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CHANTELLE BAYES

Reimagining Urban Nature

Literary Imaginaries for Posthuman Cities

LIVERPOOL UNIVERSITY PRESS
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Introduction

Towards a posthuman urban ecocriticism

The Earth asks us to change as everything changes and evolves, like the flesh-tearing Allosaurus who became a warbler singing from the treetops when the time for flesh-tearing was over. For if we don't change, we will, like all that does not change, perish. (Kimmerer, 2014, p. 22)

We, entangled humans and nonhumans, are at a critical point in managing environmental degradation, with human-induced environmental change occurring on a grand scale. Several environmental problems need urgent attention, including climate change, the sixth great extinction of plants and other animals, and increasing resource depletion in some of the most vulnerable places around the world. While humans can lessen the impacts of these events, much more damage will occur without action. To encourage people to act, the most significant challenge we must overcome is changing how we imagine and connect with the more-than-human world by moving away from the current consumption-based thinking to a more relational understanding of the human place within the environment. This is becoming increasingly important in Australia, where reminders of the impacts of human-induced climate change and environmental destruction were felt in the recent bushfire crisis, are evident in the record for the most mammal extinctions of any landmass over the last 30 years, and are revealed in the increase in more severe droughts, floods, and storms. All of us, human and nonhuman alike, must live with the impacts of these environmental events, although of course they are unevenly experienced as they are given shape by social dimensions such as gender, class, race, disability, age, sexuality, and geographic location, as well as the socio-ecological concepts applied to nonhumans, such as endemicity, consumption value, and perceived danger.

This book aims to question some of the underlying imaginaries that for so long have allowed us to develop technologically at great cost to the more-than-human world and ourselves. Through a combination of embodied and ecocritical methods, it examines the way we imagine the more-than-human city through an investigation of fictional texts that reflect cultural understandings of key urban spaces. In cities, cultural and more-than-human entities are in frequent contact; however, the nonhuman is often seen as expendable in these human-centric places. While much important work has been directed at improving care for the more rural and wild areas of the globe, in order to really address environmental degradation, we must work towards reimagining the human in relation to the more-thanhuman in urban places and systems. These are places where the majority of people live and work, and where the majority of decisions are made about the care and protection of many environments. This book will contribute to the still underdeveloped field of urban ecocriticism by adding a posthumanist perspective that goes beyond the social ecology lens that has dominated thinking in this area.

This investigation of place and relationships is grounded in the Australian (and, more broadly, the Australasian) context to allow for the analysis of a more diverse set of voices, texts, and ecologies in an area still dominated by American studies. Postcolonial Australian nature has often been placed in opposition to the idealised nature of Europe and America, creating a fruitful space to renegotiate the relationships between humans and nonhumans in writing. As a key aim, this book will therefore investigate how writers conceptualise the nonhuman in Australasia and explore how the Australian urban might be reimagined as a posthuman place through the examination of five expressions of urban place: houses, gardens, bodies of water, public parks, and streets. Considering the long history of First Nations peoples on the land, the relationship between humans and nonhumans also requires a consideration of who is excluded from the dominant cultural narrative of urban nature. The exclusion of First Nations people from the development of cities and a long-held denial of First Nations land ownership in Australia has also meant an exclusion of

the cultural knowledge that resides in the land on which cities are built (Giblett, 2011; Pascoe, 2014; Rose, 1996). The inclusion of narratives written by First Nations authors is therefore an essential part of the book, although it is important to recognise that, as a migrant-settler to Australia, I cannot speak of this work without acknowledging my own position as an outsider, and as an inheritor of a colonial system that in many ways continues to misrepresent and appropriate First Nations and global Indigenous knowledges without benefit to those communities. My intention, therefore, is not to speak on behalf of Indigenous peoples but rather to highlight those Indigenous voices already speaking through research and writing practices. As Palyku scholar Ambelin Kwaymullina (2016, p. 440) argues, 'If Indigenous voices are already speaking (or are being denied the opportunity to speak), then the task of the non-Indigenous scholar is not necessarily to add to the commentary but to highlight and support Indigenous voices'. This means that, rather than framing these narratives through posthumanism, I attempt to draw these texts into conversation with posthumanism and find some common ground on which to care with the lands, human/nonhuman peoples, and others in the city.

This book is a study in urban ecocriticism that examines how literary texts position the nonhuman nature of the city and explores strategies that can be used by writers to create new environmental imaginaries of cities in their narratives. This research will add to the growing field of urban ecocriticism by using posthumanism to inform the analysis, a perspective that opens up new possibilities for living with and writing about the nonhuman in cities. In addition, conversations such as this speak to the broader environmental humanities and urban adaptation studies by considering the decisions that are made about how we live in cities, who gets to live in them, and how such spaces are controlled and managed or how this management might be challenged so that we (humans, nonhumans, vibrant matters) might all thrive.

This introductory chapter works to position this book in the field of urban ecocriticism, particularly in relation to the work of Michael Bennett and David Teague, whose book *The Nature of Cities* (1999) was foundational to this area of inquiry and Schliephake's more recent *Urban Ecologies* (2014), as well as the considerable scholarship that Ursula Heise has contributed to urban ecocriticism and other important urban ecocritical studies by academics such as Astrid Bracke (2013) and Lawrence Buell (2005). While not a truly urban

ecocritical study, Raymond Williams's important work *The Country and the City* (1973) has nevertheless had a major influence on the urban environmental humanities and remains a seminal text for urban ecocriticism. Therefore, I also consider the influence of this work on current scholarship. In addition, the complexities of considering the urban through a posthumanist perspective are discussed, providing a working definition of the term and positioning the concept in relation to urban ecologies.

This chapter also examines the influence of new materialism on the field of urban ecocriticism, and explores how new materialism relates to posthumanism in order to explain how this book incorporates current shifts in the field. The methodology employed involves a combined creative/critical approach to research, which is outlined in this chapter. I discuss the relationship between creative and critical research practices as a way to reconsider how knowledge can be produced in urban ecocriticism. This is based on the work of creative writing scholars such as Jeri Kroll (2013, p. 17), who show that the processes involved in critical and creative research practices often follow a similar path: 'conducting and replicating experiments, interpreting results, [and] gathering information, before gaining fresh insights'.

Urban ecocriticism

This book sits within the growing field of urban ecocriticism. There have only been two major works of urban ecocriticism produced in English over the last 20 years. The first was a collection edited by Michael Bennett and David Teague called *The Nature of Cities: Ecocriticism and Urban Environments* (1999). The second, more recent, text is a monograph by Christopher Schliephake called *Urban Ecologies: City Space, Material Agency, and Environmental Politics in Contemporary Culture* (2014). M. Bennett and Teague (1999, p. 3) offer the following explanation for why ecocriticism hadn't until the 1990s undertaken any major studies of the urban environment: in literary studies, 'ecocriticism has come to be associated with a body of work devoted to nature writing, American pastoralism, and literary ecology', much of which was set in less developed areas. Even though ecocriticism is now a much broader field of inquiry with more geographic locations and types of texts being examined,

as well as a broader range of methods and theories being applied in the research process, the city remains largely absent from new work in ecocriticism. As Schliephake (2014, p. 10) states, ecocriticism 'has evolved into a burgeoning field of literary and cultural studies, [however] urbanity has, to a large extent, been missing from its main subject matters or was treated only marginally in its theoretical underpinnings'. While there has been an increase in research from urban political ecology and urban geography that deals with the sociocultural phenomena of the city, an examination of culturally produced narratives that form urban imaginaries and contribute to our understanding of the complex urban entanglements of structures, actants, and sociohistorical systems is distinctly missing from urban studies scholarship. Bracke (2013, p. 9) suggests that this might be attributed to the fact that many of the major hubs of ecocritical study in the United States, the United Kingdom, and Europe are found in rural universities, and since ecocritics are more likely to write about geographies in close physical proximity and those with which they are more familiar, this has meant a focus on rural and less developed areas. Goodbody and Rigby (2011, pp. 2-3) argue that while many US texts have focused on 'wild' areas, European ecocriticism has been more open to examining texts in peopled areas, due to the population density of the continent; however, these studies are still focused on rural rather than urban geographies.

In Australia, early research in the environmental humanities tended to be driven by environmental history, ecophilosophy, and ethnography, with ecocriticism only emerging in the 2000s (Rigby, 2019). While the population of Australia is predominantly urban, much research in the environmental humanities has tended to focus on less-developed areas. This is partly a result of the link between research in the environmental humanities and environmental activism (Rigby, 2019), which has tended to focus on conserving less-developed areas, although these are often threatened by urban development or by infrastructures that support urban development, such as the mining and logging of rural environments. It is likely that the bush myth of Australia also has an impact on the focus of research, as Graeme Davison (2016, p. 173) suggests: 'The Bush myth dies hard, but it dies all the same. Long after most had left the farms and small towns for the big cities, Australians continued to look inland, across the Divide, towards the "true" or "real" Australia'. In addition, Bracke (2013) cites the enduring trope of urban ecologies as 'brownfields'

in reference to Buell (2005, p. 88), who describes cities as having 'severely altered, damaged landscapes'. This has left a lasting impact on ecocritical thinking, since this notion of brownfields 'implies that urban nature represents a "lesser" kind of nature that cannot match the expansiveness and sublime experiences of wilderness' (Bracke, 2013, p. 10). We can see this value system play out in the discussions about what 'wilderness' should be protected. For example, in 2014 the Tasmanian and Australian federal governments sought to delist a portion of the UNESCO world heritage forest in Tasmania's south due to degradation from logging in the recent past that had left it less than 'pristine' (Fairman & Keenan, 2014). This valuing of pristine over 'brownfield' ecologies, coupled with the myth of Australia as a 'bush' nation, works to reinforce the idea that 'real' nature is to be found outside the city. Devaluing urban nature also allows it to be seen as expendable and available for development.

Although there has been substantial development in the broader field of urban environmental humanities, it is therefore clear that a comprehensive 'urban ecological cultural criticism' in relation to the literature produced in and about urban ecologies is still needed (M. Bennett & Teague, 1999, p. 4). This book is an attempt to address this gap in the literature. I draw heavily on the broader investigations of urban ecology to develop an urban ecocritical study that accounts for literary representations – or, in Barad's terms, 'diffractions' – of urban environments, extending the work of M. Bennett and Teague, Schliephake, Heise, and Bracke.

M. Bennett and Teague's *The Nature of Cities* began an important conversation about urban ecocriticism and identified some preliminary concerns for the area, particularly the cultural understanding of the city vs the country, a discussion that builds from Raymond Williams's (1973) exploration of this tension, and a recognition of the city as part of a broader ecosystem. According to M. Bennett and Teague (1999, p. 4), 'the main objective [of their book] was to remind city dwellers of our placement within ecosystems and the importance of this fact for understanding urban life and culture'. The collection works to bring a focus to the relationship between urban ecologies and literature, which before that point had largely been absent from ecocriticism. Their essays provided 'the parameters for an urban ecocriticism that offers the ecological component often missing from cultural analyses of the city and the urban perspective often lacking in environmental approaches to contemporary culture' (M. Bennett &

Teague, 1999, p. 9). However, *The Nature of Cities* is largely grounded in the philosophy of social ecology that was applied in an attempt to overcome some of the problematic ideas underpinning theories of deep ecology. While acknowledging the importance of addressing environmental destruction, deep ecology reinforces a separation between the realm of nature (seen to reside in rural and wild areas) and the realm of culture (seen to reside in cities and towns). While social ecology was a helpful step towards reimaging the city as more-than-human, to use David Abram's (1997) term, social ecology still holds some resonance of anthropocentrism, as I discuss in Chapter 1.

I build on the work of M. Bennett and Teague through a posthumanist lens – my own attempt to resolve the residual anthropocentric notions that underpin social ecology, which still privileges the human as the sole creator of culture. A posthumanist idea of the city in relation to Karen Barad's and Jane Bennett's conceptions shifts the focus from epistemology to ontology, and allows for a new perspective on cities – one that accounts for the city as a multispecies construction and views culture not only as influenced but co-created by the nonhuman. I will pick up this thread again in the 'Posthumanism' section below.

In Urban Ecologies (2014), Schliephake provides more contemporary theoretical foundations to the field of urban ecocriticism. His most important contribution is his in-depth investigation of urban ecologies through ecocriticism, in which he accounts for the impacts of urbanisation beyond the politically defined geographic boundaries of the city. He also provides an in-depth discussion of the ways in which contemporary texts and films evoke particular environmental imaginaries of the city, moving away from a focus on nature writing and Romanticist imaginaries of urban nature. Schliephake (2014, p. 10) suggests that M. Bennett and Teague's collection was 'under-theorized when it came to the question of how an urban environment relates to its wider surroundings and in how far it could be viewed as an ecosystem itself'. This is the mandate that Schliephake takes up in Urban Ecologies as he addresses many of the gaps in urban ecocriticism. He identifies the value provided by an urban ecocriticism grounded in urban political ecology as he works to extend our understanding of urban ecologies:

Within this framework of a cultural ecology, imaginative literary texts and cultural forms of creative self-expressions do not only 'stage and explore, in ever new scenarios, the relationship of prevailing cultural systems to the needs and manifestations of human and nonhuman "nature", but also reflect on deficits and alternative models of that reciprocal relationship. In this sense, the cultural products explored in this book will be analysed as media that, on the one hand, give a critical account of various aspects of our contemporary urban world, and that can, on the other, 'transform' our ideas and images of cities by re-imagining their place in nature and showing how they are integral parts of ecological processes that manifest themselves not only locally, but globally. (Schliephake, 2014, p. 14)

As with any field still in its infancy, there are still many geographies, methods, and theories left unexamined in urban ecocriticism. While Schliephake's book provides some vital new insights, he largely focuses on urban geographies in the United States, although the final chapter does include works set in South Korea, South Africa, and Germany. In contrast, Reimagining Urban Nature seeks to add to this conversation by examining works largely related to cities in Australia and New Zealand, and the complexities of these colonised landscapes, which are still under-theorised in urban ecocriticism. In addition, Reimagining Urban Nature focuses on the potential for an in-depth study of the posthuman city and presents this research with a focus on the development of new environmental imaginaries. Therefore, in contrast to other research in urban ecocriticism, such as Schliephake's *Urban Ecologies*, which is firmly placed in literature and media studies, I intend to bring together literary studies and creative writing practice to examine how a posthuman urban ecocriticism might be used to inform the practice of writers working with urban environmental imaginaries. I argue that writers can create new environmental imaginaries of the city by drawing on notions of multispecies assemblages, co-constructed and situated knowledges, and relational understandings of urban ecologies, all of which are important to a posthuman understanding of the city. In addition, this research might benefit others working with cultural and political imaginaries of the city. Reimagining our human selves in relation to others is key to changing the way the city operates. Those who wish to enact new cultural and political imaginaries might therefore find narratives to be a valuable starting point.

Urban ecologies

Schliephake (2014), Christensen and Heise (2017), and M. Bennett and Teague (1999) all trace the foundations of urban ecology studies back to the Chicago School in the 1920s, with a more recent sociological turn in scientific ecology that accounts for humans as part of the environment, coupled with an ecological turn in urban studies in the 1990s. Until then, the distinct boundaries between social science and ecological science prevented a more thorough investigation of urban ecologies (Christensen & Heise, 2017). Schliephake argues that an urban ecology must bridge these boundaries:

An 'urban ecology' calls for the need to, on the one hand, broaden ecology's outlook by integrating built environments and human communities into its theoretical frameworks, and, on the other, to integrate the natural environment, environmental processes, and material substances into [urban] geography in order to avoid an anthropocentric perspective that is narrowly focused on 'the human dimensions of the city. (Schliephake, 2014, p. 13)

However, as Christensen and Heise show, this hasn't been an easy transition:

Oddly enough, the science of ecology has had a rough time in the city, even as 'urban ecology' has become a popular emergent term in the field and well beyond. Despite decades of efforts in the long-term ecological research stations in Baltimore and Phoenix, the primary lesson is that the laws of ecology – mostly fashioned in research in study sites that excluded human variables as much as possible – simply do not apply to cities. Very basic empirical measurements and simple predictions, about the effects of nitrogen in waterways, for instance, are productive. But theories about the population dynamics of species in urban settings, for example, will have to be built from the ground up, if they can be built at all. (Christensen & Heise, 2017, p. 457)

The environmental humanities have also found that new ways of thinking about the city are needed in order to account for the many varied ways that sociocultural and environmental entanglements come into relation. For example, Barad (2007, p. 169) suggests that early application of social constructivism and Latour's actor-network theory 'neglected crucial social variables and relations of power such as those related to race, gender, and sexuality'. This is not, however, the case in Australia, where the environmental humanities formed around issues of race and gender – often in relation to the history of violence towards First Nations peoples: the stolen and colonised land, settler and Indigenous relationships to country, and land management – and ecofeminist views, particularly in relation to the work of Val Plumwood (2008) and Deborah Bird Rose (Rigby, 2019).

Christensen and Heise (2017) show that thinking about urban ecologies requires a broader understanding than the political boundaries of the city allow, since the impacts of urban infrastructure and consumption go far beyond the physical limits of the city as defined by maps. Similarly, Schliephake argues:

An urban ecology is thus also faced with the necessity of creating a new 'image' of the city – one that does not negate the different environments and transitions between it, but that breaks down rigid oppositions that 'transform' the city into some strange other, an ugly concrete stain on an otherwise beautiful landscape. The city, too, is a form of nature. (Schliephake, 2014, p. 12)

Further, urban political ecologists have suggested that we should move away from talking about cities as stand-alone entities and towards talking about urbanisation as a process. For example, Swyngedouw and Kaika (2014, p. 462) argue that, rather than talking of particular geographical environments, we should consider the 'urbanisation of nature', which takes into account the ways that 'all types of nature are socially mobilised, economically incorporated (commodified), and physically metabolised/transformed in order to support the urbanisation process'. Further, Tzaninis et al. (2020) argue that a more complex picture of the city is needed to form an imaginary in which urban nature is seen to co-construct the city, and that sees the city as neither unnatural nor natural in the sense that it is not a self-sustainable entity but requires a consumption of resources beyond its limits. This is where the idea of the city as posthuman might be employed. Rather than considering separate social and environmental agents interacting, a posthumanist perspective accounts for the intra-actions of entanglements that may consist of

humans, nonhumans, 'vibrant matter' (using Jane Bennett's term), and other socio-environmental phenomena.

When brought into conversation with urban ecocriticism, the study of urban ecologies might be extended in new directions. M. Bennett and Teague (1999, p. 4) argued that 'various sociological and philosophical approaches to urban ecology have tended to lack a thorough-going cultural analysis of urban environments'. There has been much development since then, yet a cultural analysis of urban environments remains under-examined - particularly from a literature and creative writing perspective. Christensen and Heise (2017, p. 458) suggest that 'it is to the future, and science fiction and speculative nonfiction, that we look for more complicated versions of how these histories and theories and cultural imaginings might play out'. This concurs with Schliephake's (2014, p. 9) argument that 'an urban ecology which only takes into account the socio-spatial or material processes that frame urban life is incomplete, since manifestations of the cultural imagination have to be seen as integral parts of what we refer to as the "environment". Instead, Schliephake seeks:

to view cities as spatial phenomena that have manifold and complex material interrelations with their respective natural environments, and that harbor 'minds' ... of their own: Ideas, imaginations, and interpretations that make up the cultural symbolic and discursive side of our urban lives and that are stored and constantly re-negotiated in their cultural and artistic representations. (Schliephake, 2014, p. 9)

This is in part what this book hopes to achieve: a cultural study that not only examines the way texts have shaped urban imaginaries, but how they may continue to reshape urban imaginaries. This extends the work of scholars such as Schliephake, who argues that an urban ecocriticism

[e]xplores our cultural representations and 'symbolisations' of cities – firstly, because these media and texts critically engage with the shortcomings of contemporary urbanity; and secondly, because they can stage alternatives to predominant urban policies, re-imagining the socio-environmental processes that make up our urban worlds, and can illustrate ways to make them more sustainable. (Schliephake, 2014, p. 17)

The value of developing an urban ecocritical study that speaks to the practice of writing might also be seen to contribute to the reimagining of how we live in and manage urban places.

Imaginaries might be understood as social constructs through which we make sense of the world and through which we determine cultural and personal values, attitudes, and beliefs. According to Neimanis, Asberg, and Hayes (2015, p. 5), environmental imaginaries help us to make sense of the way physical environments shape 'one's sense of social belonging' as well as how we 'formulate – and enact – our values and attitudes towards "nature". These environmental imaginaries underlie urban structures and work to determine which aspects of the city are valued, who is welcomed into the city and who is excluded from participation in urban systems and processes. The development of new narrative imaginaries can question some of these underlying assumptions, as well as how we might settle conflicts in ecologically diverse communities.

Posthumanism

The purpose of using a posthuman perspective in this book is to develop a framework that addresses many of the problems underlying other philosophies that have influenced, and continue to influence, the environmental humanities, such as deep ecology and social ecology. However, posthumanism has itself gone through many changes, with many versions in circulation, so a careful consideration of what posthumanism might mean when applied in this urban ecocritical inquiry is necessary. According to Braidotti,

the argument is straightforward: if the proper study of mankind used to be Man and the proper study of humanity was the human, it seems to follow that the proper study of the posthuman condition is the posthuman itself. This new knowing subject is a complex assemblage of human and non-human, planetary and cosmic, given and manufactured, which requires major re-adjustments in our ways of thinking. (Braidotti, 2013, p. 159)

Further, in Braidotti's thinking the main subject of the humanities has never been 'man' but the cultural production of humans. Therefore, it follows that the study of the posthumanities is the cultural production of 'posthumans', which might broadly be seen as entanglements of bodies, beings, matter, and phenomena. In posthumanism, therefore, the human is replaced in the world with embodied entanglements of 'nature' as well as 'culture'. This does not necessarily mean a removal of the human from the posthumanities, but rather a refiguring of what it means to create as a human that is neither a bounded or singular being, nor the only agent in the process. In the case of this book, drawing posthumanism into conversation with urban ecologies and ecocriticism allows a more relational and interconnected perspective, a writing that investigates becoming with or 'as' the city. Following this research, a posthumanist urban writing practice would then work to explore these intra-active relations by constructing new imaginaries of the city that account for entangled subjects as well as an entangled writing process.

More broadly, Barad provides some clarity around what the boundaries of posthumanism as a mode of thought might entail. They argue that posthumanism 'is not calibrated to the human' so that entities and entanglements that are not human and do not include human-produced entities might still be taken up as subjects of posthumanism. Instead, posthumanism is

[a]bout taking issue with human exceptionalism while being accountable for the role we play in the differential constitution and differential positioning of the human among other creatures (both living and nonliving). Posthumanism does not attribute the source of all change to culture, denying nature any sense of agency or historicity. In fact, it refuses the idea of a natural (or, for that matter, a purely cultural) division between nature and culture, calling for an accounting of how this boundary is actively configured and reconfigured. (Barad, 2007, p. 136)

This acknowledges the nonhuman agency of the city, allowing for recognition of the ways in which urbanisation is impacted and co-constructed with a range of nonhuman others – not just in the sense that human production requires relationships and cooperation between human and nonhuman beings, bodies, and matters, but also in the ways that weather, environmental conditions, other animals, and water courses determine how cities are built, and can change or shape those processes. For example, flood plains can dictate where buildings can safely be built; volcanic activity can shift geologies;

and the presence of earthquakes, termites, or trees can impact what materials are used in buildings.

Yet in using a posthumanist perspective, we must be careful not to reproduce colonial forms of knowledge that erase the Indigenous and non-Western perspectives from which posthumanism also owes its origins. Springgay and Truman (2017) argue that posthumanism has often worked to reinforce Eurocentric knowledge supported by dualistic ontologies. They also caution that in moving to a posthumanist perspective, we must not create a universal or essentialist perspective but rather one that can be shaped in localities and through other cultural ways of being and knowing (Springgay & Truman, 2007). This is one reason why it is so important in this book to attend to a variety of voices in the fiction on urban nature – settler, Indigenous, and non-Western accounts all shape our understanding of and relationships with place. Astrida Neimanis offers an example of how knowledge might be viewed in a posthumanist way that goes someway to addressing the situatedness of knowledges. In this way, she accounts for the impact that human and nonhuman others have on the ideas contained in her research:

My name is printed below the title, but among the other things that water has taught me, I have learned that knowledge is always a partial and collaborative project. The lines on these pages emerge from entanglements with many (sometimes unwitting) [human] co-authors and interlocutors ... Other collaborators in this writing include: a thermal hot spring in Iceland, a puddle, a ferry boat, my childhood swimming pool, and an irrational fear of sharks. This list is short and inadequate; it attests to troubling omissions as much as to acknowledged inclusions. Such attempts at accounting, however, are salient in relation to a conversation that has been unfolding in various entanglements, in various places, but often contextualised in rooms in buildings in institutions in a system of Western scholarship that encourages us to treat our ideas as singly authored property to which we must lay claim. (Neimanis, 2016, p. 1)

What Neimanis raises here goes beyond a simple application of posthumanism to the environmental humanities by offering a critique of the broader knowledge system of which posthumanism, the environmental humanities and this book are a part. In recognising

these limitations of academic expressions of knowledge, we must also recognise that knowledge can be shared in other modes of expression such as narratives. This is where I believe we can question the authority of certain kinds of knowledge production and attend to other kinds of embodied and embedded knowledges that might be expressed more clearly in other forms but with the same rigour of thought.

New materialism

New materialism shares an aim with posthumanism in that both seek to decentre the human and reinscribe nonhumans with agency in research. According to Springgay and Truman (2017, p. 7), 'a materialist ontology recognizes the interconnections of all phenomena where matter is indeterminate, constantly forming and reforming'. In this way, new materialism extends the notion of 'becoming' and suggests that the human, along with all matter, is always in a process of becoming. The notion of becoming arises out of Deleuze and Guattari's (1988) attempt to reconsider knowledge as a subjective process. This term has been co-opted in new materialist, posthumanist, and ecofeminist discourses as 'becoming with' in Haraway (2003) or 'becoming other' in Neimanis (2016), and applied to acknowledge the ever-changing nature of bodies and relations in understanding the world. Rather than viewing bodies as wholly bounded, stable, and singular, becoming gets closer to describing the many ways bodies interact with the world: the way that skins or cells provide permeable boundaries, not hard borders and an acknowledgement that bodies are never singular or stable but are made up of relationships between many matters, beings, and processes and are therefore always in flux. However, for some Indigenous communities 'becoming with' doesn't quite capture a relationship with the world in which some humans are (and others might be again) an integral part of the ecology, as benign contributors rather than a destructive force. For example, the Yolnu Indigenous collective Bawaka suggests that 'becoming as' is more appropriate for Indigenous people, since 'Country has awareness, it is not just a backdrop. It knows and is part of us ... Country is the way humans and nonhumans co-become, the way we emerge together, have always emerged together and will always emerge together' (Bawaka Country et al., 2019, p. 683). This 'becoming as' is perhaps what posthumanism attempts to direct us

towards along a slow winding path that draws us in many directions to form an ethics of care. There are three key concepts in new materialism that overlap with posthumanism and help to capture the posthuman lens employed by this book: entanglements, material-discursive practices, and situated knowledges.

Entanglements

Entanglements are formed through relationships between various human and nonhuman entities that collectively work to impact the world around them. However, as Springgay and Truman (2017, p. 6) suggest, 'objects do not exist as discrete entities that come together through interactions but are produced through entanglement'. This is what Barad calls intra-actions:

That is, in contrast to the usual 'interaction,' which assumes that there are separate individual agencies that precede their interaction, the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action. It is important to note that the 'distinct' agencies are only distinct in a relational, not an absolute, sense, that is, agencies are only distinct in relation to their mutual entanglement; they don't exist as individual elements. (Barad, 2007, p. 33)

One example of an entanglement might be what we call soil, which is a combination of decaying plant and animal matter, root systems, microbes, insects, all the flows of water, air, and chemicals that are present, and increasingly bits of plastic and other processed materials. These entities might have their own effects or agencies within the soil, but the soil itself only exists as a collection of beings. As Springgay and Truman (2017, p. 6) argue, entanglements such as soil 'become determinate, material and meaningful through relations'. Further, entanglements of soil are not inert but alive - moving, changing organisms that impact the world around them by encouraging plant growth; that allow for communication between plants through networks of mycorrhizal fungi; and that can nourish or poison. The human (and indeed any animal body) might also be considered an entanglement of intra-actions between gut bacteria, microbes, flows of water, and nutrients through the body, and even the mitochondrial bacteria fused in each of our cells, all of which allow the human body to function. Who we are is in part determined by these organisms

(the nonhuman in the human), which impact our mental and physical health and help shape our identities and relationships with others. This is further evidenced by the extent of recent research linking our emotional health with the health of our gut bacteria (Clapp et al., 2017).

Entanglements build on the concept of assemblages developed by Deleuze and Guattari (1988). J. Bennett describes assemblages as:

Ad hoc groupings of diverse elements, of vibrant materials of all sorts. Assemblages are living, throbbing confederations that are able to function despite the persistent presence of energies that confound them from within ... And precisely because each member-actant maintains an energetic pulse slightly 'off' from that of the assemblage, an assemblage is never a stolid block but an open-ended collective, a 'non-totalizable sum'. An assemblage thus not only has a distinctive history of formation but a finite life span. (J. Bennett, 2010, pp. 23–24)

This reflects the notion of becoming whereby individual elements are temporarily in relation, but as there is movement and change within the assemblage, relations might also change. Many use the terms 'entanglement' and 'assemblage' interchangeably, but Barad (2007, p. 23) suggests that there is a subtle difference: 'perhaps it is less that there is an assemblage of agents than there is an entangled state of agencies'. This goes back to Barad's concept of intra-actions, which suggests entanglements are created through the relations between entities whereas an assemblage suggests a grouping of individual entities. If we use Barad's notion of entanglements, then an ethic of care is expressed in paying attention to those entanglements of which we are an active participant, as Barad argues:

Ethics is not simply about the subsequent consequences of our ways of interacting with the world, as if effect followed cause in a linear chain of events. Ethics is about mattering, about taking account of the entangled materialisations of which we are a part, including new configurations, new subjectivities, new possibilities. (Barad, 2007, p. 384)

However, it is also important for new materialism and posthumanism as fields of knowledge to acknowledge the ethics of establishing and applying these theories. One of the criticisms of new materialism is that it makes invisible the way Indigenous notions of animism have always engaged with the world as a living entity and as one that has entangled relations with the world (Rose, 2013). In addition, as Amitav Ghosh (2022, p. 37) argues, the same principles were applied to animistic groups in Europe as they were on other continents: 'when poor Europeans resisted the dual suppression of their rights to land and of the sacredness of their landscapes, they too were subjected to forms of violence that were intimately linked with colonial conquest'. In this sense, new materialism is not new, but a Western recovery of animism lost from its own history but very much present in the lives and cultures of many Indigenous peoples. Val Plumwood's notion of 'philosophical animism' might be better equipped to avoid this erasure and recognise the roots from which new materialism emerges (Rose, 2013).

Material-discursive practices

Material-discursive practices describe the way language and materialities come into relation through a communicative exchange. New materialism resists the idea that language is more important than the physical world. Conceptually restoring the agency of the nonhuman requires a way of attending to all the ways in which we might communicate with these materialities. J. Bennett suggests that addressing how language and thought are used is an essential aim of new materialism:

I will emphasize, even overemphasize, the agentic contributions of nonhuman forces (operating in nature, in the human body, and in human artifacts) in an attempt to counter the narcissistic reflex of human language and thought. We need to cultivate a bit of anthropomorphism – the idea that human agency has some echoes in nonhuman nature – to counter the narcissism of humans in charge of the world. (J. Bennett, 2010, p. xvi)

So materialities might be seen to communicate in modes beyond human language, particularly beyond textual communication, but also work to co-construct these cultural processes. In order to further interrogate this concept, I look to some of the key questions and critiques of material-discursive processes. Žižek asks us to consider the relationship between language, perception, and materialities:

Are these vital qualities of material bodies the result of our (the human observer's) 'benign anthropomorphism,' so that the vitality of matter means that 'everything is, in a sense, alive,' or are we effectively dealing with a strong ontological claim asserting a kind of spiritualism without gods, with a way of restoring sacredness to worldliness? If 'a careful course of anthropomorphism' can help reveal the vitality of material bodies, it is not clear whether that vitality is a result of our perception being animistic or of an actual subjective vital power. (Žižek, 2010, p. 10)

As Barad (2007) and J. Bennett (2010) suggest, a 'vital matter' requires a liveliness in nonhuman terms and must take into account the effect of material entanglements. But rather than 'vital' meaning consciousness, or metaphysical qualities, 'vital matter' is matter that has an effect on the world beyond human use of that matter. For example, Barad suggests that new materialism sees language/culture and materiality/bodies as shaping each other in a co-constructed way:

The primary ontological units are not 'things' but phenomena – dynamic topological reconfigurings/entanglements/relationalities/(re)articulations of the world. And the primary semantic units are not 'words' but material-discursive practices through which (ontic and semantic) boundaries are constituted. This dynamism is agency. Agency is not an attribute but the ongoing reconfigurings of the world. The universe is agential intra-activity in its becoming. (Barad, 2007, p. 141)

Here Barad suggests that we might rethink the world in active terms so that we attend to the processes in which 'things' (matter, words) become as they exist in the world, and see these as steps in a further process. For example, the writing on this page is the result of a process of thinking and being in the world, and even as these words may appear stationary or even produced by a single author, they are one step along a trajectory of that thinking and being and have been produced through a co-construction of relationships between myself and a range of knowledges, bodies, and phenomena. Therefore, the focus of material-discursive processes is on 'doings' or 'actions' rather than descriptions of a stationary reality. Further:

A performative understanding of discursive practices challenges the representationalist belief in the power of words to represent pre-existing things. Unlike representationalism, which positions us above or outside the world we allegedly merely reflect on, a performative account insists on understanding thinking, observing, and theorizing as practices of engagement with, and as part of, the world in which we have our being. (Barad, 2007, p. 133)

Material-discursive practices then become a key way in which language and materialities come into relation. In addition, rather than seeing language as representation or a 'mirror image' of the world, Barad (2007, p. 37) suggests the term 'diffraction' to account for co-constructed realities as differences and changes that occur through phenomena: 'Realism, then, is not about representations of an independent reality but about the real consequences, interventions, creative possibilities, and responsibilities of intra-acting within and as part of the world'. David Abram (1997) suggests that writing itself is a kind of animism, a contemporary 'magic' where worlds are brought forth through marks on a page just as Indigenous people might 'read' features of a landscape that bring forth stories. However, Abram recognises that writing is also an anthropocentric animism, from which others are excluded. This is not to say that we should turn away from writing as Abram attests; rather, we need to reconsider writing as the process and result of our being in the world, as well as how we might create more inclusive narratives so that the matter of the world might be 'read' as people read books. This would require listening to and empowering Indigenous peoples whose knowledges already attend to the world in such ways.

Situated knowledge

New materialisms take up the idea of situated knowledges, which Haraway (1988, p. 581) describes as knowledges that critique a 'universalist, disembodied "God's eye" view of the world' (see also Bozalek & Zembylas, 2016, p. 194). Scientific inquiry has long dominated the discourse of nonhuman nature, relying on notions of objectivity and rationality in order to appear as the authority on knowing and understanding the world (Katz & Kirby, 1991, pp. 261–62). However, David Demeritt (1998, p. 188) argues that the conception of scientific research as 'objective truth' leads to 'the tendency either to worship science for its God-like objectivity or

to demonise it for failing to live up to our unrealistic expectations'. These two interpretations of science are supported by dualistic thinking, which separates nature and culture, objectivity and subjectivity, the scientific and the social. Val Plumwood (2002, pp. 41-42) argues that scientific objectivity excludes the emotional and the bodily (seen as feminine traits), the particular, the personal, and the political; however, the actual practice of science and discovery are far from objective. This myth of objectivity in science conceals the context of scientific research, influenced by economic markets and political agendas, and instead serves to 'facilitate control by privileged social groups' (Plumwood, 2002, p. 42). New materialism does not seek to disregard scientific inquiry, but to recognise the context in which that inquiry is undertaken with the aim of re-placing this knowledge into the broader sociopolitical sphere. In new materialism, epistemology, ontology, and ethics are seen as entangled: 'If ontology and ethics, or being and acting, are always already relational, then ethics shifts from a responsibility to act on the world in a particular moral way' towards a 'becoming with' that occurs through practices located in geographic and social contexts (Springgay & Truman, 2017, p. 7). Knowledge then arises from these located practices, and while there are facts of the world that cannot be changed, as discussed in Chapter 1, this knowledge is also unsettled by its locatedness: 'if "we" are intra-actively entangled in worlding, then there will never be a final solution or outcome, rather new matterings will emerge for our entangled intra-actions' (Springgay & Truman, 2017, p. 7). Therefore, 'accountability shifts from being responsible for, to a response-ability-with' (Springgay & Truman, 2017, p. 7). Knowledge that results from this research inquiry would present a more relational view of the world that accounts for sociopolitical impacts and the subjective nature of research.

How knowledge creation is viewed impacts the sort of language used in documenting that research. In the past, language has been considered objective when it distances the writer from their subject matter by presenting the bare facts without identifying the author's presence or opinion in an attempt to create a non-biased text. This is achieved largely through use of third-person voice. In addition, the 'truth' sought through objective language is a uniform and universal truth that can be applied to multiple situations. The authoritative and seemingly objective voice of scientific texts allows the authors to

obscure their own position in the construction of concepts of nature and so reinforce this idea of nature as *other*. Barbara Adam says:

Scientific objectivity ... suggests that the position of 'observers' is irrelevant to what they see, that the object of observation is the same irrespective of context, that difference in time and space do not affect it in any way. (Adam, 1998, p. 38)

However, this kind of 'truth' telling, and 'objective' language might actually lead to obscuring those implicit biases, and negating the original purpose of such language. This is the concern that situated knowledges seeks to address. Situated knowledge considers the relationships present and contributing to the research, including the relationship between researcher and subject. While no less rigorous, placing the researcher in the text using personal pronouns and acknowledging their impacts on the research allows for a relational understanding of the world that accounts for contexts, subjectivities, and continuous change. This is not to say that science is unimportant for understanding the world, but it must be recognised that scientific discourses are also cultural productions, and as such are constructed and interpreted. However, seeing science as subjective can lead some to undermine the value of that research - this is one reason why subjective language continues to be resisted in some disciplines. For example, Demeritt (1998) argues that climate change sceptics have used the social constructivist argument to denounce scientific demonstrations of climate change and advocate inaction, which has led to further social and environmental damage. This is another effect of the oppositional dualism between 'objectivity' and 'subjectivity' that sees one as legitimate and the other as illegitimate. Taking a relational and situated view of knowledge can ironically work to address some of these broader sociopolitical factors that exploit such oppositional dualisms.

One key criticism of new materialism is that when thinking of entanglements, it can be difficult to determine power relations – particularly within those entanglements. This is an important question for determining whose 'knowledge' we are receiving and how situated knowledges are constructed. Compared with assemblages, entanglements struggle to account for power relations between matters, bodies, and phenomena since they are not seen as a series of individuals as in assemblages, but come into formation

through intra-action. Cudworth and Hobden (2015, p. 135) ask, 'if we humans are simply another node in the relational net of lively matter then how exactly can we be seen to act in and on the world, in particular, in the pursuit of human projects of emancipation?' This has important ethical considerations since it may be seen as a removal of agency or 'individual' responsibility to others within or beyond those entanglements:

In both hybridity and vitalism, there is a tendency to horizontalism – relations are not understood to exist in a context of hierarchies of power. The flat, non-hierarchical networks for ANT [actor-network theory] cannot deal with power because it cannot make distinctions between nature and society, or between humans, other animals, plants, and objects. In theorising power, we consider that [there is a] need [for] such distinction between different kinds of being and objects in the world in order to recognise, for example, that distinction [sic] such as those between humans and all other 'animals' are forged through and continue to carry, relations of inequality and domination. (Cudworth & Hobden, 2015, pp. 138–39)

While posthumanism and new materialism seek to decentre the human and reduce those hierarchies that have led to so much damage, we also need to be able to acknowledge the many ways in which these hierarchical myths have and continue to have real-world effects. Cudworth and Hobden (2015) suggest that there are several kinds of agency enacted within and by entanglements. By acknowledging these kinds of agency, they hope to address this problem, which 'conflates the idea of the properties and powers of beings and things, and the notion of action and the idea of agency', as well as the 'assumption that a distributed concept of agency will be effective in unsettling humancentric politics' (Cudworth & Hobden, 2015, p. 138). So 'reproductive', 'transformative', 'affective', and 'differentiated' conceptions of agency allow for situated notions of agency in which nonhuman others are participants in situated relations rather than exerting agency through 'intrinsic capacity alone' (Cudworth & Hobden, 2015, p. 140):

First, reproductive agency acknowledges the way in which agential beings, both human and non-human, emerge into a pre-existent web of social relations and unequally distributed power and resources and their practices over time reproduce those situational constraints with relatively minor alterations. Second, there is transformative agency where humans and possibly some other creatures engage in a struggle over resources and social organisation to effect differences in that distribution. The human world overlaps with innumerable non-human systems, both animate and inanimate, which can impact and influence, and indeed radically change the structures of the human world. We describe this as 'affective agency' ... We have argued for a conception of differentiated agency in which the agential being of nonhuman animals, particularly mammals, is countenanced, and the possibilities for agency very much depend on the relational systems which produce such being. We would use affective agency to discuss the significant effects of natural systems and the beings and things caught up in them and in their relations with other systems. (Cudworth & Hobden, 2015, p. 139)

These agencies allow for actions to arise from entanglements in ways that privilege certain relations and processes over others. In this way, not only can humans become social enactors, but so too can nonhuman matters and other animals while accounting for sociopolitical, cultural, and environmental power relations. Therefore, situated knowledges are able to acknowledge the many ways in which certain relations and processes are supported or hindered by contextual factors where a more objectivist or abstractionist view of theory might obscure these power relations. I continue this discussion in Chapter 2 by considering how writers might employ situated knowledge in their material-discursive writing practices.

Barad (2007) and Demeritt (1998) both suggest a philosophical framework that might account for subjectivities and contexts in the production of knowledge. Demeritt proposes a new way of conceptualising science through artefactual constructivism:

The reality of the objects of scientific knowledge is the contingent outcome of social negotiation among heterogeneous human and non-human actors ... It refigures the actors in the construction of what is made for us as nature and society. The social in these social constructions is not just 'us': it includes other humans, non-humans, and even machines and other, non-organic actors ...

These objects of scientific knowledge are co-constructors. This makes them no less real or materially significant. It simply highlights the complex and negotiated process of scientific practice and representation by which they are materialized and produced for us as natural-technical objects of human knowledge. (Demeritt, 1998, p. 175–80)

This conception of science requires a careful consideration of both human and nonhuman agents in the construction of knowledge and opens up science to a new kind of critical analysis along with other ways of knowing. Meanwhile, Barad straddles the boundary between realism and constructivism from the other side:

I propose 'agential realism' as an epistemological-ontological-ethical framework that provides an understanding of the role of human and nonhuman, material and discursive, and natural and cultural factors in scientific and other social-material practices, thereby moving such considerations beyond the well-worn debates that pit constructivism against realism, agency against structure, and idealism against materialism. Indeed, the new philosophical framework that I propose entails a rethinking of fundamental concepts that support such binary thinking, including the notions of matter, discourse, causality, agency, power, identity, embodiment, objectivity, space, and time. (Barad, 2007, p. 26)

Together, these frameworks allow us to trouble both realist and constructivist positions in order to generate a more relational kind of knowledge production that accounts for the co-constructed nature of knowledge.

What results from the research process is often called 'theory' – one way in which knowledge might be ordered and presented. While theory might at first be seen as an abstraction of knowledge, for Neimanis (2016, p. 4), theory might be refigured through the idea of 'figurations' that imply 'embodied concepts' and allow knowledge to be recognised as embedded and embodied in the world:

Figurations are keys for imagining and living otherwise, but unlike a concept unfettered by the world we actually live in or as, figurations are importantly grounded in our material reality. I have never been entirely convinced by theory that frames anything as wholly 'immaterial' ... I like the idea that our best concepts are already here, semi-formed and literally at our fingertips, awaiting activation. Never conceptual fantasy or metaphor, these imaginative 'interventions' describe what we already are, but amplified. (Neimanis, 2016, p. 5)

As Neimanis suggests here, figurations avoid removing theory from the context in which it was constructed. Further, theory might be understood as co-constructed by that context through intra-actions. Braidotti (2011, p. 13) argues that 'a figuration is a living map' that 'attempts to draw a cartography of power relations' by situating knowledge in a location.

The posthuman city

The Romantic tradition continues to impact the way urban places are imagined in the West, which has undoubtedly also impacted those areas around the world on which these cities rely for resources. Emerging from the Romantic tradition, fiction and poetry since the eighteenth century have often evoked nature as something to be found and experienced in rural and wild places or designated within urban areas as passive settings (Arnold et al., 1999). Writers such as William Wordsworth linked natural landscapes with tranquillity and conjured up images of Pan: harmonious connections with forests, the renewal of life in springtime, and the pastoral ideal (Wordsworth, 2015). By looking back to an idealised rural life, some writers have sought to counter the ideals of rationality, objectivity, intellectualism, and material progress, which are seen as driving the exploitation of natural resources and a loss of untamed nature (R. Williams, 1973, p. 127). However, as Raymond Williams shows, often city and country are used to signify larger processes of change, which have comparable effects on both areas:

Clearly ideas of the country and the city have specific contents and histories, but just as clearly, at times, they are forms of isolation and identification of more general processes. People have often said 'the city' when they meant capitalism or bureaucracy or centralised power, while 'the country' ... has at times meant everything from independence to deprivation, and from the powers of an active imagination to a form of release from consciousness. (R. Williams, 1973, p. 291)

So, while the city is often linked with industrialisation as though it were the city driving the destruction of rural lifestyles, the processes of capitalisation, manufacturing, and production have had an effect on the social and natural elements of all geographies. Rural myths that play on nostalgic ideas of simpler times, lost rural cultures, and lifestyles more in harmony with nature are now perpetuated in cities within constructed suburban communities and tourism reproductions of farm life (Wilson, 1991). Similarly, the more recent myth of the city as green space has led to new emerging imaginaries that persist to separate the 'cultural' city from the rural and wild 'nature'. As Christensen and Heise argue:

Cities have recently come to be envisioned as one solution to climate and other environmental problems. Cities are already 'green' by virtue of being dense, having a smaller per capita carbon footprint, and occupying less space on Earth. By crowding together in cities, we are saving nature out there. This perspective begs the question of which nature we are saving out there and what happened to nature in the city? (Christensen & Heise, 2017, p. 557)

This highlights the need to complicate the imaginary of the city to see both urban and rural in more nuanced ways. For example, in some instances, rather than a more 'natural' landscape in rural areas, traditional farming practices have led to considerable changes in ecologies through the draining of wetlands and deforestation (Giblett, 2011; Wilson, 1991), while some urban processes such as sewerage management have led to increased diversity and ecosystem health, as Tim Low (2002) demonstrates. Rural myths serve to reinforce the idea that nature-culture relationships are better in idyllic rural areas, while also suggesting that these areas are remnants, and these relationships are not possible in a contemporary industrialised and urbanised world. On the other hand, new myths of the city as 'green' can also reinforce the idea that 'real nature' doesn't exist in urban places.

Writing about the complexity of nature/culture in cities requires new ways of thinking about the urban. Christensen and Heise (2017) highlight some of the more dominant notions of the 'biocity', as they call it, which influence the way urban ecologies are imagined. Some of these imaginaries include the garden city developed in response to the idea of the city bereft of nature as a place of mental and physical illness; gentrification through landscaping and gardening – an idea that is still playing out, for example, in the recent approval of the rejuvenation of the Champs-Élysées in Paris by planting garden beds along the street; GIS, which informs the mapping and planning of the city to create discrete areas for humans and nonhumans in green spaces, residential and industrial areas; biomimicry and the development of vertical and rooftop gardens; climate urbanism that sees the city as green and seeks to address climate change by encouraging densely populated shared spaces; and vertical living as a way to live on less land.

Now the majority of the world's population lives in cities, there is a fear that the globalisation of urban networks will cause cities to become uniform and repetitive reproductions of each other (Olalquiaga, 1992, pp. 1–3). Early ecocritics such as M. Bennett and Teague (1999) and Buell (2005) worked to change the conception of city as non-place by reminding us of the network of natural and cultural processes feeding each city with its own assemblage of entities. More recent scholarship by Bracke (2013) and Schliephake (2014) has built on this by addressing the problematic notion of urban 'brownfields' to show that the nature of the city is just as valuable as other forms of nature. I argue that by complicating ideas of the city and reimagining the urban through posthumanism, we might destabilise dichotomous notions of nature and culture further, to value the nature of the city as we value nature in less-developed areas.

