 'Urban Political Ecology: Theoretical Concepts, Challenges, and Suggested Future Directions.' *Erkunde* 64 (4): 343–354. 10.3112/erdkunde.2010.04.04.

Yerbury, Rachel M., and William E. Boyd. 2018. "Human-Dolphin Interactions:
Relationships, Connections, and the Reinforcement of an Ongoing Nature
Relationship." *Anthrozoös* 31 (4): 443-458.
https://doi.org/10.1080/08927936.2018.1482116.

Yoo, Joanne. 2020. "My Child and His Beautiful Body." *Qualitative inquiry* 26 (3-4): 257-261.
https://doi.org/10.1177/1077800419838578.

Yoo, Joanne. 2021. "Imagining the I-You through Embodied Writing." *Qualitative inquiry* 27
(6): 723-726. https://doi.org/10.1177/1077800420948104.

Appendix 1: Semi Structured Interview schedule

Questions are a guide to addressing the topic, exact phrasing may change and clarification and expansion will likely be required re nature and senses.

Topic: Involvement in projects in urban nature settings

- What it mean to be involved in Earthwise? This may include practical involvement (for example: tasks undertaken, time commitments and relationships or community building), emotional/spiritual aspects, or aspects related to political or activist goals.

Questions:

- What do you do at Earthwise?
- What motivated you to get involved with Earthwise?
- Why do you continue to be involved with the Earthwise garden?
-

Topic: Relationships with nature:

- How do participants see their relationship to nature? Both in general, and in regard to their involvement in Earthwise.

Questions:

- How do you see your relationship to nature? (ask clarifying questions to establish this in general, and in regard to their involvement in Earthwise).
- Do you consider yourself to be a part of nature?

Topic: Embodied and sensory experience

- Establish what participants see as the importance of sensory experience to their work at Earthwise and to their relationship with non-human nature.

Questions:

- What do you see as the role of the senses in your experience at Earthwise? By the senses I mean touch, sight, sound, taste, smell.