In developing new environmental imaginaries, posthumanist conceptions of the city can be drawn upon to readdress urban space as complex, questioning utopian notions of the city particularly as they relate to the exclusion of certain others, and allowing for diverse socio-ecological communities. The posthuman city might be understood in opposition to anthropocentric notions where the nonhuman is seen as something separate from culture and in need of management and control within the human sphere of the city. In this context, the posthuman city is not absent of humans. That is, the posthuman city does not figure 'post' as 'after' the human but instead considers the posthuman as displacing the human from the centre of the city and reimagining the city beyond the needs of only its human inhabitants. Instead, the posthuman city is a complex entanglement

of hybrid nonhuman, cultural, and technological entities (Braun, 2005). Therefore, the writer who experiences the city through a posthumanist lens acknowledges the human as already embodied and embedded in this more-than-human world. Key to reimagining the city is recognising the myriad ways in which nonhuman nature also acts upon us and influences decisions about how we live in cities (Schliephake, 2014, p. 140). In The Nutmeg's Curse, Amitav Ghosh (2022, p. 220) shows how stories arise through relationships with the land and argues that the land is 'capable of making its own meanings and of narrating its own stories' if only we humans were listening. Similarly, Schliephake (2014, p. 11) argues that 'the urban environmental imagination is ... determined by the "physical environment" as well as by the fleeting, mutating bodies and material substances that move through it'. In reconsidering the city as a negotiated process between nature and culture rather than a colonisation of nature by culture, the agency of nonhumans to contribute to the construction of cities, and indeed environmental imaginaries, might be acknowledged (Bayes, 2018).

Olalquiaga (1992, pp. 1-2) describes the experience of contemporary urban living as psychasthenic, a state in which an organism's physical location within a space becomes confused with represented space. She analyses the psychasthenic city, where boundaries between objects are blurred through reflection, repetition, and simulation. Her own psychasthenic experience of the city involves noticing the way buildings - like walls of glass - seem to 'disappear behind reflections of the sky' and the way hourly changes in light are artificially neutralised as the city shifts from sunlight to constructed lighting (Olalquiaga, 1992, p. 3). Implicit in these experiences she describes is an indication of the extent to which the boundary between nature and culture is also blurred within the city. As the idea of psychasthenia suggests, the city is often thought of as non-place, lost somewhere between physical location and symbolic representation of an ideal city. I argue that, despite the merging of physical and symbolic, cities are full of human and nonhuman agents contributing to the construction of place. Michel de Certeau (1984, p. 103) writes that the city is 'a universe of rented spaces haunted by a nowhere or by dreamed-of places'. This idea of the city captures the complexity of natural/cultural cities where language and representations are overlaid on physical space. Christopher Schliephake (2014) argues that understanding cities requires cultural mediation of human-nonhuman relationships through language, although his ideas sometimes contain problematic notions of what that means. For example, he says, 'we are of an environment, but we do not blend with it. That other broad realm called "culture" gives us the means with and by which we engage with our surroundings - thoughts, language, and tools' (Schliephake, 2014, p. 143). This is a view of the human relationship with place that is steeped in social ecology, which still sees humans as separate from the environment. This is particularly problematic in relation to the First Nations perspective of belonging to Country and the close historical relationship in which First Nations people both shaped the Australian ecology and are shaped by the Country on which they live. Nevertheless, the use of narrative is an important way in both Western and non-Western perspectives to connect with the land or at least express that connection. For urban places, too, narrative imaginaries can work to recognise those things that make up a city's localities by exploring the relationships between the natural, the cultural, and the human who is entangled with both.

Cities are complex structures of nature and culture. Not only do cities require flows of clean water, air, and food, but they are developed through historic negotiations between natural and cultural entities. The location of cities has often been decided based on proximity to fresh water and resources (Gandy, 2014). However, Rod Giblett (2011) shows how the construction of cities often meant the destruction of swamps and wetland environments, as well as the exclusion of First Nations peoples from their lands. However, rather than see the nature of the city as displaced by culture, it is possible to reimagine urban nature as an active agent contributing to the city:

The urbanization of nature, a transformation that has gained accelerated momentum over the last few decades, is clearly much more than a gradual process of appropriation until the last vestiges of 'first nature' have disappeared. The production of urban nature is a simultaneous process of social and bio-physical change in which new kinds of spaces are created and destroyed, ranging from the technological networks that give sustenance to the modern city to new appropriations of nature within the urban landscape. (Gandy, 2006, p. 63)

This reconsideration of the urban as a negotiated process between nature and culture, rather than a colonisation of nature by culture, acknowledges the agency of nonhumans in the construction of cities. Some nonhuman entities and human groups have inevitably benefited from this process at the expense of others, requiring a reconsideration of these marginalised others and new ways of negotiating urban processes. Bruce Braun (2005) contends that cities need to be reimagined as more-than-human. A key aspect of this reimagining is examining relationships within cities:

The interest in 'connectivity' might itself be seen as an outcome of attempts to think cities as ecological spaces, for once the myriad things that circulate through its streets, plazas, offices and homes are brought out of hiding, it becomes clear that urbanisation occurs in and through a vast network of relationships, and within complex flows of energy and matter, as well as capital, commodities, people and ideas, that link urban natures with distant sites and distant ecologies. (Braun, 2005, p. 637)

Conceiving of the city as more-than-human undermines the traditional separation of nature and culture. Key to reimagining the city is recognising the myriad ways in which nonhuman nature acts upon humans and influences decisions on how we all live in cities (Schliephake, 2014, p. 140). The notion of 'posthumanism' underlies this understanding of the city and is beneficial to conceiving of urban nature as a philosophical position that acknowledges the human as already embodied and embedded in the more-than-human world.

In the 1990s, the city became more widely recognised by ecocritics and human geographers as a place suitable to discuss nature (Christensen & Heise, 2017). This identifies a shift in thinking away from the usual duality between what is wild and what is civilised and towards a reimagining of both rural and urban places. Braun suggests that the city allows for boundaries between nature and culture to blur:

[R]hizomatic geographies confuse the purified spaces of the city and compound our attempts to divide space, bodies and organisms into 'here' and 'there', 'this' and 'that'. We may have brought 'nature' into the city, but we may still be some way from truly grasping the transivity, porosity and rhythms of these multiscaler 'machinic assemblages' that give urban life its potential and its risks. (Braun, 2005, p. 647)

This confusion of boundaries is a conceptual act that allows us to reimagine cities and even ourselves as natural/cultural entities, to re-place the human in nature.

When reconceptualising the city as posthuman, boundaries between nature and culture blur, destabilising oppositional dualisms and providing a space to reconsider what it means to be human. This reimagining of the city can also combat reductionist ideas of cities as non-places. The city as uniform cultural reproduction can also be addressed by recognising the agency of nature and the role of natural entities in shaping urban environments. If, as Schliephake (2014) attests, language allows us to make sense of our place in these environments, then literature can serve to reconsider the cityscape as natural/cultural place.

Critical-creative methods

For me, three overlapping methods occur in the process of research-creation: thinking, reading, and writing. In thinking, I attended to the current relationships between humans and nonhumans in the city, which required engagement with place through critical walking and ecophenomenology. Reading involves applying urban ecocriticism to literary texts, while writing involves an imagining or reimagining of those relationships. This book is my attempt to bring together many threads of thought and practice, so it is the result of several methods arising out of a practice-led research methodology (which might simultaneously be called research-led practice). These methods together have allowed me to contribute a new perspective on urban ecocriticism.

In writing this book, I seek to extend understandings of 'urban nature' through the concepts of situated knowledge and lived experience with reference to Estelle Barrett (2007) and Donna Haraway (1988, 1991). By questioning the binary set up between theory and practice, situated knowledge allows engagement between theoretical and creative inquiry and results in a more complex understanding of the creative practice—research relationship (Barrett & Bolt, 2007). Producing new writing about the environment might be considered more than just creative: it is also the *practice* of theory which, along with academic scholarship, is able to extend ideas of what it means to be human in the contemporary world and how

people might live as natural/cultural beings. The produced text then constructs an environmental imaginary:

In some literature, this term denotes how one's physical environs shapes one's sense of social belonging and values, but it can also refer to the imaginative space wherein we formulate – and enact – our values and attitudes towards 'nature' ... Like social imaginaries (and overlapping with them), environmental imaginaries are sites of negotiation that can orient material action and interaction. (Neimanis, Asberg, & Hayes, 2015, pp. 5–6)

As Astrida Neimanis, Cecilia Asberg, and Suzi Hayes (2015) suggest, by constructing imaginaries, writers might bring together multiple ways of knowing through practice. They further suggest that through the writing of imaginaries, the researcher can produce knowledge that is connected to and derived from the material world:

Although focus varies considerably both within and between fields of inquiry, the imaginary is nonetheless generally understood as the explorative, yet somewhat restricted, sense-making field wherein humans cultivate and negotiate relations with the material world, both emotionally and rationally, while also creating identities for themselves. Since imaginaries are created through engagement with our world, we could say that imaginaries are not what we have, but what we do. (Neimanis, Asberg, & Hayes, 2015, p. 5)

While the idea of imaginaries can equally be applied to non-fiction and scholarship, we might consider the way fiction also works to produce imaginaries derived from an engagement with material realities.

Barrett (2007) argues that the benefit of the dual platform of inquiry (creative practice/scholarship) is in the extension of scientific knowledge, situating research in everyday experience. Scientific ideas might be enhanced through broader studies of understanding and texts that explicitly recognise subjectivity. For many cultures and for much of history, narratives have been used to impart knowledge to others (Ghosh, 2022). Lawrence Buell, Ursula Heise, and Karen Thornber (2011, p. 424) remind us that scientists often rely on local or Indigenous people's knowledge to guide their research. However, it is only recently that scientists in Australia

have begun to examine First Nations narratives themselves to find that these accounts record environmental transformation over time, including the longest known oral history of climate change (N. Reid, Nunn, & Sharp, 2014) and the introduction of foreign species to Australia (Bowman, Gibson, & Kondo, 2015). Scientists also utilise narrative to tell environmental stories to a wider audience. Rachel Carson discusses chemical pollution in *The Silent Spring* (1962), Tim Flannery explores climate change in *The Future Eaters* (1994) and The Weather Makers (2005), and Tim Low re-evaluates urban nature in The New Nature (2002). Creative writers, in turn, have examined the possibilities of scientific research through fiction. Frank Schatzing explores nonhuman intelligence and climate change in The Swarm (2012) and Margaret Atwood investigates the potential effects of genetic engineering in the MaddAddam series. Atwood sets the three books – Oryx and Crake (2003), The Year of the Flood (2009), and MaddAddam (2013) - in a post-apocalyptic world where a waterless flood (a pandemic virus) kills almost all humans, who are then replaced by bioengineered and environmentally friendly hominids called Crakers (Atwood, 2013). While this may seem fantastical, Atwood (2013, p. 393) suggests that these books are futuristic projections of current issues and based entirely in current scientific achievements: 'Although MaddAddam is a work of fiction, it does not include any technologies or biobeings that do not already exist, are not under construction, or are not possible in theory'. By remaking the connection between knowledge and narrative, we can consider how narratives enable readers to think about the world and construct environmental imaginaries.

Practice-led research

This research also exists in relation to my creative practice. Urban ecocriticism employed through a practice-led lens means I was particularly focused on how narratives use particular strategies that work to trouble anthropocentrism or enact posthumanist ideas within their narratives. Exploring how these ideas can be put into practice is the aim of this book, but creative writing practice also informs these ideas as I try out different techniques through reading, thinking, and writing. Thinking about writing requires thinking as a practitioner – for example, asking questions of other narratives such as how a particular strategy might work in practical terms. In analysing the work of others, I considered how the writer

constructed the text, what techniques they used, and how elements such as setting, metaphors, plot, and characters worked to decentre the human in the texts. While my own creative work is not figured in this book, it is nevertheless a crucial part of the methodology for researching how writers reimagine, and how they might reimagine, the city in writing. In addition, just as the writing techniques outlined in Chapter 2 are suggested to support creative practice in this area, I also engaged in similar methods in researching and writing this book. I undertook a critical walking practice where I consciously considered my relationship with the places with which I was engaged. Through encounters with urban entities, I attempted to think through a posthumanist lens and explore the ways in which environmental imaginaries of various kinds, including those that are more destructive, are brought into action - and the potential for posthumanist ways to reimagine urban entanglements. I was also careful to be attentive to the human and nonhuman agencies present in urban places and ways that human-nonhuman intra-actions co-construct urban imaginaries.

Literary analysis

The literary texts analysed in chapters 3, 4, and 5 were chosen for their diversity of voices, narrative strategies, and contribution to posthuman thinking. I sourced these texts in several ways. Since it was important to include First Nations voices and writers, I found the AustLit database Black Words helpful for sourcing narratives by First Nations authors. However, there have also been several prestigious and award-winning novels by First Nations authors released over the last few years that made these narrative voices more visible. Since I was interested in how narratives treat particular urban and urbanised geographies, traditional and structured methods of research using library databases and systematic reviews were often not successful methods of sourcing appropriate texts. Many times, narratives came to my attention through conferences, and serendipitous finds in second-hand bookstores. While I was

I Particularly the European Association for the Study of Literature, Culture and Environment's 2018 conference on gardens in narrative at the University of Würzburg, Germany; and the online Southern Waters: A Creative and Critical Symposium, University of Adelaide, 2021.

particularly interested in seeing how the Australian (and broader Australasian) context might contribute to global understandings of urban ecocriticism, there were several novels written by authors beyond this region whose narrative techniques provided useful comparisons to trouble particular aspects of posthumanism – for example, Chinese-Canadian author Larissa Lai's 2002 novel Salt Fish Girl provided an important contribution to the discussion on water in narrative; Iranian author Shahrnush Parsipur's 2012 novella Women without Men demonstrates the potential of plant–human hybridity in garden narratives and provides a useful comparison to Ellen van Neerven's (2014) use of plant–human hybrids; and Indian-British author Indra Sinha's 2007 novel Animal's People provides a useful counterpoint to the figuration of the garden as place of nourishment as well as introducing us to a dishuman flâneur that troubles relationships with public spaces in the city.

Overview of the book

The remainder of the book is structured as follows:

Chapter 1, 'The Language of Urban Nature', examines the way the more-than-human city has been represented through language in the past. Words such as landscape, wilderness, and nature have been used to conceptualise the nonhuman in ways that reinforce the separation of the human from the more-than-human world. New terms might be employed in writing to rethink the nonhuman and to encourage a re-placing of the human in relation to the cultural and natural entanglements that make up the city. For example, terms such as terroir, more-than-human, and companion species encourage more relational understandings.

Chapter 2, 'Writers Who Venture', explores embodied research methods, and the ways writers use them to explore human—nonhuman relationships in their texts. I focus particularly on the use of ecophenomenology, econarratology, and place-based creative practice. In this chapter, I consider the role of embodied methods of writing research, including gardening, surfing, swimming, and walking, and how the texts produced are impacted by these embodied practices. This extends upon a tradition of writers who have employed walking in their writing process, from Thoreau's rural wanderings to Benjamin's urban *flâneur*, as well as a tradition of researchers who have used

walking to inform their thinking from Michel de Certeau's urban walks to the recently termed 'critical walking methods' employed by Springgay and Truman (2022). Walking for creative writing has often been underpinned by phenomenological understandings of embodied knowledge, and I examine new posthumanist versions of this methodology to consider what a critical posthumanist writing practice might involve.

Chapter 3, 'Private Entanglements: Houses and Gardens', seeks to reposition the relationship between house and garden, questioning the inside/outside and human/nonhuman contradictions that exist in the ways these spaces are managed in cities and constructed within narratives. The house and garden are places of mutually imagined construction. In a posthuman sense, these interlinked places might be considered the result of a joint process of domestication, as Robin Wall Kimmerer (2013, p. 124) describes: 'Wild plants have changed to stand in well-behaved rows and wild humans have changed to settle alongside the fields and care for the plants - a kind of mutual taming'. The garden has subsequently become a space where humans and nonhumans work together to construct places of leisure, production, and cultural significance, separate from the human site of the house, from which the garden is often excluded by a walled and carefully monitored barrier. I consider what a posthuman garden might look like and how writers might work to reimagine the house and garden as reciprocal and relational. I do this through an ecocritical investigation of several narratives that represent the generative and destructive potentials of gardens and gardening practices. In these narratives, gardens provide a space of resistance and transgression where people might express or heal from trauma, resist oppression, and rewrite official histories of place. In addition, I discuss how some narratives work to question particular garden imaginaries that have led to the harm of entangled humans, nonhumans, and vibrant matters.

To survive, the city requires water for its interspecies residents and in large amounts. Chapter 4, 'Bodies of Water', investigates the ways in which writers position bodies of water within their texts to create particular associations and metaphors. The water of the city is often an important part of the way we understand and interact with place, whether through leisure, transport, or consumption. However, cities like to cultivate certain kinds of water, such as lakes, ocean views, and canals, with development often occurring at the

expense of other kinds of water – usually in-between spaces such as swamps, bogs, and wet/dry creek beds. I consider posthumanist ways of relating to and writing about water through the notions of swamp-cultured texts and hydro-logics. In this chapter, I provide an ecocritical analysis of several texts that complicate the histories and futures of urban water as well as texts that create new kinds of imaginaries about the water of the city; imaginaries which reposition waters to create more complex associations with all these ecologically important bodies of water. In addition, I examine how writers might draw on and extend this work through relational understandings of the city in its many watery entanglements.

Chapter 5, 'Public Entanglements: Parks and Streets', explores the ways in which inner-city and suburban streets have been represented in narratives about the city. Most often, this has been through the figure of the flâneur who, in the Benjaminian tradition, was evoked by writers to make sense of a changing modern city. Often streets and green spaces intersect, creating pathways through the city where humans and nonhumans interact. In this chapter, I ecocritically analyse literary fiction that refigures the street and park. I also consider the potential for new narrative modes and imaginaries that may question traditional notions about who and what belongs in these public urban spaces. I argue that new ways of engaging with the imaginaries of urban public spaces (postmodern flâneurs, companion species, rewilding) and new modes of writing (digital narratives, podcasts and audio tours, situated narratives) can work to construct new kinds of relationships with the city. In doing so, I examine methods used to control urban spaces such as zoning, surveillance, and defensive architecture that determine who is invited into the city and how they can participate.

The concluding chapter brings together the threads of thought developed across the preceding chapters, considering how urban ecocriticism and creative practice might contribute to broader discussions on the urban, the environment, and the human—nonhuman relationship. Across the chapters, several themes, narrative strategies, and concepts are examined that trouble the edges of a posthumanist reading of the city. It is in these troubling edges that researchers can identify and address remnant issues in the theory and practice of an urban ecocriticism. In addition, this chapter brings together an overview of the strategies that writers have used to construct relational urban worlds that work towards a reimagining of how

we might live in cities as well as strategies that might be developed in new work. Further, the literary texts analysed in this book raise important questions about dominant Western conceptions of 'nature' that influence how many cities are constructed and how the relationships between humans, nonhumans, and other matters of the city might be reimagined. These are important questions to consider for researchers, activists, and writers if we are to construct new imaginaries of the city that reduce intersectional violence and create liveable cities for all residents.

CHAPTER ONE

The language of urban nature

This book aims to reconsider the place of narrative in reimagining the entangled human and nonhuman relationships in urban areas. One of the most powerful ways in which narratives can do this is through the use of language that embodies certain conceptions of the city and shapes our understandings of the nonhuman in these places. When the city is spoken of as a place of development and control, those who don't fit into this imaginary - including those nonhuman others considered pests or weeds – are considered interlopers in this space. In this chapter, I provide an overview of some of the important theoretical considerations that impact the way we tell narratives and the kinds of language that might be employed to reimagine notions such as nature, landscape, place, and wilderness. In this endeavour, I find the French term *terroir* useful in reconsidering the concept of landscape, questioning the Romantic human gaze over the land that has often had the effect of limiting the human-nonhuman relationship (Buell, 2005, p. 142). In addition, the term 'country' better captures the relationships between peoples, histories, and land than the limited notion of 'wilderness'. A key focus of this chapter is nature writing, a genre that has traditionally spoken about places beyond the city in direct relationship with notions of landscape, wilderness, and what constitutes 'nature'. Nature writing has also been employed by scientists, writers, and activists seeking to change policies and lifestyles, and some, like Rachel Carson's Silent Spring (1962), has been very successful in doing so – in that case, by regulating the use of the pesticide DDT.

Research into language and perception has shown that the way the world is represented through language impacts how we process and understand the world around us. As Lupyan and Clark (2015, p. 282) argue, 'language not only functions as a means of communicating

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our thoughts but plays an active role in shaping them'. Some studies have demonstrated how cultures are able to process mathematical problems differently based on the ways in which languages describe numbers, and the ways in which different language users apply stereotypes through common linguistic metaphors to make sense of particular situations (Lund, 2003). These studies show that language use can have a direct impact on our epistemological understanding of the world around us. According to Lund (2003), these studies and the subsequent critique demonstrate that while procedural knowledge activities such as driving a car or perceiving colour appear to be processes that do not necessarily rely on language to mediate them, when it comes to conceptual knowledge that directs us to make abstract judgements about the external world, our perceptions are impacted by the words and grammatical structures we use. If this is the case, then addressing the way we use language to represent the nonhuman can impact the way we conceptualise the world, and therefore impact our relations with and actions towards nonhumans and companion species. While our overall perception of the world is likely composed through exposure to multiple competing narratives produced by a range of media, written narrative can allow for alternative ways of thinking to emerge, thus enabling us to question some of the more damaging conceptions of the nonhuman and to reimagine the urban as a more-than-human space.

Urban companions: Nature as other

I look out over my Mum's suburban backyard. Most plants in her garden were put there by someone, although she's proud that her lawn contains a diverse mix of grasses and meadow flowers that she has managed to keep despite the real estate agent suggesting she use a weed killer. Rip out the native violets, poison the clover, cut back the milk weed. Apparently, a uniform patch of grass would be more aesthetically pleasing. On both corners of her street are 'wilderness' areas, a compromise between development and conservation. They were cleared and replanted with native plants, and are now managed by the local council. They are also routinely used by neighbours to dump rubbish. A cat smoodges around my legs for attention like she might do to another cat in her kin group. When I ignore her, she meows – a distinctly domestic trait. Cats who grow up without humans

only meow as kittens or to communicate with kittens, but I don't understand her scent marking so this is her best option for communicating with me. There is no doubt that the garden, the wilderness area, and the cat are nonhuman and act beyond human intentions, but all are changed in some way through human contact. In return, humans are also changed through these relationships as they learn how to read and respond to the cues of these companion species. These close relationships between human and nonhuman reveal the complexity of defining what a nonhuman nature might even mean.

Rather than seeking to pin down a definition of the term 'nature' in this book, I seek to extend the possibilities of how we represent 'nature' and ultimately reimagine the relationships between human and nonhuman. The term 'nature' is often used in relation to the environment or nonhuman others, but this interpretation can reinforce the perceived separation between the human and the nonhuman. To address this, I draw from, problematise, and reinterpret both the deep ecological aspect of ecocritical theory and the poststructural aspect of postmodern theory in relation to conceptions of nature. There are many variations within both of these theoretical perspectives, and I first examine the extreme positions of each in order to articulate the complexities of a combined perspective. Unsettling these theoretical positions allows the urban to be reimagined as more-than-human, a counter to the anthropocentric notions of cities that enable human development at the expense of nonhuman others (Braun, 2004, pp. 272-73).

Ecocritical thinking has been heavily influenced by deep ecology. Norwegian philosopher Arne Naess (1989, p. 12) coined the term 'deep ecology' to refer to a deep connection with and concern for the natural environment. Naess talks about nature as something that can be found and experienced away from human culture. Deep ecology relies on a realist stance in which nature is seen to exist apart from projections of cultural meaning. This idea of nature is at odds with a poststructural view, the driving force of postmodernism, in which everything (including nature) is seen to be a construct of the language and contexts created by culture (Conley, 1996). Both deep ecology and poststructuralism become problematic when applied to the concept of nature. Deep ecology creates a separation between human and nonhuman, and reinforces a position in which human action is seen in isolation from distant environments. Poststructuralism doesn't necessarily deny the existence of a world beyond the human,

but creates a human-centric idea of culture in which the nonhuman is denied agency. These issues are emphasised in urban places where nature is present along with culture, and cities are shaped by these entangled natural and cultural entities. Michael Bennett suggests that resolving the disconnection between ecocriticism and postmodernism enables urban environments to be analysed more effectively:

The deep ecological perspective adopted by many ecocritics, bereft of the theoretical insights of social ecology, will always be incomplete; it will also be unpersuasive and unavailable for most city dwellers and ultimately inadequate for non-urbanites as well. (M. Bennett, 2003, p. 301)

He adds that 'We would do well, instead, to adopt a theoretical frame as spacious as the land about which we write' (p. 306).

Sue Ellen Campbell (1996) and Michael Bennett (2003) both explore the boundaries of these theories in an attempt to create a study of nature that imbues nature with respect and value but can also be discussed in the realm of postmodern (and indeed posthumanist) literature studies. Campbell (1996) identifies two areas where these concepts connect. Both deep ecology and poststructuralism have similar critical positions and could be understood to share a similar belief in the nature of reality. From Campbell's (1996, p. 127) perspective, both poststructural theory and deep ecology reject a humanist view. Poststructural theory replaces this with a focus on textuality and deconstruction, whereas deep ecology focuses on 'the way the rest of the world – the nonhuman part – exists apart from us and our language' (Campbell, 1996, p. 133). M. Bennett links deep ecology and poststructuralism by calling for a move towards a 'social ecology':

In short, deep ecologists are troubled by humanism because they hope to replace androcentrism with a biocentric view that displaces the human, while social ecologists, influenced by poststructuralism, are more likely to be troubled by the raising of the human into an 'ism' – a transcendent, ahistorical, and monological category of absolute value. (M. Bennett, 2001, p. 34)

This concept of social ecology is able to sustain both ecological and postmodern perspectives by adopting what seems to me to be a deep

ecological view of the nature of reality (ontology) and a postmodern view regarding how we are able to know and understand this reality (epistemology). So, nonhuman nature can be said to exist in reality and beyond our conceptions of it, but the only way we can know and understand nonhuman nature is through culture, and therefore through cultural representations such as written narrative. This philosophical position is confirmed by Paul Wapner (2002, p. 174), who writes that 'postmodernists do not question the fundamental substratum of material reality ... but, rather, they question the way people make sense of that reality'. Social ecology allows flexibility to rethink relationships between human and nonhuman nature, and provides for new representations of cities to emerge. This combined perspective highlights the human position as both interpreter of the natural world and creator of ideas about nature.

However, while social ecology seeks to do away with hierarchies, the responsibility for developing a sustainable world is still seen to lie exclusively with the human (Barry, 2011). While I agree that we must seek more sustainable and less damaging ways of living with the nonhuman, this might be reconceived not as something that humans do to a non-thinking world, reinforcing the idea of nature as machine, but rather as a co-construction of the world that recognises the agency of nonhumans in this process. Robin Wall Kimmerer's 2013 book *Braiding Sweetgrass* shows how human and nonhuman action might be seen as a reciprocal process whereby restoration and care of landscapes requires an acknowledgement of nonhumans and their roles in this cooperative multispecies practice:

The slowly accreting community of weedy species can be a partner in restoration. They are developing ecosystem structure and function, beginning ever so slowly to create ecosystem services such as nutrient cycling, biodiversity and soil formation ... We can trust the plants to do their work, but except for windblown volunteers, new species can't get here across highways and acres of industry. Mother Nature and Father Time could use someone to push a wheelbarrow, and a few intrepid beings [research students] have volunteered. (Kimmerer, 2013, p. 334)

This is where concepts such as critical posthumanism, agential realism and artefactual constructivism can be useful. These theoretical positions question the human as enactor of nature and

urge representations that capture the entangled engagements and co-constructions of urban environments to allow narratives that highlight the role of nonhumans in this process. Demeritt (1998, p. 175) outlines the way artefactual constructivism demonstrates scientific knowledge as a co-constructed process: 'The reality of the objects of scientific knowledge is the contingent outcome of social negotiation among heterogeneous human and non-human actors'. Demeritt suggests that:

It refigures the actors in the construction of what is made for us as nature and society. The social in these social constructions is not just 'us': it includes other humans, non-humans, and even machines and other, non-organic actors ... These objects of scientific knowledge are co-constructors. This makes them no less real or materially significant. It simply highlights the complex and negotiated process of scientific practice and representation by which they are materialized and produced for us as natural-technical objects of human knowledge. (Demeritt, 1998, p. 180)

This epistemology requires a careful consideration of both human and nonhuman agents in the construction of knowledge and opens up a new kind of critical analysis along with other ways of knowing. In addition, Barad (2006, p. 26) reminds us that besides science being a co-construction, we are also part of that 'nature' being studied: 'our ability to understand the world hinges on our taking account of the fact that our knowledge making practices are social-material enactments that contribute to, and are a part of, the phenomena we describe'. To address this complexity of creating knowledge from within entanglements, Barad suggests a move away from knowledge as representation and towards knowledge as performance. Drawing on such thinking can therefore be helpful in finding new ways of analysing and constructing texts that recognise the world as co-constructed by entangled human-nonhuman entities. This also allows for a reconsideration of the language (and underlying conceptions) of the city that has enabled destructive relationships with nonhuman others in urban places.

One of the most important terms to become commonplace in the environmental humanities is David Abram's (1997) 'more-thanhuman'. Sarah Whatmore (2006) co-opted this term and has applied it to more-than-human modes of inquiry that refigure *human* geography to encompass the many nonhuman others that live with humans. This concept also helps to reimagine the city, since it replaces the ecological system in which we live and suggests an agency that exists beyond the human in these spaces (Braun, 2005). Whatmore (2006) suggests that 'more' is used in the sense of 'beyond', not 'better than'. However, while the term 'more-than-human' aids in reimagining cultural urban geographies, it still emerges as an anthropocentric term that places the human at the centre of geography and suggests that the nonhumans who inhabit the city do so only in relation to the human. In addition, Springgay and Truman (2017, p. 11) warn that we 'need to ensure that while attending to the "more," colonization, racial violence, and legal oppressions are not ignored in the name of animacy'. Further, they caution that the term can work to erase the Indigenous ontologies that have always attended to the nonhuman:

Indigenous scholars have interrogated the more-than-human turn, arguing that it continues to erase Indigenous knowledges that have always attended to nonhuman animacy. Queer, trans, disability, and critical race scholars argue that while a decentering of the human is necessary, we need to question whose conception of humanity more-than-human theories are trying to move beyond. As Zakiyyah Jackson (2015, p. 215) argues, 'appeals to move "beyond the human" may actually reintroduce the Eurocentric transcendentalism this movement purports to disrupt, particularly with regard to the historical and ongoing distributive ordering of race'. (Springgay & Truman, 2017, p. 3)

I use the term 'more-than-human' in this book to discuss the practice of posthumanism in the city; however, it is important to recognise that even concepts employed in this way are limited by the language used to describe them. In a more-than-human city, natural-cultural entanglements and hybridities lead to new textual representations. We might then be seen to live as companion to a range of other species, as Haraway (2003) suggests. To this end, the philosophy of critical posthumanism that drives the inquiry in this book provides a framework upon which to hang this new language of the city. Through changes in the language and underlying conceptions of urban nature, writers might construct new narratives about the city that push the boundaries of writing about urban nature and allow for more inclusive multispecies imaginaries of the city to emerge.

Urban companions: Nature as self

Defining 'nature' is no easy task. Not only does the term shift across time, cultures, and contexts, but meanings are often vague and expansive (see Ducarme & Couvet, 2020). In writing this book, I am aware that contemporary language used to describe and represent nature is bound up in historic ideas about nature as infinitely available, regenerative, and belonging to humankind, which has led to more destructive relationships with the nonhuman (Soper, 1995, pp. 15–37). Nature was reconceived in seventeenth-century Western thought through the idea of the world as machine rather than organism, and this has subsequently influenced how people have sought to know and understand the nonhuman in dominant Western culture. In this way, the human came to be seen as something separate from 'nature'. Carolyn Merchant demonstrates the way this change in thinking encouraged an imperial attitude towards the nonhuman:

The image of the earth as living organism and nurturing mother had served as a cultural constraint restricting the actions of human beings. One does not readily slay a mother, dig into her entrails for gold or mutilate her body, although commercial mining would soon require that. As long as the earth was considered to be alive and sensitive, it could be considered a breach of human ethical behaviour to carry out destructive acts against it. (Merchant, 1980, p. 3)

The connection of nature with lifeless and unfeeling machines enabled a cultural acceptance of more destructive industrial processes. A reconsideration of the human relationship with nonhuman nature is therefore necessary in order to find new ways of constructing nature in texts. In response to this issue, Kate Soper (1995, p. 19) questions how human relations with nature are viewed as damaging when the similarly damaging actions of other species are seen to be part of the natural order of things. Soper is not attempting to defend or excuse environmental destruction, but rather wants to explore this boundary between human and nonhuman in an effort to see us as part of nature. Ecologist Kay Milton (1999) responds to these kinds of questions with a definition of nature that fits a posthumanist perspective. For both Milton (1999, p. 446) and Soper (1995, pp. 44–45), nature can be seen as all-encompassing, including all that

is human and culture. However, Milton (1999) argues that culture is only one part of nature – that there is a nonhuman nature that exists beyond the realm of both culture and the human. As Cudworth and Hobden (2015) argue, deciding what is human and what is not can help to acknowledge the power structures within entanglements that both recognise the agency of nonhumans and the ways that humans have caused damage to other humans and nonhumans. Wapner (2002, p. 171) outlines this concept of a nature beyond the human: 'As a matter of necessity, nature can be manipulated – and indeed, always is as humans interact with it – but its ultimate physicality and fundamental structural characteristics are not up for negotiation'. This is particularly evident in urban environments, which encourage a rethinking of the boundaries between nature and culture – since, when examined closely, they become more and more difficult to distinguish from one another.

The cultivation of plants and gardens, the domestication of animals, or even regular feeding of wildlife mean the boundary between what is nonhuman nature and what is human or cultural is never clear. In fact, even nonhumans manipulate their environments, as Soper (1995) points out, and have cultures, as new research informed by animal studies demonstrates (for example, see Schuppli & Van Schaik, 2019). If we consider the highly manipulated structures of other species such as beehives or termite nests as natural, then it is hard to argue that the act of building human structures is somehow unnatural. However, the construction of city structures is often a highly damaging process. This creates a tension within urban entanglements: while the growth of cities is supported and influenced by nonhuman nature, cities are often responsible for the destruction, pollution, and damage of these nonhuman others. This is no more evident than in the development of plastics, a material that is often used just once, but that takes hundreds of years to break down, causing many environmental problems. The key issue is not whether cities are natural but the extent to which these urban interactions disrupt ecosystems and cause irreparable damage (including to humans, nonhumans, and vibrant matters). At the heart of this issue is the way we use language to represent the nonhuman in the city. If the term 'nature' creates the kinds of separations discussed above in the construction of urban imaginaries and allows for the destructive practices to continue, then we must find new ways of talking about and imagining the more-than-human world.

I use the term 'nonhuman nature' in this book to indicate nature beyond the human. However, even in this term, the boundary between human and nonhuman is not clear. The Oxford English Dictionary describes nonhuman nature as the 'features and products' of the Earth, as opposed to humans or human creations'. This definition is arguably no longer adequate, as human actions now have such a global and historical reach that what may appear to be natural is in fact a co-construction. A human layering has formed over landscapes; the intervention is initially unseen in what otherwise appears to be a natural space. Not only are nature and culture heavily intertwined, but nature is a cultural category often applied to the nonhuman. Adam (1998, pp. 29-33) extends definitions of the nonhuman, adding that nature is also a series of processes. Seen as a set of 'features and products', nature becomes a passive and stable concept that suggests it is something to be gazed upon and separate from our human experience of being within the world. As a series of processes, nonhuman nature is active, able to affect human culture as culture in turn affects nonhuman nature. This active and changeable concept of nonhuman nature places it within our temporal as well as spatial experience of the world, allowing us to see nature as an influence in everyday life rather than something to be stumbled upon in wild, untamed, or rural areas (Adam, 1998). Nature is not a singular entity, but plural and entangled with cultures, as Muecke (2006, p. 1) argues, and he uses the term 'naturecultures', with reference to Bruno Latour, to describe these complexities. Even this definition of nature proves problematic in some contexts. Andrew Ross (1993, p. 111) argues that we must be able to separate what is natural and what is a cultural projection upon nature. Nature as a model of behaviour or a higher moral authority is in fact a cultural representation. We must recognise that in knowing and understanding nature, we cannot conceive of it without creating nature in part conceptually. The dynamic character of the term 'nature' and the active and changing processes of nonhuman nature makes it difficult to stabilise. By keeping the term 'nature' in flux, the city might be conceived of as natural space where relationships between nature, culture, and the humans and nonhumans who exist in-between can be written about in resistance to problematic dualisms.

Taking cues from Whatmore (2006) and Braun (2005), I also employ the term 'more-than-human' to describe physical multispecies places.

Whatmore coined the term 'more-than-human' as an alternative to 'posthuman', which suggests something that is to come after the human. Instead, Whatmore (2006) argues that the term 'more-than-human' acknowledges something that is beyond rather than after the human. Here, I use these terms in two distinct ways: 'posthuman' to refer to the philosophical body of work that builds on humanism and investigates the relationships between the human and nonhuman, and 'more-than-human' to refer to the application of posthumanist thought to physical places.

Narratives for urban nature

The use of narrative allows a development of environmental imaginaries, which Neimanis, Asberg, and Hayes (2015) argue are communal sites of negotiation and contest that work to reorient social values, material action, and interaction. Environmental imaginaries can encourage people to question their relationship with places and encourage the kinds of social values that drive alternative ways of living as ecological beings. Consequently, the narrative text becomes a way of linking the conceptualisation of nature with the everyday lived experiences of a wider audience. In fact, the nature writing tradition has always allowed for a blend of narrative discourses, including the scientific, philosophic, poetic, mythic, and personal, which make the underlying thinking more digestible for the reader. Robin Wall Kimmerer's Braided Sweetgrass (2013) demonstrates how the knowledge produced through multiple modes of address might work together to increase understanding and care for the more-than-human. Kimmerer braids together scientific teachings (the knowledge of nonhuman others), non-fiction narrative (care and engagement with nonhuman others), and traditional Indigenous American stories (imaginaries of both destructive and beneficial other ways of living). Without one of these narrative strands, the teachings are incomplete, missing cerebral knowledge, care, or the ability to imagine another way forward. The resulting text might be seen as an expression of this ethic of care: 'We may not have wings or leaves, but we humans do have words. Language is our gift and our responsibility. I've come to think of writing as an act of reciprocity with the living land' (Kimmerer, 2013, p. 347). This combination of discourses demonstrates how multiple ways of thinking might

contribute to understandings of the nonhuman, the human, and the relationships between them.

What is important to contemporary nature writers who seek to create more appropriate ways of writing about 'nature' is the experience involved in connecting with nonhuman nature as well as culture. In essence, the nature writer is expected to engage with place as part of the writing process. Kate Rigby argues:

However the craft of nature writing might be conceived, there is a sense in which the nature writer is necessarily called to be a follower. Such writing, that is to say, necessarily follows nature: temporally, in that the natural world to which it refers is presumed to pre-exist the written text; normatively, in that this pre-existing natural world is implicitly valued more highly than the text which celebrates it; and mimetically, in that the text is expected to re-present this pre-existing and highly regarded natural world in some guise. (Rigby, 2006, p. 1)

At first, this seems to suggest a linear process whereby the writer engages in experiences with nonhuman nature that ultimately lead to the practice of writing; however, nature writing (as Rigby concedes) is actually a manifold process, whereby the writer's experience with place is in part already shaped by previous experiences, memory, texts with which they have engaged, cultural assumptions, and suggestions and signs presented to them upon entering a place (Rigby, 2006, p. 11; Ryan, 2011, pp. 44–48). Therefore, Rigby argues that:

Rather than thinking of this primarily as a matter of mimesis, however, I suggest that such writing be considered, more broadly, as embodying a literary practice of response: as such, we can truly say that writing comes second, following on from the other's call, while becoming in turn the locus of a new call, to and upon the reader. Called forth by particular more-than-human others, places and histories, our words are nonetheless cast into, and framed by, a human communicative context, necessarily responding also to the words of others of our own kind, whether written or spoken. (Rigby, 2006, pp. 10–11)

The text therefore acts as expression of engagement with the world, but also provides readers with a means of experiencing

nature. Not only does the nature writer form preconceptions of nature through memory, culture, and literature, but the ways these notions shape the text also have an effect on readers' constructions of nature. Some of these preconceptions of nature are brought about through problematic notions such as landscape and wilderness, as I will discuss. However, as writers set out to experience and then construct place within a text, it becomes possible to imagine and engage with nonhuman nature in new and embodied ways (Bayes, 2014, pp. 5–6). By instead drawing on terms such as *terroir* and 'country', the nature writer might be able to recognise and reimagine the human in relation to place within their texts, as I discuss later in this chapter.

Moreover, 'nature writing' itself is a contested term. Scholars such as C.A. Cranston and Robert Zeller (2007, p. 8) and Mark Tredinnick (2003, p. 31) argue that 'nature writing' is a dismissive term, and that 'place-based writing' might be a more appropriate label because it allows for the inclusion of many genres. More recently, the term 'literary ecology' has been employed to describe the multiple forms, styles, and disciplines of texts discussed in ecocriticism (Schliephake, 2015; Waldron & Friedman, 2013). Conversely, Jason Cowley (2008) suggests that nature writing *can* include a variety of genres and texts about a range of subjects. In this book, I use the term 'nature writing' in reference to the established body of literature it encompasses, as well as to emphasise the way these texts foreground nonhuman nature.

However, nature writing has largely been a literature focused on areas outside of the city. Arnold et al. (1999) surveyed the field of ecocritical study and literature written about the environment not long after ecocriticism began to gain traction in the 1990s. At the time, they identified three areas that they felt needed further discussion: urban nature writing; a focus on a wider range of texts including fiction; and expanding the focus to include texts and ecocritics outside Euro-America (Arnold et al., 1999). A more recent study (Bracke, 2013) found that, despite this call for expansion in 1999, urban areas in ecocritical and nature writing remain largely unexplored and require further consideration.

Two publications that have sought to expand nature writing are *The New Nature Writing* (Cowley, 2008) and Terrell Dixon's *City Wilds* (2002). Both anthologies address some of the issues raised in Arnold et al.'s 'Forum on Literatures of the Environment'. Cowley

(2008, p. 10) describes traditional nature writing as romantic, pastoral wanderings, while stating that 'new nature writing' approaches nature in unorthodox and experimental ways. All the articles published as part of *The New Nature Writing* (2008) anthology are first-person narratives, giving the writer's voice a privileged presence within the texts and highlighting a subjective experience of 'nature'. Many pieces are autobiographical or creative non-fiction in style – approaches that have become fashionable and somewhat dominant in nature writing. However, other ways of writing about nature were included: graphic fiction, poetry, photographic memoir, and fiction.

The dominant use of the first-person essay in nature writing comes partly from the tradition of writing natural histories. Thomas Lyon (2001, p. 20) describes the nature essay as having three main dimensions: 'natural history information, personal responses to nature, and philosophical interpretations of nature'. The use of the subjective first-person essay allows nature writers to draw attention to human destruction, ask questions about how we live with nonhumans, and develop greater understanding of place. In addition, writers of non-fiction bear witness to place:

Mostly this literature of nature is framed by the authors' own experience of geography. Without a personal presence nothing may be witnessed. But when the writing is good, the work, you feel, is not really *about* the author. It is about a place – and its meaning for one writer. (Tredinnick, 2003, p. 33)

This bearing witness has allowed for a cross-checking of information. As Don Scheese (2002) argues, the non-fiction writer can't hide in speculation, but must locate the narrative in place to confirm or correct knowledge. This form of writing has played an important part in developing understandings of nature, but fiction can also contribute to knowledge of nature–culture relationships. The ability of fiction to abstract and simulate complex social and ecological phenomena means it offers a way to examine problems, test out solutions, and construct experiences for readers that pay attention to unexamined realities.

One important goal for nature writing is recognised by Lydia Peelle (qtd. in Cowley, 2008, p. 12). She stresses the need for nature writers to connect with nature in ways that go beyond scientific objectivity and observation:

The new nature writing ... has got to be couched in stories – whether fiction or non-fiction – where we as humans are present. Not only as observers, but as intrinsic elements. In my thinking, it is the tradition of the false notion of separation that has caused us so many problems and led to so much environmental degradation. I believe that it is our great challenge in the twenty-first century to remake the connection.

Here, Peelle raises the importance of exploring nature in urban environments as well as rural and wild places. The separation of nature and culture can be seen most prominently in the tradition of nature writing, where nature has often been discussed away from highly built-up areas. Gina Mercer argues that successful new nature writing places people back into the environment:

It is writing which shows a passionate consciousness of our belonging to, and interaction with, the natural world. This kind of writing doesn't separate human from animal, it shows a deep understanding of the fact that we too are 'just' animals with all the implications of that in terms of how we live on the planet. These writers, when they speak of 'water issues' don't think of that as an external problem to be solved by bureaucrats on planning committees. These writers profoundly remember that our bodies are composed of 70% water, so if the planet has 'water issues' then that is an issue for every individual – we can't split ourselves off from it and treat it as remote and somehow separate. (Mercer, 2011, n. pag.)

This reconception of nature writing shows that it is possible to include fictional and non-fictional narratives about urban, rural, and wild places. Therefore, nature writing might be defined not as a proscribed form, but rather through its express goals to understand and connect with the nonhuman through writing.

The second anthology of new nature writing, City Wilds, directly addresses the need for an urban nature writing. Dixon (2002, pp. xii–xiii) says that while those who live in the city may foster a concern for rural and wild landscapes, often the nature of the city itself is ignored. Environmental destruction within cities has become commonplace, allowing cities to expand and progress at the expense of nature. In choosing pieces for the City Wilds anthology, Dixon

(2002, p. xvi) suggests that he was more concerned with the way writers engaged with urban nature than any particular style. Urban nature has been given prominence in these stories rather than being reserved for setting, background, or a point of casual reference. A range of creative non-fiction as well as fictional pieces are included, with care taken to incorporate pieces from writers of various nationalities and backgrounds, and stories featuring a wide variety of places.

Dixon (2002, p. xvi) observes that fiction is important to understandings of urban nature, as it provides diversity in styles and ideologies and allows for a wider scope of imaginative freedom. Literature can serve to 'transcend and undermine the frameworks posed by dry scientific or cultural theory, expressing and testing inherent tensions and contradictions within a de-pragmatised discourse' (Schliephake, 2015, p. 199). Multiple truths merge in fiction, and the authority of knowing or understanding nature can be questioned. This is partly because fiction can be explicit about the construction of nature. Annette Kolodny argues that 'the final written account is inevitably partial and contrived, a shaping and reshaping of whatever the actual raw experience might have been' (qtd. in Dobrin & Keller, 2012, p. 9). Even in non-fiction, the written performance of place is a reshaping; however, fiction makes this process more obvious with the added dimension of imagining other ways of being. Schliephake (2015, p. 205) argues that 'literature itself can be seen as a mode of ecological thinking, where disciplinary gaps are transcended and alternative visions of living with and in an environment that encompasses both the human and non-human can be explored'. Nature writing reconsiders a dynamic and agential world in which humans are also remade, enriched, and resituated in an ecological community (Kelly, 2011, p. 6; Plumwood, 2009, p. 119).

One story in the City Wilds anthology that demonstrates how a fiction writer may successfully discuss the complexity of urban nature is 'Bottles of Beaujolais' by David Wong Louie, described in Dixon's introduction as a 'complex environmental fable' (p. 47). The unnamed protagonist is responsible for an otter, which has been displaced from his natural environment and housed in the shop window of a sashimi bar. The otter, called Mushimono, has been placed within an environment created to mimic his home, complete with a faux natural climate that the protagonist generates. At the beginning of the story, the complicated processes of nature have

been mastered, scientifically explained, and re-created. By the end, however, the protagonist and his love interest Peg/Luna find the artificial climate lacking. While on a date, the protagonist attempts to transform Mushimono's tank from a night in the middle of winter into a summer's day only to find the climate outside imposing. This attempt to create an artificial version of the environment only to find it lacking is mirrored when the protagonist and Peg/Luna make wine. The protagonist had earlier cut his hand while preparing sushi and he and his date decide to mix his blood with saki (sake) in an attempt to make something resembling red wine. However, something goes wrong in the process and the protagonist finds the wine transformed:

I picked up the bowl and was horrified by what I saw. The contents had been retranslated by the suns. The blood had coagulated into a cinnamon crust, sealing in the saki underneath. (Louie, qtd. in Dixon, 2002, p. 58)

So, the wine, which at first appears to be just like Beaujolais, is revealed to be a kind of monstrous creation lacking the essential qualities of real wine. The story suggests that the real Beaujolais wine captures something of the *terroir* in which it was made, an inherent component that cannot be manufactured. The characters often refer to Beaujolais as the wine of summer. The image of Édouard Manet's painting *Le Déjeuner sur l'herbe* is used to represent the symbolic importance of the wine, invoking images of summer holidays, picnics in the grass, and the French countryside. The protagonist and Peg/Luna find they are unable to re-create either the wine or the French summer and at the end of the story they retreat outside with Mushimono, into the real nature of the city:

'Central Park,' I told the cabbie. 'To the lake where you rent those boats in the summer, you know, where the ducks live'. ... The cab swerved uptown. Snow kept falling. It covered the city, softening edges, blurring lines. But I had never seen things any clearer than I did that night. Blizzard-force gusts made our journey difficult. I told the cabbie not to rush. We could not outrace the storm. There would be snow, plenty of snow. I knew by daybreak the snow would turn to rain and by noon it would all be forgotten. (Louie, qtd. in Dixon, 2002, p. 60)

Realising that the created environment in Mushimono's tank is missing the essential character of the real place, the protagonist takes the otter back to the park. This story captures the complexity of living in the city, a place where natural and cultural entities engage, co-operate, and come into conflict. Louie reminds us that nature is ever-present in our cities. However, his story can also be read as a cautionary tale that questions the ability of humans to control and reproduce nature through technology.

Fiction writers do not just represent nonhuman nature but are capable of reimagining cities and natural/cultural relationships. By broadening the nature writing genre, as Cowley suggests, writers can more freely examine urban nature and extend understandings. The inclusion of fiction in a broader genre of nature writing means multiple forms may be held up together, as parts of an ongoing conversation. By drawing on multiple disciplines and engaging multiple perspectives in texts, nature writing can serve to question traditional notions and authorities of knowing. While writers have explored ecological problems and understandings of nature in literature before, often these contributions can be missed, as Tim Winton suggests:

Literature has been quarantined from other disciplines for so long. My suspicion is that my public work as an activist has alerted some critics and scholars to the role of the environment in my fiction, but very few saw that strand of thought in the work itself until very recently. (qtd. in Vidussi, 2014, p. 118)

The increased interest in relationships between nature and literature has no doubt also brought to readers, writers, and scholars a new awareness of how writing can and does engage with place. Examining fictional narratives within the broader context of nature writing provides a space to consider how this body of work broadens public awareness of environmental issues and how it might encourage care for the nonhuman.

Place and space

To write about cities as places, it is necessary to discuss the complexities of the term 'place' and the associated term 'space'. Lawrence Buell (2005) defines place by its contrast with space. In an

effort to address the privileged position that space has been given in dichotomous thinking, Buell theorises place as being value-laden, while space becomes the empty counterpart (2005, pp. 64–65). Place, Buell argues, is what we attach ourselves to and imbue with cultural significance. Our memories and histories are written onto place, not space. In contrast, space is described as an abstract concept, empty of both physicality and meaning (Buell, 2005, pp. 64–65). But this way of thinking could easily lead to an inversion of the Western dichotomy of space/place, where place would simply become more valued than space.

For this reason, de Certeau's (1984) theory of place makes an important contribution to the discussion. For de Certeau (1984, pp. 91–110), the distinction between place and space is an issue of movement. Place concerns the arrangement of entities distributed in an area and the coexisting relationships formed by their configurations. There is an implied stability to place. Space, de Certeau (1984, p. 98) writes, is an acting out of places. The movement of entities within an area feels out direction, speed, and time variables that create space.

For Doreen Massey (2005), de Certeau doesn't push the concepts of place and space far enough. Both space and place are ever changing. For Massey (2005, p. 130), space is characterised by the simultaneity of intersecting trajectories while places are events – collections of stories in a particular location and at a particular point in time. Massey's conception of place and space supports an idea of nature as a series of processes, situated in spatial but also temporal experience. This is important for understanding cities as places: 'Rather than bounded spaces, cities are best seen as "polyrhythmic" assemblages composed of multiple networks stretched across space and time in which humans and nonhumans are inextricably entangled' (Braun, 2005, p. 644). Braun's sense of cities as spatio-temporal networks mirrors Massey's concept of meeting trajectories.

Movement is central to Massey's conception of place and space. Place requires a recognition that even geographies change over time as continents rise and fall, as well as inch towards or away from other land masses (Massey, 2005, p. 57). The stability and even location of place is brought into question. Massey (2005, p. 57) argues that this constant movement means that places are invariably always moving on, as humans and cultures are always in motion. As Sidney Dobrin and Christopher Keller (2012, p. 2) argue, 'Places are not static, reified

things but instead are open-ended, contradictory processes'. So, the places we remember are not the same places to which we return. In this sense, we are always interacting with places in flux, as multiple entities affect and are affected by these relationships.

Reconfiguring the ideas of place and space also has implications for how we write about environments and nonhuman others. Springgay and Truman (2017, p. 18) argue that 'if space is open and place cannot be assigned a prior location, then we need different ways to articulate place-making'. A recognition of the changing liveliness of place might be represented in writing through the language that is used to describe these entities. As Kimmerer (2013, p. 55) discovers by learning her Indigenous language, Potawatomi, the way places are spoken about impacts the way we understand those places and nonhuman others:

A bay is a noun only if water is *dead*. When bay is a noun, it is defined by humans, trapped between its shores and contained by the word ... 'To be a bay' holds the wonder that, for this moment, the living water has decided to shelter itself between these shores, conversing with cedar roots and a flock of baby mergansers.

By reimagining place as an event and recognising the fluidity of environments, narratives might embody the more-than-human nature of the city and recognise the urban as a multispecies assemblage. Nature is given agency as the trajectories of humans and nonhumans are taken into account and brought into relation. This way of thinking about space and place gives them equal importance and provides a more embodied sense of these concepts. By refocusing on movement and spatio-temporal experience as opposed to cultural significance, both natural processes and cultural practices (including attributing value to place) are included in notions of place and space.

Terroir

Terroir can be used to reimagine places in more embodied ways. As with the term 'landscape', terroir describes the human use of the land but emphasises the physicality of the human in place rather than the conceptual abstraction of the human as suggested in the term landscape, as I will demonstrate. 'Landscape' is one of the concepts

that has powerfully shaped Western ideas and attitudes towards nature. In the Western cultural tradition, the term 'landscape' was used to describe a style of painting, formed during the Romantic Movement, which depicted rural and wild places - both real and imagined (Buell, 2005, p. 142). Romantic notions of landscape allow a cultural framing of the natural world, both literally and conceptually - literally in that particular scenes of nature were constructed to fit within a frame (as a view from a window or a painting) and conceptually as this allowed for particular cultural understandings of nature to emerge that related to notions of order, symmetry, harmony, and composition (Adam, 1998; Soper, 1995). The notion of landscape was also connected with the sculpting of physical land, which was often seen as an 'improvement' of nature and sought to present an Edenic wilderness that was aesthetically pleasing, tidy, and suggestive of an original or pure nature as presented in the Garden of Eden narrative (Merchant, 2003, p. 118). These notions of landscape were entrenched in much nature writing of the period and continue to influence current notions of nature/place (Buell, 2005). However, the Romantic Movement was also a response to the exploitation of natural resources and loss of untamed nature in an age of technological innovation (Adam, 1998, p. 27). Soper (1995, p. 25) argues that 'untamed nature begins to figure as a positive and redemptive power only at the point where human mastery over its forces is extensive enough to be experienced as itself a source of danger and alienation'.

Similarly, the current environmental crisis can be seen as a driving force for new fields, such as ecocriticism, to emerge. However, many ecocritics and other contemporary academics who research nature-culture relationships see this idea of 'nature as a redemptive force' as problematic, because it suggests that a pristine nature exists and can provide a solution to cultural problems (Arnold et al., 1999, pp. 1097–98; Ross, 1993, p. 111). Instead, ecocriticism seeks to learn from flaws in previous environmental movements with a view to addressing dualisms such as nature/culture, urban/rural, and body/mind (Soper, 1995). Jonathan Levin (in Arnold et al., 1999, p. 1098) suggests that rather than choosing between nature and culture, ecocritics should focus on how the human fits into and impacts this natural/cultural world. As a result of ecocriticism's renegotiation of nature-culture relationships, contemporary use of the term 'landscape' is no longer limited to the descriptions of wild or

aesthetically pleasing areas, but can be applied to rural and urban areas, places that aren't necessarily aesthetically pleasing and places where views may be obscured as well as panoramic (Buell, 2005, p. 142).

Terroir is a complex term used to describe the distinctive relationships between cultural and natural elements as they exist within each particular area. Each region or terroir is seen as having a unique set of characteristics, including its climate, soil composition, topology, cultural and agricultural practices, and people (Gade, 2004, p. 849). According to appellation laws and policies, these unique arrangements are able to produce unique products. Timothy Tomasik (2001, pp. 523-24) argues that as well as being used in reference to particular wines or cheese, terroir is also used to describe a person's accent or a localised turn of phrase. However, there are some aspects of this term that need to be addressed also. As Dolan (2020) shows, the term terroir emerged out of early modern practices of winegrowing in Europe when the word 'race' was used interchangeably with the new term terroir and described the characteristics of wine that linked it to a particular place and time. This association between race and terroir has led to several problematic aspects, including ethnocentric ideas about who and what belongs in place. This is reinforced by the protectionist practices of enclosure and private ownership that are meant to 'protect' the terroir. However, Dolan (2020) demonstrates the ways that products such as wine produced in one place continue to change through the manufacturing and improving processes as additives are mixed in, as well as over the life of wine as it begins to deteriorate or be made into other products. In addition, the complexity of growing crops like grapes through grafting vines onto disease-resistant root stock, the mixing of soil with manure and compost, and the migration of humans and nonhumans as well as climate change all work to question the 'purity' of place. Therefore, Dolan (2020) cautions that terroir should not be thought of as a stable condition but as something that changes over time as plants, humans, and other animals are introduced to places, and as soils are changed through the processes of industrialisation, migration, and climate change.

I introduce the term *terroir* here not in order to evaluate its usefulness as a geographical tool; instead, I borrow it from its original context in an attempt to unsettle the idea of landscape and reimagine it as an inclusion of natural and cultural entities. While this borrowing may have been seen by de Certeau as a 'poaching'

(displacing) of the term, as Tomasik (2001, pp. 521–22) argues, there is no appropriate word in the English language that sufficiently parallels its meaning and so the use of the French word is necessary. Tomasik (2001, p. 540) also borrows the word in his translation of de Certeau's work, reasoning that 'poaching' might also be a means of making something 'digestible' for the reader.

Applying the term *terroir* to the land through a posthumanist lens, allows the word to take on specific meanings. *Terroir* becomes a relational concept that describes how humans, nonhumans, and matters engage with each other in a particular time and location so that locales come to be seen as embodied by both natural and cultural elements. This makes *terroir* a particularly useful concept for writing posthumanist narratives about place/nature. With *terroir*, the focus is shifted from the Romantic figure gazing upon the land from the outside to a person who is an active part of the cultural and natural processes that shape places. As writers set out to experience and then construct place within a text, it would become possible to imagine and engage with nonhuman nature in relational and embodied ways (Bayes, 2014, pp. 5–6).

Landscape is often evoked in writings that discuss nature. Both John Wylie (2010) and Barry Lopez (1989) explore ways of writing about landscape by addressing the separation between inner self and outer landscape, an issue linked to the disembodied gaze that underlies conceptions of landscape. Wylie attempts to address this separation by using personal narrative, drawing on Jean-Luc Nancy's theory of estrangement and Irish writer Tim Robinson's poetry. Wylie critiques the position of phenomenology in discussions of landscape and addresses notions of estrangement and 'uncanny' experience as a counterpoint. He uses personal narrative as a point of entry to this debate though admits his lack of knowledge in literary matters:

Down on the beach I didn't know which way to look, at this or that aspect of the scene, at small things close to hand, or out into the middle distances – out over the sea, for example, whose entire surface was glowing salmon pink and mercury silver, a sight the like of which I had never seen before. (Wylie, 2010, p. 52)

These reflections of his experiences enter into Romantic conceptions of landscape, using only visual descriptions of nonhuman nature, and

positioning Wylie as 'other'. He discusses this dual struggle (both personal and academic) in forming a phenomenological connection with his surroundings, a 'being-within-the-world' (Wylie, 2010, p. 46).

Wylie's sense of ambiguous distance from his surroundings may stem from his own conception of landscape as an entity to be gazed upon by either a 'domestic' and 'rooted dweller' or 'nomadic' traveller. He resolves this struggle between inside and outside, belonging and estrangement by positioning himself between the two. He concludes that writing about landscape is writing as a form of absence even while being in the midst of landscape. For Wylie, even the dweller whom he views as an insider is 'other' to the landscape, so the separation between nature and culture remains unresolved and unresolvable here. I use this work as a reference point to show that in contemporary Western thought, the concept of landscape still resonates with eighteenth-century conceptions that separate nonhuman nature and human culture.

By contrast, Buell (2005) critiques the work of deep ecologists and phenomenologists, such as Martin Heidegger, who believe that a concern for nonhuman nature is better addressed through the practice of 'dwelling'. With reference to Heidegger, Buell (2005, pp. 63–71) suggests that to 'dwell' is to form an intimate attachment to a single region. A distinction must, of course, be drawn between these phenomenological meanings and alternative contemporary uses, where the term 'dwell' might be employed to describe the attachments formed with multiple places by those living or working in them – however momentarily. Buell (2005, p. 69) also disagrees with the practice of regionalism implied by the notion of phenomenological dwelling, arguing that writers who travel, such as Lopez, are able to exercise as much concern for nonhuman nature as those who dwell.

What links the work of Wylie and Lopez is their participation in travel and the response this generates to notions of *inside* and *outside*. Ideas of travel are negotiated differently by Wylie and Lopez: Wylie (2010, pp. 50–51) embarks on a journey to a place near his childhood home, calling himself a tourist and suggesting the landscape to be 'inaccessible' to those who do not dwell there; Lopez (1989, pp. 87–92), rather than consigning himself to the role of outsider, finds ways of connecting with place through narrative. The potential of travel, as conceived by Lopez, is a way of narrating landscapes

through movement, unsettling place, creating space, and allowing an interaction with nature and culture.

Lopez (1989, p. 89) uses travel and personal narrative in an attempt to reimagine how self and landscape might connect. He describes two landscapes, the inner landscape of the self and the outer landscape of nature. This outer landscape includes both the sight and the sensorial experience of the land. He writes about these experiences in terms of the relationships that exist between the human and the natural/cultural elements of a particular place. The inner landscape is a projection of the outer landscape, but within a person (Lopez 1989, p. 89). In this way, Lopez believes that the places in which we live and those we travel through become part of us, influencing our understandings of the relationships that exist in the landscape and our attitudes towards nature and culture. This view of landscape evokes ideas of embodied experience that parallel the notion of terroir.

Lopez (1989) also addresses the conflict between factual accounts in the naturalist tradition and fictional accounts of nature. He dismisses the idea that one form of writing may be a better representation of nature or better at advocating connections between nature and culture. Instead, he describes the difference not between fact and fiction, but between 'authentic' and 'inauthentic' stories (Lopez, 1989, p. 93). He describes an authentic story as being able to accurately capture the relationships present within the landscape while maintaining that an inauthentic narrative denies these relationships (Lopez, 1989, p. 93). While the idea of authenticity is problematic, Lopez's considerations open up possibilities for other ways of writing about nature.

Country

Early Australian writing reflected some of the colonial ideas about Australian nature, often associated with resilience and endurance in difficult circumstances, but also reinforced the concept of terra nullius, the empty country. Some contemporary Australian writing still tends to reflect a sublime and sometimes Romantic idea of nature – that it is awe-inspiring, but also dangerous. Despite this, Australian writing has the potential to contribute new perspectives to international debates about nature writing and

ecocriticism, an area often dominated by American and European voices. Not only can Australian writing add to a growing body of work that questions ideas of wilderness and landscape, but the Australian context is a useful place to think about the renegotiation of relationships between people and place. Australian nature doesn't always allow us to stand back and gaze upon it in the Romantic tradition - especially in places like Queensland, where nature can be intrusive. Bats occupy residential neighbourhoods and propagate palm trees by digesting and depositing seeds, birds attack or steal people's food, and fast-growing vegetation can engulf neglected structures very quickly. This disturbs the Romantic gaze and forces people into sometimes unwanted, yet embodied relationships with nature. Meanwhile, consideration of the long-standing connections between the First Nations communities and country can disrupt ideas of wild, pristine, or untouched nature and interrogate ideas of nature, culture, and the place of humans.

I attend to considerations of postcolonialism since it is important to address these implications for writing in and about Australia. In this book, I use the term 'First Nations people/s' to refer to the diversity of Aboriginal and Torres Strait Islander groups that live across the Australian continent except where certain authors prefer another term. Terms such as 'Indigenous' and 'Aboriginal' are considered offensive by some groups since they originated in the colonial period and homogenise more than 300 separate cultural and language groups in Australia (Peters & Mica, 2017; Martin, 2017; Smith, 2021, pp. 6–7). However, global Indigenous rights movements draw together many groups in order to encourage policy and legal and social reform and many groups have had to fight to be recognised as part of these movements (Smith, 2021). In addition, some First Nations people self-identify as Black, Indigenous, or Aboriginal and so I try to use the preferred terms where appropriate. For example, 'Indigenous' is by far the most common term used in the research field of Indigenous studies and is used to describe Indigenous knowledges and Indigenous research methods. When referring to specific groups, I use the preferred nation, group, tribe, or language name. However, when referring to global-wide peoples who were the original inhabitants of the land on which they live and who are now marginalised, I use the term 'Indigenous peoples', with a capital 'I', but when referring to indigeneity in general terms I use a lower-case 'i' (Smith, 2021).

For First Nations people, country is never empty, but rather 'alive with cultural presence' (Salleh, 1997, p. 120). The notion of wilderness, like terra nullius, denies the presence of First Nations people in country and reinforces the separation of nature from culture. This denial of the presence of First Nations people has led to violence, dispossession of people from their land, and the denial of cultural participation (Kelly, 2011; Salleh, 1997). The exclusion of First Nations people from the development of cities and a long-held denial of First Nations land ownership in Australia has also meant an exclusion of the cultural knowledge which resides in the land on which cities are built (Giblett, 2011). Noelene Kelly (2011) argues that writers must at least acknowledge the Indigenous history of countries within their work:

For settler Australians, representing the land from a position of knowledge and intimacy in the way that nature writing requires, is clearly problematised when that same land is the site of Indigenous dispossession and ongoing regimes of violence, social marginalisation and economic disadvantage. (Kelly, 2011, p. 3)

By acknowledging this history, nature writers can work to disrupt narratives of terra nullius and at the same time contribute to understandings of people and place. Nature writing can also serve to deepen settler relationships with land by developing identification with and a sense of belonging to place: 'In Australia, where the land has for millennia been invoked through poetic address, been known and communed with through visceral and embodied interaction, nature writing is potentially one access point for settlers seeking a similar communicative exchange' (Kelly, 2011, p. 9). It is important to note that Kelly is not suggesting that settlers can have the same relationship with the land as First Nations people, but rather that poetics can allow a greater understanding of and connection with place, and ultimately lead to less-damaging relationships with the land. As Kimmerer (2013) argues, we are all indigenous to somewhere and being indigenous means cultivating a reciprocal relationship to the land. Concepts such as country and terroir can be used to renegotiate ideas of landscape in fiction, and construct narratives that are sensitive to both cultural and natural changes in urban environments.

The Anthropocene

The term 'Anthropocene' has been suggested to describe the contemporary geologic age in which human activities have profoundly impacted environments, and can be seen in the geologic layer as materials such as plastics and traces of climactic change and other pollutants accumulate. While this term can help to describe this moment in history of particularly destructive human action, it also reinforces the separation of human and nonhuman by building on imaginaries related to the ravaged Mother Earth trope. As Bezan argues:

While the ravaged mother-earth trope is familiar, this figurative construction reinforces a heteronormative logic that construes nature as a body subject to violation. The framing of this problem has been set: it has been well-established that the initial constitution of the scientific board responsible for coining the term 'Anthropocene' was largely composed of male scientists. (Bezan, 2021, p. 77)

In addition to considerations about the gendered nature of this imaginary, it also reinscribes dominant Western relationships with the nonhuman:

Locally informed responses to global environmental crises cannot be constructed without first deconstructing the universalist and Eurocentric framing of the Anthropocene that often sidesteps questions of race, colonialism, and slavery and blunts the distinctions between 'people, nations, and collectives' whose experiences of human–environmental relations have developed differently. (Zong, 2020, p. 105)

Kimmerer explains this further:

It is, of course, undeniable that the human species has caused great disruption – indeed, of geologic proportion. But to declare the Age of the Anthropocene smacks of the terrible arrogance that got us into this predicament ... It is a fatal error to think that we are in charge; the instructive myths of most every culture hold that lesson. If we don't remember that, I'm sure that the

viruses will be happy to remind us. I don't believe that we are entering the Anthropocene, but that we are living in a transient period of profoundly painful error and correction on our way to a humbler consideration of ourselves. In the geologic scope of things, the Industrial Revolution that fueled the expansion of the exploitative, mechanistic worldview was only an eye blink ago. For eons before that, there was a long time on this planet when humans lived well, in relative homeostasis with biotic processes, embodying a worldview of reciprocity that was simultaneously material and spiritual. There was a time when we considered ourselves the 'younger brothers of creation,' not the masters of the universe. (Kimmerer, 2014, p. 23)

The Anthropocene is not yet an officially recognised age in geology, but it is often used as shorthand to refer to the many current destructive human forces that are shaping the world, including fossil fuel emissions, increased consumption and waste, plastic and chemical pollution, and the sixth great extinction event. However, by placing humans at the centre of our geologic age, this term reinforces anthropocentric notions of our relationship to others. Several other terms have therefore been suggested to decentre the human while still being able to describe this time of destruction, including the Capitalocene, Plantationocene, the Symbiocene, and the Chthulucene. Each of these terms seeks to address some of the concerns with the original term. Capitalocene was suggested to highlight the ways in which capitalism as a social structure has largely been responsible for supporting this environmental destruction and places the start of this in the fifteenth century with the rise of European colonialism (Turner, 2021). Closely related to this, the Plantationocene seeks to acknowledge the many ways by which race has played a role in environmental destruction:

Plantation worlds, both past and present, offer a powerful reminder that environmental problems cannot be decoupled from histories of colonialism, capitalism, and racism that have made some human beings more vulnerable than others to warming temperatures, rising seas, toxic exposures, and land dispossession occurring across the globe. (Moore et al., 2019)

These two terms seek to describe the current condition through damaging pasts. However, Haraway (2015) argues that we also need

terms that capture possible futures. Albrecht (2020) coined the term Symbiocene to counter the phenomenon he terms solastalgia – the feeling of environmental displacement that comes with the destruction of ecology and country. According to Albrecht:

The Symbiocene provides a vision of a desirable future state toward which social change can be directed. Without a meme that gives generously of optimism, no current generation will be able to simultaneously critique the status quo and be in the vanguard of change toward that desirable future. I have defined the Symbiocene as: a period in the history of humanity on this Earth, [which] will be characterized by human intelligence and praxis that replicate the symbiotic and mutually reinforcing life-reproducing forms and processes found in living systems. This period of human existence will be a positive affirmation of life, and it offers the possibility of the complete re-integration of the human body, psyche and culture with the rest of life. The path to avoiding yet more solastalgia, and other negative psychoterratic Earth emotions that damage the psyche, must take us into the Symbiocene. (Albrecht, 2020, pp. 21–22)

In addition, Haraway's term Chthulucene, that at first seems to be a feminist and posthumanist (or compost-ist) version of H.P. Lovecraft's Cthulhu, is instead named 'after the diverse earth-wide tentacular powers and forces and collected things' which 'entangles myriad temporalities and spatialities and myriad intraactive entities-in-assemblages – including the more-than-human, other-than-human, inhuman, and human-as humus' (Haraway, 2015, p. 160). While the Capitalocene and Plantationocene seek to highlight human destruction, the terms Symbiocene and Chthulucene seek to reimagine the current epoch in ways that decentre the human and remind us that, despite the human impact on the world, humans are part of a much bigger system of physical but also cultural and emotional relationships with human and nonhuman others, ecological materialities, and environmental phenomena.

In writing this chapter, I find myself continually directed towards movement in response to the failure of stasis. A recognition of the fluidity of environments allows texts to become more inclusive of human culture and nonhuman nature. This book sets out to question the way we think, write, and live with place and the

nonhuman to arrive at a conception of urban nature that is flexible, reflecting complex relationships as opposed to simplified representations, and avoiding stasis. In some circumstances, current terms might be reconceptualised in order to address these concerns, while in others the use of new terms and new ways of representing the nonhuman through language is necessary. Terms such as 'space', 'place', and 'nature' might be reconceptualised in posthumanist ways that account for the fluidity of physical places, since these terms are already flexible in their meanings and therefore allow for new ways of applying them to more-than-human contexts. In particular, a reframing of the term 'nature' through a critical posthumanist lens enables a rethinking of the language used to describe the nonhuman. The terms 'more-than-human', 'nonhuman', and 'companion species' clarify what 'nature' is being discussed and recognise that humans and nonhumans exist in complex and entangled ways in urban spaces. Nonhuman entities such as bodies of water and land formations might also be described using 'to be' verbs rather than nouns, in recognition of the ways these entities are continually changing. This further emphasises the agency of nonhuman others. However, in the case of terms such as 'landscape' and 'wilderness', which are associated with unpeopled places and therefore continue to reinforce the separation of human and nonhuman, nature and culture, and nature and the urban, new terms with new associations might be used in their place. The term *terroir* describes a more embodied sense of place, while the term 'country' replaces the human and recognises that humans have always been embedded in particular places, times, and ecosystems. What links all of these theoretical and semantic considerations is a recognition of the agency of the nonhuman and the vibrancy of matter. In the following chapters, I will take up these considerations through the investigation of particular urban places and their literary representations, as well as how writers, researchers, and activists might work to reconsider the ways in which these places are represented through written narrative.

CHAPTER TWO

Writers who venture Posthuman methodologies

This chapter examines embodied research methods, and the ways writers can use embodied methods to explore human-nonhuman relationships in their texts. The role of walking in the writing process has been well documented from Thoreau's rural wanderings to Benjamin's urban *flâneur*. However, writers employ a range of embodied methods - including gardening, surfing, and swimming in addition to walking, which allow them to engage with ecologies and nonhuman others as part of the writing process. I examine these activities as critical methods for writing practice as well as providing some insights from authors about what impact these activities have on the resulting texts. If these methods are employed with a critical posthuman lens as part of the writing process, there is potential for the resulting narratives to create new environmental imaginaries of the city. In addition, fields beyond the arts, such as geography and urban studies, have embraced arts-based practices in recent years as a research method to study place and I will touch on some of the broader applications of writing as praxis in place-based study.

This chapter seeks to question the binary set up between theory and practice by drawing on the concepts of situated knowledges and lived experience with reference to Estelle Barrett (2007) and Donna Haraway (1988, 1991), concepts that extend ideas from phenomenology as conceived by Maurice Merleau-Ponty (2012), but are also influenced by feminist, queer, and Indigenous traditions. Situated knowledges allow engagement between theoretical and creative inquiry, and result in a more complex understanding of the creative practice–research relationship (Barrett, 2007). In the Western tradition, embodied writing methods have often been underpinned

by phenomenological understandings of knowledge. However, I will trouble this tradition by considering the mixed heritage of situated knowledge. Phenomenology is further complicated by Michel Serres's (2008) critique of the way language has been privileged over embodied experience, as well as Astrida Neimanis's (2016, 2017) posthuman phenomenology and Louise Westling's (2011) ecophenomenology – all of which have led to contemporary shifts in ecological inquiry.

Producing new writing from a posthumanist lens might be considered a creative practice born out of conceptual work, which along with research scholarship is able to extend ideas of what it means to be human in the contemporary world and how people might live as natural/cultural beings. This chapter explores the varied approaches writers might take to engage with place as part of their practice, and particularly to explore approaches that go beyond observation to create embodied and reciprocal relationships between writer and place (and therefore between text and place). Further, this chapter also examines new scholarship on reader empathy and engagement with ecologies in relation to the sociological concept of environmental imaginaries, and neuroscientific investigations on how abstract ideas and literary fiction impact readers' understandings of and actions towards real-world beings and matters, as well as Alexa Weik von Mossner's work on ecocritical affect theory and Erin James's work on econarratology.

Embodied writing practices

I begin this chapter with a discussion of situated knowledges before discussing the more specific phenomenology of practice in the next section. Although phenomenology has had an important influence on Western thinking and writing practices in relation to explorations of places, bodies, and knowledge, it is not the only philosophy that situates knowledge relationally in or through the body. Phenomenology has undoubtedly influenced thinking about the production of knowledge that has led philosophers such as Merleau-Ponty (2012) and Serres (2008) to adopt a less anthropocentric method for knowledge construction, but many feminist, queer, and Indigenous traditions also have ontologies that are conducive to situated knowledges that exist beyond phenomenology. This is clear from the work of scholars such as Deborah Bird Rose,

who shows that the concept of situated knowledge is embedded in First Nations thinking:

Rather than humans deciding autonomously to act in the world, humans are called into action by the world. The result is that country, or nature, far from being an object to be acted upon, is a selforganising system that brings people and other living things into being, into action, into sentience itself. The connections between and among living things are the basis for how ecosystems are understood to work, and thus constitute Law in the metaphysical sense of the given conditions of the created world. (Rose, 2005, p. 303)

According to Aileen Moreton-Robinson (2000, p. xxii), methodological reform involves critiquing an 'epistemological foundationalism' that privileges and values white, Western, middle-class perspectives and an acknowledgement that 'all knowledge is situated and therefore partial'. In addition, Neimanis (2017) argues that notions of embodied knowledge as conceived by phenomenology and new materialism were never 'new' methodologies, but rather constituted a return to the situated knowledges still practised by many Indigenous communities.

The historical erasure of embodied knowledges in Western thinking holds the same impetus that led to the devaluing of creative work as a way of expressing knowledge (Ghosh, 2022). Although narrative can be, and has been, used solely for entertainment in some contexts, across many societies story has been a primary way of holding and passing on knowledge. As Jones (2016, p. x) argues, 'stories reflect traditional Indigenous forms of preserving and transmitting knowledge. Their re-telling at different times by different people helps to construct and maintain a sense of shared cultural values'. The valuing of formal and impersonal modes of writing (such as scientific, or in Jones's case legal, language) over others mean narrative-based knowledge has been overlooked or, in the case of many Indigenous knowledges, appropriated by non-Indigenous researchers and turned into something more 'scientific' - in the past, this has often been without acknowledgement of the people who own the knowledge and not in accordance with community protocols, as well as often being framed in ways that misrepresent the knowledge or communities (Kwaymullina, 2016). Further, James and Morel argue that:

Thinking of narrative as a practice for living in a place likely will not come as a surprise to members of indigenous communities that have drawn on narrative epistemologies for millennia before narrative theory or ecocriticism existed. As Daniel Wildcat puts it, indigenous knowledges often consist of 'collaborations ... emergent from the nature—culture nexus'; such knowledges suggest that stories are intimately tied to the places they are told, and vice versa. (James & Morel, 2018, p. 361)

Amitav Ghosh (2022, p. 32) provides a clear example of this in his study of the Banda Islands: 'For Malukans ... as for many others who live in seismic zones, volcanoes are makers of history as well as tellers of stories'. This is in contrast to historians who depend 'primarily on written records' and therefore 'nutmegs, cloves, and volcanoes may figure in these stories, but they cannot themselves be actors in the stories that historians tell; nor can they tell stories of their own' (Ghosh, 2022, p. 32). As this example demonstrates, a dismissal of narrative modes of inquiry also overlooks how story can work to cement knowledge culturally beyond an academic audience as well as impart knowledge in ways that refigure the relationships between humans, nonhumans, and environments. Further, David Herman (qtd. in Weik von Mossner, 2017, p. 7) argues that 'scientific modes of explanation ... characterise phenomena as instances of general covering laws', but narrative modes help to 'structure our present and past experiences' and are consciously constructed to make sense of our experiences with 'time, process and change'. In this way, scientific and narrative inquiries might be considered to work together to provide a fuller picture of the ecological world. In addition, as Jones (2016) shows, storytelling can also help to construct laws that organise communities, demonstrate conventions, concepts, and rules, and tease out problems. What is important to contemporary writers, who seek to create more relational ways of writing about nature, is the experience involved in connecting with nonhuman nature and human culture (Cranston & Zeller, 2007). Jonathan Levin points out that:

Experience is always situated, in ways that no amount of theoretical reflection can transcend, and no matter how valuable that reflection may be, we should recognize the advantages (evolutionary and cultural) of living as experientially situated beings. Our bodies, our language, our sociocultural environment all shape our distinctive styles of being in the world ... The choice is not between nature and culture, as if to locate redemption either in a fuller recovery of nature from culture or in a more complete and rational application of culture to nature, but rather among different styles of dwelling in the world ... Ecocritics should aim to understand how and with what effects we are implicated, as embodied individuals and as cultural agents, in natural environments. (Levin, in Arnold et al., 1999, p. 1098)

Therefore, writing might be seen as a process of accounting for this experience of being in the world. By reimagining the way the human relates to place and recognising that embodiment is part of experience, the nature writer can begin to construct narratives that reflect these ways of being in the world – ways that allow for connections between nonhuman nature and human culture without encouraging the dominant positioning of culture.

Bringing together creative practice and knowledge in this way is variously called a practice-led approach to research and a research-led approach to creative practice. These methods allow practice and theory to be brought into relation to produce situated knowledges (Haraway, 1988). Situated knowledges arise from research that is located and requires the researcher to engage place and context in their work. Barrett also links situated knowledges with creative research and explains how a practice-based approach makes a significant contribution to established knowledges:

An innovative dimension of this subjective approach to research lies in its capacity to bring into view particularities of lived experience that reflect alternative realities that are either marginalised or not yet recognised in established theory and practice. A recognition that objectivity can only be partial calls for re-admitting embodied vision and positioning in research. Embodied vision involves seeing something from somewhere. It links experience, practice and theory to produce situated knowledges, knowledges that operates *in relation* to established knowledges and thus has the capacity to extend or alter what is known. (Barrett, 2007, p. 145)

As Barrett suggests, situated knowledges also re-evaluate and test established knowledges. Springgay and Truman (2017, p. 2) call this

process research-creation to emphasise the 'intersection of art, theory and science', which they describe as 'engendering "concepts in-the-making", which is a process of "thinking-with and across techniques of creative practice". The idea of *thinking-with* creative practice is helpful for creative writing practitioners who seek to approach narrative-making as a process of knowledge creation. We might consider the way that bodily experience is embedded in the text, but also how the text is influenced by those material and nonhuman others that impact the narrative. A conscious practice of testing and re-evaluating knowledge through posthumanist engagements with place might therefore be used to develop creative texts that extend thought about human—nonhuman relationships.

In recent years 'non-representational' and arts-based methods have also been embraced in fields such as geography, urban studies, and climate change studies as a way to relate conceptual ideas with experiences and emotions. For example, Hawkins (2015) explores the potential of what she calls 'art-full' approaches to geography that include visual arts as well as creative writing. In addition to prose which this book largely focuses on, other creative writing forms such as poetry and lyric are being used to engage complex experiences and emotional responses with place. Boyd (2017) shows that poetry has been used by disciplines as varied as education, geography, and nursing since the 1980s to capture autobiographic or autoethnographic elements of practice or experience. In relation to the environment, researchers have used poetry to inform people about climate mitigation and climate adaptation (Anabaraonye et al., 2020), to address marginalised positions and experiences (Paiva, 2020), to interrogate colonial and heteronormative spaces of knowledge production (de Leeuw & Hawkins, 2017), and to refigure urban ecological imaginaries (Curtright & Bremm, 2017). According to Daniel Paiva (2020, p. 1), 'the promise of poetry in geographical research lies within the affective power of this literary form, which is helpful to express particularly emotional aspects of the spatial experience and to promote empathy across difference'. He also shows that geographers have used writing to attune to other ways of being in and experiencing place through multispecies and vegetal imaginings and argues that 'engaging with these non-human ways of inhabiting the world in geographic poetry is vital if we truly wish to engage with and express a pluriversal world' (Paiva, 2020, p. 2). However, de Leeuw and Hawkins (2017) point out that without the

skills honed through years of research-creation practice, researchers might unintentionally construct narratives (or more broadly literary and art works) that reinforce problematic ideas. They argue that 'many geographers are producing creative work and undertaking creative practices with little or no explicit reflection on or explanation of the politics of their work or the works' political implications' and that this 'can lead to white Eurocentric colonial performances of universalization and rationalism' (de Leeuw & Hawkins, 2017, p. 308). Therefore, researchers who are less practised in creative work might find it helpful to engage with the specialist knowledge of creative research practitioners either through collaboration or using an analytical framework such as ecocriticism in order to undertake this necessary reflection of their own and others' creative work.

While the situated knowledge present in nonfiction work is well accepted, there is a popular misconception that fiction writing occurs in the mind, and that imagination is wholly a process of cerebral construction (Krauth, 2010). However, as Bradley comments:

I suspect most people conceive of writing – and people who write, with a few notable exceptions – as confined to a sphere which not just excludes the physical, but which actually exists in some sort of opposition to it. In fact, the processes of writing, and of entering a space where it is possible to write, seem to me to be about a way of being which is almost seamlessly continuous with the life of the body. (Bradley, 2009, n. pag.)

Krauth (2008) also argues that the fiction writing process is embodied. He documents the ways in which writers venture out into places, engage with the world as embodied beings, and then look to their bodies to help produce the text:

Writers are hunters and gatherers in the real world; what they garner they store in their heads. Continually they pass between the real world and their stored world. This process of passing between – this weaving/merging of the inner and outer environments – creates fiction. The fiction writer exists in an ecosystem of mind, body and world. (Krauth, 2008, p. 2)

This is of relevance to writers interested in capturing the nonhuman in their texts as they must navigate between preconceptions of nonhuman nature and their physical experiences with place. An awareness of this entanglement between imaginative thought and embodied experience can help writers to evaluate their writing practices in an effort to construct more positive and embodied textual experiences with nonhuman nature.

The phenomenologist Serres (2008, p. 35) points out that writing is itself a physical act: 'The painter, with the tips of his fingers, caresses or attacks the canvas, the writer scarifies or marks the paper, leans on it, presses it, prints on it'. In coming to writing, the writer must engage with the writing materials, whether computer or paper and pen, through the act of touch. Not only is the writer's body responsible for the act of writing, but this practice is an entanglement of materials (ink and paper or computer) and bodies. Further, Krauth draws on notions of phenomenology as well as fiction writers' accounts of their creative practices in order to describe the way the writing process is embodied:

There is a sense that the writing process is located, partly or wholly, somewhere in the body beyond the brain. But exactly where is not easily identified. In the best circumstances (those of Welty and James), you ask of your body and you receive. With Greer and Bukowski, you continue to strain and the body ultimately provides. With Kerouac and West, you wait for the convulsion to happen, or find a clever way to prompt it. (Krauth, 2010, p. 4)

Here, Krauth suggests that the writing process is not just a means of imagining or constructing; there is also a physical aspect to the writing that goes beyond fingers on the keyboard. For example, in some of these anecdotes, writing is seen to come about as the result of straining the body, prompting memories stored in muscles, hands, or the nervous system, then capturing these bodily processes in writing (Krauth, 2010, pp. 3–6). Christos Tsiolkas and Fiona McGregor (2010) suggest that through performance work they came to recognise the value of bodily experience in their writing as a way to embody characters, places, or scenarios that feed into their fiction. For example, Tsiolkas (2010, p. 5) says, 'what actors taught me was that imagination is not only resident in the mind; characters and stories can also emerge from the body'. This captures how simulating stories for a reader also requires the author to first simulate that narrative through their

own experiences and body, to feel out the characters in a similar way to Stanislavsky's acting techniques that require a thoughtful consideration of how a character would inhabit a body, move, and express emotion through the body. Acknowledging that the body forms part of the process of constructing narratives means that, methodologically, the body must be allowed to take in information. John Ryan (2011, p. 47) argues that 'through the multiplicity of the senses engaged actively on the land, place is made palpable'. By becoming actively aware of how the body influences the writing process, the nature writer can enter places and engage with nonhuman nature in embodied ways and ultimately write texts that allow more mutually beneficial constructions of nature—culture relationships.

Embodied experiences are expressed through the act of writing; however, a multilayering of nature/culture occurs in the production of writing about nonhuman nature. The writer enters into a manifold (rather than linear) process of engagement, whereby their physical experiences are also shaped by preconceptions of nature - previous engagements with places, cultural assumptions, texts, and memories (Rigby, 2006, p. 1). The text then adds to readers' understandings of nonhuman nature. Therefore, the text does not just act as an expression of bodily and conceptual engagement with the world, but also presents the reader with a means of experiencing and connecting with place. As the world becomes more globalised and the individual's impact on the environment becomes less direct or obvious to them, there arises a need for writers to reframe these nature-culture relationships in an attempt to understand the human and nonhuman impact on place, and imagine less damaging ways of living with nature. This highlights the need for writers to find ways of creating texts that encourage readers to form deeper connections with the natural-cultural entities of places.

In fact, writing about the nonhuman sets up an assumption of the writer's physical participation with the world. In nature writing in particular, there is an expectation that the writer will engage and form physical connections with the natural and cultural entities of places prior to constructing a narrative. This is the case even if the places written about don't actually exist, or exist in a way that doesn't directly reflect a real place. The act of nature writing is already hybrid, a combination of 'scientific and poetic methods, intermingling facts with metaphors and feelings' (Ryan, 2011, p. 48). Ryan (2011, p. 48) suggests that nature writing situates the cultural

activities of humans biogeographically, scientifically, ethnographically, in literature, through the personal and within political or socially satirical conditions. By becoming aware of these influences, the nature writer can explore what it means to be human as a hybrid natural/cultural being. I argue that acknowledging the human as hybrid can allow the nature writer to modify oppositional dualisms by reimagining the relationships between such notions as nature and culture, mind and body, and real and constructed, to create alternative possibilities.

Ecophenomenology

Ecophenomenology draws on feminist, posthuman, and new materialist thinking to try to address the residual anthropocentrism found in phenomenological theories. As Neimanis (2016, p. 32) says, 'we need a different kind of phenomenology – one that can divest itself from some of its implied and explicit humanist commitments'. A posthuman ecophenomenology attempts to avoid the privileging of the discursive over the experiential by focusing on the way the body co-constructs knowledge through entangled relationships with others. Neimanis (2016, p. 25) suggests that there can never be a true posthuman phenomenology as phenomenology will likely always retain a residual humanism that sees the body 'as a bounded materiality and individual subjectivity, and as universally human'. Despite this, Neimanis suggests that while not applying a 'proper' phenomenology to her work, she retains the idea of phenomenology to ground the human as a situated body:

While posthumanism pulls us out of the mire of anthropocentrism, my aim in holding on to phenomenology (at least as a starting point) is to insist on our own situatedness as bodies that are also still human – insisting that without this close attunement and politics of location, a responsive ethico-politics towards other bodies ... will likely elude us. (Neimanis, 2016, pp. 25–26)

So, an ecophenomenology that draws on posthumanism would work to decentre the human while acknowledging that we still speak from a human body. As Neimanis (2016, p. 43) says, 'we can't – and I would argue we shouldn't – take ourselves out of the picture, but we

can cultivate ways of imagining our lived experience as decentred, if always transcorporeally implicated'. Louise Westling points out that humans are never a single entity coming to knowledge, but exist

in symbiosis with thousands of species of anaerobic bacteria that colonize our bodies and perform necessary functions such as neutralizing plant toxins, digesting our food, and cleansing our blood. The number of these microbes vastly exceeds the number of our own 'human' cells. (Westling, 2011, p. 131)

We also hold external symbiotic relationships with animals, plants, and geologies, and Merleau-Ponty (1966) extends this to include language and thought (Westling, 2011).

Maurice Merleau-Ponty is credited with extending phenomenology to see the human as always in relationship with a web of others, and therefore an embodied cognition would involve thinking from a situated sociohistorical and environmental context. In Merleau-Ponty's phenomenology, knowledge not only arrives through embodied experience but is shaped by a 'somewhere, sometime and somehow' (Neimanis, 2016, p. 44). His phenomenology presents a world in which humans are embodied and embedded in the world and is suggestive of Deleuze and Guattari's notion of 'becoming with'. According to Merleau-Ponty:

All my knowledge of the world, even my scientific knowledge, is gained from my own particular point of view, or from some experience of the world without which the symbols of science would be meaningless. The whole universe of science is built upon the world as directly experienced, and if we want to subject science itself to rigorous scrutiny and arrive at a precise assessment of its meaning and scope, we must begin by reawakening the basic experience of the world of which science is the second-order expression. (Merleau-Ponty, 1966, p. viii)

However, Serres argues that phenomenology retains a privileging of written language over experience:

What you can decipher in [Merleau-Ponty's *Phenomenology* of *Perception*] is a nice ethnology of city dwellers, who are hypertechnicalized, intellectualized, chained to their library

chairs, and tragically stripped of any tangible experience. Lots of phenomenology and no sensation – everything via language (Serres, 2008, p. 132)

It is clear that part of what bothers Serres is the class difference between himself and Merleau-Ponty, but he also suggests that the urban is somehow outside of nature, which he equates with sensation in *The Five Senses*. Instead, Serres (2008) suggests that phenomenological methods ought to produce texts that describe the sensations of the world. Particularly in the Western tradition, knowledge that is presented in published books (and then only certain kinds of books with certain kinds of language) is given more importance than knowledge that is lived, or passed on through oral and narrative modes. But Serres (2008, p. 112) asks, 'How can we do this without also saying it? How do we divest ourselves of flesh which has been speaking for millennia? Is there a single given independent of language? If so, how do we apprehend it?' He resolves this by turning to a less formal academic language in his book *The* Five Senses (2008) and uses a more narrative ficto-critical style in the attempt to capture more of the sensations in his discourse that come along with thinking through embodied knowledges. Further, Barad (2007, p. 146) argues that 'to think of discourse as mere spoken or written words forming descriptive statements is to enact the mistake of representationalist thinking. Discourse is not what is said; it is that which constrains and enables what can be said'. This suggests that in finding language to express knowledge, we must also attend to the ways in which language (and therefore discourse) is limited or constrained and the ways that different styles of language might be constrained differently. Kimmerer suggests that scientific language allows for insights but also restricts knowledge in some ways:

[It] was a longing to comprehend this language I hear in the woods that led me to science, to learn over the years to speak fluent botany. A tongue that should not, by the way, be mistaken for the language of plants. I did learn another language in science, though, one of careful observation, an intimate vocabulary that names each little part. To name and describe, you must first see, and science polishes the gift of seeing. I honor the strength of the language that has become a second tongue to me. But beneath the

richness of its vocabulary and its descriptive power, something is missing, the same something that swells around you and in you when you listen to the world. (Kimmerer, 2013, pp. 48–49)

Barad's material-discursive practices can help to address the power imbalance between written language and embodied experience by focusing on the *practices* that create knowledge, discourse, and language rather than seeing discourse as the product of thinking or a static object:

Performativity, properly construed, is not an invitation to turn everything (including material bodies) into words; on the contrary, performativity is precisely a contestation of the excessive power granted to language to determine what is real. Hence, in ironic contrast to the misconception that would equate performativity with a form of linguistic monism that takes language to be the stuff of reality, performativity is properly understood as a contestation of the unexamined habits of mind that grant language and other forms of representation more power in determining our ontologies than they deserve. (Barad, 2007, p. 133)

This is not to say that words are not an important part of knowledge construction; rather, we need to shift the way we think of knowledge away from being just the text produced at the conclusion of thinking to the embodied *process of thinking* itself. In this way, the text is only one iteration of the knowledge from a larger trajectory of practice that begins before the text and continues on after the text is written or published. Furthermore, the writing process might be seen as a co-construction as ideas are solidified by the intra-actions of the bodies, matters, and phenomena that create the text and then feed back into practice so that text and practice are active and in relation. In addition, these texts become expressions of 'lived' concepts, as Neimanis demonstrates:

Thinking is also an embodied act; concepts are also embodied. We understand them because our bodies as finely attuned sensory apparatuses live them, in one way or another. Following this proposition, we have to understand these conceptual frames as somehow also arising from lived experience. (Neimanis, 2016, p. 42)

In considering the ways knowledge is co-constructed, we also must reconsider the assumption that humans are 'expressive agents (active)', and the way nonhumans are positioned 'as those with nothing to express (passive)' (Rose, 2013, p. 102). Decentring the human, which is less about taking the human out and more about resituating the human among (rather than above) nonhuman others, also requires us to reconsider how others may communicate beyond language (both written and spoken). Rose suggests that listening to the nonhuman is an important part of this exchange and something that is practised in Indigenous cultures but often left out of dominant Western knowledge systems:

To speak is the human prerogative (because we have language), it is the active mode of being; listening (or being spoken to) is the passive or recipient position. The power relation is clearly hierarchical: those who speak are more powerful than those who are spoken to ... I am proposing that listening, and more broadly, paying attention, should also be considered an active verb; indeed in multispecies creature communities, it must be so considered. To pay attention is to exercise intelligence, to know so as to be able to inter-act. (Rose, 2013, p. 102)

This has implications for how we go about acknowledging the other in our texts. In some cases, narrative may be better at expressing the situatedness of knowledge by allowing an expression of 'sensations'. For Serres (2008, p. 162), writing about geographies might be seen as the earth writing about itself. As Stephen Connor (2008, p. 12) attests, 'Serres represents his own writing as a geography, an earthwriting, a writing that mimics the autography of the earth', despite 'the name "geographer" being given to one who puts the earth into writing'. However, the danger here is a flattening of the relationships between the human and nonhuman others who form entanglements but are not equal participants and do not mutually benefit from that writing. As Neimanis argues:

Living ecologically demands more attention to difference, and any theory on the relationality of bodies of water [including human bodies] must readily answer this demand. Again, as bodies of water, 'we' are all in this together, but 'we' are not all the same, nor are we all 'in this' in the same way. (Neimanis, 2016, p. 16)

There are thus two projects involved in posthumanist writing practices: that of acknowledging the way false hierarchies impact entangled beings differently; and that of reimagining those relationships. An attentive listening to and acknowledgement of those others who are entangled with human bodies in place comes closer to an idea of practising a posthuman phenomenology as research and writing process. Nevertheless, as Abram (1997) argues, writing itself is always an imperfect animism that retains some anthropocentrism by excluding the nonhuman/locatedness in the telling since the text is often displaced from the location and context in which it was constructed. As narratologists show, however, this doesn't mean the text can't affect the reader or ask them to question their relationship with place, even if that place is unknown to the reader or unknowable – as is the case in speculative or non-realist fiction.

Reader empathy and econarratology

Cognitive narratologists have long studied the experience of reading, but more recently the field of environmental humanities has sought to combine cognitive narratology with the study of environments in order to explore questions about how reading impacts place-making and how environmental imaginaries affect the reader. Econarratology pays attention to the structures and forms of narrative-making. James, who coined the term, says:

Econarratology embraces the key concerns of each of its parent discourses – it maintains an interest in studying the relationship between literature and the physical environment, but does so with sensitivity to the literary structures and devices that we use to communicate representations of the physical environment to each other via narratives. (James, 2015, p. 23)

James does this primarily through the notion of the 'storyworld' and the ways in which people experience the world of a narrative. James and Morel (2018, p. 1) further explain that econarratology might involve 'examining the mechanics of how narratives can convey environmental understanding via building blocks such as the organization of time and space, characterization, focalization, description, and narration'. However, James (2015, p. 4) points out that ecocritics

have been slow to embrace narratology due to a stronger focus on 'realist content than form or narrative structure'. New findings in cognitive narratology and ecocriticism allow us to consider 'previously neglected aspects of the narrative strategies that writers use to create immersive environments for readers' (Weik von Mossner, 2017, p. 12). Strategies suggested by Weik von Mossner (2017, p. 32) include using an occasional second person to place emphasis on the 'transportation' of readers; using detailed description to offer some concrete 'instruction' to readers; and use of 'emotionally salient visual cues' that imbue the light, colour, and other phenomena with particular affective responses that ask readers to feel place. For example, Weik von Mossner's (2017, p. 33) descriptions of environments as fertile or flowery evoke in readers positive or pleasing responses, 'not least because it suggests an environment that sustains human life'. Moreover, the 'disposition of elements' and position of them in the narrative landscape have more of an effect on the reader's perception than any individual feature (water, trees) – for example, being up high can psychologically trigger readers to feel safe, since height provides a place to survey the scene (but can also reinforce the imperialist gaze) (Weik von Mossner, 2017). However, the narrative strategies mentioned above are reminiscent of a non-fiction nature writing tradition, and particularly one linked to the Romantic Movement. Therefore, some of these strategies might not be suitable for writers attempting to construct posthumanist narratives. As James points out:

Storyworlds are always mediated by someone (a narrator or focalising character) and are thus necessarily imagined representations of material realities ... readers only come to know what it is like to live in, perceive, and experience a narrative's environment from the perspective of the people (or existents) who narrate that environment. (James, 2015, p. xii)

This is also an important consideration for writers who work in postcolonial contexts such as Australia, where imported imaginaries might dominate the narrative strategies used. However, James (2015, p. xiii) also argues that narratology can allow for comparative understandings of narrative that work to bridge cross-cultural imaginaries: 'storyworlds can provide readers access to subjective, site-, and culture-specific imaginations of life in particular spaces and times'. Further:

Narratives, via their world-creating power, are an important tool for sharing cross-cultural perspectives of environmental imaginations and experiences, and as such they stand to play an important role in alleviating some of the obstacles that jeopardise sustainable and just transcultural environmental policies. Of course, reading narratives is not a solution to these problems in itself ... Yet conversations catalysed by the imaginative inhabitation of storyworlds suggest an ideal respect for comparison, difference, and subjectivity that can challenge the universalising assumptions that often dominate such issues. (James, 2015, p. xvi)

Therefore, reading storyworlds created by voices that are different from our own and drawn from other ways of being and thinking about the world can allow readers to experience new environmental imaginaries. This is particularly important for thinking about postcolonial places where readers might form deeper understandings of ecologies by paying attention to diverse voices, particularly those Indigenous and marginalised communities who are more vulnerable to environmental damage. James (2015) brings postcolonial and ecocritical narratology into conversation to reconsider the kinds of narrative strategies that are used to create affect and transformation in the reader. However:

It would be a mistake to simply superimpose narrative theory onto indigenous texts, as narrative theory has developed primarily in a Western framework closely tied to scientific projects at times at odds with indigenous interests. Yet conversation among these different frameworks may nonetheless illuminate productive points of convergence that help storytellers communicate. By putting into relief storytellers' different methods and purposes, the pairing of ecocriticism and narrative theory may even help train more creative listeners. (James & Morel, 2018, p. 361)

James (2015) argues that ecocriticism has been present in other literary traditions beyond Anglo-American and British and while she focuses on contributions from the Global South, we might also extend this to include thinking in Australasia. James writes:

Contrary to what Buell's model implies, postcolonial writers have not arrived late to the scene ... postcolonial writers have

been attentive to nature and have grappled with the relationship between landscape and identity, but not in ways immediately legible to a scholarly discourse that privileges ideas of conservation and wilderness. (James, 2015, p. 9)

In fact, in Australia recognition of the relationship between First Nations dispossession and environmental damage meant Australian ecocriticism arose with an anticolonial or postcolonial emphasis (Bergthaller et al., 2014). There are four key schisms that James identifies between postcolonialism and narratology:

Postcolonialists tend to foreground hybridity and cross-culturation while ecocriticism tended to be drawn to discourses of purity; postcolonialism is largely concerned with displacement, while ecocritics are largely concerned with literatures of place; postcolonial studies have tended to favour cosmopolitanism while the canons of environmental literature and criticism developed within a national (and often nationalistic) framework; as postcolonialism is interested in excavating the marginalised past, while environmental literature tends to repress the past in its pursuit of moments of timeless and solitary communion with nature. (James, 2015, p. 10)

While these schisms are not as simple in the Australasian context where ecocriticism has been concerned with notions of purity, history, and nationalism, these ideas still impact and shape the discipline of environmental humanities more generally. A posthuman and postcolonial econarratology must therefore be able to attend to the kinds of narrative strategies that challenge anthropocentrism with attention to other historical, racialised, and gendered perspectives. I consider some of these strategies in more depth in chapters 3, 4, and 5, including the use of characters that are hybridised human—plant and human—other animal bodies or bodies that experience the world differently, as well as futures that resemble the past, and places reclaimed by plants or waters, or are otherwise shaped by pollutants and constrained by human actions.

Fiction and creative non-fiction have different roles to play in culture as they add to the knowledge of the nonhuman in different ways and signify different things to readers. Creative non-fiction allows the writer to bear witness to particular places at particular

times, as experienced by a subjective participant. This process acts to question, confirm, or reshape knowledge through experience. The resulting narrative gives a deeper understanding of the past and present as manifest in place. Fiction, on the other hand, extends knowledge by abstracting and simulating reality. The writer of fiction is able to test out scenarios, behaviours, and systems and project possible futures based on current and past conditions. The readers of fiction place themselves in this simulated world as emotionally engaged participants:

The abstraction performed by fictional stories demands that readers and others project themselves into the represented events. The function of fiction can thus be seen to include the recording, abstraction, and communication of complex social information in a manner that offers personal enactments of experience rendering it more comprehensible than usual. Narrative fiction models life, comments on life, and helps us to understand life in terms of how human intentions bear upon it. (Mar & Oatley, 2008, p. 173)

While the boundaries between fiction and non-fiction are not always clear, and both can act to simulate reality to some extent, the focus of non-fiction is observable phenomena and experience, while the focus of fiction is what lies beneath and beyond individual experience. As opposed to scientific experiment, however, fiction does not try to locate a universal truth but instead offers a space to test out possible truths, extreme realities, and personal reactions:

Fiction is a laboratory that allows us to experiment in a controlled and safe manner with intentions, emotions, and emotion-evoking situations that would be impossible and often highly undesirable in the real world. (Mar & Oatley, 2008, p. 183)

As Raymond Mar and Keith Oatley (2008) suggest, fiction can have a real effect on readers. Researchers have demonstrated the way literary novels can increase empathy and place people into the position of others (Bergland, 2014; Clark, 2013). Novels might also act to help people understand their socio-ecological environments. Anecdotally, a couple caught up in the 2004 tsunami in Indonesia recognised early warning signs from a description in Franz Schätzing's novel *The Swarm*, and were able to flee to safety before the water hit (Banz,

2013; Gebauer, 2013). Further, novels may even help us to critically examine complex social and environmental phenomena. For example, Clare Coleman's *Terra Nullius* (2017) puts the reader in a position to examine what it means to experience the dispossession of land and loss of liberty by a colonising force in a future or present that mirrors the past.

New research into reader empathy by Alexa Weik von Mossner (2017, p. 37) shows that a deeper connection with a text can lead to 'greater attitude and belief change' in readers. Weik von Mossner shows that:

The brain does not really differentiate between consciously constructed and consumed narratives and other, less conscious forms of narrativization ... 'we build perceptual and memory representation in the same format'. This is why we can learn from stories in ways that impact the narratives of our everyday lives. Narrative, then, is a means for making sense of the world. (Weik von Mossner, 2017, pp. 6–7)

Narratologists have often embraced the research of neuroscientists to understand how narratives affect readers and how textual structures might be used in particular ways. New narratological research brings the body into the equation by drawing on phenomenology and focusing on both embodiment and environmental situatedness (Weik von Mossner, 2017). Neuroscience shows that mirror neurons are activated when consuming media to allow us to simulate the actions in our minds. Our minds then respond to that media stimulus in the same way they would if we physically performed those actions ourselves, 'allowing us to understand the other person's action on a visceral level' (Weik von Mossner, 2017, p. 23). Speech and text work in the same way as visual stimuli to prompt image, emotion, and sensation responses in the brain. This is termed 'feeling with' by neuroscientists, and it echoes Deleuze's notion of 'becoming with' (Weik von Mossner, 2017, p. 23). Whether a text is fiction or non-fiction doesn't make a difference to the emotional impact on the reader - 'our affective response to a literary text is determined by emotional memories we have retained of previous experiences (real and imagined) and by the vivacity of the things we imagine while reading' (Weik von Mossner, 2017, p. 24).

In addition to the theory of mind process, whereby readers attribute words, expressions, and mental states to a character in the same way we interpret others in real life, fictional narratives can also prompt the reader to share a character's consciousness: 'readers will map the sensations, emotions, and movements of a character onto their own brains, thereby understanding, and literally feeling, their interaction with the character's environment, its pleasures, and its pain' (Weik von Mossner, 2017, p. 25). The idea that texts work as instruction manuals for readers to simulate action acknowledges 'the active role of the reader as someone who performs the narrative' (Weik von Mossner, 2017, p. 20). Ecocritics have acknowledged the way non-fiction uses such strategies to move readers towards real-world action, but other genres and art forms have been more ambiguously discussed. However, according to Weik von Mossner (2017, p. 9), narratives can make 'a reader consider the potential real-world relevance of the fictional events [they] experience vividly and in an emotionally salient way ... [while] scientific research ... can give us a better understanding of how certain narratives impact readers in ways that resonate beyond the immediate reading experience'. A narrative allows 'those who receive it to imagine that sense or feeling of what it is like' and

cue recipients ... to simulate that sense or feeling in their minds, using their own real-world experiences as models and their own bodies as a sounding board for the simulation. Psychological research suggests that events we mentally simulate in response to a story can continue to impact our emotions, attitudes, and behaviours after we have finished engaging with it. (Weik von Mossner, 2017, p. 7)

In terms of environmental narratives, this 'feeling with' effect on the reader is true whether reading about a human experience or a nonhuman, even inanimate 'experiencer' of the action (Weik von Mossner, 2017). For example:

Reading that the snow *bends* and *trims*, lightning *strikes*, and avalanches *mow down* the forests will activate the somatosensory and motor cortices in readers' brains, regardless of the fact that these actions are attributed to nonhuman agents. (Weik von Mossner, 2017, p. 35)

Therefore, Weik von Mossner (2017, p. 36) asks whether a narrative needs a human presence within it to experience events (even if that person is just the narrator), yet she complicates this by reminding us that 'it takes *some kind* of experiencing mind to tell a story about nature or anything at all, just as it takes one to perceive and mentally perform that story'. However, the impetus lies in that 'some kind of experiencing mind', which suggests that this could extend to nonhuman experiencers.

Weik von Mossner (2017) shows that both non-fiction and fiction can successfully evoke natural environments and use similar narrative strategies to create 'transportation' in the reader, including visualisation, subjective movement, and affective language to direct the reader to imagine how a place looks and feels (both physically and emotionally). As Weik von Mossner shows:

There is no difference between fiction and nonfiction in terms of transportation and imagined perception. Rather, it is the skillful use of sensory imagery that activates the sensorimotor cortices in readers' brains and thus ensures vivid imagined perception and, as a result, a distinct affective experience of the evoked environment. (Weik von Mossner, 2017, p. 48)

It is also through characters' emotions that narratives create an 'empathetic affective response' in readers, either through allegiance or resistance to the character's feelings about an environment (Weik von Mossner, 2017). Green, Chatham, and Sestir (2012, pp. 54-55) suggest that while the intensity of the emotional response is the same for both fact and fiction, the influence of fiction may disappear sooner than that of non-fiction – although this hypothesis was not tested in their study. However, I would suggest that it depends on what value is placed on certain types of narrative. It would be difficult, for example, to hold up a piece of fiction in an Australian government meeting as evidence for conserving a particular place or species; however, in some historical times and contemporary cultures, non-realist, cultural, and metaphysical narratives may hold more sway over the protection of a place than a scientific study and therefore the individual impact of that narrative on thinking and doing is likely to last longer in those societies that value them more highly. For example, in New Zealand, the Whanganui River is now protected under legislation that also recognises its value as a site inhabited by *taniwha*, metaphysical creatures that are part of a relational Māori belief system. This has only been possible through sociopolitical progress, including support for Māori scholars and communities, which has allowed Māori knowledges and narratives about the land to exert such influence in the country.

Moving away from realist epistemologies towards posthumanist and postcolonial ontologies also means seeing value in non-realist fiction, too. James argues that ecocritics have often favoured non-fiction and realist fiction, since

the favouring of realism within ecocritical scholarship assumes a basic correlation between 'accurate' or 'realistic' environmental content and conservation ethics – an assumption that a specific set of aesthetic characteristics will draw readers closer to the 'real' world and thus encourage them to appreciate better the environment around them. (James, 2015, p. 12)

However, she not only shows that the types of narratives considered 'green' or postcolonial change across spatiotemporal and cultural contexts, but that even in Western contexts, non-realist narratives can affect the reader. Further, James (2015) demonstrates how nonmimetic and nonrealist narratives can prompt 'transportation' and reader connection even with places that don't exist.

Place-based writing research

In the final section of this chapter, I wish to turn to the more practical considerations for embodied methods of writing research. I draw on the words of writers themselves to explain the impact of place-based research practices on their writing. I focus on four key activities in which the writers in my research most often engaged – walking, swimming, surfing, and gardening – to consider how these practices form part of the thinking process that leads to creative work. I also consider how these experiences manifest in the work itself, although not all writers considered this aspect in their process. These accounts were sourced largely from published texts, including interviews with writers, self-published articles, and books that describe their personal writing practice or, in one case, personal communications on the writing process. This section was originally organised by the

types of activities that the writers undertook; however, as I examined these accounts, a number of common themes emerged across all the activities and therefore it became more important to organise this section into the following themes: the use of the activity for what might be called process-related aspects of writing such as using the activity to prompt memory, solve writing problems, or get into the mindset needed for narrative building; a deeper connection formed or solidified between writer and ecology/place; and the impact of the activity on narrative structures. There was also a sense in many writers' accounts that the activity itself helped them to understand how they create narratives, so these activities were often used as metaphors for the writing process. While these themes were nuanced by the type of activity undertaken, examining them in comparison allows for a greater understanding of the relationship between text, place, and embodied experience in the creation of situated knowledges.

Writing processes

Place-based research methods rely on ideas of embodiment and the ways in which bodies affect and in turn are affected by place. One such method that has arisen through reflection on posthumanist methods in the environmental humanities is critical walking, a term coined by Springgay and Truman (2022). Walking has long been used by writers as a part of their writing process, as is evident from the volume of writers who have spoken about their walks, particularly in the Romantic era with poets, essayists, and novelists such as Henry Thoreau, Walter Benjamin, and siblings William and Dorothy Wordsworth all writing about their walking practice. Critical walking methods reimagine the practice of walking for research or writing and involve collecting both observational and embodied information about place, reflecting on relationships between nature and culture, and exploring the human and other-than-human experiences of place paying particular attention to ethical considerations. Doreen Massey (2005) suggests that movement constructs place, so methods like critical walking can be used to reimagine place bringing sociopolitical, narrative, history, and memory together to contextualise place. This also fits into Massey's (2015) notion that place is formed through the experience of bodies moving through a specific place at a specific time, and in relation with others present. While critical walking methods appear to be specific to walking, Springgay and

Truman (2022) argue that 'walking' refers to all manner of walking-like movements which might include wheelchairs or other devices and other ways of moving through space. In addition, the framework in which critical walking methods operate could easily be applied to other kinds of activity including but not limited to those discussed in this section.

Walking is by far the most common place-based activity described by writers as part of their research-creation. Nigel Krauth (2008) and Tony Williams (2013) both explore the way walking can be used as part of the creative process. Krauth (2008, p. 1) describes the writing process as movement: 'The writing process can be described in terms of moving about - of mobility, portability and itinerancy - among a series of spaces, from external to internal, that constitute the writer's creative territory'. These creative territories include the physical world with which the writer interacts, the private space of the writing desk, the intimate space of the writer's mind, and the imagined space of the text (Krauth, 2008, p. 1). Krauth also draws on testimony from writers to examine how the strong tradition of walking as part of the writing process is a source of creative stimulus. Writers such as Dorothy and William Wordsworth and Walter Benjamin walked as a 'professional activity, with an aim to produce culturally significant writing' (Krauth, 2008, p. 8). Tony Williams argues that this walking can contribute to writing in two ways. The first is through 'a break in consciousness':

By stopping thinking about writing, I enable new creative thoughts to happen. Walking serves as a productive site of accidental advances. I don't think continually about writing when I walk; sometimes I think about the gas bill, or even pay attention to the landscape I'm walking through, and a phrase or solution or idea comes to me 'out of the blue'. (T. Williams, 2013, p. 231)

Tony Williams (2013, p. 233) also sees walking as a time to reflect on writing:

Working on a novel involves a constant imperative to write, to make material progress, but while immersed in individual chapters at the desk it is extremely difficult to think clearly about the project as a whole: stepping away from the work to walk the dogs provides me with the daily discipline of non-writing

reflection time, where local problems can be seen in terms of the global structure.

These accounts of walking feed back into Krauth's idea of movement. As the writer walks, they also move between three of the four territories identified by Krauth: the physical world, the intimate space of mind, and the imaginary world of the text. This engagement with place supports a reconceptualisation of writing through the intertwined processes of research and creative practice, termed research-creation, and is essential to an arts-based approach to research.

Janet Frame is another writer whose work suggests that both the inner and outer worlds of the writer must be navigated as part of the writing process. Simone Oettli-van Delden argues that:

[Frame] thus imposes her internal reality upon external reality and moves the boundary of the 'real' to such an extent that the 'real' ceases to exist even as she is moving through it. 'I knew,' Janet confesses, 'that whatever the outward phenomenon of light, city, and sea, the real mirror lay within me as the city of the imagination'. (Oettli-van Delden, 2003, p. 76)

Rather than imposing her reality on the external or striking the 'real' from existence as Oettli-van Delden suggests, in my view Frame is describing the experience of creating imaginaries, a combination of the real and the constructed, the inner and the outer. Instead of setting up a dichotomy of real/constructed, I propose that Frame represents place as hybrid. This is made clearer in her novel *Living in the Maniototo*, where Frame explores the creative writing process in more depth. The boundary between truth and fiction blurs as the narrator takes us through the process of constructing a narrative:

A writer, like a solitary carpenter bee, will hoard scraps from the manifold and then proceed to gnaw obsessively, constructing a long gallery, nesting her very existence within her food. The eater vanishes. The characters in the long gallery emerge. I speak however, of fiction. (Frame, 1979, p. 134)

The manifold is a repository of facts, memories, texts, and ideas, a combination of the inner and outer worlds of the writer. Here,

Frame suggests that writing lies somewhere between fact and fiction, blurring the boundaries and allowing for other possibilities of 'truth' to emerge (Mercer, 1994). The use of the carpenter bee here as a metaphor for the writing process conceives a connection between the cultural processes of humans and practices of nonhuman species while also reimagining the construction of a narrative as a physical and embodied practice.

This practice of moving through place to incite creative thinking is not limited to creative practice, but has been documented in research processes in both the sciences and humanities (see Hetherington, 2010, p. 7; Krauth, 2010; T. Williams, 2013, p. 232). Michel de Certeau (1984) argues that walking in the city is a critical process that allows people to read the narratives of the city. Further, he suggests that in his social research, narratives are constructed in and to some extent by places as the traveller connects place with memories and stories, discovers 'relics', and collects new narratives, all of which constitute a reading of place (de Certeau, 1984, p. 107). Michel Serres takes this further to suggest that in his geographical research, bodies tell narratives and that senses beyond the visual might tell them better:

We used to read in our textbooks that our intellect knows nothing that has not first passed through the senses. What we hear, through our tongue, is that there is nothing in sapience that has not first passed through mouth and taste, through sapidity. We travel: our intellect traverses the sciences the way bodies explore continents and oceans. One gets around, the other learns. The intellect is empty if the body has never knocked about, if the nose has never quivered along the spice route. Both must change and become flexible, forget their opinions and expand the spectrum of their tastes as far as the stars. (Serres, 2008, pp. 162–63)

This is what has come to be called non-representational work in geography. According to Hayden Lorimer (2005, p. 83), non-representational theory, better termed more-than-representational theory, is 'an umbrella term for diverse work that seeks better to cope with our self-evidently more-than-human, more-than-textual, multisensual worlds'. Representationalism has been critiqued for 'framing, fixing and rendering inert all that ought to be most lively' while more-than-representational work acknowledges that the world is not passively

waiting to be interpreted and represented by humans (Lorimer, 2005, p. 85). In addition, Ghosh (2022) reminds us that storying the world is not just a human attribute but that other species make meaning out of their experiences, have memories, and communicate in complex ways. Both Ghosh and Lorimer recognise the role of creative practice in attending to memory, emotion, and experience.

As suggested above, two interrelated processes are at work as writers move through place. One involves the careful attention to place, people, bodies, and movement. The other is an inattentive movement through place that allows creative thinking. These two processes work together, as Tony Williams observes:

In fact, it is as difficult to imagine a walker who passed through a landscape in a state of total attention as it is to imagine one who notices absolutely nothing: we all attend to a greater or lesser degree, and our attention fluctuates. (T. Williams, 2013, p. 234)

Attending and daydreaming are not limited to walking, but rather a key feature of all embodied activities that writers might undertake, including activities that go beyond those I will examine in this section - for example, cooking or driving. This co-mingling of internal and external processes is also a mixing of research (paying attention) and creative practice (daydreaming). These writing methods depend on a writer's embodied experience with place, yet this embodied conception of the research/writing process differs from that of Wylie (2010), discussed in Chapter 1. Where Wylie saw a separation between self and place - an absence that couldn't be reconciled -Tony Williams's (2013) conception of the research/creative writing process does not separate the writer from place; instead, the writer is seen to exist between the internal and external, but is always connecting with place through the body (whether consciously or not). Therefore, this notion of the embodied writer is a helpful way of reconceptualising the writing/research process.

In fact, Alexis Wright (2019) reminds us that embodied methods for narrative and knowledge making have a long history since the combination of walking and storytelling has been a tradition in Australia as long as First Nations peoples have lived with the land. She recounts the way her grandmother's 'library' gave her access to Waanyi stories through walking:

Her stories, told orally, came from the sagas and sacred stories that have been kept alive by the retelling of these stories over time. I would go on long walks with her in our landscape of dry and windswept yellowing grasslands, and along dry sandy riverbeds with a few remaining water holes, through the winding sandy beds of red gullies, and over the hillside goat tracks in the dirt where people walked. One of my most prevailing memories of her was how she yearned to return to her traditional Waanyi homelands in the Gulf of Carpentaria. It was the focus of her stories, and the binding love for her traditional country. (Wright, 2019, n. pag.)

The capacity of place to not only construct narrative but for narrative to inhabit place is clear in Wright's work, where the narratives are written on and live in the land:

Our elders talk of our spirituality being inside country and of being inside ourselves, and it has been these voices, of our law storytellers, that have stayed in my mind while trying to develop a literature grown from our own ancient oral storytelling culture. It is about sovereignty of mind for place, of country, and of people who govern themselves ... I wanted to see what literature was capable of being in this country, in creating new forms of writing, or of a literature growing out of the country itself, and of being capable of changing the way we think about literature in Australia. (Wright, 2019, n. pag.)

Wright (2019) shows how diverse experiences with place can create new kinds of narrative structures for readers to engage with. She also highlights the importance of having diverse voices in storytelling and place-making to better represent country, peoples, and relationships. These sentiments reflect James's (2015) argument that storyworlds can introduce people to a variety of ontologies through narrative and that we might come to form better cross-cultural understandings of place by engaging with narratives from this diversity of voices.

The idea that embodied activity can provide time for reflection and a break in consciousness is also evident in all the other activities examined. Writers who used surfing, swimming, and gardening as part of their writing practice talked of these activities prompting memory, allowing for problem-solving, and assisting them to get into a mode of thinking conducive to creativity. As Tim Baker puts it:

In my own experience, surfing definitely fuels the writing process. I'm never more productive than when I get to my desk fresh from a surf, salt water still draining from my sinuses, and try and channel that delicious aquatic energy into my prose. (personal communication, 12 October 2020)

James Bradley has similar things to say about surfing as part of the writing process:

This sense of the world's presence in its pieces, of its divinity is one which runs deep in my writing. But the knowledge of its existence grounds me in a more mundane way, binding me to the act of surfing, to the escape it offers. For in the loss of self that surfing demands, the submission of the conscious mind to the rhythms of the ocean, I find a sort of peace, a capacity to move and think freely, and ultimately, to attain the sort of equilibrium I need to write. (Bradley, 2009, n. pag.)

Like Baker and Bradley, Johnny Pitts (in Liptrot et al., 2019) suggests that swimming prepares him for writing: 'Somehow the work that takes place there is devoid of anxiety. A later analysis may disprove my theory, but I only have "good" ideas when I'm submerged, feeling free and creative'. Pitts (in Liptrot et al., 2019) also suggests (similarly to Tony Williams above in relation to walking) that swimming can assist with reflection and problem-solving: 'I problem solve and write as I swim – I composed some of this essay beneath the water'. Bradley (2009) uses similar words to describe this experience as a way of being able to think or feel free, a state that allows for creativity and writing to take place. In addition, he describes the water as allowing for an 'escape' or a place 'devoid of anxiety' (n. pag.).

Writers who garden have similar ways of thinking of the garden as a prompt for their writing practice:

I really began as a gardener/writer, in many ways. One of the things I love about gardening is that it is a very desultory kind of work; it doesn't occupy all of your brain, by any means, at least the way I do it, and so there's plenty of room for speculation and

for posing to oneself silly questions while one labours. It's not the same with carpentry, about which I've also written (I wrote a book on architecture and building). If you let your mind wander while you do carpentry, you end up wounded. But in the garden this isn't likely to happen. (Pollen, 2003, p. 3)

Michael Pollen suggests a similar process to that of walking, both processes involving attending and the capacity for letting the mind drift. Jamaica Kincaid, on the other hand, finds the process of gardening itself to be a creative process that both prompts and is prompted by narrative:

I wanted a garden that looked like something I had in my mind's eye, but exactly what that might be I did not know and even now do not know. And that must be why: the garden for me is so bound up with words about the garden, with words themselves, that any set idea of the garden, any set picture, is a provocation to me. (Kincaid, 1999, p. 7)

Kincaid also talks about the way that, for her, gardening is a way of prompting and embodying memory:

It dawned on me that the garden I was making (and am still making and will always be making) resembled a map of the Caribbean and the sea that surrounds it ... the garden is for me an exercise in memory, a way of remembering my own immediate past, a way of getting to a past that is my own (the Caribbean Sea) and the past as it is indirectly related to me (the conquest of Mexico and its surroundings). (Kincaid, 1999, p. 8)

While Kincaid mentions similar processes to those who walk, swim, and surf, it is clear that the tangible and continuing presence of the garden as opposed to the momentary experiences of walking, swimming, and surfing has a slightly different impact on the writing process. In the garden, memory is not just prompted, but embodied and solidified through the garden. Also implicit is the idea that the writer is enacting concepts through gardening that might not be known in the process, but can be accessed later through observation and reflection. In this way, the writer/gardener is also participating in the same processes of attending and reflecting that were identified by

Tony Williams above, and that are present in the other activities, but this process may not occur during a single experience in the garden and the two forms created (the garden and the text) can speak to each other as two forms of thinking out the same idea.

The other process that is evident in writers' accounts of place-based methods is a conceptual overlapping of the writing and the activity. This meant that writers were better able to explain the writing process metaphorically through the embodied activity. Writers who swim or surf often use words like 'flow' or 'fluidity' to describe the process of writing, as well as ideas of 'showing up', 'waiting', and 'riding the wave' of creativity. For example, Tim Winton says:

Writing a book is a bit like surfing ... Most of the time you're waiting. And it's quite pleasant, sitting in the water waiting. But you are expecting that the result of a storm over the horizon, in another time zone, usually, days old, will radiate out in the form of waves. And eventually, when they show up, you turn around and ride that energy to the shore. It's a lovely thing, feeling that momentum. If you're lucky, it's also about grace. As a writer, you roll up to the desk every day, and then you sit there, waiting, in the hope that something will come over the horizon. And then you turn around and ride it, in the form of a story. (qtd. in Edemariam, 2008, n. pag.)

Similarly, Fiona Capp describes a very different account of writing that involves the struggle of learning to write as akin to the struggle of learning to surf:

Back then, it never occurred to me to ask someone to teach me. I didn't believe that surfing could be taught. Like writing, it seemed too fluid, too unpredictable an activity too much a matter of individual talent and temperament. You had to work your way out from the shore break, get used to being dumped and spat out; you had to watch more experienced surfers and figure it out for yourself. In other words, you had to do it the hard way. (Capp, 2002, p. 46)

Notions of failing or 'being dumped and spat out', of learning from watching those 'more experienced' and figuring it out alone, are applied simultaneously to writing and surfing in this passage. As

the narrative explains how Capp came to engage in surfing lessons, there is also an implication in the narrative that writing workshops might be a way of avoiding the struggles involved in trying to 'figure it out for yourself'. Further, Elizabeth-Jane Burnett (in Liptrot et al., 2019, n. pag.) argues that 'Writing and swimming are complementary practices; they encourage us to conceive of ourselves differently. Both processes question our habitual ways of moving through the world'. This comment also suggests that the connection with place changes thinking to generate new knowledges about human bodies in place. Likewise, in Kate Llewellyn's writing, Collett (2006, p. 487) argues that gardening and writing are often held up together as symbiotic processes as she describes the way 'the reader is encouraged to recognise "gardening" as "writing": gardening as a form of writing, and gardening as an allusion to writing' in Llewellyn's garden trilogy. Tai Snaith also sees gardening and creativity as linked processes:

The process of gardening shares many parallels with the process of art-making; process through trial and error, consideration of colour, texture and composition and the creation of a complete, shared environment. The garden is also literally a site of digging up history, highlighting politics of place and activity 'on country', both indigenous and introduced. (Snaith, 2017, n. pag.)

While writing might not include the aspects of texture and colour (except in a descriptive way), the process of trial and error and the creation of a shared (albeit imaginary) environment also make this a suitable analogy for writing. These accounts of walking, surfing, swimming, and gardening show that the relationships between the writing process and embodied activities are complex and overlapping. Not only do the activities considered in this section generate creative thought; they also help writers to articulate the process of writing, and both gardening and writing are seen by the authors to be simultaneous and entangled art-making practices.

Connecting with place

Many writers also speak of the way engaging in place-based activities encourages them to connect with place, draws their attention to their bodies in place and, in some cases, prompts them to recognise human-induced damage and act to protect those places. Johnny Pitts (in Liptrot et al., 2019) talks about how swimming draws attention to

his body moving through water, and prompts him to consider who else shares the water with him:

I marvel at my human capability as I ply through dead insects in the water – even though it may seem a humble skill (and I swim badly), I can't believe that my body is making all the minute adjustments it needs to keep itself fluent in the language of the aquatic, while my mind is firmly elsewhere.

His embodiment is also tied up in his writing, which is emphasised in his use of metaphors for describing the experience. That his body is 'fluent' and speaks a 'language of the aquatic' suggests that writing and swimming are bound up in similar processes of storytelling, but one is written and the other performed. This invokes both Barad's (2007) concept of material-discursive practices whereby reality might be first performed and then written, and Doreen Massey's (2005) concept of place as a performance of space. James Bradley also speaks of his connection with water through surfing:

Although your conscious mind still matters, you enter a world where it is your physical existence that matters first and foremost, the movement of your body in the water, with the water ... But there are other times, most often in the last hour or so of dusk, when the beach is quiet and the sky has begun to fade, when it is far more. Then, as the ocean moves beneath you and the long feed of the clouds passes overhead, it's possible to sense the presence of a meaning which lingers just out of reach. It is to do with time, and its depth, with the rhythm of the sky and the waves, the cry of the birds as they pass overhead. (Bradley, 2009, n. pag.)

As with Pitts above, Bradley suggests that this connection with place while surfing has an impact on his ability to create. He also recognises the way other bodies, including the body of water, the sky, and birds prompt 'meaning', by which he seems to be suggesting that ideas emerge in relation with these bodies. Elizabeth-Jane Burnett (in Liptrot et al., 2019) also talks of her connection with others in water when she swims: 'these moments of encounter with other species are a large part of swimming's appeal for me. I am fascinated with whom I'm sharing the water: from the flashy birds overhead to the microscopic organisms beneath'. However, her engagement with the

water also prompts her to imagine the ways in which others, as well as herself, have been damaged by human action:

The space of the river doesn't always offer a rural idyll. Even remote locations can bear the marks of human-influenced damage, as pesticides spill off fields into water and, potentially, a swimmer's body. Just as the fish, and other lives in the water, may carry these pollutants, so may the swimmer. We are in a community with the other species who are similarly entangled in both the problems and the pleasures of our land and waterscapes. (Burnett, in Liptrot et al., 2019, n. pag.)

This passage suggests that Burnett sees herself as part of a posthuman or more-than-human place as she imagines not only the ways she is in that moment entangled with other bodies but also in the way her entanglement extends beyond that swim. She carries with her traces of the water and perhaps pollutants when she leaves. Tim Winton describes a similar feeling of connection with the water through surfing and an awareness of human damage to the ecosystem:

If there's something I've learnt from surfing it's about connection. When you sit out in the line-up you're bobbing in seventy percent of the earth's surface. Seventy percent of your own body is water. Water connects you, internally, to yourself, and it links you externally to everyone else. I really feel the gravity of that. And I think feeling joined to nature, knowing how much I depend on it, and how it's affected by me and my species, has been very important. And as an artist, as someone who writes stories and tries to make words into beautiful forms, it's vitally important to me, especially in a culture that's forgotten the value of beauty. It's a primary source or inspiration, I guess, when so much of what goes on around you is only about money and big swinging dick capitalism. It's important for blokes to be able to do beautiful stuff, impractical stuff, that adds to life. That's an early life-lesson from surfing. (qtd. in Baker, 2010, p. 37)

Here Winton raises the idea that this connection and his recognition of the symbiotic relationship between humans and the sea is a key 'inspiration' for his fiction. So not only does the practice create a connection between the writer and place, it can also filter into the writing produced.

While the accounts discussed above focus largely on water-based activities, there are many examples of writers who talk of their connection with place while walking, which often leads them to advocate the protection of those places. This is particularly true in the American tradition of nature writing, where writers such as Henry Thoreau and Aldo Leopold walked as a regular writing practice and advocated the protection of the places through which they walked. In Australia, Ellen van Neerven draws on the First Nations traditions of walking and talks of the connection to country and story that it brings:

I'm a proud Mununjali person, and south east Queensland is home for me on many levels. I was born here, my mob are from this area, and I feel very homesick when I'm away for too long. I feel a bit connected to the poetry of the place. Whether it's walking in the bush or walking on a street, words come through me. (van Neerven, 2020, n. pag.)

This reflects a notion of walking and connection to place through narrative similar to that described by Alexis Wright earlier in this chapter. There is less discussion of connection in accounts from writers who garden, but there is a clear relationship between the writer, garden, and text, even when this is more implicit. For example, Kate Llewellyn (1987) in *The Waterlily* seems to publish poems in part to fund her gardening as she spends her earnings not on the 'pressing bills' but on a new plant, while Pollen suggests that connection with others in the garden can prompt the questions he pursues in his writing:

One day, during the first week of May, I was planting potatoes, and right next to me was a flowering apple tree. It was that week in May, in Connecticut where I live, where the apples were just in spectacular blossom, and the bees were going crazy, and this tree was just vibrating with the attention of the bumble bees. So I asked myself this sort of silly, but ultimately to me quite profound question: what did I have in common with those bumble bees as workers in this garden? (Pollen, 2003, p. 3)

Like Burnett's notion that all species in the water are connected, Pollen here links all 'workers' in the garden suggesting that gardening involves more than just human effort and action. essa may ranapiri shows that connections with place are also often mediated through technology, which impacts the way those connections might occur as well as the way stories might be told about them:

Writing about place is everything really, it hurts a lot, it challenges me, it makes me feel everything I lack, but also it's everything we are and will be and have been. Because it's all about place right? The whole state of things is due to where we are placed, where we are displaced. I wrote a poem about my marae, a place I have only passed on the highway or 'visited' via the Google Maps and the work really does summon something, like just putting words into the world establishes some tenuous connection point. Like a little gift from my ancestors. But also I do worry I fetishize that disconnect sometimes, make my life about the things I don't have rather the [sic] opportunities and connections that I can make. It's also funny as well because growing up I feel like a lot of things teach you that place doesn't matter like all the names of the streets are some dead colonizers from Britain and the shows on TV are American, none of us present on the box. It has really been a learning experience for me over the last ten or so years finding place or even coming to see it. (ranapiri, 2020, n. pag.)

ranapiri shows that the disconnection from place can be a key motivation for writing and that digital 'wandering' of streets and urban spaces can stand in for those experiences when people are displaced.

Narrative structures

Finally, some of the writers who engage in place-based activities as part of their writing practice speak of the activity having an impact on narrative structures. Baker talks of channelling 'aquatic energy' and Bradley of submission to 'the rhythms of the ocean', which suggests that the activity of surfing has an impact on the writing that goes beyond process-related aspects. In their accounts, they suggest that the rhythm or energy of the water is somehow captured in the narrative. Similarly, many writers who surf also talk about the idea

of flow, as both a process and a structural element of their writing. For example, Baker says:

I think there's definitely a flow and an instinctive, intuitive style of writing that comes out of surfing that can often be dreadful but occasionally sublime. My peak moments of flow while writing about surfing have felt so effortless. I've felt like I'm cheating but they seem to inevitably be the passages readers respond most enthusiastically to rather than the ones I labour and agonise over. (personal communication, 12 October 2020)

In connecting with place, writers also speak of questioning writing conventions. For example, Robin Wall Kimmerer questions grammatical conventions in relation to gardens and botany:

We accept with nary a thought that the names of people are capitalised ... Capitalisation conveys a certain distinction, the elevated position of humans and their creations in the hierarchy of being. Biologists have widely adopted the convention of not capitalising common names of plants and animals unless they include the name of a human being or an official place name ... Indigenous ways of understanding recognise the personhood of all beings as equally important, not in a hierarchy but a circle. So in this book as in my life, I break with those grammatical blinders to write freely of Maple, Heron, and Wally when I mean a person, human or not; and of maple, heron and human when I mean a category or concept. (Kimmerer, 2013, p. 385)

While she doesn't explicitly talk about walking, Alexis Wright discusses the way she crafted her narrative *Carpentaria* in response to Waanyi country in the Gulf of Carpentaria on the north coast of Australia:

I wanted the narrative voice to be one that we know, to speak to this country in its language, because our old people will tell you that country hears its people, it is listening all the time, and it will speak back to you. (Wright, 2019, n. pag.)

While Kate Llewellyn hasn't herself spoken about the impact of her gardening practice on her writing, others have commented on the way gardening might have impacted the structure of her narratives:

Her experimentation with a genre that might be loosely described as 'garden writing' (despite her protestations) is also garden practice: it follows the highly artificial principle of grafting. In this case, the delicate stem of poetry is grafted to the sturdy trunk of prose, and thus a readership is created out of the popular demand for garden and travel writing. (Collett, 2006, p. 483)

This suggests that even if writers have explicitly reflected on the relationship between gardening and practice, or even if they aren't conscious of an effect, there might still be an impact on the narrative structure and form.

These place-based experiences work to reflect something of the places through which writers move, a manifold process of engagement with stories, places, texts, and bodies, as Kate Rigby (2006) suggested earlier in this chapter. However, these accounts also show that engagements are not limited to the content of the narrative, but that embodied experiences with place might also impact the structures and styles of narrative, creating new conventions and capturing rhythms of movement across lands and through waters – rhythms that readers will no doubt simulate as they engage with the text.

Towards a critical posthumanist writing practice

In order to create new environmental imaginaries, writers can explore place-based methods of research-creation. Activities such as surfing, swimming, walking, and gardening allow writers to engage in two important processes of research-creation: a close attention to place; and daydreaming and reflecting to incite creative thinking. Writers suggest that these activities help them to get into the right mindset for writing, help them work out creative challenges and generate new ideas. Consequently, writers also talk about how these activities allow them to reflect on their relationship with place, and in some cases, how this relationship impacts the text through the use of particular structures, rhythms of language, and narrative forms. Further, other environmental humanities researchers might also find the process of research-creation fruitful for examining imaginaries, memories, and relationships in place as well as considering the entanglements of people (human and nonhuman), places, and texts.

In the above accounts of writing, it is also evident that many writers have evolved in their thinking about environmental concerns or connections with place through critical embodied activities. Jamaica Kincaid's (1999) writing explores her relationship with place and gardens in My Garden (Book), where she explores the way research-creation practices helped her to think through complex histories of colonisation, slavery, and racial experiences of gardens and gardening, which sometimes began unconsciously through performing gardening, reflecting on the shape and style created and then coming to an understanding of why. Tim Winton is an environmental activist, and many of his surfing experiences have evidently impacted his writing, with characters in many of his books living with and around bodies of water, while connections with place are prominent in his narratives. For Alexis Wright, walking and storying place are part of a long tradition that she remakes through written narrative. For many of these writers, narratives arise in and from place. A posthuman critical practice of engagement with place might involve attending to the co-constructed nature of texts in place as a result of the connections between writer and the nonhuman others, matters, and phenomena encountered. The methods explored here are only a selection of possible activities that could be used to engage critically with place. Most of these - swimming, walking, and surfing - require a high level of 'able-bodiedness' that is not accessible for all writers, and not necessary for a critical engagement with place. It is also not enough to just engage, it has to be a critical engagement as Springgay and Truman argue (2017). Therefore, a critical embodied engagement with place could look much less physically intense than these activities while achieving the same level of cognitive and creative work. For example, sitting in a place and attending to the embodied experience of place, the relationships between self, others, materialities, and phenomena could in fact provide a more critical posthumanist method than engaging uncritically with place through a more physical method.

Situated knowledge might be seen to arise as a result of these co-constructed experiences with place in consultation with reflective research that considers how established knowledges, conceptions of nature, and environmental imaginaries impact those experiences with place. To engage in a practice of writing informed by posthumanism would also require careful attention to the way bodies take in information, and are always in relation with the nonhuman

through both internal and external entanglements. Place-based experiences, established and situated knowledges, imaginaries, and sociopolitical contexts are entangled in the writer's manifold (using Janet Frame's term) and can be taken out and shaped to form written narrative. This is what might be called 'making with' or sympoiesis to use Haraway's (2016) term or 'thinking with', where narratives are considered to be co-constructions generated through a writer's entangled engagements with others in place. In this context, 'with' should not be read as a way of positioning place as an object or tool which humans use to make or think but rather a participant in the performance of research-creation.

The written text works as an instruction manual for the reader that can impact how they consider their own relationship with place. The reader might be directed to consider new environmental imaginaries or new ways of relating to place through the writer's use of language, narrative forms, and storyworld structures, as well as plot, voice, and content. Through narrative, writers can work to question established knowledges and dominant imaginaries, as well as asking readers to consider other ontologies, cross-cultural perspectives and experiences, and other ways of being in the world including through nonhuman bodies and experiences. Cognitive narratology shows that when readers form strong connections with a text, they can experience transportation, and that this transportation can lead to shifts in thinking and understanding. Therefore, it is possible to construct texts that embody concepts drawn from posthumanism and situate knowledge that readers might feel-with in order to reconsider how we live among the nonhuman and how we might live as part of a caring multispecies community.

CHAPTER THREE

Private entanglements Houses and gardens*

This chapter seeks to reposition the relationship between the house and garden, questioning the inside-outside and human-nonhuman relationships that exist in the ways these spaces are managed in cities and constructed within narratives. House and garden are places of mutually imagined construction. In a cultural sense, these interlinked places might be considered the result of a joint process of domestication, as Robin Wall Kimmerer (2013, p. 124) describes: 'wild plants have changed to stand in well-behaved rows and wild humans have changed to settle alongside the fields and care for the plants – a kind of mutual taming'. The garden has subsequently become a space where human and nonhuman work together to construct places of leisure, production, and cultural significance. However, in many cases gardens are separate from the human site of the house from which the garden is often excluded by a walled and carefully monitored barrier. Gardens in turn have often been safe spaces, walled or fenced off from the more-than-human beyond. However, gardens might also be considered sites of cultivation that blend into the surrounding environment as with Indigenous gardening practices (Gammage, 2005). As places caught between public and private, gardens are also sites of transgression and transformation. Inside the garden, residents are free to engage with the nonhuman without fear of any human or nonhuman others that may interrupt or threaten this engagement in less-managed green spaces. Likewise, the garden provides fiction with a space to reconsider the relationship between people and the

^{*} Parts of this chapter have been adapted from an article published in *Australian Geographer*: 'Creative Writing as a Means of Reimagining Gardens' (2022).

more-than-human places that make up cities. According to Rebecca Solnit (2000), fiction brings the mythical, symbolic, and narrative into the garden space where thinking and walking take place, creating a mutual engagement between the physical, imaginative, and analytical. Gardens in fiction have been spaces of transcendence and resilience, healing and creativity, damage and madness. In this chapter, I consider what a posthuman garden might look like and how writers might work to reimagine house and garden as reciprocal and relational.

Houses, gardens, and narrative

The garden is a space where nature and culture come into relation. Imagination has always played a role in how gardens are constructed, what meanings are brought to particular garden spaces, and who belongs to them in what capacity. As Saguaro (2006, p. xii) shows, 'gardens, like texts, extend both the critique and the perpetuation of particular ideological premises and practices, in ways that are not always obvious'. In Australia, there are two key gardening traditions from which other gardening practices have sprung, one emerging from the ancient practice of Indigenous gardening and the other from the colonisation and subsequent migration that sought to reproduce gardens from other ecologies (Holmes, Martin, & Mirmohamadi, 2007). These practices have had an impact not just on the ecology of Australia but also on the environmental imaginaries and relationships between people and places. As Saguaro argues:

Certainly, imperialistic 'plots' (including the plunder and export of exotic plant species and/or the transplantation of Englishness – in garden-style as in much else – to places of conquest) and their postcolonial, multicultural aftermath have had an impact, literally, on garden plots – and on literary plots. (Saguaro, 2006, p. xii)

What she suggests here is that conceptions of physical gardens and literary imaginings of place are produced through the same environmental imaginaries operating in any sociohistorical context. There are many forms of garden, and each comes with its own mythologies, conceptions, and contexts. Saguaro provides a list of key garden types that have impacted ecological imaginaries:

Edenic, Arcadian, pastoral, paradise, natural, wild, formal, plantation, vegetable, fruit, flower, botanical, physic, orchard, arboretum, allotment, walled, country, city, park – each of these terms is familiar in relation to gardens; each gives rise to other issues such as: myth, cultural specificity, historical context, nation, topography, class, race, religion, gender. (Saguaro, 2006, p. ix)

Jamaica Kincaid (1999) gives an example of how contexts and gardens shape each other in My Garden (Book). In this memoir, Kincaid explores her own relationships with gardens, but also the impact of colonisation on her ancestors and their relationship with gardens. As discussed in Chapter 2, Kincaid makes a garden that represents her ancestral homeland, but she also mentions the way her ancestors likely had a very different relationship with gardens from her own. Colonisation in the Caribbean meant that those of African and Latinx descent have often been forced to work in gardens rather than gardening for leisure or relaxing in them. In this sense, gardens, and particularly plantations, represent pain and oppression for many. In Australia, the practice of blackbirding – or taking people from the Pacific Islands for unpaid labour on sugar cane plantations – as well as the labour of Aboriginal and Torres Strait Islander peoples who similarly were stolen from their families and put to work for little or no pay, has undoubtedly left a similar legacy that continues to embody that suffering in some forms of colonial gardens and gardening (see Davis, 2021). However, as Bruce Pascoe (2014) shows, this sits beside an ancient practice of Indigenous gardening associated with the nourishment and healing of both peoples and ecologies.

In contrast to Indigenous gardening practices, Arcadian and imperial conceptions of nature were present in early settler relationships with place, as Aidan Davison suggests:

Private dreams of Edenic harmony with and social autonomy in domestic nature were not only prominent during the first century of Australian suburbanisation (roughly, 1850 to 1950), they operated as a counterweight to public dreams of technological dominion over raw nature in the creation of Australian modernity. (A. Davison, 2005, p. 1)

This negotiation of place mirrors the questions about human relations with the natural world being asked in Europe. Although, at the time

of colonial settlement, Australian nature was often depicted as ugly and in need of improvement, Paul Carter (1987, p. 45) argues that the problem was partly a limitation of the English language with 'the Australian places failing to conjure up the proper associations'. For example, an Australian 'valley' or 'glen' was so unlike the European version that the words failed to describe these places accurately according to the settler imagination. This misalignment between conception and reality led writers to describe less than ideal versions of such places for European audiences (Bayes, 2017, pp. 1–12). Settler conceptions of nature also played out in the domestic and public gardens, as colonists sought to import what they considered more aesthetic visions of nature. Meanwhile, the notion of Indigenous gardening was overlooked and erased from the public discourse, another consequence of the terra nullius myth. The practices of Indigenous gardening and land management were illuminated by the work of Bruce Pascoe and culminated in his book *Dark Emu* (2014), which contests dominant colonial ideas of precolonial Aboriginal life.

These conceptions of gardens and gardening are also present in narrative fiction as writers work to recreate and reimagine gardens. According to Saguaro (2006, p. 226), the literary garden has been reconceived in various ways. For example, the labour required to establish and maintain a 'beautiful easeful façade of the uppermiddle class Victorian English garden' promoted the glory of empire, Englishness, and hierarchy in modernist fiction. This can be seen in novels such as Jane Austen's Mansfield Park (1814), where gardens are enjoyed by the wealthy elite and their guests while the lower-class labourers responsible for constructing and maintaining them are almost invisible. Postmodern and postcolonial narratives, on the other hand, question whose stories are told through gardens. This can be seen in Tan Twan Eng's novel The Garden of Evening Mists (2013), where the gardening practices of the coloniser (in this case, Japan) are reclaimed and used to memorialise the life of someone killed by Japanese soldiers. The notion of gardens has also been refigured through cyber-culture and the notion of simulacra in speculative and science fiction, where gardens are no longer what they seem - they might be created through robotics or genetics, and are often poisoned or enhanced through human endeavour. This can be seen in narratives such as Indra Sinha's Animal's People (2007), where gardens are sources of poison and death rather than nourishment, and in Philip K. Dick's Do Androids Dream of Electric Sheep? (1996), where apartment gardens have been replaced with small plots of 'covered roof pasture' where animals both real and simulated 'grazed' (Dick, 1996, p. 10). In the suburbs, gardens are described through loss: 'what had once been a terraced path, garden enclosed' (Dick, 1996, p. 164, emphasis added) and through damage:

The garden had perished during the war and the path had ruptured in a thousand places. But he knew its surface; under his feet the familiar path felt good, and he followed it, passed along the greater side of the building, coming at last to the only verdant spot in the vicinity – a yard-square patch of dust-saturated, drooping weeds. (Dick, 1996, p. 164)

These damaged gardens tell a story of where our current relationship with urban ecologies might lead through extractivist thinking and consumerism. New narratives as well as recent interest in Indigenous narratives in literature attempt to revision this relationship by telling 'histories of coevolution' about the 'interaction, adaptation and reciprocal impact' of plants and people (Saguaro, 2006, p. 226).

Through a posthumanist lens, the garden might be seen as a negotiated space where human and nonhuman must work together to create a new kind of hybrid natural/cultural entity, rather than being viewed as a place imposed upon by humans in an attempt to control and civilise the natural world (Hunt, 2000). After all, the garden has never been a wholly human-controlled space. As Kincaid shows in My Garden (Book), plants don't always grow or bloom in the way we expect them to. The gardener's imagined and planned garden is not always the garden that eventuates, so there is always a negotiation that involves refiguring and reimaging the garden as the gardener responds to the plants over the course of the garden's growth. Haraway (2016) suggests that an ecocentric reimagining of place involves a 'becoming with' - that is, a becoming in relation with human and more-than-human entities. This involves a shaping of 'response abilities', where 'all together the players evoke, trigger, and call forth what - and who - exists' and opens up a new space for relations between inhabitants (p. 16). In this sense, becoming-with is not restricted to human-nonhuman relationships, but also includes relationships between more-than-human others. Haraway (2016, p. 16) explains that 'what results is often called nature'. Therefore, becoming-with is what happens in gardens as plants navigate their

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environmental conditions, as humans provide resources and restrict space, as other animals such as insects provide nourishment and restrict particular kinds of growth. In Haraway's thinking, these relationships involve reimagining the family unit, so the idea of kin extends to our more-than-human cohabitants. Talking of her own extended kin, Haraway (2003, p. 9) writes that 'like the productions of a decadent gardener who can't keep good distinctions between natures and cultures straight, the shape of my kin network looks more like a trellis of an esplanade than a tree'. This echoes Édouard Glissant's use of the creole garden rather than the family tree to describe kinship:

The specificity of the creole garden is that it involves planting a little bit of this and a little bit of that, in close proximity and apparent disorder. To an outsider, the creole garden might appear to be simply inefficient and disorderly. A single-minded rationalist might propose a more efficient distribution of crops. The various crops 'protect each other'. The small scale, lack of uniformity, and apparent disorder that make the creole garden inefficient also protect it against ecological perils that have become well known in the era of industrial monoculture, including increased vulnerability to catastrophic failure if a crop should succumb to environmental changes or to pests that evolve around the crops' defenses. In Glissant's hands, though, the creole garden becomes a potent metaphor for the benefits of cultural diversity. The agricultural promiscuity of the creole garden symbolizes the value of interdependent networks of cultural difference. Like the creole garden, the Tout-monde is highly inefficient, but it maintains a reservoir of cultural differences that, working through analogy, fuels innovation and creativity. (Prieto, 2010, p. 119)

These metaphors reveal how gardens and plants can become part of our kin network but also how thinking with gardens makes it easier to conceptualise a posthumanist understanding of human relationships with place. In this sense, the posthumanist notion of a garden need not be limited to the physical geography of the garden space itself:

I am a gardener. I can't think of a more important responsibility. Gardening is not just a set of tasks. It's not restricted to backyards,

courtyards, balconies. It can, and should, happen anywhere, everywhere. Gardening is simply a framework for engagement with our world, grounded in care and action. To garden is to care deeply, inclusively, and audaciously for the world outside our homes and our heads. It's a way of being that is intimately interwoven with the real truths of existence – not the things we're told to value (money, status, ownership), but the things that actually matter (sustenance, perspective, beauty, connection, growth). (G. Reid, 2019, n. pag.)

Georgina Reid (2019) therefore suggests that gardening constitutes a way of being in relation to others in the world. This can be seen in the recent COVID-19 pandemic, when entire social structures were interrupted: the relationships most needed are the ones often overlooked – caregivers and food producers, as well as places to shelter and places for movement, such as parks. This is not to suggest that all who garden or have gardens will be attentive to these relationships, since destructive gardening practices such as the use of pesticides often impact other lives and ecologies beyond the garden.

The house, too, might be refigured in relation to the garden. In the dominant Western Imaginary, the house and garden are envisioned as separate spaces – the human spaces of the house and the controlled natural spaces of the garden (Solnit, 2000). In homes, doors and windows keep out 'nature', and pesticides are used to control who can enter or live within. The garden has in some figurations been an extension of the home, a safe outdoor space fenced and protected from any dangerous people or animals beyond it. This sense of the house and garden has further been refigured more recently in Australia as houses have grown to engulf garden spaces, as Holmes, Martin, and Mirmohamadi (2007) show. There has also been a trend towards viewing the garden as a commodity through shows such as Backyard Blitz, where the occupiers of the house are not involved in designing or constructing the garden themselves. According to Holmes, Martin, and Mirmohamadi (2007), the house in this post-millennium imaginary is the only place of safety and security where the exclusion of human and nonhuman others is paramount. Instead, people have outsourced either the gardening or the garden completely and engage in their outdoor activities in places away from the home, such as managed public parks, indoor gyms, and nature reserves (Holmes, Martin, and Mirmohamadi, 2007).

In contrast, there have been experiments in architecture and narrative to explore urban structures that blur the boundary between house and garden. One example can be found in the work of artist and architect Friedensreich Hundertwasser, who addressed these separations in his Hundertwasserhaus in Vienna by creating architectural forms that blend the home and garden using uneven surfaces to create more naturalistic spaces, particularly places where trees and other plants might be grown. He sees traditional spaces that are characterised as having flat surfaces, straight lines, and standardised features as 'designed for machines' (Kunst Haus Wien, 1991, n. pag.) - although the uneven floors are only suitable for able-bodied humans. While his work predates the posthumanist movement, Hundertwasserhaus could be considered a posthuman vision of the house that goes beyond aesthetics to create mutually beneficial relationships between the people and 'plant-friends' cultivated within (Kunst Haus Wien, 1991, n. pag.). These plants are not just potted house plants; they penetrate the inside/outside boundary of the house with spaces designed to accommodate the needs of 'plant-friends' with domes that allow sunlight in, special windows that allow branches to access the outside, and inlaid spaces for soil and roots to be placed. In addition, his design of the 'humus toilet' uses gravel, dirt, and assistance from these plants to turn sewage into clean water that can be reused in the home/garden.

Another example comes from recent experiments with living architecture that use trees and fungi to create structures that can grow and repair themselves. As Vallas and Courard (2017) are quick to point out, living architecture isn't new. In the past, it has been part of local arts and community projects, but these new bio-structures such as living concrete and myco-architecture are proposed for widespread use in cities. In the experiments carried out by Vallas and Courard (2017), living trees were shaped from seedlings and then covered with mycelium (a type of fungus) to create a sealed structure. These kinds of living structures build on imagined cities in previous art and narrative practices. One work key to imagining a living city is the Myst franchise of books (2003) and video games (1993–2005), produced largely by Robyn and Rand Miller (1993, 2004). In the Myst universe, people live symbiotically with plants and structure cities by shaping trees as they grow. This requires people to maintain these relationships in order for their cities to continue providing them with shelter and food. These living homes remake the house and garden so

that a distinction is no longer possible. Despite the length of time that Vallas and Courard (2007) found was required to grow a house (ten years), these experiments show that it is possible to create other kinds of cities that make relationships between people and ecologies more apparent and encourage the kinds of relational living conceptualised by posthumanism. Narrative fiction might thus offer us new ways of imagining the private spaces of cities. The intimate places in homes and gardens are the entangled spaces of our everyday lives, so writers can produce posthumanist interventions in this place-making process.

In the following sections, I examine the strategies writers use to reimagine gardens. There are gardens that are performed and etched on the body, bodies of human-plant and human-garden hybridity, and gardens that question or resist dominant narratives of many kinds. Through these narratives, we find potential strategies, structures, and forms that writers might use to imagine relationships in and with gardens and the potential to create new posthumanist gardens in fiction.

Inscribed gardens

One strong theme that emerges in narratives with gardens is the use of gardens to provide a space for both physical and psychological transformation. In particular, gardens were imagined as spaces for remembering and memorialisation, recovery from past traumas, and dealing with end-of-life concerns. In this section, I examine two novels, Tan Twan Eng's The Garden of Evening Mists (2013) and Fiona MacGregor's Indelible Ink (2010), both of whose narrators experience gardens as places for remembering, recovery, and preparing for death. For Marie in Indelible Ink, the garden is an extension of the family where she finds comfort after her divorce and while undergoing cancer treatment. For Yun Ling in The Garden of Evening Mists, gardens are sites where she can recover from the trauma of war, and they become strongholds for her memory as she suffers from the effects of the debilitating disease aphasia. In addition, the protagonist in each narrative inscribes the garden on her body with tattoos, which has the effect of transforming the relationship between bodies, gardens, and temporalities in the narratives.

Both novels document transformations as Marie in *Indelible Ink* and Yun Ling in *Gardens of Evening Mists* attempt to construct new

identities for themselves. For both, the garden is a place of healing, a place of transition, and a space where they can reimagine themselves in relation to the world. In understanding how these characters enact this transformation in relation to their gardens, it is useful to look to Donna Haraway's (2016) work on co-mingling. Kin-making is present in *Indelible Ink*, where Marie often refers to specific plants within her garden in similar terms to her children. She worries about them, and nurtures them: 'Marie couldn't wait to get into the bags of blood and bone to feed her hungry garden'. She also mourns them when they die:

Walking back up to the house, she heard the banksia groaning and thought as she turned how uncanny it sounded, like a creature crying for help, and as she stood there watching, the tree slowly fell. It was a surreal and frightening sight, the old man banksia falling towards the harbour with a groaning woody shriek, dropping dead before her eyes. It was over quickly. Vertical one minute, horizontal the next. (McGregor, 2010, p. 26)

Over the course of the narrative, Marie finds out that she has cancer, but in fact she is not the only one dying in the story. Her garden is suffering from the effects of climate change, long-term drought, and the threat of development, which extends across the city: 'Outside, the sun was killing half the city's plants; the rivers were drying up; the whole world was dying' (McGregor, 2010, pp. 211–12). The banksia is the first in a series of deaths in the narrative, culminating in her own death and the psychological journey Marie takes to confront and accept death not as an end but a transformation of life. This echoes Rosi Braidotti's (2013) suggestion that we must cultivate 'death in life' and since others have died in order for us to exist, death is therefore our past as well as our future: 'It is a precondition of our existence' (p. 132).

The Garden of Evening Mists and Indelible Ink are narratives that employ the garden as a hybrid space and reveal how these spaces can aid in cultural and ecological well-being. By inscribing the garden on the body, the protagonists are able to transform themselves in relation to the hybrid space of the garden and to reconstruct their relationship with place. This inscribing also allows them to remain connected to these significant places while absent. Braidotti's concept of posthumanist death is useful in understanding the significance of this tattooing, which allows the characters to visualise themselves

as part of the garden and, at the end of each narrative, enact death 'by merging into this generative flow of becoming' (Braidotti, 2013, p. 136). Braidotti reminds us that:

The generative capacity of this life-death continuum cannot be bound or confined to the single, human individual ... Just as the life in me is not mine or even individual in the narrow, appropriative sense espoused by liberal individualism, so the death in me is not mine, except in a very circumscribed sense of the term. (Braidotti, 2013, p. 135)

Inscription of the garden through tattoos works to confirm the psychological and then physical transformation of these women. According to DeMello:

The transformative power of the tattoo is especially useful for individuals experiencing crisis in their lives. Women, especially, speak of situations involving domestic violence, the break-up of primary relationships, or serious illness. These women see in their tattoos the power to handle such crises. (DeMello, 2000, pp. 166–67)

In *Indelible Ink* and *The Garden of Evening Mists*, Marie's and Yun Ling's tattoos are linked to gardens as places of healing, so the tattoos work to find new ways of existing with and beyond trauma. As Rhys, the tattoo artist in *Indelible Ink*, says, 'I like to tell myself that tattooing heals' (McGregor, 2010, p. 76). Furthermore, DeMello (2000) argues that the tattooed person takes the drawn subject into themselves as part of their identity. Therefore, Marie and Yun Ling are also able to reimagine themselves as part of the garden, which prompts a refiguring of the garden itself in relation to their lives.

Further, tattooing of the body, linked to the transgressive space of the garden, leads Marie and Yun Ling to subvert dominant narratives that seek to control and, in effect, cause damage to social and ecological well-being. This is evident in both narratives as the characters seek to transcend social conventions to tattoo their bodies at the same time as they enact an ecocentric practice of gardening. At the beginning of *Indelible Ink*, Marie performs her role as affluent mother for family, friends, and neighbours in upper-class Sydney, while at the beginning of *The Garden of Evening Mists*, Yun Ling

is performing her role as respected judge, bringing to account those who have committed war crimes. Both perform these roles in ways that conform to social expectations, but also restrict their identities. When Marie begins getting tattoos, her children and friends find it disturbing, while Yun Ling is so concerned with social critique that she hides her tattoo (horimono) under clothing for 40 years, only revealing it to certain people – though they do respond much more favourably to the artistic qualities of the horimono than in Marie's case. Yun Ling reflects on this covering up towards the end of the novel: 'I think of the years of solitude, the care I have had to take in my dressing so that no one could ever see what lay on my skin' (Eng. 2013, p. 339). And 'I was rising up the ranks of the judiciary – just a rumour of something like this would have ruined my career' (Eng, 2013, p. 339). However, she considers the *horimono* to be so valuable that she resists medical treatment that might cause damage to the tattoo, which she also wants to be preserved on a cutting of her skin after death. Moreover, these tattoos reflect the way that gardens can work to trouble boundaries - questioning relationships between life and death and inside and outside, as well as blurring boundaries between cultures, species, and timespans. For example, in *The Garden* of Evening Mists, Yun Ling considers the garden to be complete only when a heron comes to inhabit it. This heron is also depicted in the garden that is tattooed on her back. In Indelible Ink, boundaries are crossed in the garden as the neighbour's vegetation encroaches, and in the pairing of Marie's children with specific plants in the garden.

Gardens and cultural heritage

In both narratives, the protagonist is a settler (albeit in very different sociopolitical contexts), and this relationship is also reflected in the ways they position local and imported nature. In *The Garden of Evening Mists*, the tea plantation, the English rose gardens, and Yugiri are all positioned as an 'improvement on nature'. However, Frederik makes plans as they age to remake the formal gardens on the tea estate into 'indigenous gardens' that he describes as 'using plants and trees native to the region' and letting them 'grow the way they would have done in the wild with as little human assistance – or interference – as possible' (Eng, 2013, p. 22). Yun Ling's response to this is to remind Fredrick that the tea plants, herself, and him 'especially you' are also 'alien' to the land (Eng, 2013, p. 22). In *Indelible Ink*, Marie decides to keep lilies despite them being 'weeds'.

The big difference between the protagonists' status as settlers is that while Yun Ling faces prejudice, Marie is the beneficiary of a colonial heritage. This is reflected in language used in *Indelible Ink* that holds this history of colonialism – Marie uses the word 'blackboy' to describe her tree, and in response, her friend Susan says, 'You're not allowed to call it that anymore, Marie. And your blackboy is a grass tree you know. *Xan-thor-rhea*' (McGregor, 2010, p. 42). The text also refers to a plant named the Wandering Jew. The fact that Marie doesn't question these names shows how traces of colonialism persist. As Ghosh (2022) shows, the erasure of local plant names in countries colonised by Europe and their renaming with European terms was a key strategy of imperialism.

In The Garden of Evening Mists, Yun Ling navigates the difficult terrain of making amends with the colonial legacy left by Japan in Malaysia despite her traumatic internment during the Second World War and the rape and death of her sister at the hands of Japanese soldiers. Japanese gardens are complicated for Yun Ling as she associates them first with her sister's love of them and a childhood holiday to Japan and then with the trauma of war and the killing of her sister. However, her coming to terms with this trauma occurs in Aritomo's garden as they work together to restore what is often referred to in the book as a work of art. When she first begins to work in the garden, Aritomo tells her, 'You will never become a well-regarded gardener if you carry such anger with you' (Eng. 2013, p. 250). This suggests that gardening not only enables healing, but requires it. This garden is not strictly a Japanese-style garden, as Yun Ling finds, but a mixture of Japanese techniques and allusions to Chinese myths and traditions etched onto the Malaysian landscape. According to Cammack and Convery (2012, p. 163), 'This sort of borrowing, cross-fertilisation and hybridisation has occurred throughout garden history and it undermines the notion that any particular style of gardening is uniquely linked to a particular place or time'. The garden thus becomes a place to bring together cultures and traditions, and to imagine new ways forward.

Within the Garden of Evening Mists, or Yugiri as it comes to be called, cultural distinctions are broken down and refigured to allow what the characters refer to as a harmony between cultural traditions, and between culture and more-than-human others. This harmony often involves making compromises, drawing on similarities, but also bringing together contradicting forms to construct new

shapes and ways of being. The relationships between Chinese and Japanese cultural traditions are further blurred by the history of Japanese gardening. Yun Ling explains that 'gardens were created to approximate the idea of a paradise in the afterlife' in the Buddhist temples of China (Eng, 2013, p. 89). In addition, the Japanese gardens of the Heian Period 'emphasised mono no aware, the sensitivity to the sublime, and was marked with an obsession with all aspects of Chinese culture' (Eng. 2013, p. 89). Slowly, Japanese gardeners began to establish gardens with 'their own principles of composition and construction ... creating less cluttered gardens paring down their designs almost to the point of emptiness' (Eng, 2013, p. 90). However, Yugiri is a combination of styles from different periods. When Yun Ling tells Aritomo that 'it must have made it more difficult to achieve an overall harmony in your garden', he replies, 'not all my ideas were workable' (Eng, 2013, p. 94). This reflects Aritomo's attempts to repair some of the damage done by his country to the Chinese minority in Malaysia. According to Gail Fincham (2014), it is precisely this artifice of the garden, its presence as a hybrid of Chinese and Japanese traditions, that creates a new 'fiction', another way of seeing the self in relation to culture and therefore a place for Yun Ling to reimagine her relationship amongst these two cultures.

Therefore, in Yugiri, Yun Ling can begin her transformation to become-with and form new connections with a postcolonial Malaysia, including aspects of Japanese nature and culture, primarily through memory and memorialisation of her sister. It is not surprising, then, that this garden plays on notions of remembering and forgetting with the figures of Mnemosyne and Lethe, who adorn the gardens of the nearby tea estate. This is further emphasised by Yun Ling's progressing disease, although her doctor tells her that memory loss is not a symptom. She finds that memories come to her as she writes and in her archery practice, in the moment of silent breath before releasing an arrow from her bow, but they are also embedded in the garden and in her tattoos - the meteor shower she and Aritomo observe just before their first kiss is captured on her back along with the heron in the garden. As Fincham (2014) demonstrates, by placing herself in the garden and using the breathing techniques learnt from her gardening and archery practice, Yun Ling is able to hold onto and in some cases bring forth memories that are beginning to fade: 'The lessons are embedded in every tree and shrub, in every view I look at [but] the reservoir has begun to crack. Unless I write them all down'

(Eng, 2013, p. 175). But there is also a sense that forgetting is part of the healing process: 'Emptiness: it appealed to me, the possibility of ridding myself of everything I had seen and heard and lived through' (Eng, 2013, p. 90).

Transformations: Tattoos, gardens, and posthuman death In the case of Marie, tattoos represent transformation through both real and imagined links to her garden. She begins with the tattoo of a rose, a domestic flower. She immediately dislikes it, telling Neil that she was never able to grow them in her garden and he remarks, 'pissy English flowers aren't they?' (McGregor, 2010, p. 22). This sets up a question about relationships between Indigenous and colonial expressions of gardens in parallel to Marie's relationship with Sydney as a settler of colonial descent though she never directly addresses this. After the rose, she gets jasmine anklets, then flames across her stomach. This flame tattoo follows a conversation with her son about how some of the Australian plants in her garden might be refreshed by a fire. Many native Australian plants require fire to release seeds and produce new growth, so this might also be read as symbolic of her need for growth and change. Her later tattoos are passionfruit vines, a moth her son has preserved for her, and an angophora tree from her garden. These tattoos create another kind of garden on her

body:

She wondered about the final barrier of dermis against which the ink drilled to a rest, the eternal stain filtering its picture through millions of renewing cells. She considered herself from the inside: tongues of fire, wings of a moth, the flower-studded vines weaving them together. And all the spaces of bare skin between like chinks of sky ... Rhys worked until dark to finish the passionflowers, one just inside her left forearm, on her upper right, the third on her chest, the vine curling and winding between the flowers were maroon, purple and orange, with the clarity of botanical drawings. Marie left the studio feeling closer to completion. (McGregor, 2010, p. 260)

Her final tattoos are gauntlets around her wrists, with images of birds of paradise, ocean waves, palms, and Gymea lilies – a combination of imported and endemic plants. The use of tattoos allows Marie to transform psychologically despite not undergoing a physical

journey. There is an Australian tradition of novels where suburban housewives seek a metamorphosis, but this is usually realised by them leaving the suburbs. Belinda Burns (2016, p. 71) argues that, through tattoos, 'Indelible Ink offers the most complex portrayal of how a female protagonist might undergo transformation without recourse to physical relocation away from the suburban realm'. Here, Marie's body is opened up as a site for becoming instead. This becoming does not happen alone, but in relation to the garden. According to John Rush,

Art is an extension of oneself ... Tattooing on the other hand is like impregnation. You construct an idea, belief, or behaviour through analogies in nature and mentally move from the outside (from the event in nature, or the image for example), to the inside (to one's thoughts), and back to the outside (to the body), where assistance or at least tools are necessary to place the thought or symbol back 'into' or onto the body. (Rush, 2005, p. 5)

As Rush suggests, this process involves the embodiment of an idea and offers the possibility of transformation that goes beyond the superficial.

Through this tattooing, Marie is able to transcend her lifelong roles as mother and wife and, as Burns demonstrates, reimagine herself as an individual, the role of mother becoming just one part of a broader identity that also includes lover, artwork, and ecological being. She also expands the role of mother to include her garden and her tattooist's family. However, Marie doesn't just experience a feminist becoming, but also an ecological becoming as she moves from her life of excess to an understanding of herself as part of the ecosystem:

In the garden, Marie seeks to transcend the dominant proprietorial relation with place: trees planted after the birth of each of her three children literally ground those events in the place and materially and symbolically root them there even as the children move away. Moreover, due to the garden, she is attuned to the seasons and the drought in ways that seem strange to her friends, and she is frustrated to the point of cynicism about the ways in which she cannot respond to the world in the way she can to her garden. While preparing the home for sale on the market

Marie watches the home next door bulldozed and rebuilt by new owners, erasing the personal histories of those who lived there before. She recognises that the same thing is going to happen to her garden. Stubbornly refusing to surrender the personal history she cultivated in the garden, Marie begins to tattoo it on her body. (Hamilton, 2018, p. 10)

Her integration of self and garden is to some extent present at the beginning of the narrative, when we learn that she has carefully nurtured her garden for many years, but throughout the novel and through tattooing, Marie is able to express this part of her identity more firmly. She describes the act of tattooing as a way to reclaim herself:

She had never liked her skin: she lived inside it like a captive. Imported, unsuitable, over-reactive, it kept no secrets. Everything transmitted: spicy meals, tears, anxiety, another long day in the garden. Every ultraviolet hour of her life written across it, every drink taken. Yet now, finally, here was a mark she had chosen. She had planted her own flag in her own country. (McGregor, 2010, p. 23)

Towards the end, once her cancer prognosis is clear, Marie relates her coming death back to the plants that die and decay in her garden and that go back to the earth. She asks why this isn't enough: 'Marie jerked her head at the view ... "Isn't that enough? I mean *look* at it. It's a universe" (McGregor, 2010, p. 344). McGregor asks the reader to consider why we need to believe in a human life after death when the decay of the body and a becoming of many others *is* a new life – just a nonhuman one.

An ecocentric view of the world involves paying attention to the relationships between things rather than focusing on the individual organism. Both Marie and Yun Ling move from an anthropocentric view focused on people to a more ecocentric view focused on the relation between people, nonhumans, and a more-than-human place. However, the results of this transformation are very different. Whereas Marie moves from materialistic to ecologically focused, Yun Ling's repositioning of ideas is more subtle. She disapproves of Frederick's plans to change the English garden at the tea estate to a more indigenous garden. The reason for this is that all gardens – even

indigenous ones – are artificial, controlled, and maintained, and Fredrick's transformation of the garden would involve damaging the present ecosystem in order to restore another, possibly doing more damage to the inhabitants. The end of the book sees her restoring Yugiri for public display. Yun Ling says:

There are some people like Fredrick who might feel that such practices are misguided, like trying to wield heaven's powers on Earth. And yet it was only in the carefully planned and created garden of Yugiri that I had found a sense of order and calm and even, for a brief moment of time, forgetfulness. (Eng, 2013, p. 23)

However, even here this forgetting is temporary: 'the moment I moved into Yugiri I felt insulated from the world beyond its borders ... But the world outside soon intruded; I had been foolish to think that it would not' (Eng, 2013, p. 244).

Yun Ling, however, pays attention to the relationships between nonhuman others. Of particular significance in the garden is the heron, which comes to Yugiri once they complete the pond and is the image with which we are left at the end of the book. In constructing this garden, we are given a sense that an ecosystem has also been created, one that attracts a great deal of local and perhaps foreign species. It is important that this is a distinction that is never made by Yun Ling, given the way dividing the country ethnically had caused so much damage to particular inhabitants in the past. Rather, she places emphasis on the way these organisms might live together:

The garden should reach inside you. It should change your heart, sadden it, uplift it. It has to make you appreciate the impermanence of everything in life ... that point just as the last leaf is about to drop, as the remaining petal is about to fall; that moment captured everything beautiful and sorrowful about life. *Mono no aware*, the Japanese call it. (Eng, 2013, p. 175)

Aritomo, the gardener, questions the idea of an Edenic garden when he suggests that 'when the First Man and First Woman were banished from their home, Time was also set loose upon the world' and yet he does not consider this a punishment, far from it: 'a garden where nothing dies or decays, where no one grows old, and the seasons never change. How miserable' (Eng, 2013, p. 324). Instead, Yugiri is

'a garden composed of a variety of clocks', where Yun Ling comes to terms with the idea of death: 'Every single plant and tree at Yugiri grew, flowered and died at its own rate' (Eng, 2013, p. 324). But she experiences the garden as a place where time both passes and appears to stand still, as though the space required Yun Ling to adjust to a different timescale, just as 'the trees from a colder world ... had adjusted to the constant rains and mists, to the seasonless passing of time in the mountains' (Eng, 2013, p. 324). Not only does the novel end with Yun Ling accepting that she will never find Aritomo, she also stops looking for her sister, doesn't construct a memorial garden and, after making all the arrangements, decides not to preserve her tattoos after death. Rather than acts of giving up, this might be seen as a giving into the generative flow of life and, in Braidotti's terms, a 'becoming-imperceptible' where

Life does go on, relentlessly non-human in the vital force that animates it. Becoming-imperceptible marks the point of evacuation or evanescence of the bounded selves and their merger into the milieu, the middle grounds, the radical immanence of the earth itself and its cosmic resonance. Becoming-imperceptible is the event for which there is no representation, because it rests on the disappearance of the individuated self. (Braidotti, 2013, p. 137)

What Braidotti raises here, and what is suggested in both novels, is that the lives of Marie and Yun Ling are not ended but reformed, as their bodies are swept into the milieu of life to re-emerge as others. Yun Ling suggests that she will choose this death in the same way as Aritomo did – by disappearing into the forested hills: 'before me lies a voyage of a million miles, and memory is the moonlight I will borrow to illuminate my way' (Eng, 2013, p. 348). Significantly, we are left with the imagery of the garden:

The lotus flowers are opening in the first rays of the sun. Tomorrow's rain lies on the horizon, but high up in the sky something pale and small is descending, growing in size as it falls. I watch the heron circle the pond, a leaf spiralling down to the water, setting off silent ripples across the garden. (Eng, 2013, p. 348)

This shows us that time goes on, the seasons change, and life remains, despite the bodies that pass. Likewise, Marie looks to her garden to

come to terms with her own death. While walking in the garden, she comes to the realisation that:

Most animals hid themselves to give birth or die. Were they ashamed of their pain? In their vulnerability did they expect attack rather than comfort from the pack? Did animals understand what humans so often denied: that all life was dispensable? We humans with our drama and ceremony and paraphernalia. Marie thought of [her cat] Mopoke's difficult last months: she must have been relieved to die. (McGregor, 2010, p. 30)

The transformations of Marie and Yun Ling can be read through the tattoos left on their skin. For both, this allows a greater connection with their gardens as they deal with illness and mortality. Gardens become places where each might find a way to live with their changing bodies, to find ease with the world and forget past traumas. For Marie, this is a public display of her changing identity with allusions to her garden. For Yun Ling, it is a hidden representation of both the garden at Yugiri and her journey towards forgiveness. Together, these narratives show the potential of gardens for healing, transformation, and repositioning the self in relation with place. The act of inscribing the garden reinforces this transformation and creates an embodied link to the garden, allowing for Marie and Yun Ling to become other and to become with.

Gardens of resistance

Another key way in which narratives refigure human–nonhuman relationships is by figuring the garden as a space of resistance to social restrictions that impact both the people and plants within the garden. In this section, I examine three narratives where gardens are sites of resistance: Janet Frame's *Living in the Maniototo* (1979), Tara June Winch's *The Yield* (2019), and Shahrnush Parsipur's *Women without Men* (2011).

Going to seed in Living in the Maniototo

Janet Frame's *Living in the Maniototo* is a book that plays with boundaries often located between homes and gardens. One way in which Frame challenges expected boundaries is by exploring the

idiom 'going to seed'. She considers the ways in which this concept relates to humans and nonhumans, and reveals connections between the two meanings:

Yes, I am going to seed. I know it.

After being eaten for so many years,
Cut, recut, forced to branch this way and that,
I have grown tall, I have put forth small white flowers,
I look over fences into people's faces.
Bees glance at me, the wind has taken me in hand.
My taste is too strong and sour, my growth is rank.
People frown to see me put down yet one more root.

(Frame, 1979, p. 77)

This poem blurs the conceptual boundary between the human going to seed and a plant that is going to seed. For the narrator, this is an emotional response to losing her husband; for the plant, it is a biological response to the season – yet both are seen as undesirable:

With my rank growth and my proliferation of roots and a travel handbag of memories I returned to Baltimore toward the end of the northern winter ... I see now how close death is to the process of 'going to seed', for both are merely an abundance of life which shocks and frightens by its untidiness, its lack of boundaries and the finality of its choice of a place to grow. (Frame, 1979, p. 78)

This kind of conceptual play with boundaries creates a space in the novel that allows for hybridities, multiplicities, and embodiment, all of which address problematic dualities by reimagining realities and relationships with urban nature. In addition, this is a book about writing and Frame's writing is often dependent on the environment. Places where the environment is destroyed are often places where people are exploited, and the protagonist cannot write. It is only when the narrator retreats to the hills that she is able to develop a narrative that draws out a series of character-companions from books about environmental phenomena blurring the boundaries between reality/fiction, urban/wild, and human/nonhuman.

Throughout the novel, the reader is directed to make connections between houses, gardens, and narratives. Writing narratives and living in narratives are linked with the construction of nonhuman structures such as 'there are some insects that carry a bulge of seed outside their body ... a spider has its milky house strung *fragilely* between two stalks of grass' and 'there are some that live forever in the manifold; it hangs in their lives like a wild bees' nest full of honey of assorted flowers' (Frame, 1979, pp. 117, 118). All three of these passages are used as analogies of the writing process – suggesting that writers might either have a clear vision of the narrative and manage to hold that at a distance to themselves like the seed, hold the connections between life and story tenuously like a daydream that could break at any moment like the spider's web, or inhabit their storyworld fully like bees in a hive.

In *Living in the Maniototo*, the city is also dangerous, polluted, and damaging to both the people who live there and the surrounding and underlying nature. The industrial city of Baltimore is described as a place where

The days still take their identity not from blossoming flowers but from the morning blossoming bank raid, the Saturday supermarket robbery, the Saturday night murder; from drifts not of fallen frothy rhododendron and azalea petals but of paper and packet litter, and instead of the display of neat gardens the cluttered windows of shops with their giant reductions, the straddling pyramids of rusted dented tins of tuna, beans, yellow plums, spaghetti. (Frame, 1979, p. 24)

In Living in the Maniototo, places where nature has been heavily controlled, destroyed, or lost (Baltimore and Blenheim in the book) are also places where poets die or cannot write (Frame, 1979, pp. 30–31, 55). Meanwhile, the plains of the Maniototo are a refuge for writers – the place where the extraordinary writer Peter Wallstead lived and wrote – although the protagonist, Mavis, asks who would want to live in the Maniototo in such isolation from society (Frame, 1979, p. 55). The Berkeley Hills, on the other hand, allow nature and culture to live symbiotically, and this is where the protagonist is finally able to write. Frame shows the potential of the city to become a place where nonhuman nature might thrive:

In contrast to the shaven lawns of Blenheim with no grass blade out of place, and the careful mown grass verges, Berkeley was passing through a 'wilderness' phase where it was fashionable to let meadow grass and herbs grow as they pleased, and the wild creatures come and go in the gardens and on the hillside roads, with the deer and the squirrels having right-of-way on the road. (Frame, 1979, p. 125)

By proposing that this 'wilderness' phase is simply the latest fashion, Frame implies that the Berkeley Hills has not always been so friendly towards nature and may revert to destruction or control once again in the future. However, for the moment this nature/ culture symbiosis seems to be a necessary ingredient for Mavis to write. Returning to the notion of 'going to seed', plants are finally allowed to 'grow as they please' here and Mavis finds she can also 'go to seed' unimpeded by social conventions as she prepares to deal with yet another death. In this book, Frame circumvents the relationships between narrative and garden by asking what gardens can do to narratives. Healthy natural environments are equated with healthy cultural environments, imagining the city as a place where natures and cultures are co-constructed. This is a book where narratives, homes, gardens, and writers are thoroughly entangled in complex ways that shift boundaries, shape new imaginaries, and reshape relationships.

Rewriting the erased garden in The Yield

While The Yield is set largely in rural areas, I have included it here as part of a broader investigation of the urbanisation process which impacts smaller towns and drives the destruction or exploitation that feeds cities. This novel also makes an important contribution to discussions of the relationship between homes, gardens, and narratives, and the potential for narratives to rewrite these relationships. The Yield is told in three strands: the first depicts the experiences of August returning to her family farm to bid farewell to her grandfather; the second documents her grandfather's dictionary of Gondiwindi terms and stories of the farm; and the third provides a series of historic letters written by the reverend who set up Prosperous farm as a German mission during colonial times. The Yield depicts First Nations history through these multiple lenses, so that we come to see the gardens that were invisible to colonial settlers and to recognise the legacy of these geographical memories. The Gondiwindi gardens are overlooked and then erased

from the record since they do not meet colonial expectations – they are without fences or clear boundaries, and therefore blend in with their surroundings. We are told that less than 5 per cent of the vegetation on Prosperous farm in August's story is native and later read in the reverend's letters that much of the Gondiwindi gardening was replaced by Western methods of farming and European plants such as wheat:

It was impressed on me the importance of sustaining a source of consistent supply at the Mission, so of the five hundred acres at my disposal, I set aside fifty close to the riverbank for the experiment of planting a crop. I planted a kitchen garden, the soil dug like ashes. Orchids, lilies and losses flourished among the strange grain crop that had been growing in some patches here and there by the river. Later, when I enquired, the Natives referred to the grass as *gulaa* and motioned to their mouths as if it were edible. The straw of the Native's grain I threshed and buried in pits, and threw in with it everything that I thought would rot and turn to manure. (Winch, 2019, p. 101)

However, in the glossary, gulaa is given the meaning 'anger'. Their anger is not difficult to understand as their traditional crops are burnt to make way for less effective crops and gardening techniques that are more suited to the ecologies of Europe than Australia. We are left to question whether this word came to mean anger as a response of this treatment or whether the reverend had misunderstood. Through the dictionary, we see another version of the history of the land told through a Gondiwindi perspective. In these stories we are told:

The Gondiwindi were sick of the settlers taking over their land, digging up their tubers, ruining the grazing work they'd done forever. The Gondiwindi were farmers see, farmers and fishermen and they cultivated the land here long before, they stayed even through the rare winters. (Winch, 2019, p. 31)

This braided narrative structure allows the reader to piece together a deeper knowledge of the farm than is available to the characters in any one strand until the end. The reader is encouraged to compare the two historical accounts, which reveals the naivety of the reverend and colonial ideas of the land compared with the deep knowledge held by the Gondiwindi inhabitants. Therefore, braiding together the narrative also allows a rewriting of the historical record as the Gondiwindi account is replaced over the colonial history. This new vision of the garden serves to undermine the colonial idea of Australia as terra nullius:

Postmodernism delights in exposing the bias and self-interest of the 'enlightenment certainties' that so often gave the West a dispensation to interpret the world through its own progressive lens. This is precisely why these postmodern narratives undercut, in content and in narrative form, the consolidated, confident view and instead attend to: rumour, gossip and legend, evolution and natural selection, multiple duality, contingency, accident, pastiche. The gardens in postmodern fictions are there to show how their meaningfulness in one time or place can be re-visioned from another, to startling – and playful – effect. (Saguaro, 2006, p. 125)

Only in the end do we see the full value of that dictionary preserving the Gondiwindi knowledge in language, as August reveals:

After protesting the mine scientists wrangled permits and, with the anthropologists from the museum, they estimated the Gondiwindi milling techniques to be around eighteen thousand years old. They said it rewrote the history of world agriculture ... The evidence of their civilisation, after so many years of farming, was difficult to find on the surface of the land. But they said it was embedded in the language. (Winch, 2019, p. 307)

Using this braided narrative technique, Winch is able to undercut and question some enduring myths about people and gardens. *The Yield* presents a more relational imaginary of people, place, and language that allows for other ways of living with gardens and homes that look very different from settler and commercial imaginings, as the dictionary suggests:

The ancestors told me about all the plants and trees and how to use them. They told me that the plants were pregnant with seeds, that the plants were our mothers and so I was only to use them for

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the Gondiwindi, not for selling, just for living. Remember that, wherever you go and touch the trees and plants, they are sacred. (Winch, 2019, p. 32)

Narratives such as *The Yield* might thus be used to rewrite geographies of memory that awaken histories embedded in places and languages.

Becoming garden in Women without Men

In Shahrnush Parsipur's novella Women without Men, the boundary between people and plants is blurred. Gardens are associated with the female body and female sexuality - for example, Mahdokht considers her 'virginity [to be] like a tree' (Parsipur, 2011, p. 8), which leads her to plant herself in the ground, while Farrokhlaga moves to an orchard after the death of her husband, who had questioned her ability to garden while menopausal. Here they are joined by a group of women, variously affected by restrictive laws and social conventions that uphold virginity as pure and respectable, and blame women for being raped or killed by men when they deviate from these norms. In the garden and through their relationships with the garden ecology, they find a place of freedom where they can better express their thoughts but also their sexualities. For example, Munis, who remains a virgin and at 26 is considered a spinster, finds out that 'virginity was not a curtain but an orifice ... She thought of her childhood days when she had longingly looked at hedges and trees, hoping for a time in her life when she could freely climb them without compromising her virginity' (Parsipur, 2011, p. 25). It is significant that she has been prevented from experiencing the space: 'as long as she could remember she had looked at the garden through the window' (Parsipur, 2011, p. 24), which also reflects the way she has been restricted from experiencing sexual freedom. Abbasi (2018) argues that since the Persian garden is a tradition that stretches back to ancient Babylon and is embedded in Iranian social and cultural practices, the garden transcends historical and political change. This allows women to experience the garden as a space of 'feminine regeneration well beyond the reach of oppressive, hierarchical structures ... in the garden, women learn a new experience of self-belonging and a different reality free from traditional cultural and historical narratives' (Abbasi, 2018, p. 68). However, in Women without Men, the garden is only a temporary respite for the women who, after transformation (whether physical or emotional), all leave

in various ways: some are drawn back into their previous lives – albeit in a changed way – while others find new ways to exist in the world:

The garden can, therefore, be perceived as both a place of refuge for a more free and democratic society and a space of exile that is finally influenced by the socio-cultural constraints and apprehensions that women bring with them. Parsipur not only destabilizes binary oppositions between public and private but also expresses the relevance of the feminine voices to lived experience. Virginity is no longer of primary importance; instead, it is the characters' experiences of displacement and exile and their journey in search of a better life that prioritizes their concerns. (Abbasi, 2018, p. 72)

The resistance of patriarchal restrictions is also linked to a posthumanist experience of the garden by two characters in particular. Zarrinkolah, the former prostitute, and Mahdokht, the painfully shy virgin, undergo the most extreme changes in the garden - changes that keep them entangled with it even after they leave. Mahdokht wishes to remain a virgin despite the social pressures to marry and, since her virginity is not 'cold' or 'frigid' as she has been told but, by her own definition, 'like a tree' (Abbasi, 2018, p. 8), she plants herself in the garden so that she can become a tree. With the care of the other characters, she grows branches and leaves, and blooms with flowers, finding a new identity based not on the way that society wishes to define her but through her determination to experience the world on her own terms. Hybrid forms have often been used in postcolonial writing to interrupt ideas of nation and belonging (Saguaro, 2006). While Mahdokht remains rooted in the garden, she is also able to transcend this position as she is dispersed through her seeds that drift along river currents:

In a perpetual transmutation Mahdokht was separating from herself, suffering excruciating, unbearable pain like birth contractions ... It all came to a sudden end. The tree was now a mountain of seeds. A strong wind scattered them into the river. The seeds travelled with the water to all corners of the world. (Parsipur, 2011, p. 105)

Meanwhile, Zarrinkolah falls pregnant with the gardener's child and becomes 'increasingly translucent, like crystal, with light shining

through her' (Parsipur, 2011, p. 94). She births a marigold, supplies the breast milk that feeds the Mahdokht tree, and allows Mahdokht to bloom. Once Mahdokht's transformation is complete, Zarrinkolah is engulfed along with the gardener by their child-flower and borne up to the sky on what the gardener calls 'a journey' (Parsipur, 2011, p. 113). This reflects a posthumanist experience where the women are not only assisting in the garden's construction, some of them become so entangled with the garden and the garden's ecology that their bodies and the bodies of plants and soil that make up the garden can no longer be separated.

Women's bodies have often been linked to gardens in narrative through imagery such as the Mother Earth trope and through associations with the reproductive capacity of flowers. According to Bezan (2021, p. 78), 'while the ravaged mother-earth trope is familiar, this figurative construction reinforces a heteronormative logic that construes nature as a body subject to violation'. In addition, this also works to reinforce and justify women's bodies as sites for mastery and control, just as women's bodies at the start of Women without Men are controlled through patriarchal structures. When the women enter the garden, however, this Mother Nature trope is refigured as women find a space in and as part of the garden, where they are nurtured rather than violated and are allowed to become otherwise to what is socially permissible beyond the garden. However, rather than a means of objectifying or linking women with ideas of passivity, this connection between women's bodies and plants or flowers is a point of resistance to the restrictions placed on female sexuality. The garden allows women to take control of their bodies, both physically by expressing their reproductive potential in other ways such as the birth of seeds and a marigold, and in the social imagination, since the valuing of these women is no longer bound up with the status of their sexual history. Therefore, the garden provides a transgressive space where they can redefine their sexualities on their own terms.

New ways of living in the garden

The narratives of Winch, Frame, and Parsipur all serve to resist sociopolitical control and damage to particular groups of humans and nonhumans. In each narrative, the garden provides a space where new imaginaries are constructed. In Frame's *Living in the Maniototo*, the garden's growth and her own grief are subject to social controls that

also constrain her creative practice. In Winch's The Yield, colonial control of the garden erases Gondiwindi practices and therefore prevents legal claims to the land. In Parsipur's Women without Men, the garden provides a space to avoid control of women's bodies. These writers employ strategies that work to question relationships between bodies, plants, and gardening practices. Braided stories and protagonists with limited information work to question truths, while blurred boundaries between people and gardens reconsider the human body as permeable, entangled, and always in relation to others. These narratives of resistance show that often gardens and particular groups of people are subject to the same means of control and direction. Importantly, these narratives demonstrate that this human resistance doesn't need to come at the expense of the nonhumans they are categorised alongside, but that resistance can encompass the multispecies and entangled character of oppressive social structures.

The more-than-human gardener

Another theme that emerges from narratives that refigure the relationships between humans and nonhuman others through gardens, is that of the garden without humans, the nonhuman gardener, or the human/plant hybrid garden where it becomes unclear who is the garden and who is the gardener. In this section, I examine Indra Sinha's *Animal's People* and Ellen van Neerven's 'Water'. Both narratives create spaces where these more-than-human gardens and gardeners interrupt our ideas of what a garden means and refigures conceptions of human-nonhuman entanglements in the garden.

Gardens that poison in Animal's People

Animal's People by Indra Sinha is the coming-of-age story of Animal, a young man living with the consequences of an accident caused by a pesticide factory explosion that led to poisons spreading through his village. Animal was disfigured by this explosion as a child. As with many living in destitution, there is less distinction between houses and gardens in Animal's People. In Animal's village, called the Nutcracker, the people sleep on dirt floors. When the doctor, Elli, visits his neighbourhood and points out the pollution and unsanitary conditions, Animal is forced to see his home differently:

Up to that moment this was Paradise Alley, the heart of the Nutcracker, a place I'd known all my life. When Elli says earthquake suddenly I'm seeing it as she does. Paradise Alley is a wreckage of baked earth mounds and piles of planks on which hung gunny sacks, plastic sheets, dried palm leaves. (Sinha, 2007, p. 106)

These dwellings have permeable walls that the nonhuman can cross or live within – for example, the scorpions that live in the walls of Animal's home. However, this blurring occurs even in wealthier areas of the city. So, in Elli's surgery and home we find another garden that unsettles the boundary. Her bedroom is located on the open rooftop within her garden:

we're on her roof's like a scented jungle [sic], in big oil tins she has planted jasmine creepers, roses etcetera, scarcely three months has she been here, already they're swarming up into the mango tree, same one I [Animal] climbed, it grows right by her building and hangs its branches over the roof. (Sinha, 2007, p. 148)

Not only is this garden/bedroom questioning the inside/outside dichotomy present in Western culture, but there is a clear crossing of boundaries between those plants that belong to the rooftop garden and the mango tree that grows beyond the building's structure. Sinha is aware of these distinctions, having written the novel for a Western audience (Shelton, 2019). The storyworld presents the reader with an alternative ontology and guides them to question dominant Western ontologies that encourage extractionist ideas of nature by offering a more relational view of the world from an Indian ontological position.

Within this world is a garden that subverts ideas of the Edenic. This is not a traditional garden, in the sense that humans have not intentionally constructed the space and it is only indirectly managed by human actions. Within the abandoned pesticide factory that is at the centre of the narrative, plants are beginning to take over: 'Creepers, brown and thick as my wrist, have climbed all the way to the top, tightly they've wrapped wooden knuckles round pipes and ladders, like they want to rip down everything the Kampani [the American pesticide company] made' (Sinha, 2007, p. 31). Here, Sinha uses descriptive language to blur the boundary between plant

and human, such as 'wrapped wooden knuckles' as he associates the plant with Animal's own brown wrist. This works to emphasise the agency and now dominance of plants in a place that was ironically built to assist people in the often-destructive management of gardens and agricultural plots. Like other gardens, the Kampani factory garden is enclosed by walls and is the result of both human and nonhuman actors; however, rather than being a place of leisure, this garden is 'poisoned and haunted' (Sinha, 2007, p. 30). This is also a garden with a different set of inclusions and exclusions:

Step through one of the holes, you're into another world. Gone are city noises, horns of trucks and autos, voices of women in the Nutcracker, kids shouting, all erased by the high wall. Listen how quiet it's. No bird song. No hoppers in the grass. No bee hum. Insects can't survive here. Wonderful poisons the Kampani made, so good it's impossible to get rid of them, after [nearly 20 years] they're still doing their work. Once inside, in the grass, it's careful hands, careful feet. Fucking place is full of cobras. Dogs too you've to watch for. (Sinha, 2007, pp. 29–30)

This passage shows how notions of ideal gardens have been overturned in the narrative, where desirable nature such as birds, bees, and humans are largely absent and have been replaced by the kinds of natural dangers that people have often built gardens to avoid, such as snakes and rabid dogs. Further, the garden is also inhabited by 'those who died' in the Kampani chemical explosion, the same event that left Animal disfigured and walking on all fours, which further contradicts the notion of the garden as a cornucopia and place of nourishment. However, as with many urban gardens, this is a place of escape from the loud and busy city, a place where Animal feels like the 'boss' of his own 'kingdom' (Sinha, 2007, p. 30). But, unlike many urban gardens, this place has not been directly shaped by human gardeners but indirectly by the walls and materials that have been left, encouraging particular growth patterns. We're also given a sense that there are other nonhuman agents responsible for cultivating the garden:

Look throughout this place a silent war is being waged. Mother Nature's trying to take back the land. Wild sandalwood trees have arrived, who knows how, must be their seeds were shat by overflying birds. (Sinha, 2007, p. 30)

The poisons, too, might be seen as shaping the garden by only allowing the cultivation of plants that can either be distributed rather than locally pollinated by insects or those that can be pollinated through other means.

This poisoned garden is then juxtaposed with an ideal version of the Edenic garden of Paradise later in the novel. One of Animal's friends, Faroug, tells him that 'Paradise is for humans, not for animals' and that 'there are no insects in Paradise' (Sinha, 2007, p. 208). Here the Kampani factory garden is evoked in comparison: 'Zafar hearing this remarks that in that case the Kampani's dead factory must be a kind of paradise because it too has no insects' (Sinha, 2007, p. 208). This raises the contradictions inherent in the notion of an ideal garden in the contemporary context where shops often sell gardening tools and plants accompanied by a range of pesticides, many of which lead to long-term harm in the broader ecosystem (Meftaul et al., 2020). Meftaul et al. (2020) found that, globally, urban gardeners use on average ten times the amount of pesticides on their garden plots than rural agricultural users, while roughly 20,000 deaths (95% of them in Global South countries) occur each year due to pesticide use. Animal's People shows the reality of this destructive practice as people work towards idealistic garden imaginaries that are impossible to reach. This is particularly evident when Animal questions the contradictions of the Paradise garden:

Didn't you tell me that in Paradise people will have fine couches surrounded by precious silks and carpets? ... And fountains and rivers will come gushing forth and there will be fruit orchards as far as the eye can see? ... And wine, milk and honey will flow? ... How can there be honey without bees? (Sinha, 2007, p. 208)

Sinha leads the reader to also question the impossibility of silk without the silkworm or fruit without insects to pollinate the trees. Throughout the novel, we are asked to see humans in relation to this broader ecosystem as the chemicals penetrate all bodies and cause the collective suffering of humans, other animals, insects, waters, and soils with the poisons flowing from the Kampani factory garden mimicking the human origin story in the garden of Eden. We are again reminded of this as Animal attempts his first intimate encounter with a sex worker:

So her fingers open the petals to let me see, a glistening rosy cavern is revealed. How delicate the skin is, of such softness, threaded with tiny veins, like you find in leaves or petals, really it is most like a flower and reminds me of the hibiscus at the base of whose petals is a tube filled with liquid, you pick a flower and suck, it's joyous as honey. She shows me how the rose cave leads to a tunnel whose mouth at first was hidden, this is the way that leads to the womb, where life begins, where I began, where we all began. (Sinha, 2008, pp. 243–44)

In fiction, women's bodies are often linked with gardens, and women's sexuality and sexual reproduction with flowers, but this is emphasised in Animal's narrative by the earlier discussion about the garden that figures in both the Garden of Eden origin story and the afterlife in Paradise. The irony lies in the fact that the sex worker's body as garden is a source of life in contrast with the suffering and death caused by the more Eden-like garden of the factory. In this, notions of purity and order are questioned to remake the garden imaginary.

The end of the novel follows Animal as he retreats from the city in a drug-induced state after taking pills made with datura (a poisonous flower), imagining himself dying and becoming part of the forest:

A datura is growing in my gut pushes forth leaves and flowers out of my mouth and out my nose ... Trees are writhing in the darkness I call out are you in pain, it's me who's dying. We are not in pain we are dancing. What, dancing with joy? We have no need of joy cry the deep flutes of the trees, we are in need of water and so are you O animal. Find water if you want to live. Where can I find water on this dry hill? Go down, go up, your choice. My feet are raw with blisters, I can go no further. Then lie here and we shall wrap our roots around your bones. I need my bones, friends. Lie here, die here, we are no friends of yours, soon you will have no need of your bones. (Sinha, 2008, p. 344)

Throughout *Animal's People*, human and nonhuman bodies are impacted by the same dominant garden imaginaries. Sinha challenges the separation of house and garden spaces as for humans by reminding us of those relationships we simultaneously rely on and deny through

the exclusion and killing of insects, which are also related back to the deaths of Indians (and those of poor Indians in particular) for the sake of American gardening practices.

Plant relatives in 'Water'

Ellen van Neerven's short story 'Water' from her collection Heat and Light (2014) gives us a species of 'plantpeople' hybrids. While this builds on a tradition of plantpeople hybrids in postcolonial fiction, the plantpeople in 'Water' provide a way to question the combined impact of colonisation on place and peoples in Australia. This story is set on Russell Island off the coast of Brisbane in Queensland, Australia in the near future. Here, the islands are to be mined and joined to create a major landmass for Aboriginal people who 'don't even know where they've come from' as opposed to those who have clear connections to particular lands (van Neerven, 2014, p. 74). To make way for the construction of the islands, the plantpeople have to be moved; however, as the narrator Kaden finds out, the plan is to slowly exterminate them through their plant feed. These plantpeople stand in for both displaced First Nations communities and the lands that have been damaged through urbanisation and the mining process, the most recent example of which is the Juukan Gorge sacred caves that were controversially destroyed by Rio Tinto in 2019 (Hopkins & Kemp, 2020).

It is difficult to tell who is the gardener and who is gardened in this narrative. Kaden, the narrator, is responsible for delivering 'formula' to the plants, which Larapinta says, 'keeps the soapberry bugs away' (van Neerven, 2014, p. 125). In addition, love for Kaden leads Larapinta, one of the plantpeople, to grow flowers. This is suggestive of the way gardeners assist gardens to grow, but rather than nourishment in the form of fertiliser, it is social nourishment that Kaden provides. On the other hand, the plantpeople (particularly Larapinta) provide nourishment by producing clean water from their 'fingers' - for example, when Kaden gets a jellyfish sting and when her cup is empty. Plantpeople also provide spiritual nourishment to the traditional owners of the islands and help Kaden's Indigenous community to reconnect with their Jangigir language and culture. As her uncle says, 'their knowledge goes back, big time, bub. They've helped us piece back our language' as well as fight to keep the islands as they are (van Neerven, 2014, p. 155). The plantpeople are in fact revealed to be ancestral beings of the Indigenous people of the islands,

and are there to restore care for both their peoples and ecologies. This figuring of the plantpeople as distant relatives and caretakers of Kaden's people further questions the boundaries between who is gardened and who is gardener. Moreover, the boundaries between garden and home, human and plant, and inside and outside are complicated by the queer and interspecies relationship between Kaden and Larapinta.

Leaving the garden

In these narratives, we find that the garden is still a force for those with sociopolitical power who seek to exert that power as a means of controlling both environments and peoples. Saguaro (2006, p. 125) shows that this has been a historical trait of colonisation: 'Europe believed the world was a garden - a field, more simply - to which it had the right to unlimited access; it was all in the name of what was now the highest calling: knowledge (for which, ironically, Adam and Eve were cast out of Eden)'. In the gardens of Sinha, and van Neerven, the colonising forces have changed - American commercialism in Animal's People, destruction in the name of social progress in 'Water'. As Ghosh (2022) shows, in order to gain power some members of marginalised groups have sought to reproduce colonial actions that do further damage to human and nonhuman peoples, and places. In both narratives, people and environments are damaged by these actions, yet we see a new relationship emerging in the wake of this destruction. Several posthuman narrative strategies are used in these narratives, including the plant-human chimera, the multispecies entanglement, and the figuration of kinship with the nonhuman. Animal's People and 'Water' depict the destruction and damage of places for urban development as well as the resistance of this damage by people who care about the places. Narrative structures create a clear relationship between the peoples and places: in Animal's People through the movement of poisons from the garden through the land, waters, and bodies in the city; in 'Water' through the kinship between the plantpeople and Aboriginal people who belong to the islands. Political corruption also figures prominently in both narratives. In 'Water', while an Aboriginal leader is tasked with creating 'Australia2' to give land back, her decision to connect the islands with a human-made land bridge is out of touch with the local population and causes further harm to First Nations peoples and places. In Animal's People, the lack of legal ramifications for the

pesticide company prevents the community from healing. In fact, politicians favour the company due to the flows of money, so it is only when the people cause enough trouble that the judge orders a stop to the pesticide's other commercial activity.

The posthuman garden

The narratives examined in this chapter show that there are many ways in which gardens can be refigured in order to question the relationship between the human and nonhuman. Rather than see this as a relationship where the human exists as the controlling force and the plants of the garden are passive participants in the process, in each of the narratives there is a sense that the plants and other nonhuman inhabitants of the garden are more than just passive participants, often helping to shape the people and environments. Michael Pollen captures the extent of these forces in reflection of his own gardening practice:

I realized that the bumble bee and I had a lot in common. We were both going about getting what we wanted from nature, but at the same time we were unwittingly disseminating the gene of one species and not another ... The bee has chosen to go to that particular flower, breaks in, grabs the nectar, runs off, gets away with the goods. But we know that this sense of control the bee feels, assuming she feels it, is simply a failure of bee imagination. What is really happening is that the plant has cleverly manipulated that bee into paying it a visit. And in the case of the bee, the plant does this by evolving precisely the right combination and kinds of molecules - the right color, the right shape, the right attitude toward the sun - to gratify the bee's desires. We know this from elementary or college botany. This is co-evolution, two species coming together to advance their own self-interest. They wind up trading favors, often without knowing it. So how are matters any different between me and the potatoes I was planting, or me and the marijuana plant I wasn't planting in my garden? (Pollen, 2003, p. 3)

There is a long history of recognition of the ways in which humans have genetically modified plants for our purposes – for example,

by making them more digestible, easier to grow, or less prone to disease. However, here Pollen (2003) shows how humans are not the only ones manipulating other species for their own benefit, and that in fact plants have been actively co-opting humans (and others) to reduce competition with other plants, disperse their seeds or pollen, and provide them with resources for growth such as water and manure. In each of the narratives discussed in this chapter, plants are given agency; in some cases, this is translated into human terms through hybrid forms or human consciousness as humans become plant-like and plants become human-like; in other narratives, plant lives and deaths teach humans what it means to always be in relation. Gardens allow a space where people – and women in particular – can transform either psychologically, as Marie (*Indelible Ink*) and Yun Ling (*The Gardens of Evening Mists*) do, or physically, as Mahdokht and Zarrinkolah do in *Women without Men*.

Through the narratives set in Australia, including The Yield, Indelible Ink, and 'Water', we see a revisioning of both sociohistorical power relations and the Australian landscape. Cranston and Zeller (2007, p. 216) show how settler fiction has often figured Australian gardens as a 'second-rate Eden' or 'a garden whose virtues and possibilities are still awaiting discovery'. Narratives such as The Yield, Indelible Ink, and 'Water' show that the Australian garden has other histories and possibilities, and that it can be seen not as a difficult or failed version of the Enlightenment garden or Eden, but rather as encompassing new kinds of relationships between people, plants, and places. New research on plant consciousness has also shown the many ways in which plants are attentive to the worlds around them through chemical signals, the touch of their leaves, changes in light across the day as well as over seasons, temperature, and gravity (Chamovitz, 2012; Wohlleben, 2016). However, plants are not just passively conscious of these changes; they actively respond to them by releasing chemicals to poison nearby competing plants or make their leaves taste bitter to would-be devourers, by shifting the position of leaves to follow the sun so they can absorb more energy, by waiting for light and temperature signals before blooming, by responding to the chemicals released by surrounding plants which might signal a coming threat, and by sharing nutrients in harsh times through the underground network of mycorrhizal fungi (Wohlleben, 2016). As Ghosh (2022, p. 198) argues, 'It may appear self-evident to humans that they are the gardeners who decide what happens to

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trees. Yet, on a different time scale, it might appear equally evident that trees are gardening humans'. If this is the case, then we would need to radically shift how we live with those responsible for shaping our lives. By reimagining the garden through posthuman narratives, we can think through and as gardens to consider the world from nonhuman perspectives and time scales, and ultimately reconsider the city as more-than-human entanglement.

CHAPTER FOUR

Bodies of water

To survive, the city requires water for its interspecies residents – and in large amounts. This chapter investigates the way writers position bodies of water within their texts to create particular associations, redirect narrative structures, and illuminate watery entanglements. The water of the city is often an important part of the way we understand and interact with place. This is often through leisure, transport, aesthetic appreciation, or consumption. However, cities like to cultivate certain kinds of water, such as lakes, ocean views, and canals, with development often occurring at the expense of others, usually in-between spaces such as swamps, bogs, and other wetlands. As Rod Giblett (2009) has shown, this bias for clear, transparent, and flowing water sources is partly about dominant Western imaginaries of these kinds of water, associating some kinds with cleanliness, relaxation, movement and life, and others with death, decay, dirt, and restriction. However, Astrida Neimanis (2017) shows how bodies of water might be renegotiated using other associations to position them as sites of gestation, mediation, communication, and the reconstitution of lives. Novels like Larissa Lai's Salt Fish Girl (2002), Merlinda Bobis's Locust Girl (2016), and Alexis Wright's *The Swan Book* (2013) explore relationships between peoples, cities, and waters. These novels construct representations that are more complex than simple binary distinctions like 'white' and 'black' waters allow. Drawing on the work of Astrida Neimanis, John Ryan, Li Chen, and Larissa Lai, this chapter considers ways of writing about water and the city that might reposition peoples and cultures to create more complex ways of imagining and living with all these ecologically important bodies of water.

Urban waters

The story of cities is also the story of waters, as cities traditionally grew along large bodies of water such as lakes, rivers, and coasts. These bodies of water meant a stable source of food and hydration that enabled human populations to grow larger on their banks. In some modern cases, however, bodies of water have had to be manufactured – for example, in cities such as Dubai and states such as California, where thousands of litres of water are pumped into the deserts each day to support the growth of cities. This is only possible due to technological developments and increased infrastructures that have allowed people to colonise increasingly remote and difficult terrain and to support larger populations of people in ecologies that previously were limited by a lack of water. According to Gandy:

The search for ever more elaborate technological fixes, such as nuclear-powered desalination plants, forms part of an intensified phase of capitalist urbanization predicated on distinctive sets of geopolitical, financial, and technological alliances. The quest for 'unconventional water,' in a parallel technological and geopolitical manoeuvre to the extraction of 'unconventional hydrocarbons,' marks an escalation in the hydropolitics of global capitalism. (Gandy, 2014, p. 12)

This intensification of water production parallels the rise of global urban populations and has often meant that the urbanisation process impacts waters far beyond the political borders of the city:

In this sense the urbanization of nature defies any straightforward spatial categorization, so that successive territorial recompositions of urban space blur existing boundaries between metropolitan centers, periurban spaces, and the state formations within which they are physically located. The urbanization of nature involves far more than the physical modification of space, entailing the emergence of new sets of global relationships among production, consumption, and urban culture. (Gandy, 2014, p. 12)

Gandy shows that waters breach boundaries as they are bottled and shipped, pumped across large distances, and purchased by international production companies, but also in the ways that water courses can stretch across ecologies as they wind above and beneath the ground, and connect oceans, wetlands, and rivers. In this way, local impacts on water can have far-reaching implications as they move across urban, rural, and even global ecologies. Kaika shows how urban imaginaries have contributed to the ways bodies of water have been integrated into or employed by cities:

The production of urban landscapes and the taming of nature was subject to the exercise of power and the investment of money, technology, and human labor, but it was also conditioned by the construction of geographical imaginations and ideologies of what nature is and how it should be treated, of what a modern city is and how it should function. (Kaika, 2005, p. 167)

Kaika (2005, p. 167) argues that one of these imaginaries is the idea of the 'clean, sanitised Western metropolis', which involves the construction of flows of water to remove wastes as well as the impulse to hide these processes underground or behind walls.

In turn, these imaginaries impact the kinds of water that are preserved or destroyed through urbanisation and ideas of urban progress. According to Giblett (2019, p. 227), waters that were seen as 'black waters' in the British settler imagination were characterised by their stagnancy, murkiness, and tendency to dry out in particular seasons, such as 'wetlands including swamps, marshes, mires, morasses, bogs, lagoons, sloughs, shallow lakes, and estuaries'. Giblett (2019, p. 230) argues that 'in Western culture, wetlands have traditionally, or at least in patriarchal times, been seen as places of darkness, disease and death, horror and the uncanny, melancholy and the monstrous – in short, as black waters'.

Importantly, in urban areas these waters are 'misdiagnosed as disease generating' or imagined to be where 'monsters lurk', and have ultimately been seen as 'obstacles to development' (Giblett, 2019, p. 227). Therefore, these waters were often drained, covered, and buried:

The project of colonisation, especially in its modern phase and especially in relation to the establishment of settlements and the foundation of cities, is strongly tied to the draining or filling of wetlands ... [without which] the establishment and expansion of

many modern cities would not have been possible. (Giblett, 2019, p. 233)

This is significant since many cities in Australia have been built on the banks of rivers or off coasts, which inevitably means within wetland environments. This, along with the drought and flood cycles common to many areas of Australia, has meant that cities have sought to control these flows. Giblett (2019) shows that the history of wetlands in Melbourne can now only be seen in the remnant wetlands of some suburbs, while in Perth the loss of wetlands has been memorialised in art and public exhibitions. To reimagine urban waters, he suggests that we should see these waters not as black but rather red waters – waters that refigure beings through decay and produce further life.

In contrast, bodies of water imagined to be 'white waters' in the settler imagination were characterised by clear, flowing properties and their utility either for swimming or drinking, such as oceans, lakes, and flowing rivers, which are not only integrated into urban design but have often been extended or replicated through urban development (Giblett, 2019). In addition, as Gandy shows, cities have more recently utilised such waters as part of international shows of progress:

An emerging focus on the revitalization of postindustrial waterfronts now forms part of the 'ecological gentrification' of cities. In some cases, the reconstruction of urban rivers has served as a wider symbol for urban boosterism and the creation of new forms of public space ... Water is being enlisted in the 'rebranding' of urban space as never before. (Gandy, 2014, p. 17)

Importantly, Gandy shows that some contemporary cities are now acknowledging the benefits of wetlands in managing urban waters:

The growing threat of flooding for many coastal or low-lying cities is leading to divergent strategies ranging from floodplain restoration to a new generation of technomanagerial solutions. Contemporary interest in the 're-wilding' of cities through the creation of swale-type landscapes and forms of controlled flooding encompasses strands such as ecological restoration, concerns with biodiversity, and changes in urban design. We encounter a spectrum of interventions ranging from cultural and scientific interest in the spontaneous dynamics of urban

nature and 'cosmopolitan ecologies' to the production of elaborate simulacra of 'wild urban nature'. (Gandy, 2014, p. 20)

While this allows for new imaginaries of interconnected waters, peoples and ecologies, these measures can also be used to feed the imaginary of urban waters as controlled and 'useful', their only value being to allow human development to continue. We also see some recent recognition of waters as having value beyond being seen as an urban resource in cases of water bodies being given legal personhood (O'Donnell et al., 2020). This legislation acknowledges that some controlled management of water courses and wetlands can interfere with the natural flows that are important for maintaining ecologies, as well as a recognition of the metaphysical and cultural meanings of these waters particularly to the Indigenous peoples, who are often the original custodians of such waters.

Thinking with water in the posthuman city

Imaginings of water that dominate in the city tend to centre the human. Without removing the human completely (recognising that humans can and have lived in service with ecologies¹), writers can reimagine the city in ways that decentre the human as master of the environment. The imaginaries that construct binary waters and view the value of water solely as a human resource – for example, to create the sanitised city – centre the human and needs of postindustrial urban development at the expense of ecologies. In contrast, Astrida Neimanis (2017) and John Ryan and Li Chen (2019) have proposed other ways of imagining and living with urban waters that address binary thinking to imagine cities as embedded in their ecologies. Ryan and Chen talk of 'wetland cultures' (p. 11) and the 'swamp-cultured' (p. 12) text:

As a noun wetland culture denotes things, phenomena, events, places, transactions, traditions, art forms, literary expressions,

In ecological science the term 'ecosystem services' is used to qualify (and often then translate into dollars) the ways that nonhuman others provide 'services' that support humans. Kimmerer (2013) suggests that some groups of humans have provided and humans could again provide 'services' to the nonhuman.

philosophical modes, and other interpenetrations of swamplands and culture. As a verb, wetland culture signifies the multidimensional processes, by which swamplands instigate, provoke, generate, nurture, mediate, and sustain cultural forms over time. (Ryan & Chen, 2019, p. 11)

The swamp cultured text, then, is the product of such processes and thinking. Similarly, Neimanis refers to hydro-logics:

The liquid is only one of water's phase states, and flowing is just one of the things it does. Water has other manners of being and becoming, other movements and ways of organising bodies, from which we might also learn. We might refer to these various modes of the aqueous as our planetary hydro-logics, as a way of naming myriad ways in which water enacts relations with other bodies. These are the logics according to which bodies of water make themselves sensible and intelligible; they are the patterns of existence according to which certain bodies come to affect other bodies. Bodies transform, and transform each other, through these different hydro-logics. (Neimanis, 2017, p. 53)

These notions involve the idea of thinking with waters, and in thinking with waters categories such as black and white waters can no longer be maintained. Through hydro-logics and wetland cultures, all waters are refigured as agents of change and as co-constructors of the city. For Neimanis, waters remind us that our bodies are entangled with other bodies, materials, and matter:

Our watery relations within (or more accurately: as) a more-than-human hydrocommons thus present a challenge to anthropocentrism, and the privileging of the human as the sole or primary site of embodiment. Referring to the always hybrid assemblage of matters that constitutes watery embodiment, we might say that we have never been (only) human. This is not to forsake our inescapable humanness, but to suggest that the human is always also more-than-human. Our wateriness verifies this, both materially and conceptually ...

As bodies of water we leak and seethe, our borders always vulnerable to rupture and renegotiation. With a drop of cliché, I could remind you that our human bodies are at least two-thirds

water, but more interesting than these ontological maths is what this water does – where it comes from, where it goes, and what it means along the way. Our wet matters are in constant process of intake, transformation, and exchange – drinking, peeing, sweating, sponging, weeping. Discrete individualism is a rather dry, if convenient, myth. (Neimanis, 2016, p. 3)

Here, Neimanis shows how our bodies are always in fact entangled with the environments around us. She suggests that, rather than existing as discrete separate beings, we are permeable, multiple, and always in the process of exchange with others through water.

Australia has a complicated relationship with urban waters. Most urban development skirts the edge of this vast continent, and therefore has a close relationship with coastal water systems. The current continent is dry across the inner region, making it more difficult to establish large cities; however, Ralph (2021) argues that this wasn't always the case, with much of this drying out occurring through colonisation, a removal of First Nations communities from the land and land-management practices imported from the West that worked to change ecologies and landscapes. The benefits of First Nations land-management practices that evolved in response to and helped to shape the continent of Australia are now being recognised by urban governments as important to healthy ecologies - especially when urban environments deal with increasing pressures related to climate change, including more intense storms, droughts, and bushfires. In addition, Larissa Lai (2017, p. 262) argues that settlers too must commit to 'the support, preservation and renewal of water as a living force, one to be wrested from those who perceive water as a resource to be exploited'. Lai (2017, p. 265) argues that it is not possible to avoid the 'gifts and horrors' of colonialism, but that settlers can serve waters by placing Western science alongside Indigenous knowledges to create more 'balance'. These ideas are starting to filter into policies to protect waters, many of which are dammed, drained, and managed to provide to cities at great cost to other ecologies. In the following sections, I examine texts by writers from First Nations, migrant, and settler backgrounds who respond to and reimagine relationships with waters in the postindustrial city.

Water and creation

A common theme in narratives that refigure the relationship between water and people is the retelling of creation and origin stories. In many of these creation stories, waters including wetlands become places where life emerges often with the help of a creator spirit or deity. In this section, I will primarily look at the creation stories presented in two books, Larissa Lai's Salt Fish Girl (2002) and Alexis Wright's Carpentaria (2006). These novels both have clear creation stories introduced at the start of each book, which depict waters as places where human societies are born. Since these books are set up with this refigured relationship between people and waters, the narratives that follow embody these refigured conceptions of the waters. Salt Fish Girl and Carpentaria reflect a broader movement to recognise both the ecological and cultural importance of water bodies. There is a reason why many of the newly established laws for the rights of nature around the world have focused on bodies of water - most often rivers and lakes, which feature prominently in these creation stories. O'Donnell et al. (2020) argue that the emergence of water markets has meant that waters are not only more commodified, but that Indigenous peoples have lost both ecological management rights and access to cultural connections with bodies of water. However, recent years have seen the success of collective resistance to these urban mechanisms:

This correspondingly has seen the embrace of market mechanisms to recover water for Indigenous peoples, as well as Indigenous peoples seeking to use rights of Nature to establish and entrench their claim to water rights. (O'Donnell et al., 2020, p. 417)

This resistance has seen several bodies of water around the world being granted legal rights, many of which play a role in local creation or origin stories. In part, the establishment of new laws can be attributed to the involvement of First Nations people and environmental activists, who have sought to reimagine the relationships between waters and peoples. These underlying imaginaries of water are 'based on the idea that humans are only one part of a wider community of beings and that the welfare of each member of that community is dependent on the welfare of the Earth as a whole' (Cormac Cullinan, qtd. in O'Donnell et al., 2020, p. 407) and on a

recognition of 'nature as a living being, towards which humanity has obligations and responsibilities' (O'Donnell et al., 2020, p. 413). O'Donnell et al. (2020, p. 421) argue that 'when rivers become "people", this can also transform settler-colonial relationships with rivers in ways that can help to centre the interests of the river in water management (such as the Whanganui in Aotearoa New Zealand)'. However, this can also be challenging, as the peoples given responsibility for the water might then be considered legally responsible for any damage, such as flooding that might be caused by the body of water, further entrenching the idea that humans are 'in charge' of rather than co-inhabitants with water (O'Donnell et al., 2020). These conflicting imaginaries can also be seen in narratives that examine relationships with urban water. As Calvino presents in Invisible Cities (1997, p. 20), with a version of Venice that is 'said to rise over a deep, subterranean lake' where a thousand wells 'draw up water, as far as the city extends'. In this imaginary we see some who worship the lake, while others worship the machinery and human endeavour that brings the water to the surface.

In cases where First Nations people have been deeply involved in the process of water protection movements, the rights of nature 'propose the category of "ancestral" personhood to refer to the spiritual, ontological, and relational connotations' that are often tied up in creation stories (O'Donnell et al., 2020, p. 422). For example, in the proposed rights of the Mardoowarra River in Western Australia, there is recognition of ancestral beings:

The First Laws that govern the river include Warloongarriy law and Wunan law (the Law or Regional Governance). Since Bookarrakarra (the beginning of time) these First Laws have ensured the health of the living system of the Mardoowarra and facilitated relationships between Mardoowarra nations and peoples ... regarding the river as a living ancestral living being (Rainbow Serpent) from source to sea, with its own 'life-force'. (Lim, Poelina, and Bagnall, 2017, p. 18)

This shows that relationships between peoples and waters as well as perceived responsibilities to others are often developed through creation stories, and centring these stories can then work to reimagine how to live with waters, particularly in cities where waters are managed and marketed most intensely.

Carpentaria and Salt Fish Girl destabilise power structures through origin stories, questioning dominant narratives about the origin of the nation. Further, these creation stories decentre the human by refiguring the environment as an agent that often forges the conditions for human activity and survival rather than a passive backdrop to human activity. As Wright (2006) suggests, creation stories outline value systems and principles that show us how to live. In the case of the creation stories in these novels, living relationally as part of the ecosystem is encouraged and the consequences of trying to live separately lead to destructive environmental forces that intervene in human lives. In Wright's fiction, this is often through cyclones and floods, and in Salt Fish Girl, it is realised through women born of watery more-than-human couplings who lash out in violent ways for their traumatic past (and historical) treatment.

Creation story in Carpentaria

Alexis Wright's retelling of the Rainbow Serpent creation story in *Carpentaria* presents a relational view of the waters, land, and peoples of the Gulf of Carpentaria on the Queensland–Northern Territory border:

The ancestral serpent, a creature larger than storm clouds, came down from the stars, laden with its own creative enormity ... It came down those billions of years ago, to crawl on its heavy belly, all around the wet clay soils in the gulf of Carpentaria. Picture the creative serpent, scouring deep into – scouring down through – the slippery underground of the mudflats, leaving in its wake the thunder of tunnels collapsing to form deep sunken valleys. The sea water following in the serpent's wake, swarming in a frenzy of tidal waves, soon changed colour from ocean blue to the yellow of mud ... They say its being is porous; it permeates everything. It is all around in the atmosphere and is attached to the lives of the river people like skin. (Wright, 2006, pp. 1–2)

In this creation of Carpentaria, the ocean, wetlands, mudflats, saltpans, underground aquifers, valleys, and mountains are carved out by the serpent, showing how all these flows of water and geologies are not only connected but formed in relation to each other. The First Nations people of this region are knowledge keepers of this country:

The inside knowledge about this river and coastal region is the Aboriginal Law handed down through the ages since time began. Otherwise, how would one know where to look for the hidden underwater courses in the vast flooding mud plains, full of serpents and fish in the monsoon season? ... Know the moment of climatic change better than they know themselves? (Wright, 2006, p. 3)

Wright comments elsewhere that writing Carpentaria was as much about speaking to the peoples of Australia as it was about speaking to the land:

I was often told as a child not to listen to my grandmother's stories as she was filling my head with rubbish. I have since learnt that these are stories of spiritual beliefs as much as the beliefs of the everyday. It comes from the naturalness of being fully in touch with the antiquity of this world as it is now, and through this understanding, an enabling, to understand more broadly the future possibilities. These stories are about having a belief system and principles of the right and wrong way to live. It is these things that have firmly stood by the oldest race of people on Earth and allow many of our people to uphold the country and care for the land. (Wright, 2007, n. pag.)

Therefore, the importance of sharing creation stories might be seen as setting out ways to live differently. As Rowland (2019, p. 546) argues, Carpentaria allows the present day to be redefined 'in terms of how it is still shaped by the ancient history of Dreamtime narratives, and how this ensures Indigenous survival through the transmission of Indigenous epistemology which entails knowledge about the country, its climate and its ecosystems'. Writing this book over two La Niña years in a row (2020 and 2021) and heading into a third (2022), where flooding has engulfed vast swathes of New South Wales and Queensland, it is clear that many urban structures are not built with this relational understanding of the lands on which they stand. Instead, cities try to negate the impacts of flooding by damming waters, walling them in, and diverting them through overflow courses. Carpentaria warns us about what can happen if these creation laws are forgotten, ignored, or unknown. Wright

reminds us that urban structures built without such knowledge are not always successful:

It takes a particular kind of knowledge to go with the river, whatever its mood. It is about there being no difference between you and the movement of water as it seasonally shifts its tracks according to its own mood. A river that spurns human endeavour in one dramatic gesture, jilting a lover who has never really been known, as it did to the frontier town built on its banks in the hectic heyday of colonial vigour ... In one moment, during the Wet season early in the last century, the town lost its harbour waters when the river simply decided to change course, to bypass it by several kilometres. (Wright, 2006, p. 3)

This sets the scene for the book, where the water that flows through it is an agent of change that shapes the lives of those who live alongside, on top of and around these interconnected bodies of water. Wright also shows the character of water not as stable, fixed, and bounded, but as dynamic – something that Australian cities, built on notions of stability, standardisation, and continuity, struggle to accommodate.

Troubling origins in Salt Fish Girl

Salt Fish Girl is told through two interwoven narratives: that of a creator deity, Nu Wa, from the beginning of the world to First World War-era China; and that of Miranda, a durian-scented child in a future North America from 2044 to 2062. Water is essential for the creation story told at the start of Salt Fish Girl. Nu Wa, a snake-woman deity, describes the before time as:

A murkier sort of solitude, silent with the wet sleep of the unformed world. The materials of life still lay dormant, not yet understanding their profound relationship to one another. There was no order, nothing had a clear relationship to anything else. The land was not the land, the sea not the sea, the air not the air, the sky not the sky. The mountains were not yet mountains, nor the clouds clouds. (Lai, 2002, p. 1)

Relationships between matter begin with 'the sound of a river, water rushing in to fill the gap. Here comes the river' (Lai, 2002, p. 1). Nu Wa, at first a deity who moulds people out of mud on the

banks of the river, eventually retreats to 'a cold green lake' where she 'slithered to the far end and slipped into it. The water was very clear. I lay beneath the surface. It was still as glass' (Lai, 2002, p. 6). Here, a fish who has 'eyes older than the world' gives her the chance to live with the mud people by bifurcating her tail: 'I felt a stream of water flow into my mouth like a finger. It pressed something smooth and round [a pearl] into the back of my throat ... I felt no pain there but in the tip of my tail I did ... There was the sound of flesh ripping, and then I felt it, my body beginning to split into two' (Lai, 2002, p. 8). This mirrors Nu Wa's own actions in bifurcating the tails of the mud humans when they make fun of her. In this opening chapter, not only is water the spark of creation from which all other life is brought into existence, but it also allows for bodies to be reconstructed: pulled apart, placed into new relationships (body and pearl), and made into new forms (tail to legs). This reflects Neimanis's (2017) discussion of the hydro-commons, where waters transform bodies. During Nu Wa's bifurcation, however, there is another woman sitting nearby 'also stroking her legs and marvelling at their newness' (Lai, 2002, p. 9), suggesting that there are more deities like Nu Wa - that she might not be as alone as she thinks. This recognition also troubles the origin story of humans in the novel, providing two ways by which they come into being - those moulded out of mud on the banks of the river and those who are snake-women turned into humans.

Moreover, this is just the first of many origin stories told of Nu Wa. Lai has said that Salt Fish Girl was an attempt to trouble origin stories - both origin stories of nations that use notions of authenticity to undermine other narratives and personal origins. In particular, Lai (2004, p. 171) explores what an origin might mean for someone of migrant-settler origin, whose self and family find themselves in lands that are 'pitstops on a journey family has been on for a number of generations, a journey that has sent it all over the world'. As Lai (2004, p. 171) says, 'I'm a Chinese woman. At least in one version of my history. But in another version, I'm the inheritor of many more traditions than that'. In addition, Lai (2004, p. 172) argues that 'our cities are replications that claim histories that have never existed or have existed elsewhere. These histories are violent because they utterly erase what was here before'. She is referring to North America, but given Australia's similar colonial legacy, this also applies to Australian cities where First Nations stories and

histories have so often been excluded from the dominant narratives of nation-building.

This complexity of understanding one's 'origins', as well as contesting the origins of a nation, is captured in Salt Fish Girl where Lai presents many entangled origins for the two women at the centre of her story as they are reborn in different times and places but carry something of those other times and places with them. Crucially, these traces are often associated with bodily fluids, such as the 'briny-smelling fluid' that leaks from Miranda's fistulas, small holes 'where the last outer whorl of [the] ear met the edge of the face', which Miranda considers to serve 'the function of memory, recalling a time when we were more closely related to fish, a time when the body glistened with scales and turned in the dark, muscled easily through the water' (Lai, 2002, pp. 107, 108). It is through these hydro-logics that Salt Fish Girl leaves behind 'the notion of shared biological origins, in order to embrace a politics based on affinity ... in Lai's formulation, by shared experience, as opposed to shared origins' (Reimer, 2010, p. 7). These origins are watery origins, not just in the sense that they all occur in or around waters but also in the structure and nature of the origins – that is, they are 'indeterminate, multiple, turn in on themselves, or seem to regress infinitely - and they do so without explanation' (Reimer, 2010, p. 5).

Nu Wa is born at least twice more over the course of the narrative. Her first birth occurs after she accidentally reverses her bifurcation by climbing into a cistern of water. In this cistern, she grows small enough for a woman to swallow her when she drinks the water: 'I glided down her throat and slid into her womb. Nine months later I emerged as a bawling black-haired baby girl' born into late nineteenth-century China (Lai, 2002, p. 48). Her second birth is via a durian tree that 'stretched roots into both land and sea, drew water and salt up into its thick convoluted trunk' (Lai, 2002, p. 208). Again, water acts as a conduit for bodies to communicate and reform. Nu Wa makes herself 'small as a worm, crawled through the tiny aperture of a barely opened bud, and coiled [her]self round and round its small black heart' (Lai, 2002, p. 208). This is presumably how Miranda is conceived by a mother who 'was a good eight years past menopause' (Lai, 2002, p. 15). However, two alternative narratives converge in this conception, as we are also told that the durian her parents ate was genetically modified to help with fertility issues. These seemingly contradictory narratives trouble the simple linear

origins that dominate in Western thought, and instead introduce us to alternative epistemologies where both mythological and biological explanations might be accepted at the same time. As Reimer argues:

In Salt Fish Girl, Lai imagines the outcome of late-capitalist neoliberal technocratic logic as it affects marginalized people as well as its impact on the control of both the environment and genetics and works to prevent it by demonstrating how the notion of origins upon which this logic relies is itself illogical. (Reimer, 2010, p. 6)

Thus, Salt Fish Girl presents creation myths as a way to question the idea of bounded, linear, and stable histories (or waters).

Watery origins

Whether set in the city or not, the creation stories in Carpentaria and Salt Fish Girl have implications for how cities might form in other less destructive ways. The rights of nature that seek to protect water sources and recognise not just the ecological but also the cultural value inherent in bodies of water show that urban structures and systems are able to adapt to alternative imaginaries of waters. Wright presents the interrelationships between peoples and waters that existed in Australia before colonisation, and an acknowledgement that urban processes often interrupt these water courses. These origin stories are the same ones that underlie and yet have often been excluded from cities. Lai presents a narrative that directly addresses waters in the city and troubles origin stories so that many tangled and overlapping origins come together through the waters that flow through peoples, ecologies, and cities over time. She reminds us that our watery origins are slippery, multiplicitous, and relational. In both Salt Fish Girl and Carpentaria, the creator being is tied to water and settles near humans (in Salt Fish Girl, Nu Wa becomes human, while in Carpentaria the Rainbow Serpent settles into the depths of the aquifer). These creator-beings both have serpent-like bodies and special relationships with waters. However, the structures of the narratives position these creator beings differently - Nu Wa is told in first person whereas the Rainbow Serpent story is told in third person from a human perspective. In both, water is not controlled but rather inhabited by the creator beings as well as humans, matters, and other nonhuman beings.

The future of waters and cities

Another theme that emerges from narratives that refigure the relationship between peoples and waters in the city is that of the climate or technologically impacted future of human-water relationships. Most often, these relationships are refigured either through a lack of water or an overabundance of water. Such states are sometimes due to climate change causing rising tides or exacerbating the drought/flood cycle, or to more direct human actions through urbanisation and urban development. Adrian Franklin (2017) argues that flooding has only recently come to be seen as an emergency when once it was considered a routine way of living in the city. He argues that this is 'more a function of less commensurate modern domestic technologies' and may be considered along with modern imaginaries of the controlled and managed space of the city (A. Franklin, 2017, p. 205). People (and others) in narrative futures tend to be in the process of adapting to these new conditions and show how we might form new ways of living with and listening to waters of the city. In these watery spaces, we see the old systems of the city break down, creating tensions between the densely populated cities we know that require more resources than can be produced on the lands they occupy and the emergence of other ways of organising ourselves.

Water is often something that impacts the city in unexpected ways. In narratives, waters and other liquid flows often impact the direction of the narrative. These flows can also work to increase damage already caused by urban processes – for example in *Animal's People*, the flows of water in and out of buildings and bodies leads to a movement of poisons across the city:

Says the mother to Elli, 'Our wells are full of poison. It's in the soil, water, in our blood, it's in our milk. Everything here is poisoned. If you stay here long enough, you will be too'. Of an instant, it's like the ground under my feet has turned to water. The young woman seems to be floating on a glittering ocean, the papaya trees are tall green waterspouts or else tails of monstrous plunging fish. (Sinha, 2007, p. 108)

Here, Sinha shows the way all inhabitants of Kaufpour, the city of his novel, are connected by these waters. Animal's vision of the

'glittering ocean' emphasises the extent of the watery flows that underlie the city.

Water is also often contested in the city, since waters are some of the most controlled resources available. In some narratives, it is the lack of access to water that impacts the narrative. Being piped into homes, walled, fenced, drained, or dammed means that those with power have unlimited access to waters while those in disadvantaged positions can be left without any access at all. For example, in Meg Mundell's *Black Glass*, where one of the protagonists is living on the street as an undocumented citizen:

Thick coils of heat lay trapped between the buildings, the sunlight burned your eyeballs, and a constant slick of sweat coated her skin. All day she hunted fresh water, and at night she dreamed of mysterious taps rising from the asphalt. People threw away unwanted food all the time, but liquid was more elusive. The rare trickles she found were of suspicious origin and soon vanished into the filthy cracks of the city. (Mundell, 2011, p. 47)

The issue here is not the amount of water in the city, but rather where it can be sourced. While water is often found all over the city, who has access to it (especially clean and safe water) can reveal sociopolitical dynamics in narratives. In *Animal's People*, the distance between the wealthy US lawyers and the locals is also demonstrated when Animal sneaks into the garden of Jehannum, the hotel where the Kampani lawyers are staying:

Rich and delicious scents rise up from Jehannum's damp earth. What? Has it been raining? The monsoon is still some weeks away, it's the driest season of the year. Fool! In the haunts of the rich, rain falls daily via a hosepipe. (Sinha, 2007, p. 269)

Water is plentiful in this resort, but in Animal's village clean water is difficult to come by, since it is not piped into homes but must be collected from wells and tanks, and even in those cases is likely to contain poisons. The excess of this scene shows that waters are available in the city – but only to the wealthy, who in this case are largely outsiders to the community.

In this section, I look at three novels that refigure relationships between peoples and waters through speculative futures of the city. 170

In Merlinda Bobis's Locust Girl, water is scarce, and knowledge of waters has been eroded leading to a future that exacerbates current controls of water. In contrast, Alexis Wright's The Swan Book shows a future of abundant waters, waters that inhabit urban spaces in ways the city is not set up for, yet these conditions allow parts of the city to be reclaimed by those currently excluded from or discouraged by urban processes. Lai's Salt Fish Girl, on the other hand, tells of a future where peoples and waters are bound up in biotechnological processes that are destabilised by waters. What these narratives have in common is futures that also work to consider the legacies of current and past relationships between peoples, waters, and urban processes, particularly those processes that have emphasised inequalities and socio-environmental injustices. Emily Yu Zong (2020), drawing on the work of Derrida, terms this 'the future-as-past-to-come' (p. 120) and explains that novels such as these 'speculate about a spectral future in which colonialist, sexist, capitalist, and ecological violence from the past (or the present) comes back to haunt humanity' (p. 102). This allows the authors to reclaim pasts and respond to current environmental concerns by projecting these on uncertain futures.

Water scarcity in Locust Girl

The world of Bobis's Locust Girl is situated around a city, called the Five Kingdoms, which is separated from the surrounding areas, called 'the wastes', by a border that is sometimes physical (barbed wire in some areas, a wall in others) and sometimes politically enforced both by people watching the border and by firebombing the villages of those who attempt to cross the border. There is a concentration of resources in the city of the Five Kingdoms, with abundant water, plant, and animal life, whereas the surrounding areas, where waters and resources have already been extracted by the city, have turned into deserts with scarce resources, few children, and almost no other life besides the small groups of humans who receive rations and locusts burrowed in the sand. The narrative is told from the perspective of the 'strays' or 'wasters' who inhabit the deserts, and hope to cross the border into the city. However, despite a lack in these deserts, the city still finds things to extract, including the bones of people killed by firebombs. These bones are powdered and sprinkled on the urban soil to nourish trees, which are then used as watchtowers to monitor the border.

While the absence of water dominates the narrative, Locust Girl reflects several of the watery logics outlined by Neimanis, namely transformations, multiplicities, and connections between watery bodies. The most obvious of these is the entangled locust-human form of Amadea, which 'reorients her embodied subjectivity to become in and of the environment' (Zong, 2020, p. 100). The locust has lodged itself in her forehead and sings her towards water or away from danger. According to Zong (2020, p. 120), these kinds of entanglements between bodies and environments work to 'recuperate a planetary ethics of multiplicity that undoes anthropocentrism'. Bobis creates a world that emphasises what can happen when there is no 'relational ethics of care' among those in power, reflecting the need for a transformation in how cities operate and their shared responsibility to care not just for the urban environment but also for those places beyond the borders of the city that produce many of the resources needed to support urbanisation (Zong, 2020, p. 120).

Locust Girl speaks both to the history of Australian environmental change and to a possible dystopian future. As Ralph argues, the novel

reads as a thinly disguised account of human agents and agencies that transformed Australia from a verdant continent with ample sources of water to a sunburnt and parched one after 1788. In global contexts, the novel describes the planet Earth as humans are transforming it from a cool green sphere into a hot red orb. (Ralph, 2021, p. 67)

This future captures some of the current anxieties about the control of water, the impacts of an extractionist management of urban and other environments through the process of urbanisation, and climate change injustice. Narrative futures such as that told in *Locust Girl* also reflect on past manifestations of these same issues, where the control of water has been taken away from certain groups, while colonial forms of environmental management have led to permanent change or damage with the most vulnerable harmed the most by these environmental changes. For example, Ralph argues that First Nations people have lost more than just access to their land through colonisation, that those lands were also fundamentally changed by the process:

Anglo-European newcomers to Australia transformed the continent in a remarkably short period of time, between 1788 and the present, from a loosely united amalgam of many small and relatively autonomous countries, where the human and the environment coexisted and where the environment was green for much of the year, to a country that now is dry across much of its length and breadth for many months in the year ... many Australians take for granted or have been misled to believe that Australia's dry and sunburnt lineaments without exception predate by thousands of years the advent of European newcomers. (Ralph, 2021, p. 71)

In co-opting this situation and projecting it into the future, Bobis is able to reclaim the history from a perspective not necessarily recorded and to imagine the ways that this past-as-to-come has far-reaching impacts for all peoples and environments who suffer from the inequalities produced.

Water is an ever-present force in *Locust Girl*, though often in the form of imagined and remembered waters rather than flowing in physical proximity to the characters. For example, Amadea's father recounts his experiences of abundant water made surreal by their present situation:

The grey locusts had bulging eyes and blue whiskers. Like strange prawns, my father said. He knew prawns from long ago, but not me. I had never seen prawns or the water where they were found. Water which he called riverrrr, with a delicate roar in his mouth, or ocean, with a ssshh that hushed me to sleep. My father had seen all those 'big, big waters, sometimes as big as this desert and coloured blue'. I could not imagine, them, especially when he said you couldn't drink them, well the salty ones. I only knew water from the blue barrels rationed from far away, way past the horizon. (Bobis, 2016, p. 6)

In this future world, waters are controlled by a select group called the 'Heads of the Five Kingdoms', who manage the last of the resources, a role that includes the growth and distribution of food, water, materials, and cultural products, which are all scarce beyond the border. This arrangement is justified by a false history constructed in the Five Kingdoms that suggests

[an] 'ideal for preservation' ... which dictates the Kingdoms' citizens as humans and 'carers of the natural world' versus the Strays as less-than-human 'wasters' who have 'dried up nature with their profligate ways long ago' and 'have no place in this new order'. (Zong, 2020, p. 107)

As Zong (2020, p. 107) argues, 'Such obfuscating claims of equality and justice, however, are predicated on an unequal distribution of subject recognition'. Thus, this novel carries forth a legacy of colonialism that is derived from a history of imagining the nonhuman as mute and mechanistic and the subsequent view that some groups of humans were similarly mute and mechanistic while others were endowed with 'civilisation' (Ghosh, 2022). The maxim that describes the values of the Five Kingdoms - 'Symmetry. Equality. Justice' - sets up a fantasy that overlooks the very real injustices enacted on those beyond the borders (Bobis, 2016, p. 76). These injustices are further obscured through laws against singing, which work to control the narratives passed between peoples and by the control of memories through the distribution of seeds in the rations that erase memories. However, before Amadea reaches the Five Kingdoms, this myth of the kingdoms as carers of waters has already been undermined by the crying woman in a cave who seems to be unable to control either her tears, which pool around her, or her memories, which flow from her mouth:

But our well was not dry, yes, we had a well once upon a time. Our whole village could drink once upon a time even our animals. It was green once upon a time ... Then the good men and women came to our village once upon a time. They came to tell us we had too much water and we were wasteful. We had to save water for the future. So they built pipes into our well and our water disappeared ... Once upon a time the good men and women said they were the keepers of water. Once upon a time they said that our water was somewhere safe now for the future, and they promised to send us just enough water, so nothing will be wasted. So once upon a time there came barrels of water, which we had to share, but there was never enough and our well was completely dry. Then the barrels stopped coming. The good men and women forgot their promise. So our village began drying up, even the wombs of our women. (Bobis, 2016, pp. 42–43)

This suggests that the five kingdoms had stolen the waters from the original custodians and created these dry conditions beyond the border by pumping all the water into the city. Herrero argues that this intervention in the official narrative offers a way to reconsider our own histories and relationships with place, which in urban areas are built on the notion of species hierarchies and racial injustices:

Bobis uses fantasy as a weapon, not only to humanize the Other as embodied by all of those dispossessed communities fighting for survival beyond the border, but also to question the western/anthropocentric/humanist belief that so-called 'civilized' societies can deal with nature and the rest of cultures and human beings as they please, that these 'civilized' humans are the only rational and therefore superior beings, that 'there is a border between us and the non-human world'. (Herrero, 2017, p. 958)

This is evident in the many kinds of watery extractions enacted in the city. Not only do they pump in waters from the surrounding areas, but they also extract bodily fluids from 'strays' who have crossed the border and been appropriated by urban processes as well as the strange animal-like creatures who populate the urban gardens. We are told of mothers who 'are suckling newborn animals whose own mothers were killed by hunters for their silken fur. The mothers suckle the orphans with their blood, because there's no milk in their breasts' (Bobis, 2016, p. 95). We also see both plants and animals concentrated into gardens that at first seem idyllic but are revealed to be constructed for the mass extraction of bodily fluids:

The sprawling ground smelled as intensely with flowers much bigger and brighter than the ones we saw. Most bowed towards a pool that kept changing colours, sometimes blue, sometimes yellow and even red. On closer look we saw that the flowers were dripping thick liquid into this pool, and those that were too far away had a little catchment, which trickled the juices towards the blue balls on three legs, but gracefully and without disturbing the efficient arrangement around. At first I thought they were wearing yellow stones under their eyes, but I was wrong. These were vials catching the consistently dripping fluid. The animals were crying out their oils. And among all these were slender

golden pipes sprouting from the earth like overgrown flowers or grasses. (Bobis, 2016, p. 132)

In all these extractions, this city is able to not just prosper and hoard resources at the expense of the dry lands beyond, but also to exploit urban residents. This serves both as exploration of past geographical change and a warning for a future where we might all become wasters and exploited carers. It is important that the narrative does not set up an opposition between these two groups but shows how the 'strays' who cross the border without being killed are co-opted by the systems of the city and move from being labelled wasters to being labelled carers who are exploited, but also become complicit in upholding the narrative separation between wasters and carers, and continue the harm against the now 'other' wasters.

Bobis also uses watery language to attribute certain conditions to these competing narratives. Herrero (2017, p. 960) argues that 'the dry landscape in Locust Girl represents the dryness of the human heart'. Throughout the narrative, Bobis uses dryness to signify a lack of care. For example, Amadea describes the maxim of the Five Kingdoms as dry: 'Symmetry. Equality. Justice. Those words ... My brow lined them up in my ear. My mouth tested them. So grand and difficult, so dry' (Bobis, 2016, p. 76). In contrast, Amadea describes the crying woman's words as wet: 'each of her words became like dripping water' (Bobis, 2016, p. 43). We are also told of the mothers who suckle the guri animals: 'their breasts dry up like their eyes', suggesting that this work is exploitative rather than mutually beneficial (Bobis, 2016, p. 95). This dryness is not just a physical condition, but a subjective experience that responds to the socioenvironmental conditions, which is why we often find descriptions of wetness in the wastes and dryness in the city despite the contradictory geological conditions. This tension is only resolved in the narrative through 'mutation - a change of heart' (Herrero, 2017, p. 960). Amadea goes through several transformations in the novel. First, she is buried when her village is bombed and a locust burrows into her forehead. Later she is burnt in another village bombing and wakes with blotchy skin and a smooth head as the locust burrows deeper. Her final transformation occurs in the city as her body self-immolates in the court of the Five Kingdoms and she re-emerges from the ashes as a locust. This transformation is prompted by the locust, which begins to sing all the memories of people they've heard

from beyond the border. Zong (2020, p. 118) argues that 'the strain of embodying this multiplicity makes her implode and catch fire'. But rather than mirror 'the implosion that is in other parts of the novel associated with dryness and the Kingdoms' firebombs', this immolation 'becomes here a redemptive act of love and sacrifice' (Zong, 2020, p. 118). Ralph (2021), Herrero (2017), and Zong (2020) point out that this retelling of pasts allows for a reclamation of global Indigenous narratives in the face of colonial myths that seek to erase them. However, Bobis addresses these myths in order to create 'a politics of care against a politics of fear' (Herrero, 2017, p. 953).

Floods and other watery demands in The Swan Book

Alexis Wright's *The Swan Book* is set in a future where urban structures are starting to break down as waters frequently interrupt lives, both on the streets and in homes. We are introduced to this place through Oblivia, who has been taken from her home in the swamp to the city as the promised wife of the first Aboriginal prime minister, Warren Finch. Wright suggests that she wrote this story to consider how a climate-changed world might impact the stories of the land:

I talked to traditional owners living along the coast and they were saying there used to be a lot of swans here and now there is hardly any and we don't know why. Well, we do know why. Global warming, perhaps? A change in weather patterns? And over many years, there had been human interference along rivers feeding into the sea, tampering with the flow of the water, and rivers dammed up, which ended up with silt and salt everywhere and other environmental damage. And so the swans just moved. We had taken them out of their habitat through environmental damage that has been mostly man-made, and the swans moved. They have to go somewhere. Where do they go and what stories do they have? How do you make stories for them in a new place? (Wright, in Zable & Wright, 2013, p. 30)

In this case, fiction might be considered an experiment in updating socio-ecological imaginaries of place to represent changing environments and the myriad peoples and other animals that are forced to move. In *The Swan Book*, water is plentiful in the city, but electricity has become scarce, impacting the ways in which

movement across such a landscape can be achieved. So, despite the increase in the number of people and other animals moving across the land, mobilities and communications are fragmented, unreliable, and nonlinear.

The relationships between peoples and waters are also refigured in this city. For those who can afford to avoid the worst impacts of climate change, the ocean view is no longer desirable. Oblivia is first taken to The Christmas House, where:

The large garden was a forest of full-grown pine trees decorated with coloured lights. It stretched all the way to the edge of a rocky cliff where waves crashed, but the red-haired lady said it was a good thing they planted the trees to muffle the sound of the ocean, because you get sick of it roaring day and night. It was enough to give you a headache. Underneath the dripping canopies of the trees a single seagull was lost somewhere in the needles, singing its airs to the seagulls gliding far away, over the sea. (Wright, 2013, p. 212)

This speaks to both the changed landscape and the changed imaginary of the ocean. That trees are used as a boundary to both seeing and hearing the water suggests that people no longer see the ocean as calming, but rather as stressful. Meanwhile, in the cities, those who can't afford to avoid the waters are forced to listen to them:

Theirs was a primeval kind of surveillance, like wild dogs. She pretended not to notice how wet the people were who slept against walls, some standing, and others lying under pieces of cardboard while Styrofoam and plastic rolled over them in the wind. They lay on the concrete sideways with an ear to the ground, as if trying to hear the stories that lay underneath. Oblivia did not understand then that what they were really listening for was the hint of another tidal surge flooding in the sewers below the city. (Wright, 2013, pp. 234–35)

This is a common thread that runs through the novel – waters demand to be listened to but not everyone is willing to hear what they say. As Wright suggests elsewhere, these waters can be seen as speaking of the past harms caused to the climate: 'It's what we believe in: ancestors, spirit of the country. If you do the wrong thing to

the country, the country will get sulky and cause harm' (Zable and Wright, 2013, p. 30). Those who are listening also happen to be those most affected by the impacts of climate change.

In *The Swan Book*, the swamp is a place where narratives conflict. This is the site where Indigenous and other displaced people have been forced to live through historical army-controlled camps, yet these people have created deep relationships with this place. For Oblivia, the swamp is an idyllic home both for herself and the swans:

In those days the graceful gliding swans, swirling around in loops in settled softness, there was a serene calmness that ran throughout the swamp. The swans stayed all seasons, even until the swamp almost dried up when the old loved spring did not flow. Sometimes, the whole mass would suddenly disappear in the middle of the night and the swamp would seem empty and silent – as though they had never been there – then unexpectedly, they returned, homing to the old woman. Perhaps it was her stories. Or, she really could call swans. (Wright, 2013, p. 67)

However, when Oblivia is displaced from her home by her forced marriage, her husband Warren decides that the people should be removed from those conditions. As Le Guellec-Minel (2021) argues, 'the environmental disconnection of the lake from both spring and sea by drought and changed wind circulation patterns parallels the effects of the deadly policies enforced on the Indigenous population' (para. 25). Despite calling them 'his own people', Warren also considers whether the swamp people 'were even worth saving at all' (Wright, 2013, pp. 149, 148). This culminates in his decision to remove the swamp:

He had just ordered the total evacuation of Swan Lake. The Army would do it. The whole shebang would be bulldozed that night. He imagined total annihilation. The swamp dredged. The unpredictability of seasons passing, weaving the light as he fell asleep. (Wright, 2013, p. 160)

While Warren is supposed to usher in a new way of running the country, his actions mimic the same colonial violence and cause further displacement of 'his' people. This reflects Ghosh's (2022, p. 196) demonstration of the ways that marginalised groups have

often sought power by enacting imperialist techniques: 'The terrible irony is that the unbruting of the middle classes of the non-West has been precisely by repeating, and even intensifying, the processes of brutalization that were set in motion by Europe's colonial conquests'.

With the destruction of her home and her own removal to the city, Oblivia is neither certain of where her homeland is nor whether it is possible to return to that land. As Wright suggests, environmental displacement will become a reality for many more around the world as the effects of climate change intensify already existing inequalities:

Why not consider swans in a world of the future changed by the impact of climate change, say one hundred years from now, and juxtapose their fate with a similar reality of millions of people in the world becoming homeless through climate-change wars, and our own people being locked up in army-controlled detention camps in a climate-changed world of Australia. (Wright, 2019, p. 52)

However, Oblivia is followed in her displacement by that of the swans, who also make their homes in the city:

Yes, the swans were multiplying, nesting among flooded trees, reeds and swan weed, and had already overfilled ponds in the abandoned botanical gardens and a small lake in the city's zoo, then the city's shallow lakes where they were breeding along the bays, gullies and inlets. (Wright, 2013, p. 264)

Le Guellec-Minel (2021, para. 38) argues that this is how 'Wright challenges dominant narratives of extinction by using the swan's associated symbolism of death and resurrection in folklore and literature from around the world'. Both Oblivia and the swans find ways to maintain community in exile and imagine a new way of living through post-climate collapse. As we see from the above scene, animals such as swans, but also bats and Oblivia herself, find refuge in the botanic gardens, not because they are carefully controlled and maintained, but because they are not. This allows the conditions for peoples and animals to make homes when they might otherwise be excluded from or heavily managed within such

places. The end of the novel, however, sees not only Oblivia but many urban residents flee the city and cross the land searching for an Indigenous understanding of the landscape that might help them to settle and adapt to the new environmental conditions.

Lively waters in Salt Fish Girl

Lai's Salt Fish Girl is a novel permeated by water. Bezan (2021, p. 78) describes it as a 'literary hydrology', and in many ways Salt Fish Girl enacts the hydro-logics outlined by Neimanis's (2017) work on the posthuman. These are borne out through the multiple incarnated couplings between Nu Wa and the salt fish girl, as well as the flows of water that are expressed in smells, bodily fluids, and genetic material. Often, as the waters flow through bodies and matters, something is taken and something left, and this is also the case in terms of genetic inheritances or mutations as Nu Wa makes her way through rivers and oceans, bodies, countries, languages, and durian fruit. Similarly, the salt fish girl's journey reflects this motion through her reformation from salt fish seller in early twentieth-century China to genetically engineered carp-woman in a futuristic North America. The waters of Salt Fish Girl are agents in the narrative that often shift and move the story along: The mists on the Island of Mist and Forgetfulness push Nu Wa towards migration and obscure her pathway back to China for some time; the scent of salt water brings Miranda's memories of Nu Wa back to her; and the 'dreaming disease' infects people with historical memories so 'their eyes swim with grief and history' and they have 'a compulsive drive to commit suicide by drowning' (Lai, 2017, pp. 244, 100). Waters allow new life and reformed lives to emerge, are agents that carry or obscure memory, and convey bodies both towards and away from each other.

Salt Fish Girl complicates anthropocentric notions of the human as discrete, contained and separate from the environment in the novel's use of watery gestation and human-nonhuman hybridity. The world Lai creates is full of intentionally constructed carp-humans and cat-humans, unintentionally created durian-humans, as well as the naturally occurring snake-women and constructed mud-people. As Bezan (2021, p. 84) argues, 'from immaculate human-vegetal conceptions to fishy labors and births in water, Lai's novel opposes the geological and stratigraphical epistemologies of the Anthropocene, conveying it fluidly into

an unstable and affirmatively procreative future'. This works to question the human as separate from the environment but also 'denies racial purity' as a way to address the racial and social hierarchies that have allowed some groups to justify claims to the land and the authority to manage ecologies in often damaging ways (Lai, 2004, p. 173). Bezan (2021, p. 79) argues that 'the commingling of bloodlines overrides and re-encodes the trauma of colonial geographies, while the subsequent act of sex produces new shape-shifting forms for traversing the bounds of time and space'. The relationship between the salt fish girl and Nu Wa spans generations and continents as the characters are incarnated in new forms generations after their first meeting. Their bodies as Miranda and Evie carry traces of their previous lives in their blood, through the scent of salt fish and durian, and in the mark of their fistulas. Personal traumas are enacted on the salt fish girl and Nu Wa in the historical storyline from patriarchal family structures, including the salt fish girl's controlling father and exploitative job in a factory, and Nu Wa's arranged marriage, pressure to produce a child, and subsequent killing when she has an affair in a quest to produce a child. These traumas are reproduced in the future as Evie's 'father' is the exploitative doctor responsible for creating her and her sisters to work in slave factories, while Miranda is both born through and conceives by eating durian. These traumas are not just suffered but, as Lai (2004, pp. 174-75) argues, Miranda also partly causes the trauma inflicted on others: 'Miranda and her family are comfortable, but their comfort is supported by tremendous chaos and abuse of power that they are complicit in even if they aren't directly party to it'. Lai suggests that this was to show how migrant-settlers might be complicit in colonial injustices even while suffering the impacts of those injustices themselves. This can be seen in the walled protection of Serendipity, where Miranda's family originally lives, compared with The Unregulated Zone, where there are dilapidated houses, contaminated soils, and unknown impacts from eating genetically modified foods, one of which is responsible for the immaculate conception of Miranda.

Through the narrative's hydro-logics, Lai dissolves hierarchies of all kinds – heteronormative couplings, racial purity and authority, patriarchal structures, human distinctness, and anthropocentrism. As Reimer (2010, p. 8) argues, 'the unnatural, monstrous, racialized bodies in Lai's novel trouble the alleged authenticity and purity of

human bodies'. While they carry past traumas with them, Miranda and Evie also represent a hopeful future:

The novel presents water as a queer substance that links bloodlines and suffuses the flow of historical trauma, while also containing the (re)productive possibilities for future species. The novel's hydro-logics of space can therefore be defined as the watery spaces of (pro)creative sex that link bodies together across past, present, and future temporalities. (Bezan, 2021, p. 78)

As though placed into water, dissolved, mixed, and strained, the future narrative draws together elements of the historical one, with new formations of previous bodies and mutations that combine old and new:

Evie's beauty lies in her ability to survive, adapt and reproduce in forms that mutate the present. She both doubles the past and diverges from it, in order to open to an embodied, knowing hopeful future. (Lai, 2004, p. 193)

This structure is also embedded in flows of water, most prominently through the relationship between Nu Wa and the salt fish girl. The connection between the two women and water culminates in the love scene between Miranda and Evie, where:

Her fingers moved over my skin, cool and tingly as ice water. I wanted to turn into water myself, fall into her the way rain falls into the ocean. I moved through the cool dark with her, my body a single sliver of muscle slipping against hers, flailing for oxygen in a fast underwater current, shivering slippery cool wet and tumbling through dark towards a blue point of light in the distance. (Lai, 2002, p. 162)

Here, this encounter allows for an expression of Nu Wa through Miranda's body and mimics previous scenes of Nu Wa as snake-woman. This sexual encounter also seems to contribute, at least partly, to the growth of their child. Even before consuming the durian, Miranda says that 'perhaps it was at this moment the child took root' and then feels 'something shift inside me that remembered another longer, leaner shape' (Lai, 2002, pp. 162, 163). The final scene

in the novel sees Miranda and Evie enter a natural hot spring in the mountains, where their legs fuse, one into a fish tail and the other into a snake tail as Evie births their child. For Bezan, this moment holds a promise for a new story to emerge:

The final scene of the book, which is set in a mountain pool that smells 'faintly of salt' (268), similarly treats the stench of bodies of water as a vehicle that transports characters into other temporal and spatial realms. (Bezan, 2021, p. 79)

This ending in a pool of 'ancient ocean bubbling up, through rocks, salty and full of minerals' is also reminiscent of the start of the novel, where Nu Wa tells us that 'in the beginning there was me, the river and a rotten-egg smell' (Lai, 2002, pp. 269, 2). The connection between the odours of bodies and the odours of waters is more apparent in these scenes. The odours that accompany the dreaming disease and permeate the book, including Miranda's durian smell and Evie's salt fish scent, are also reminiscent of lively bodies of water such as swamps and geothermal hot springs. Just as these waters contain decaying pasts suspended in their bodies and give birth to new forms of life, the dreaming disease mimics these qualities in human bodies, causing people to bring forth historic memories buried in their bloodlines and remind sufferers of their watery origins (whether these are origins in Nu Wa, the mud-people, or the fishy distant ancestors of humans).

Cities of water

The three narratives discussed here, Salt Fish Girl, The Swan Book, and Locust Girl, each work to undo 'the patriarchal underpinnings of the founding myths of nations' (Lai, 2004, p. 174): Bobis through competing narratives of who does and doesn't deserve to live in the city and have free access to water, Lai through multiple origins and watery births, Wright through the repetition of harms to the swamp and swamp peoples in a future that resembles colonial interventions of the past. Each narrative uses watery logic to interrupt current inequalities through watery gestations (Salt Fish Girl), animal and watery interruptions of urban processes (The Swan Book), and hybrid human/animal/vegetal forms (Salt Fish Girl, Locust Girl). Identities are multiple in all these narratives and each narrative interrupts neat, linear, and singular structures as waters interrupt temporalities and

permeate spatial boundaries. Waters haunt people and bring forth histories: in *Locust Girl* through the tears and stories of the woman in the cave, in *The Swan Book* through the demands of flood waters, and in *Salt Fish Girl* through genetic traces.

If Carpentaria can be seen as the start of a conversation and The Swan Book as a continuation of that story, then the creation myth told at the beginning of Carpentaria also underpins the narrative of The Swan Book. Similarly, the creation story of Nu Wa resonates across the ages and threads of Salt Fish Girl. Creation stories are important because they outline the value system on which societies are built. According to Sefton-Rowston:

Both Carpentaria and The Swan Book are hopeful of a new world order but show the difficulty of achieving this without society's willingness to start all over again, to proceed into the unfamiliar, strange, and unknown world of the other. This new start manifests itself in the theme of apocalypse: a motif in both texts, representing the need for significant ends in order to generate new beginnings for Indigenous and non-Indigenous subjects. (Sefton-Rowston, 2016, p. 362)

Waters reveal sociopolitical processes as they play out through questions of access and control but also provide a way to reform cities and reimagine human-water relationships. In all the narratives discussed in this chapter, the city intensifies inequalities, as some have access to waters and others struggle for access, struggle to avoid flood waters, or are forced to consume poisons through waters. However, in *Carpentaria* and *The Swan Book*, waters demand those in power to pay attention. In *Salt Fish Girl*, the waters are always bringing the past bubbling to the surface. Finally, in *Locust Girl*, memories and waters pour forth from the woman in the cave, refusing to be contained.

CHAPTER FIVE

Public entanglements Streets and parks*

The urban and suburban street has long been a significant location in narratives about the city. Most often, this has been through the figure of the flâneur, who in the Benjaminian tradition was evoked by writers to make sense of a changing modern city. The street is a space of collusion (protests, marches, parades, marathons) and transience - of people just passing through. Often streets and green spaces intersect, creating pathways through the city and spaces for human-nonhuman interactions. Originally seen as a cure to the city's ills, the pastime of walking to or through city parks and public green spaces continues in the contemporary city. However, these are places that can simultaneously be for leisure, work, and protest; they can be the last remnants of local habitat for some species, yet places where safety (of women in particular) is brought into question. In this chapter, I explore the way literary fiction has drawn on and refigured the street and park as well as the potential for new narrative modes and imaginaries that may question traditional notions about who and what belongs in these public urban spaces. I argue that new ways of engaging with the public spaces of the city and new modes of writing can work to construct new kinds of relationships with the city.

^{*} Small sections of this chapter are refigured as a ficto-critical piece in Swamphen: 'Letter to the City of Murky Dreams', Swamphen, 9 (2022), 1–8.

The ideal city refigured

In the contemporary city, where spaces are controlled and ordered, some members of the socio-ecological community suffer as a result of idealistic notions of who and what belongs in the city, and how we must behave as urban citizens. These affects also extend beyond city boundaries, as determined by political divisions, mapping, and zoning policies, and can work to cut geological or geographical formations and nonhuman territories while urbanisation draws in surrounding rural and less developed areas for resource production. According to Tzaninis et al.:

Despite recent trends of urban 'gardening' or 'agriculture', cities will never be materially self-sufficient and will continue depending on the periphery and generally the spaces that provide urbanism with its sustenance through 'exploitation and exclusion', as Ruddick's 'para-sites' suggest. (Tzaninis et al., 2020, p. 242)

New literary imaginaries that capture the complexity of urban environments can question some of the more damaging processes and systems, offer new ways of connecting with the city, and propose alternative ways of living with the nonhuman in such places. There has already been much research, including work by Lawrence Buell (2005) and Ursula Heise (2008), on the contribution that art and literature can make to the development of environmental imaginaries, whether intentional or unintentional and resulting in both positive and negative associations with urban inhabitants (see also Yusoff & Gabrys, 2011).

The notion of an ideal city has taken many shapes, but Christensen and Heise (2017) have identified several urban mythologies that continue to influence how urban ecologies are imagined and who is seen to belong there. Nonhuman nature has always had a place in ideal urban imaginaries, but often in controlled ways and only the kind of desirable nature with which humans choose to cohabit. These imaginaries range from the 'sanitary city' that began to regulate water, to the 'garden city' that introduced public gardens and parks to offset the 'ills of the city', to more modern developments in the 1960s and 1970s with the mapped city, made possible through the development of geographic information systems (GIS) technologies:

Here procedural democracy and bureaucracy, spatial partitioning, and a God's eye view of the city come together to imagine, if not a perfect harmony, then everything in its right place: a park here, green infrastructure there, industry over there, housing, shops, schools in other places. And the map becomes something to argue about. (Christensen & Heise, 2017, p. 556)

In addition, concerns about safety, mobility, and conditions that enable consumption all contribute to contemporary imaginaries of the city. These mythologies conceal the many others who are excluded and damaged by such measures of control. Several writers have explored these tensions in their fiction, including Italo Calvino in *Invisible Cities* (1997), Antoni Jach in *Layers of the City* (1999), and Meg Mundell in *Black Glass* (2011). Calvino (1997, p. 44) writes that 'Cities, like dreams, are made of desires and fears, even if the thread of their discourse is secret, their rules are absurd, their perspectives deceitful, and everything conceals something else'. This captures the ways in which urban systems and processes may conceal both the desires and fears of residents, governments, and administrators. Therefore, asking people to reconsider some of these imaginaries about the city and what drives certain perceptions and constructions of urban areas can offer new possibilities for living in more inclusive multispecies communities.

Marginalised groups of people are often discouraged and excluded from living in particular areas of the city through urban policy and commercial practices (Shaw, 2015). Likewise, certain nonhuman others, such as birds, are allowed to inhabit our cities while those that don't fit ideal urban imaginaries, such as bats or snakes, are controlled, excluded, or killed (Low, 2002). Often, this relates to the imaginary of the city as machine that requires management through technology. As Gandy explains:

The nineteenth-century conception of the city as an assemblage of identifiable organs placed particular emphasis on the circulatory dynamics of urban space. In the twentieth century these corporeal analogies were extended to conceive of urban space as an organic machine amenable to increasingly sophisticated types of technical control. (Gandy, 2014, p. 10)

This technical control alluded to by Gandy includes the defensive architecture, CCTV, and audio deterrents that are often employed

in cities to control public spaces. In London, the spiked corridor of a shop entrance designed to keep homeless people from sleeping there (Andreou, 2017; Borromeo, 2017) mirrors the spiked ledges that keep pigeons from resting on buildings (observed in 2019). On Queensland's Gold Coast, youths are deterred from loitering in public spaces with classical music (observed 2013–2019), while in Brisbane predatory bird calls are played near outdoor restaurants to discourage ibis from pestering customers (Hinchliffe & Begley, 2017). In contrast, bright lights, calming music, and inviting scents are used to welcome orderly consumers into shopping centres, while certain kinds of plants are cultivated in urban parks and gardens to attract acceptable wildlife such as butterflies and lorikeets (Low, 2002; Wilson, 1991). These ways of managing public spaces are built on utopian conceptions of the city as a 'civilising' force – a place of order, consumption, and safety.

Meg Mundell's Black Glass (2011) intensifies these tensions as a future version of Melbourne is imagined to be split into carefully controlled zones where people such as Tally are excluded from certain commercial areas. Black Glass tells the story of a city that is heavily controlled and restricted, with zones to keep 'undesirable' beings in certain areas away from the commercial centre. This novel shows how vulnerable people such as those who find themselves homeless and undocumented engage with the city in unintended ways, and are often damaged by increased measures of control and surveillance that are concealed in narratives about safety concerns. In Black Glass, city spaces are manipulated to encourage spending - taking current consumer techniques further to imagine experts who are hired by companies and governments to 'tune' the emotional atmosphere of locations in real time using music, light, and scents that respond to the people in the crowd: 'The effect is so subtle you wouldn't think to question it: just one of those mysterious moments of beauty that well up in a city then fade out unexplained' (Mundell, 2011, p. 157). This zoning is also highlighted in Antoni Jach's Layers of the City (1999, p. 92), a contemporary view of Paris where there is 'civilisation as far as the eye can see, habitations as far as the eye can see ... a gigantic quilt ... where everything fits together with an inexorable logic'. Such imaginaries reflect Christensen and Heise's (2017) argument that the myth of mapping taken to its extreme can leave the city both fragmented into discrete parts and controlled in ways that benefit commercial interests while reducing liveability for many who inhabit the city. However, in *Black Glass* this control is undermined and, in the end, cannot stand against a determined crowd of protesters.

The posthuman city

Living in the posthuman city requires us humans to engage with the city on multiple levels as we navigate the virtual, corporeal, and imagined spaces that make up the contemporary urban experience. The virtual city is made up of narratives projected through media productions such as tourism campaigns, informational plaques, site markers, and images on Google Maps, all of which privilege certain understandings of the city. Virtual reflections of the city serve to define it through a network of historical and spatially determined locales. Closely bound up with the virtual is the imagined city, which draws on urban ideals, potential developments, mythical or alternative versions of particular cities, and literary interpretations of cities. These narratives are overlaid on the places with which we engage in our everyday lived experiences. Embodied encounters with the city serve to reinforce or counteract certain virtual and imagined versions while imagined and virtual narratives enhance locales by placing current experience within a temporal narrative that extends into the past as well as the future.

The notion of the cyborg, and by extension the cyborg city, seeks to capture this complex experience of the city as well as the ways in which social constructions of the city create unequal relationships and therefore unjust situations for some inhabitants while others benefit. As Swyngedouw and Kaika (2014, p. 114) argue, the city can be seen as a 'metabolic circulatory process that materialises as an implosion of socio-natural and socio-technical relations ... These relations are invariably infused with myriad configurations of power that saturate material practices, symbolic ordering, and imaginary (or imagined) visions'. The cyborg captures this complex system of relations as social constructs, power structures, and environmental processes produce the city. Through the cyborg, distinctions between the natural and cultural, the real and imagined, and the organic and inorganic become blurred, reflecting the kinds of entangled structures, systems, and entities that make up the cityscape (Haraway, 1991). As Gandy argues:

The recent shift of emphasis from the organicist city of functional flows and organs to a more diffuse neo-organicist preoccupation

with the digital realm or 'thinking space' of the city has not dispelled the limitations of earlier corporeal conceptions of urban space. The reading of the city as a 'cyborg' highlights the tension between a focus on the technological augmentation of the individual human body and the wider sets of technological networks that sustain modernity; the emphasis is not so much on augmented technological capacities as on the vulnerability of technological networks to disruption. The conceptual scope of cyborg urbanization transcends the individual human subject to consider urbanization as a larger set of sociotechnical interdependencies. (Gandy, 2014, p. 11)

The interrelationships between technologies, bodies, and other materialities in the contemporary city might be considered further through posthumanism. The concept of a posthuman city highlights the interrelationships that make up urban places, interrupting boundaries, opening up a space to reconsider what the city could be and how we might create more inclusive city spaces.

Australian cities have a particularly close relationship with plants and animals, as Tim Low discovered while writing *The New Nature* (2002). Through the writing process, Low set out to observe Australian ecologies and was forced to question traditional conceptions of urban nature:

This book has ended up a surprise to me. It's not quite the one I set out to write. The trail of ideas kept me guessing until I ended up somewhere both familiar and new. I certainly never expected to be criticising wildlife-friendly gardening, or extolling the benefits of sewerage.

It strikes me that our concepts of nature often don't match what we actually see. Native animals are taken to prefer their natural habitats and natural foods when often that's not true. The words 'nature', 'natural' and 'wilderness' end up misleading rather than informing us about the natural world. We shouldn't presume that nature, merely by definition, wants to be natural. This book is an attempt to redefine that difficult word 'nature' by putting people in the picture and taking wilderness out. (Low, 2002, p. ix)

Low demonstrates how writing about urban nature can extend and challenge existing understandings. *The New Nature* provides a more

complex picture of the city, showing species that thrive in urban environments, attracted by the concentration of resources, and others that are disproportionately damaged by human actions. These species are afforded protections or repudiated based on ascribed literary and cultural values. For example, even though magpies attack during mating season, they are local icons allowed to inhabit our cities, while bat populations are seen as diseased or destructive and often dispersed from urban parks and gardens (Low, 2002). However, there is a reason why such species are attracted to urban living. As Adrian Franklin (2017, p. 211) explains, 'cities overflow with food resources in the form of human waste and wasted food' and '30-50 per cent (or 1.2-2 billion tonnes) of all food produced (for humans) remains uneaten', leaving 'the vast majority of this available to other species in cities and city waste disposal sites and flows'. Just as humans are drawn to live in cities, Low demonstrates that so too are other species – particularly in Australia, where ecological conditions beyond the cities can make it difficult to survive.

Alexis Wright's *The Swan Book* (2013) presents a different view of the Australian city in a climate-changed future where Oblivia experiences the city first as 'Paradise' in the imagination of the swamp community and then, upon arriving in the city for the first time, sees that 'in this closer glimpse of Paradise ... much of the city had cracked ... was breaking up, as though the land beneath had collapsed under its weight' (p. 208). In this new city, urban spaces are less controlled so that humans and nonhumans break many of the conventions that underpin idealistic visions of the contemporary city. Wright has explained that the book was informed by the changing migration patterns of swans, who are now being found 'in the drier northern inland areas of Australia' after unseasonal heavy rains, impacting the imaginaries of both the black swans and inland areas of the north. Wright explores what happens to the stories when lands change:

The questions in my mind were, what happens when there is no story for swans in the places where they were now migrating? What happens when a swan enters the big stories of brolga country? What did it mean to have no cultural story that fixed you to a place either as a person, a swan or any other animal species? How do you take the ancient spiritual law stories that belonged to you when you move to another place? Then what

happens if you mix the stories of the Dreaming? The easy answer is that you create new stories, new song, new Dreaming. Perhaps, and perhaps there are other consequences. (Wright, 2019, n. pag.)

Wright suggests that even if drawing on a deep cultural tradition of storytelling, our stories must also be flexible and change to accommodate the conditions of the world: as climate change causes peoples and species to migrate, our stories must work to tell new stories of our cities. Crucially, these stories need to be inclusive of the ever-increasing variety of inhabitants and attend to new conditions. As Adrian Franklin shows:

In new urban settings especially, all species are enrolled into specifically new assemblages of constraints and opportunities that they must respond to, as others respond to them. Always dances of agency. In these circumstances some extraordinary shifts in their life chances can occur as they encounter new networks of humans and their radically different political economies; as the indeterminacy of all species become [sic] 'intensified in urban habitats' (A. Franklin, 2017, pp. 211–12)

The posthuman city works to refigure these relationships. As Donna Haraway suggests, in posthuman perceptions of living we are all 'humus', 'we make with' and 'become with each other, like compost' (qtd. in S. Franklin, 2017, p. 50). Reconceiving of the city in this way requires recognition of the species, matters, and peoples entangled in the city as well as attending to these other places and ecologies that feed the city. As Val Plumwood (2008, p. 159) suggests, 'think what it would mean to acknowledge and honour all the places that support you'.

The city garden refigured

The idea of the garden city emerged in Britain and Europe, and was imported to Australia through colonisation. According to Ward (2005), although urban planners in Australia resisted the movement at the explicit level, many of the ideas underpinning British garden cities were applied in developing Australian cities. Ebenezer Howard was the first to solidify the concept of a garden city comprising small

satellite suburbs in the early twentieth century, but as Adrian Franklin argues, the inclusion of urban parks and gardens began much earlier:

Britain's urban designers had long been ambivalent about cities completely purified of nature, their key architects having been influenced by the arcadian, pagan aesthetics/ontology of the classical world, especially the gardened square or piazza and the intermingling of the natural with the cultural. Long before Ebenezer Howard's hybrid notion of 'Garden Cities', London particularly had a love affair with squares of nature, building some 600 by 1850, though the earliest predated the Romantic period by almost 150 years and many Romantic styled parks were added subsequently throughout Britain and its colonial cities. (A. Franklin, 2017, p. 206)

Howard's (1965, p. 6) vision was for the 'beauty and delight of the country' to be brought to the 'crowded unhealthy cities'. However, his original vision also theorised a transformation of the concentrated city into many smaller 'garden cities' that would be owned collectively by the residents (Howard, 1965; Ward, 2005). While collective ownership has almost never been taken up, the idea of breaking the city up was applied to create suburban hubs (Ward, 2005). This utopian vision meant that urban sprawl could continue as societies moved away from agriculture-based economies. Christensen and Heise argue that:

Howard's late nineteenth-century proposal for a 'Garden City' had more to do with creating a just and egalitarian society of good, righteous, and healthy citizens than with anything we might call ecology today, and it resulted in leafy suburbs that played a role in making cities more segregated and unequal. (Christensen & Heise, 2017, p. 556)

As Christensen and Heise (2017) suggest, the separation of the city into suburban hubs meant that some could be provided with more services and support than others, creating both gentrified and run-down areas. In Australia this has often meant that people in poorer socioeconomic conditions are often pushed to cheaper suburbs on the outskirts of the city. This suggestion is exaggerated in *Black Glass*, where we see a futuristic Melbourne with security-controlled zones physically excluding certain people from areas of the inner city.

In *The Swan Book*, however, we see an alternative city emerge that subverts many of these imaginaries. In this future city, plants become an agent of change as 'the natural landscape was quietly returning and reclaiming its original habitat' (Wright, 2013, p. 208). Rather than gardens serving human purposes, they are left to inhabit the city on their own terms. A new kind of garden city is formed: 'Through the cracks in the footpaths small trees had sprouted, and ferns and grasses became obstacles through which people were struggling to steer a clear path as they walked', 'ferns and grasses ... swayed from mossy walls and roof tops', and 'there were places on the roads not hit by heavy traffic where long grasses grew' (Wright, 2013, p. 209). But this is not a utopia, either. Wright's city is the product of a changed climate where seas have displaced many, including the swans of the title, where people live in poverty on the streets, and where many Indigenous inhabitants are excluded from the city altogether. As the protagonist Oblivia points out, she never

expected that she of all people would see the riches of Paradise from a plane. *How come?* She thought about the Heaven people taken from the cities by the army and dumped in the swamp. They prayed all the time for the chance to see their paradise again. (Wright, 2013, p. 207)

But Wright asks us to pay attention to those who are marginalised. So, we also hear that 'Cities are where people die. That was what old Aunty always said about cities. Illness places. You will be arrested for being a terrorist' (Wright, 2013, p. 193). Those who hold power, such as Warren Finch, hide behind walls, the last people who can afford to use electricity on elevators and televisions, and who plant trees to 'muffle the sound of the ocean' (Wright, 2013, p. 212). Warren has his own solution for living apart from country:

[he was] involved in specialist trade and had the most beautiful shop in the city. It was the place where you could feel the country: This place. I made a place in the city to hold my heart. Like this place [the salt plains country]. (Wright, 2013, p. 194)

Warren further enacts a colonial extractionist relationship with place, since this solution reflects the commodification of nostalgia for the country that cities often sell.

As argued by Raymond Williams in *The Country and the City* (1973), myths that pit the city against the country often work to reinforce ideas about the kinds of human-nonhuman relationships that should be found in each of these spaces – rural spaces are seen as the place to connect with other animals and ecologies while cities are seen as being for humans. These myths obscure the impacts of urbanisation of all environments and circumvent the potential for creating new ways of living with environments that interrupt notions of who and what belongs in the city. They also obscure the fact that, in some instances, traditional farming practices have led to considerable changes in ecologies through the draining of wetlands and deforestation (Giblett, 2011; Wilson, 1991), while some urban processes such as sewage management have led to increased diversity and improved ecosystem health, as Tim Low (2002) demonstrates.

The separation of human city and natural country also plays out in places such as public gardens, positioned as a taste of the country brought into the city. Public gardens are both symbols of gentrification and healthy communities, and places where vulnerable people and species might seek refuge in the absence of other green spaces or safe accommodation. As shown earlier in this chapter, measures are often put into place to exclude certain members of the community from these spaces, such as fencing, security cameras, and anti-rest spikes on the tops of light posts and other building infrastructure. In Australia, bats have been caught up in many of these questions about who should have use of public green spaces. One of the most significant cases revolves around the changing views of bats in Melbourne's botanic gardens. The bat population, resident in the garden since 1981, has been culled in recent years:

Opponents of the bats (the scientists and gardeners of the Botanic Gardens) stressed the primacy of human amenity; in this case, gardens, and the nature of cities as compartmentalized and properly ordered by humans ... to purify an ambiguous presence that did not belong ... Their own plant collections did not 'belong' either, yet were acceptable to a native species that did (this was certainly within the historical territories of the bats who regarded the park trees as acceptable alternative nesting materials) ... the bats had not damaged or killed trees, had not taken over a large section of the gardens and had not altered in any way the key functions of the gardens. Opponents claimed they were not an

endangered species when they clearly were. They did not mention their popularity and ecological centrality as unique pollinators of native plant species. The bats were bullied by a wide variety of technologies to force them to leave and when resettlement was deemed too expensive the only option considered was a cull. Their inclination to see animals' proper place in 'so-called natural areas' created at the same time a subset of urban nature whose place and habitats can be ambiguous, fraught and insecure. (A. Franklin, 2017, p. 207)

Adrian Franklin identifies many of the tensions that might be found in public gardens as a result of the competing imaginaries of nature as native, desirable, introduced, pest, or feral, as well as the tension between spaces that are seen as being primarily for human use and enjoyment, reinforced by the idea that nature can or should inhabit so-called 'natural' areas away from human habitation. The Swan Book works to refigure the relationships between cities and gardens, creating spaces that question the inequalities around inclusion in public areas through the refigured urban parks and gardens in the book. For example, Oblivia notices from her apartment window that 'sometimes, when the weather eased, and if she looked closely ... a seemingly never-ending trail of bats [was] travelling from one abandoned park to another across the city' (Wright, 2013, p. 242). This is in stark contrast to current practices of urban management in Australian public gardens. When Oblivia finally decides to leave her apartment, she too finds refuge in the botanic gardens. However, Wright reimagines public gardens in The Swan Book as inverted spaces that welcome the newly arrived swans as well as bats, Oblivia, and other wildlife, while seeming to keep most people from entering with 'boa-constrictor thick renegade vines, wound like a monster's woven carpet throughout the wrought iron lacework' on the entrance gates (p. 269). Therefore, human management is replaced by a range of nonhuman agents:

Yes, the swans were multiplying, nesting among flooded trees, reeds and swan weed, and had already overfilled ponds in the abandoned botanical gardens and a small lake in the city's zoo, then the city's shallow lakes where they were breeding along the bays, gullies and inlets. (Wright, 2013, p. 264)

In this new kind of garden city, belonging no longer depends on human amenity, but rather leaves space for humans and nonhumans to inhabit the city together.

The flâneur refigured

The writer *flâneur*, as developed by Walter Benjamin (2002), sought to make sense of the seemingly chaotic nineteenth-century city. As with the ideal and garden city imaginaries, this too was partly a response to the idea that the city was, in contrast to the country, a place of illness, disorder, and stress (R. Williams, 1975). Now more than 60 per cent of the world's population lives in cities. Cities are therefore largely responsible for generating conceptions of and attitudes towards ecological communities that affect the way they are cared for both within urban areas and in areas impacted by urban development. Several alternative walking styles and figures have been suggested to replace the *flâneur*. Debra Benita Shaw (2015) shows how the cyborg *flâneur* complicates boundaries between the real and imagined, the organic and inorganic, and the human and nonhuman (building on Haraway's conception of the cyborg). In addition, Springgay and Truman argue that

in a time of global crisis – emboldened White supremacy – it is crucial that we cease celebrating the White male *flâneur*, who strolls leisurely through the city, as the quintessence of what it means to walk. Instead, we must *queer* walking, destabilizing humanism's structuring of human and nonhuman, nature and culture. (Springgay & Truman, 2017, p. 14)

This chapter examines how posthumanism might refigure the *flâneur* to allow for new ways of writing and reading the urban. The *flâneur* reimagined as cyborg, dishuman, and animal can work to create new narratives of the city as a multispecies community and work to make sense of the contemporary city, particularly during a time of climactic and geopolitical change. Further, the rise of smartphone apps such as Story City and Deep Time Walk (Ainscow et al., 2012), and podcast audio-tours such as *Shift and Signal*, provide writers with examples of how these platforms can be used to develop new environmental imaginaries in situ. In addition, I discuss the figures

of the dishuman, the animal *flâneur* and the nomad, as ways to address a planetary ethics embedded in the local.

In a sense, the *flâneur* is a product of this utopian imaginary of the city. According to Rob Shields, Walter Benjamin used the *flâneur* as a literary device to make sense of the changing modern city of Paris:

The *flâneur* is a hero who excels under the stress of coming to terms with a changing 'social spatialisation' of everyday social and economic relations which in the nineteenth century increasingly *extended* the world of the average person further and further to include rival mass tourism destinations linked by railroad, news of other European powers and distant colonies. This expanding spatialization took the form of economic realities such as changing labour markets and commodity prices and social encounters with strangers and foreigners which *impinged* on the life world of Europeans. (Shields, 2014, p. 67)

Through the writing of the *flâneur*, these new spaces and inhabitants were made familiar again to those who lived there. In consequence, the *flâneur* was seen as a heroic figure who approached the city like a wilderness to be studied and tamed:

Even to early 20th-century sociologists the *flâneur* was a heroic everyman – masculine, controlled and as in tune with his environment as James Fenimore Cooper's Mohican braves were in their native forests. Anticipating the hardboiled hero of the detective novel, the *flâneur* pursued clues to the truth of the metropolis, attempting to think through its historical specificity, to inhabit it, even as the truth of empire and commodity capitalism was hidden from him. (Shields, 2006, p. 210)

In this way, the *flâneur* was a stabilising force, categorising and therefore ordering the city. However, *flânerie* was also a transgressive act, as a walker engaged in eccentric and idle wondering against the usual purposeful walking practices of the time (Coates, 2017). Drawing on this aspect, *flânerie* has increasingly been employed in the humanities and social sciences as a practice of resistance, as Jamie Coates has shown. The postmodern version of the *flâneur* enacts a similar transgressive walking practice in the city, but one that serves to resist dominant narratives. With a 'greater focus on the tactile and

grounded qualities of walking' than the traditional *flâneur* and as opposed to the lone detached wonderer, postmodern *flâneurs* engage in a network of social relationships and may even wonder in groups (Coates, 2017, p. 32). Springgay and Truman (2017) also show that alternative walking practices are possible through critical walking methodologies. By employing the notion of the postmodern *flâneur*, writers might find ways to address problematic urban imaginaries and question dominant narratives about who should and should not inhabit the city.

The nomad

The concept of the nomad is bound up in Deleuze's notion of becoming-with that troubles relationality. According to Braidotti (2006, p. 1), 'nomadic philosophy mobilizes one's affectivity and enacts the desire for in-depth transformations in the status of the kind of subjects we have become'. Further, the nomad is positioned as a figure of sustainability:

'Nomadology' is a philosophy of immanence that rests on the idea of sustainability as a principle of framing, synchronizing and tuning a subject's intensive resources, understood environmentally, affectively and cognitively. A subject thus constituted inhabits a time that is the active tense of continuous 'becoming' ... Sustainability is about how much of it a subject can take and ethics is accordingly redefined as the geometry of how much bodies are capable of. (Braidotti, 2006, pp. 3–4)

This figure has also been employed to produce more relational imaginaries of the walking figure: 'the nomadic model of being affirms differential relations as the cause of qualitative experiences that further produce the thinking subject, instead of the subject imposing fixed codes of identity upon difference to make sense of the environment' (Zong, 2020, p. 116). In contrast to the *flâneur*, the nomad doesn't categorise environments in normative and hierarchical ways, but instead manages to engage with difference relationally. This is much like Glissant's creole garden theory of kinship, which is made up of 'interdependent networks of cultural difference' that 'fuel innovation and creativity' (Prieto, 2010, p. 119).

However, the figure of the nomad is particularly contentious in Australia. Precolonial Indigenous peoples were characterised as nomadic by the colonial settlers as part of their justification for declaring Australia terra nullius, as Claire Coleman argues:

The notion that the first people to live on this continent were nomadic before the British invasion is a common Australian belief. It is so strong, so overwhelmingly dominant, that it feels that to question it would be madness. This continues despite the fact that the evidence for 'nomadic Aboriginals' is virtually non-existent. Evidence to the contrary is abundant. Asserting that the first Australians were nomadic is a fundamental component of the doctrine of *terra nullius*, an idea pivotal to the British assertion of the right to colonise – to invade – this continent. It is also, for the most part, a fantasy. (Coleman, 2017b, p. 88)

First Nations peoples' connection with country was misunderstood by the colonial settlers since they moved around their country seasonally, as Coleman (2017b) suggests, in much the same way as Europeans might have winter and summer houses. In addition, once colonial settlement began displacing people from their countries, their movements likely took on a much more nomadic rhythm:

When people are displaced from their homes by invaders they become refugees. Is it not possible that the hungry, ragged travellers whom white people so often encountered were fleeing from the invaders, were hungry and ragged because they were displaced and on the run? Is it not possible that people were driven to apparent nomadism by the constantly changing frontier, the fast-moving, invading force? That frontier contained massive, terrifying animals that ate our food, destroyed our crops and polluted, defecated in and muddied our sacred waterholes. Their hard hooves, like nothing on this continent, compacted the soil that had been improved by our ancestors for thousands of years. The white people had brought those herds of alien animals, terribly unsuited to the environment the traditional owners had developed. Once those animals had arrived there was nothing to eat, no water to drink. (Coleman, 2017b, p. 94)

Instead, Coleman refigures the relationship between Indigenous peoples and early colonisers by suggesting that 'nomadic' – by definition, roaming herders – better describes those people who

arrived on the shore with their herd animals; and 'settled' better describes those Indigenous peoples who lived 'as country' with deep connections to particular areas of land. Therefore, the nomad is a troubled figure and one that can't easily solve some of the issues with the *flâneur*.

Nevertheless, where the figure of the nomad might be useful is in refiguring the experience of displacement felt by many contemporary communities. Zong argues that the nomad brings a sense of planetarity to the local:

The nomadic subject is planetary and disruptive of the nature-culture divide, for while the subject is the relay-point of intensive interconnections, the Earth is the ecological-social ground for all encounters and provides the material entities that animate the nomadic subject. (Zong, 2020, p. 116)

The figure of the nomad also captures the current global condition where some of the most iconic images in the media are of long lines of displaced people fleeing danger. This figure stands in for the global injustices of displacement that create refugees, including those forced off their land through development, war, famine, colonialism, and climate change.

The cyber/cyborg flaneur

The notion of the cyber *flâneur* emerged in the twenty-first century from the practices of idly surfing the internet, which in many ways has become an extension of the cityscape. In the contemporary world where we exist in both physical and digital spaces, the cyber *flâneur* and its cousin the virtual *flâneur* have been employed to make sense of new digital sites of connection, voyeurism, and consumption. Metaphors that evoke the city have often been used to describe the experience of the digital, including 'chat rooms', 'cyber space', and 'home pages', while new notions of digital tourism, the rise of online shopping, and meeting apps have become substitutes for engaging with the physical sites of cities, such as shopping malls, pubs, and attractions. In addition, public digital art and applications invite people to engage with the digital while moving through urban spaces.

However, as with the concept of the *flâneur*, implicit in the cyber *flâneur* is a reinforcement of traditional urban hierarchies and social structures. Debra Benita Shaw (2015, p. 3) argues that the

cyber *flâneur* is not able to represent the complexities of 'how we inhabit and experience the hybrid spaces of contemporary cities'. The flâneur and cyber flâneur have helped to make sense of the complexities and chaos of urban life so that it might become more palatable to the inhabitants, reducing anxieties about safety and disorder. This categorising, however, has also worked to solidify notions of who belongs and who does not. Here, Shaw suggests that Donna Haraway's (1991) cyborg might be used to interrupt settled boundaries and to reimagine the urban walking figure. While Shaw suggests that the *flâneur* might be laid to rest as the cyborg takes its place, I argue that the idea of the *flâneur* may still have some use, particularly when applied to new multimodal narratives. Rather than defining space, the cyborg *flâneur* might be seen to perform space in relation with an entangled natural/cultural community. By drawing on this notion of the cyborg, it becomes possible to circumvent some of these traditional associations with the urban walking figure and imagine a new kind of *flâneur*, one that walks the streets as an act to complicate rather than compartmentalise urban space.

As we emerge into a post-truth world where facts and fictions blur, creative practitioners can find opportunities to forge new ways of knowing, and new ways of connecting with the city through the cyborg *flâneur*. The development of new literary imaginaries can reconstruct natural/cultural relationships and propose alternative ways of living in a posthuman and multispecies community. The rise of smartphone apps such as Story City, which allow writers to create digital narratives overlaid on real places, have the potential to encourage real connections with urban environments. These narratives conflate virtual, corporeal, and imagined experiences of the city and can allow for new environmental imaginaries to be created in situ.

The 'readers' of these narratives become cyborg *flâneurs* as the traditional urban wanderer is combined with the virtual and imagined space of the contemporary city. As opposed to wandering the virtual city online, however, readers are encouraged to physically walk the city and engage with the narrative *in situ*. For example, in one narrative on the Story City application, readers are directed to walk a trail along the Brisbane River or through the CBD to chase a sea monster (Wilkins & Diskett, 2014). The reader can choose different preset paths that influence the outcome of each story and embed the story in a physical location. In this way, the narrative is layered onto

the real streets and spaces of the cityscape. As the reader is directed to walk particular routes through the city, the narratives that unfold are also partly constructed by the natural/cultural entities that make up those locales. The murky water of the Brisbane River could easily conceal monsters. Occasional sightings of crocodiles (Hall, 2017), fish that leap from the water, and shadows cast by rippling waves as the City Cat moves across the surface impact the experience of the story (observed 2016–2017). Potential exists to capitalise on this narrative form and develop new environmental imaginaries that pay attention to the city as a posthuman place. For example, a narrative might direct the reader's attention to the networks of water that hydrate people and animals, allow transportation, and remove waste from the city.

Urban walking tours have been around for a long time, but the self-guided tour developed with the use of smartphones. An example of a self-guided walking tour that works to help the listener connect with the nonhuman element of the city is Alex Lockwood's podcast series *Shift and Signal*, which asks listeners to pay attention to the nature of the city and accompanies a guided walk of Newcastle Upon Tyne in the United Kingdom. One of these episodes is called 'Relinquish Humanity', and it examines posthumanist ideas in everyday life, exploring how conceptions of the posthuman are 'finding their way into our everyday conversations to help us reconfigure how we live our lives in balance with the world around us' (Lockwood, 2017). This podcast can also be engaged with from afar by simply listening, or through virtual media and digital maps that allow a form of walking that is less tangible but no less rich in transportation for the digital 'reader' of the city.

Another smartphone application that works to question humannonhuman relationships is the Deep Time Walk: A New Story of the Earth application (Ainscow et al., 2012). According to the app, 'this walk combines science with humanities to help you understand our common evolutionary history with all life, how very ancient our planet is and the geological impact of humanity'. The app allows the user to walk through 4.6 million years of geological history over a 4.6 kilometre walk (with the option of skipping to various story points). The story works to replace the human and human history in the broader history of the earth, and asks the listener to see the human as one of many evolutionary experiments with consciousness. Listeners are also asked to reflect on our ecological entanglements and the impact of humans on others as inconsiderate members of the ecological community. While the app is structured for a 4.6 kilometre walk, the settings allow people to listen to the narrative without walking if needed. For the urban listener, engaging with the city (whether walking or not) while listening to the narrative can open up the city as a space of relationality. The listener is directed to see the nature around them and to find similarities with plants, animals, and geologies. We are directed to consider what ecological conditions and organisms contribute to the air we breathe, the land on which we walk, the food we eat, the nourishing planet on which we find ourselves.

The cyborg *flâneur* might be employed in much the same way as the traditional *flâneur*, to help the 'reader' make sense of the posthuman city where boundaries are shifted and increasing rates of social and ecological change are transforming contemporary urban sites and structures. Shields (2006, p. 211) asks whether the cyborg might also act as 'a stabilising figure amidst the collapse of dualisms, polluted categories, transgressive hybrids, and unstable fluidity'. As opposed to the traditional *flâneur*, however, this 'stabilising' figure doesn't sort urban inhabitants into discrete categories, but rather maps the many relations between organisms and technologies, fictions and realities, and the human and nonhuman. The cyborg *flâneur* allows for other kinds of 'reading' of the city to take place – including those by women, families, and non-Western inhabitants. As opposed to the nineteenth-century reader-flâneur, those who read the city through the Story City app are also participants in the making of the story, co-constructing the narrative along with the author and locale. These stories provide writers with an opportunity to develop narratives that direct participants to question dominant narratives of the city and to reimagine themselves within a multispecies community. In addition, by bringing readers into contact with the human and nonhuman entities that make up the city, there is potential for real relationships to be established.

Through digital apps such as Story City and the Deep Time Walk, as well as podcast audio-tours such as *Shift and Signal*, writers are able to develop new environmental imaginaries that question urban ideals, including conceptions about who belongs in the city and who does not. The notion of the cyborg is a useful concept through which to reimagine the city as a negotiated process between nature and culture, and to reimagine the *flâneur* as a performer who becomes

part of the posthuman city as they walk the streets. Smartphone apps such as Story City, which allow writers to construct new urban imaginaries, bring the virtual and imagined city into the physical spaces of the urban environment and can act to re-place the reader in diverse socio-ecological communities. The reader then becomes both product and constructer of urban space, a cyborg *flâneur* in the cyborg city.

The other flaneur: Moving with and as animal

Another key strategy that writers employ is moving through the city with and as animals. These narratives reposition the human in relation to other animals, pushing Haraway's (2003) idea of the companion species further. Instead of traditional human-animal relationships, where animals take up the role of pet or wild encounter, urban animals are engaged as equal participants; they are depicted as agents who direct action, and the category of 'animal' is refigured altogether. In Wright's The Swan Book, Bobis's Locust Girl, and Sinha's Animal's People, the protagonists engage in a posthuman version of urban flânerie - walking the streets with and as animal, challenging the idea of the *flâneur* and troubling the neat categories that traditional *flâneurs* sought to pin down. There are two ways in which this is achieved in the narratives: one strategy is for the protagonists to take direction from and collaborate with animal actors in the city; the other is for the protagonist to remove the conceptual barrier between human and other animals - something that other characters often find troubling.

The *flâneur* and *flânerie* arose out of humanism, and therefore encompass particular qualities (Springgay & Truman, 2017). In the work of early humanists, the ideal human was 'implicitly assumed to be masculine, white, urbanized, speaking a standard language, heterosexually inscribed in a reproductive unit and a full citizen of a recognised polity'; moreover, he was 'European, handsome and able-bodied' (Braidotti, 2013, pp. 65, 24). In addition, seventeenth-century colonial thought rendered most humans as well as other species mute, mechanistic, unthinking, and instinctual (Ghosh, 2022). Both *The Swan Book* and *Animal's People* question the category of the human, not just as prescribed by early humanists but also in a posthumanist sense, as they consider the difficult tension between being seen as fully human from a social justice perspective while seeking to decentre the human as a dominant category. *Animal's*

People is told as a transcription of a series of audiotapes made by an Australian journalist. Animal tells us that he has only agreed to this 'interview' if the journalist prints his story exactly as he records it, in his words, because it 'makes no sense. How can foreigners at the world's other end, who've never set foot in Khaufpur, decide what's to be said about this place?' (Sinha, 2008, p. 9). This device asks the reader to consider the way stories about experiences that are 'other' to the writer shape what the reader gets told – in this case, representations of poverty, the social construction of what is perceived to be impairment, and stories located in other socio-ecological places. These stories are often interpreted and framed in ways that continue a tradition of colonisation and oppression, or simply miss those things that are important to the people being written about. However, 'Animal's narration registers the power of the Western gaze that shapes the way his story (and the story of any marginalized identity) may be received' (Shelton, 2019, p. 8). Sinha wrote this novel for a Western audience, and asks readers to consider the ways that 'Western privileged dominance generally ensures human viability even in the face of environmental threats, while in India grave threats to the environment are equally grave threats to humans, and specifically the poor' (Ramachandra Guha, qtd. in Shelton, 2019, p. 1). We see a similar theme in *The Swan Book*, where marginalised communities are both excluded from the city and suffer damage that some members of the elite are able to circumvent. In *The Swan Book*, they do so by living in towers or properties protected from the rising tides by land barriers. In both cases, it is their wealth that affords them some distance from environmental disasters. In Bobis's Locust Girl, the elite both cause the environmental disaster and hoard the resources to negate the effects for themselves. In each case, the elite are humans who create and recreate such divisions between humans who are valued and nonhumans that are excluded and damaged.

Rather than establish a hierarchy between humans and nonhuman animals, each of these narratives reimagines the human-animal relationship without removing the social justice aim. In Wright's *The Swan Book*, the protagonist Oblivia's life is entangled with the black swans, first in the swamp and then in the city. For example, when she sneaks out of The People's Palace (Warren's apartment) in the city, she follows an owl and a swan rather than a map, and doesn't ask for directions. This often means it takes her a long time to reach her perceived destination, but she says, 'an ordinary, logical route was

not the point' (Wright, 2013, p. 262). The streets of the city provide an escape for Oblivia, but in times when she is discomfited by being alone in a strange place, she finds companionship among the swans. Since she relies on their knowledge of the place, swan companions make her feel safe. Ghosts of the city also speak to Oblivia, providing her with guidance.

In Animal's People, Animal has a close relationship with a dog called Jara, who teaches him how to beg for food and where to go to eat in the city. They are companions throughout the novel, and Animal often refers to Jara as family. However, this is not the only other species with which Animal connects. At one point, he also takes on a bird's perspective in order to 'see' the city:

I see a bird circling above, wonder what it's seeing below. Up high and early, my eye dreams the start of this Khaufpuri day. I see the world and me in it. So high I'm, the earth curves away from me, the upper air's full of brilliance. I see the world spread like a map, roads from all sides coming to the city. Over Khaufpur hands haze like stale breath round the mouth of a drunk. The tips of the minars of the Taj-ul-masjid are touching the sun, below all's dark, the lanes of Chowk are a nest of snakes.

Bird that I am sees all, white palace of gone rulers on hill, lake looks pale green from up here, eye slides along a road lined with dirty buildings, snarling away in dust and truck smoke, till it reaches a place where the city's turned to jungle, railway tracks come running up and vanish, beyond is terrain harder to interpret, mottling of brown, a pimpliness which on looking closer resolves to the innumerable roofs of the very poor. Smoke is beginning to rise among the huts as inhabitants light fires for tea and whatever meal they can grab before another day of work. (Sinha, 2007, p. 133)

While this allows Sinha to provide the reader with an overview of the city and put into context all the locations that Animal passes through across the novel, this bird's-eye view is not just framed as an imaginative experience for him. This is just one more way that he experiences the city through other animal species. Just as in *The Swan Book*, there is a sense that other animals hold knowledge that humans either do not have access to or can only access through their relationships with other animals.

Bobis's Locust Girl also involves flânerie, but in this case Amadea is moving both with and as locust. The relationship between Amadea and her locust is more complicated than typical hybridity. Rather than becoming merged into a single being, they remain separate agents as human and locust, but are entangled in the same body. As Zong argues, this works to decentre anthropocentric world views by positioning Amadea as both human and nonhuman simultaneously:

Specters and haunted lives – ghosts of anthropocentric humanism – point to the multispecies landscapes and layered temporalities that decenter anthropocentric worldviews ... The denaturalized figure of the locust girl embodies a 'transversalist' subjectivity that cuts across and reconciles dualist ends instead of pitting nonhuman resistance against human domination, the novel shows the naturalizing of both as historical manifestations of the subject. (Zong, 2020, p. 112)

Here, we are faced with a subject who is both human and insect – and not just any insect, but the kind of insect that swarms in 'plagues' and devours whole crops, an insect that is often positioned as an enemy to human survival. This is a powerful imaginary that Animal's People shows can lead to the creation of ever more destructive chemical pesticides that not only kill those insects deemed pests but also harm other species, including humans from poorer places, and whole ecologies. In considering how this multiplicity of being in Locust Girl interrupts the dualistic separation of human and nonhuman in responses to environmental change, we might look at the scene in Animal's People where a woman asks a representative of a pesticide company whether he sees any difference between the people and insects of their village. In Locust Girl, this dynamic is further interrupted when we know that Amadea had previously eaten locusts to survive the environmental conditions and then subsequently been buried in an explosion that propels her into a hibernation beneath the sand just like a locust. Her body is nibbled by locusts before one embeds itself in her forehead. These events create a cycle of entanglement between her body and the bodies of locusts in which she is consumer, consumed, shared-experiencer, and symbiont to the locusts all at once. This opens up a space for a posthumanist ethics of care that focuses on subjectivities and relations rather than just human concerns.

The second walking strategy used in narratives to decentre the human is employed by Sinha in *Animal's People*, and works to question the human as a conceptual category. Animal takes on not just the name 'Animal', but insists to his friends and the journalist that he is not human, that he has become another animal as a way of redefining his disability. He explains:

If I agree to be a human being, I'll also have to agree that I'm wrong-shaped and abnormal. But let me be a *quatre pattes* animal, four-footed and free, then I am whole, my own proper shape, just a different kind of animal from say Jara [dog], or a cow, or a camel. (Sinha, 2007, p. 208)

This reimagining of his body not as a disabled human but an enabled other animal empowers Animal in the narrative as he moves around the city on all fours (Cao, 2020). This position provides him with a level of invisibility, which means he often witnesses conversations and actions that assist in the financial scams he gets involved in for his survival or provide him with information that helps the residents to pursue legal charges against the US pesticide company responsible for his disability. Through Animal, we are also afforded a view of life more often experienced by other-than-human species:

The world of humans is meant to be viewed from eye level. Whole nother world it's, below the waist. Believe me, I know which one hasn't washed his balls, I can smell pissy gussets and shitty backsides whose faint stenches don't carry to your nose, farts smell extra bad. (Sinha, 2007, p. 2)

This experience, as well as Animal's insistence that he's 'not even human' (p. 3) and does not want to be human, reminds us that our imagining of nonhuman others is always fraught with a risk of anthropocentrism, since we cannot help removing the experience of living otherwise from their stories. Since Animal's embodied experience resembles more closely the experience of other animals such as Jara, his 'humanness' is always in question and the reader is forced to imagine the world from another perspective.

While his body is figured in the text as differently abled (rather than disabled), we still see this struggle between Animal's effort to define himself on his own terms as animal other and the social constraints that prevent him from living life as his friends do; primarily, he feels that he is missing out on the chance to engage in an intimate relationship with Nisha, which prompts him to reflect that 'to be trapped in an animal body is hell, if you dream of being human' (Sinha, 2008, p. 210). Shelton (2019, p. 3) argues that 'Animal's confidence in his nonhuman status is a bluff meant to lead readers down a familiar path of individual development, only to turn abruptly and transform Animal from rogue "other" to integral human in relation with a complex human-nonhuman, material discursive collective'. Further, we can read this book through the posthuman concept of the dishuman, proposed by Goodley et al. (2018), to trouble the difficult terrain between humanism and posthumanism - particularly when dealing with groups who have fought to be seen as wholly human, with all the rights and privileges that allows. According to Goodley et al. (2018, p. 342), 'disability epitomizes a posthuman enhancement of the self while, simultaneously, demanding recognition of the self in the humanist register'. The concept of dishuman studies 'simultaneously acknowledges the possibilities offered by disability to trouble, reshape and re-fashion the human (crip and posthuman ambitions) while at the same time asserting disabled people's humanity (normative and humanistic desires)' (Goodley et al., 2018, p. 342). Therefore, we can view Animal's narrative as an attempt to reimagine the human relationally without pitting this against concerns for social justice.

Like all flâneurs, Animal is trying to make sense of his city, but his purpose is very different from that of the Benjaminian *flâneur*. The changes that have reshaped the city are not cultural or technological but caused by the poisons that have seeped into everything and everyone following the explosion of an American pesticide factory nearly 20 years earlier. He is not only trying to make sense of his own place in the city, but of the collective suffering of the city's inhabitants. Sinha often uses metaphor to link human bodies with the insects meant to be killed by the pesticides as well as the farming and industrial processes. The metaphors used to describe Animal's bodily experience of the poisoning as his back was twisted by his condition include 'chafed my with red hot tongs [sic]' and 'the smelting in my spine' (Sinha, 2007, p. 15), using terms that would be more common in a place such as the Kampani factory. In another example, one man is described as 'ragged, thin his ribs are like furrows ploughed in his flesh', while a woman asks one of the Kampani lawyers:

Mr Lawyer, we lived in the shadow of your factory, you told us you were making medicine for the fields. You were making poisons to kill insects, but you killed us instead. I would like to ask, was there ever much difference to you? (Sinha, 2007, p. 306)

Once again, we are confronted by this scene where people have to fight to be considered human – those who don't fit the ideal human of early humanist thought. Sinha asks his readers to reconsider what it means to be human when some are left out of that category and how we might redefine the human in relation to others. As the concept of the dishuman suggests, giving up these ideals of the human doesn't mean giving up social justice, but rather looking to the disabled to refigure the category of 'human', and placing the human more firmly in relation with ecologies and nonhuman others. We see this revelation at the end of the novel when Animal retreats from the city to a rock shelter in the forest, where he finds cave paintings that help him to rethink his place in the world:

There are animals of every kind, leopards and deer and horses and elephants, there's a tiger and a rhino, among them are small figures on two legs, except some have horns some have tails they are neither men nor animals, or else they are both, then I know that I have found my kind, plus this place will be my everlasting home, I have found it at last, this is the deep time when there was no difference between anything when separation did not exist when all things were together, one and whole before humans set themselves apart and became clever and made cities and *kampanis* [companies] and factories. (Sinha, 2007, p. 352)

The city is thus refigured, and the reader is directed to see what has been building throughout the novel: a more relational vision of the city and the human. In addition, this ending shows how the novel has troubled the processes of urbanisation that have been imported from the West, including the use of pesticides to create 'Edens' devoid of insects. As Shelton argues:

This mobilizing joy of belonging is the most evident catalyst for both his [Animal's] and his city's collective healing at the end of the novel, and this important turn toward collectivity, and more specifically collective potential, redirects common

notions of national postcolonial development into a new vision of local identity formation, one more equipped to be inclusive of nonhuman co-constituents than commonly accepted modes of either national or global inclusion. (Shelton, 2019, p. 4)

Walking with and as animal in these three novels presents a reimagining of the human in relation to nonhumans. The *flâneur* refigured in this sense recognises the knowledge that nonhumans hold. Rather than elevate humans who don't fit the categories outlined by Braidotti (2013) in relation to the ideal humanist figure of the *flâneur* above other animals, these narratives question the power structures that harm racialised and disabled bodies as well as other animals and ecologies.

The city as more-than-human

The streets and public gardens of the city might be reimagined through posthumanist narrative strategies that decentre the human and present a relational view of the city. Literary fiction has the potential to engage readers in new ways of connecting with and reading the city. In addition, through modes of storytelling that encourage the 'reader' to engage with the text *in situ* through audio or podcast tours and narrative story applications, cities might be refigured through posthumanist experiences with place. In this chapter I have explored some common idealised tropes of the city that appear in narratives – the city as sanitised, organ, and machine; the garden city; and the figure of the urban *flâneur*. These ideas might be complicated and refigured through a posthumanist lens to create new environmental imaginaries of the city. Particular strategies that writers have used include:

- the rewilded future city, where gardens and streets are refigured to become relational places rather than highly controlled and concerned primarily with human amenity;
- the cyborg city, where the machine is refigured to account for the ways that technologies, nonhuman others, and materialities are entangled and agential in shaping the city;
- listening to the knowledge of other animals and nonhumans to navigate the city's streets and parks;

- reimagining the human as animal or human–nonhuman hybrids;
- introducing the dishuman body to refigure the human body in posthumanism.

Reconsidering the city garden, the walking figure, and the city as cyborg might also prompt new kinds of urban imaginaries built on posthumanist ontologies that ask readers to engage with the city in new ways, and to imagine new ways to live as part of a multispecies entangled place. These urban entanglements also increasingly include the digital and virtual providing further complexity to the relationship between the human and nonhuman but also offering new means for humans to engage and connect with other animals, plants, matters, histories, and environmental phenomena.

Public parks and streets can be both restrictive and generative spaces as humans and nonhumans come together in communal celebration or resistance or are limited and excluded by the infrastructures and systems constructed around them. Rewilding, cyborgian networks, and multispecies communities provide generative frameworks for reimagining public space through inclusion. These are valuable imaginaries for resisting the kind of exclusionary practices of zoning, defensive architecture, and surveillance that damage certain members of the urban community. Meanwhile, the dishuman and hybrid provide valuable imaginaries to reconsider the way the urban is structured, and asks us to consider spaces in ways that attend to non-normative and nonhuman bodies and how they navigate urban spaces so that new infrastructures and systems could allow bodies and beings of all kinds to flourish. This will require not just infrastructural but also cultural change and a reconsideration of what order or organisation will mean in a city refigured through a relational framework. In doing so, humans will need to become more comfortable with what may be traditionally referred to as the 'uncivilised' or 'disordered' - with other species sharing our spaces or taking up their own spaces within the city, with what might in normative contexts be considered 'mess', like leaf litter, and interruptions from noise like that from bats and birds. In addition, boundaries will need to be reconsidered as we negotiate multispecies and communal spaces of inclusion, and this will mean that humans must give up notions of the city as being primarily for human amenity in place of other species' needs.

Conclusion Recipro-city

This concluding chapter brings together common threads developed across the previous chapters, considering how a practice of posthuman research-creation and urban ecocriticism might contribute to efforts to make cities more inclusive and sustainable by providing new imaginaries of the city to live with. While writing this book, I encountered concepts, themes, and writing strategies that raised questions about posthumanist thinking and identified remnant issues in the theory and practices of urban ecocriticism and creative writing. In addressing these questions, I considered how posthumanist theories were entangled with a broad range of other theories, histories, and sociocultural understandings, including humanism; disability studies and the dishuman; postcolonialism and Indigenous ontologies; intersectionality with queer, feminist, and critical race theories; and knowledges arising through a range of situated, scientific, and narrative modes of engagement with place. These entangled ways of knowing and being that are bound up in posthumanism provide a space for new understandings of urban nature to emerge. This chapter attends to both the potential and limitations of a posthumanist reimagining of the city together with an overview of the strategies that writers have used to construct relational urban worlds. Further, the literary texts analysed in this book raise important questions for the environmental humanities in relation to conceptions of 'nature', and the relationships between humans, nonhumans, other matters, and phenomena of the city. These underlying imaginaries are also more broadly important for researchers, activists, and writers who wish to construct new reciprocal imaginaries of the city that reduce violent and exclusionary practices, and create liveable cities for all.

Our current experience of environmental crisis is partly a result of the failure to imagine an alternative way of living. Cities are built on particular imaginaries that shape how human development fits with nonhuman and material others. As long as there is a large population of humans on Earth, it will be necessary for us to organise ourselves into densely populated groups – cities. Previously, this has meant the destruction and damage of both urban environments and beyond as urbanisation has worked to exploit, extract, and concentrate resources from dispersed local ecologies connected by global trade and infrastructural networks. However, experiments with living architectures, sustainable practices, and biocities have shown that destructive and exploitative practices are not the only way to build cities – although progressing these beyond the experimental phase will require a mass reconsideration of what the city is and who it is for (Alexandra, 2018; Wang & Mell, 2019). Current cities in Australia, as elsewhere, are built on extractivist imaginaries that see human amenity as paramount to the destruction of environments and damage to nonhuman others. If we want to address the extent of destructive practices responsible for such phenomena as climate change, the sixth mass extinction of species, and environmental collapse, then we need to create new urban imaginaries that emphasise reciprocity and re-place the human in a multispecies community. Robin Wall Kimmerer argues that one way we can do this is through the cultural production of stories:

As human people, most recently evolved here, we lack the gifts of our companion species: of nitrogen fixation, pollination, and three-thousand-mile migrations under magnetic guidance. We can't even photosynthesize. But we carry gifts of our own that the Earth urgently needs ... How can we reciprocate the gifts of the Earth? In gratitude, in ceremony, through acts of practical reverence and land stewardship, in fierce defense of the beings and places we love, in art, in science, in song, in gardens, in children, in ballots, in stories of renewal, in creative resistance, in how we spend our money and our precious lives, by refusing to be complicit with the forces of ecological destruction. In healing. (Kimmerer, 2014, pp. 23–24)

In finding reciprocal ways of living, imagining, and writing the city, we can begin to address some of the problematic thinking that has

brought us to this moment of ecological instability. Fiction allows us to examine current imaginaries, think through situated knowledges, and imagine new ways of living in the city. By drawing on concepts from posthumanism, writers might find new strategies that trouble current narratives of the city and imagine new ways to live as a multispecies community. Meanwhile, researchers and activists might use story to trouble current social and political narratives that prevent change.

For example, there has been increasing attention on changing the way we live in cities as part of global discussions on climate change. This is evident from global conversations such as those at the 2021 United Nations (UN) Climate Change Conference in Glasgow (COP26) that demonstrated the need to drastically change the way we live to limit climate change to 1.5 degrees (UN, 2021). The importance of reimagining cities can also be seen reflected in UN Sustainable Development Goal 11, which focuses on working towards more sustainable cities. These global discussions have highlighted the ways in which disciplines from across the spectrum are required to address the complexities of such phenomena as climate change. Each of these disciplines brings with it limitations, connections, and opportunities. Along with the sciences, the arts and humanities can help us to make sense of the changing world. As Yusoff and Gabrys argue:

The arts and humanities play an important role in thinking through our representations of environmental change and give tangible form to the imagination of different worlds outside of the constraints of the given present.

The uncertain futures of climate-change impacts have had profound effect [sic] on the public imagination of and engagement with climate change. In this respect, climate science arguably requires even more sophisticated integration with complex cultural and political systems not just to anticipate and mitigate future impacts, but also to reconsider the political and temporal logics that underpin current scenario trajectories, and examine the descriptive crafts that produce them as spaces for the imagination. (Yusoff & Gabrys, 2011, p. 518)

As we now experience soaring temperatures in summer, more frequent and intense floods, fires, and droughts, and global events like the COVID-19 pandemic, issues related to urbanisation and

environmental damage are impacting the way we imagine ourselves as humans in relation to the places we live. In fact, as I write this book, Australia is experiencing a historic change in politics as a record number of voters prioritise parties with strong climate change policies in the 2022 election. However, we are yet to adjust our cities and our imaginaries even as research shows that cities are vulnerable to the effects of climate change with fewer green spaces and more flat surfaces owing to buildings, roads, and paths causing urban 'heat islands' that can run over 10 degrees warmer than surrounding areas (Gago et al., 2013). This highlights the urgency of finding new imaginaries that can help cities change and to help us live in and as new kinds of cities particularly as we see climate change causing damage to those humans and nonhumans who are already disadvantaged in cities. Strategies have already been suggested to reduce this heat include bodies of water, more green spaces and trees, building materials that are lighter in colour, rooftop gardens, and permeable pavements (Gago et al., 2013; Sun et al., 2018; Lin et al., 2020). However, as Schliephake shows, plans to build biocities or implement such features on a wide scale are often blocked due to funding constraints given the resources and community investment required. In addition, most cities are not yet capable of accessing such infrastructure:

At the end of this century, approximately three-fourths of the global population will live in cities. Most of these new city dwellers live in Third World or developing countries, far removed from the green design of 'urbaneer' groups or elitist eco-cities. (Schliephake, 2014, p. 214)

However, Schliephake (2014) argues that the environmental humanities could play a key part in establishing new cities through trans-disciplinary teams along with urban planners, activists, ecologists, social scientists, politicians, and architects. Through environmental humanities:

Cultural texts literally help us to read urbanism, to understand the complex inter-relations that make up our urban networks. They also help to undermine them or to critically question hegemonic readings of them, opposing fancy building projects in favor of the preservation of parks and recreational areas or pointing to the exclusion of socially disadvantaged parts of the population from

proper transportation or sanitation infrastructure. (Schliephake, 2014, p. 218)

A recent short film called *Regenerating Australia* (Damon Gameau, 2022) provides us with exactly this kind of imaginary, to show what our cities could be if we applied some of these suggestions along with other changes such as the recognition of Indigenous rights and a movement to adopt renewable energy sources. These kinds of narrative engagements as demonstrated through this book ask questions about how we could make cities, who would benefit from them, and how they might be used by urban inhabitants.

Posthuman research-creation

Posthumanism calls for an ontology that accounts for the way the world exists as an entangled community of humans, nonhumans, materialities, and phenomena. To this end, humans must be decentred - that is, removed from the pointy end of an imaginary hierarchy and re-placed in the ecological world. Posthumanism works to trouble forms of knowledge creation and I have discussed in this book the ways that traditional academic writing and creative practice become entangled through methods of research-creation. Boyd (2017, p. 211) argues that writing is a way of making sense of the world, of knowing from the inside and knowing relationally so that 'the researcher is engaged in a critical act of resistance to dominant forms of academic discourse' which favours 'clear and straightforward prose'. It is this potential for creative writing to speak to an audience beyond the academic community that holds promise, particularly at a time when researchers are being called on to make their research accessible so that it may have an impact on those broader communities. However, I hope it is clear from the discussion in this book that while creative writing might work in combination with more traditional academic research, it is not simply an alternative output of that research but, as Boyd (2017) suggests, creative practice is in itself a mode of thinking and performing knowledge and as such makes a valuable contribution to broader discussions within the environmental humanities and beyond.

However, Doucet (2021, p. 12) raises the dilemma now felt in a 'post-truth' world of how to 'work within non-representational 220

research paradigms while also attempting to hold onto representational, authoritative, and convincing versions of truth, evidence, facts, and data'. In addition, Hawkins (2015) has noted, that a potential outcome for researchers beyond the arts who engage in creative practices is that they risk reinforcing ecological imaginaries that are damaging, exclusionary, or anthropocentric unless there is a critical engagement with the artform. The solution for Doucet (2021) is to consider research as situated, relational, and interdisciplinary so that research attends to who is excluded from knowledge-making, how knowledge relates to others, and engages with multiple ways of knowing. This is similar to the notion of diffraction raised by Haraway and Barad to reconsider how research, often described as a reflection of the world, can be imagined more relationally. Barad (2007, p. 71) argues that this term is helpful since 'diffraction can serve as a useful counterpoint to reflection: both are optical phenomena, but whereas the metaphor of reflection reflects the themes of mirroring and sameness, diffraction is marked by patterns of difference'. This self-positioning of the researcher in relation to difference takes up an ethical position of knowledge-making that attends to the 'differences that our knowledge-making practices make and the effects they have on the world' but also 'make evident the entangled structure of the changing and contingent ontology of the world, including the ontology of knowing' (Barad, 2007, pp. 72, 73). Therefore, diffraction is a useful metaphor to describe what creative writing does when it performs knowledge-making; the research may not directly reflect the world but instead allows for the inclusion of difference in making sense of the world - imagining different ways of experiencing the world including nonhuman ways, imagining different kinds of worlds, and remaking the world differently. In addition, engagement in a critical practice such as urban ecocriticism as part of the writing process can help the researcher-writer to avoid or at least attend to the way that the imaginary is constructed.

Throughout this book, creative and critical works have asked questions about what a posthumanist approach involves. In troubling this approach, I have considered what a posthumanist urban ecocriticism might be and how posthumanist ideas might inform a critical-creative writing process. In doing so, there must be recognition of the animate nature of the nonhuman world – something to which Indigenous cultures have always attended. Therefore, a posthumanist writing process requires the writer to

acknowledge both the situated nature of the process and the kinds of knowledges that are reflected in the work. Situated knowledges arise through located research practices, and are co-constructed with places and others in place. In Chapter 2, I explored some of the ways in which writers engage with place as part of their writing method, including through walking, surfing, swimming, and gardening. However, just engaging in these activities is not enough to constitute a posthumanist method of research-creation. As Springgay and Truman (2017) show, these activities must be approached critically, paying deliberate attention to the nonhuman agencies that exist in these places. In this sense, posthumanist methods of engaging with place need not be limited to those activities investigated in this book. There is scope to use methods that are less physically demanding or engage with place in quieter, more contemplative ways, yet still attend to the embodied and entangled experience of place and lead to posthumanist situated knowledges.

Engaging with the agencies of place also requires us to recognise matters and materialities as 'lively'. This requires an engagement with place through material-discursive practices that recognise ways of communicating beyond human language to place emphasis on those embodied exchanges rather than the primacy of the text. As discussed in the Introduction, lively matter is not necessarily about the metaphysical or consciousness of matter, but rather the ability of matter along with phenomena to impact the world around us in significant and meaningful ways. Springgay and Truman (2017) argue that in dominant Western thinking, animacy has often been aligned with the ideal humanist figure so that those who are masculine, able-bodied, white, heteronormative, and, of course, human, are considered more animate than others. For Ghosh, this was a direct result of the particular form of colonisation enacted in the sixteenth century:

Colonization was ... not merely a process of establishing dominion over human beings; it was also a process of subjugating, and reducing to muteness, an entire universe of beings that was once thought of as having agency, powers of communication, and the ability to make meaning ... These mutings were essential to processes of economic extraction – because, as the philosopher Akeel Bilgrami observes, in order to see something as a mere resource, 'we first need to see it as brute, as something that makes

no normative demands of practical and moral engagement with us'. (Ghosh, 2022, p. 190)

Several strategies have been suggested to readdress the animacy of the nonhuman in dominant Western thinking with a transformation of this 'ideal humanist figure'. Goodley et al. suggest that, rather than attend to an ideal human, a posthumanist approach attends to entangled figures:

One character trait of posthuman analyses is the rejection of the human category as an old fashioned, elitist and narrow phenomenon and, in its place, an opening up of new forms of subjectivity, relationality and sociality associated, for example, with posthuman conceptions such as the cyborg (Haraway), rhizomes (Deleuze and Guattari), animal-human fusions (Chen), and nonhuman monsters and chimeras (Shildrick). (Goodley et al., 2018, p. 343)

Some other ways that have been suggested include telling stories that centre figures such as the inhuman, dishuman, hybrid, nomad, or nonhuman subject (including the nonhuman in the human), as well as drawing on more relational philosophical structures such as the creole garden with its collective potential and the application of hydro-logics. Each of these notions works to reconsider the human perceived as a singular, impermeable, and bounded subjectivity, as well as attend to the animacy of the nonhuman world. Importantly, these strategies are not mutually exclusive, but can be used in combination to address different aspects of animacy. For example, Springgay and Truman suggest that we might consider the entangled human as 'inhuman' – a figure that seeks both intimacy (human = the entanglement within) and difference ('in' as a prefix meaning difference = the entanglement without):

Enlivening the inhuman with animacy isn't about demanding recognition into the category of human. Therefore, the more-than-human should not become an inclusive concept that folds bodies and subjects that have typically been positioned on the outside into the fabric of the human. Likewise, the more-than-human must not merely blur the boundaries between human and nonhuman, but operate as a strategy that asks, 'how those categories rub on,

and against, each other, generating friction and leakage' ... 'the 'posthumanist' point is not to ... cross out the distinctions and differences, and not to simply invert humanism, but rather to understand the materializing effects of particular ways of drawing boundaries between 'humans' and 'non humans'. (Springgay & Truman, 2017, p. 9)

The human might thus be refigured through the many nonhumans that share our bodies, such as the gut bacteria, yeasts, watery flows, and mites that help regulate our bodies, and those that share our communities, such as other animals, companion species, and gardens.

As discussed in Chapter 5, the dishuman draws on disability studies to see how disabled bodies can refigure posthumanism so that the theory doesn't just reinscribe the same able-bodied version of the human. The hybrid figure often combines elements of nonhumans into the human body – for example, the plant-people of van Neerven's 'Water' (2014), Parsipur's plant-people entanglements in Women without Men (2011), Lai's fish-women, cat-women, and durian-women in Salt Fish Girl (2002), and Bobis's human-locust entanglement in Locust Girl (2016). These hybrid figures work to question humans as discrete units, show how human and nonhuman bodies relate to each other, and open up a space to reconsider justice. In particular, these hybrids raise questions about what bodies are considered fully human and therefore afforded full rights bringing into relation those human and nonhuman bodies who are (or have been in the past) controlled, managed, or killed. Meanwhile, the nomad (which sometimes overlaps with the dishuman) captures the planetary injustice of displacement as the figure who traverses many places often with others and through relationships with local and migratory humans, nonhumans, and vibrant matters. The nomad encompasses the idea of connection through difference and is used in Locust Girl as well as towards the end of Wright's The Swan Book (2013) where Oblivia, followed by others from the city, embarks on a journey to find the swamp she was displaced from. In addition, and again often overlapping with the dishuman and nomad, the nonhuman subject demonstrates the agency of nonhumans of all kinds - for example, the animal flaneurs in The Swan Book and Sinha's Animal's People (2007) present other animals as possessing knowledge beyond human perception; demanding waters in The Swan Book and Salt Fish Girl shape whole cities and voice past

social and environmental traumas; creation beings in *Salt Fish Girl* and Wright's *Carpentaria* (2006) demonstrate the ways in which these stories can set social rules and intentions for living ethically; and plants that form part of the family in McGregor's *Indelible Ink* (2010) capture the ways communities might extend beyond human participants.

Hydro-logics and the creole garden both provide alternative ways of thinking about community as entangled with nonhuman others, materialities, and phenomena. Hydro-logics attend to the many ways in which bodies and materialities who share the same water source are connected. Further, waters flow through cities, carrying and enabling communication, renewal, transformations, memories, and exchange. Like the concept of the inhuman and the nomad, the creole garden provides a metaphor for kinship-based connection amongst difference as many species of plants occupy the same plot of land in tightly knit communities that work together to support and protect the whole community. These posthumanist conceptions are also not mutually exclusive or exclusionary, but rather open up the singular humanist ideal to multiplicity and many ways of being and performing posthumanism.

For the urban, which has long commonly been figured as a human space, a posthumanist research-creation methodology can work to reimagine the city as a multispecies community. The dynamic and human-occupied spaces of the city mean that a new way of understanding urban ecologies is needed. As Christensen and Heise (2017) and Low (2001) demonstrate, the city is home to range of nonhuman others, some of which benefit while others are disproportionately disadvantaged by urban structures and systems. In Australia, nearly half of all threatened species can be found in cities, which means that to continue protecting these species, we need to find ways of understanding their lives within cities and shaping cities in new ways to accommodate them (Ives et al., 2016). In addition, certain groups of humans are also excluded from urban spaces through zoning, control of access to resources through infrastructure and privatisation, and through processes of colonisation that attempt to erase First Nations relationships with place. Certain imaginaries employed to understand the city or create idealistic goals for it work to shape who is seen to belong and who is excluded or damaged. Some of the imaginaries discussed include the urban garden as enclosure and place of leisure (Chapter 3), the city as garden (Chapter 5), the

sanitised city (Chapter 4), the city as a civilising force, the city as body, the city as machine, and the city as cyborg (Chapter 5). For example, nonhumans that are figured in popular culture as dangerous are often dispersed from urban areas – for example, bats, which are linked with vampires and disease. Ecologies such as wetlands, again linked with monstrous creatures and disease as well as inconvenience, are often drained or damaged to prioritise human amenity.

In developing new imaginaries of the city, we may need to employ new terms and conceptions, shifting the language used to describe urban nature. As discussed in Chapter 1, terms such as 'landscape' and 'nature' reflect a particular perception of the nonhuman that arose out of Enlightenment thinking, which figures the nonhuman as unthinking, passive, and inanimate like a machine. New terms have been developed that attempt to address these limitations and refigure the nonhuman as agential. Sarah Whatmore's (2006) phrase 'more-than-human' suggests that geographies should be viewed through a the multispecies and nonhuman lens that understands the city as a co-construction. Terms such as terroir and 'country' capture the entangled nature of geographies and work to replace the human as a member of a broader community of nonhuman others and ecologies. As shown by cognitive narratologists (Chapter 2), language in part shapes our conceptual understanding of the world, so when words and language structures are limited, our understandings of the world can be similarly limited.

Reading the city

An urban ecocriticism approached through posthumanism attends to the nature of urban ecologies as entanglements of humans, other animals, technologies, human and nonhuman materialities, environmental phenomena, and sociopolitical structures. Narrative allows readers to engage in the process of reimagining cities. As discussed in Chapter 1, the language that is used works partly to construct or shape realities while, as I argue in Chapter 2, fiction encourages reader empathy by facilitating role-taking and transportation. Green, Chatham, and Sestir (2012) argue that fiction might allow readers to better inhabit storyworlds, since they don't have to question whether their role-taking authentically captures the emotion felt by a real person.

The words used in the narrative and typical associations with those words, as well as the particular senses highlighted in the text, can work to either reinforce or reimagine particular conceptions of place. For example, a text that places emphasis on visual imagery, uses words such as 'landscape', and draws on the sublime by giving the reader a view from above, would direct the reader to adopt a detached gaze, common in Romantic writing, and reinforce the separation of humans from the nonhuman. The experience of reading fiction is further complicated by the writing process, and the reader's previous imaginaries and experiences. The writer first imagines the story through a similar process of transformation, empathy, and role-taking that allows them to imagine the experiences in the body and use bodily sensation to bring forth imaginaries, as shown in Chapter 2. The reader then uses this as an instruction manual for constructing their own imaginary in a co-constructed process. The knowledge performed in writing is shaped through the situated experiences of both writer and reader. As Rigby (2006), Krauth (2008; 2010), and Frame (1979) demonstrate, writing including fiction requires a taking in of information from the world to diffract the 'truth' of it in a text by abstracting and examining situations, making sense of the emotional and physical experiences of the world, and placing relationships into context. We must also acknowledge the ways that writers engage with place as part of the writing process – an active critical engagement with others as part of research-creation allows for a kind of sympoiesis or 'making with' (Haraway, 2016) to occur and in this process there is also a 'thinking with' so that despite the final work being attributed to a single writer, it is really produced through relationships - a co-construction based on human/nonhuman entanglements. Of course, not all are equal in these entanglements and therefore some exert a stronger influence on the text, but through critical place-based research methods writers can consider which relationships to attend to in the construction. The reader is necessarily called to be a participant in this and other entanglements as they read onto and through a text - and might be called to also 'think with'. According to Barad (2007) writing is a performance of knowledge that captures a point in the middle of thinking and so should be considered as a point on a trajectory rather than an end point. As part of that process, the reader as well as the writer can take this thinking beyond the text.

Through econarratology, urban ecocriticism can be broadened to consider a range of genres, so that the analysis might attend to more than just content that presents a realist imaginary. To this end, non-mimetic, speculative, and experimental narratives might be analysed to consider how new imaginaries of the city can introduce readers to alternative ways of being and thinking. Econarratology provides urban ecocriticism with a range of other possible considerations, including 'the organization of time and space, characterization, focalization, description, and narration' (James & Morel, 2018, p. 1). In addition, an urban ecocriticism informed by econarratology might also consider the context in which a text has been written and how texts might encode certain political stances in their representations of environments (James, 2015, p. 15). In chapters 3, 4, and 5, I considered how narratives refigure the ecology of the city paying attention to narrative structures, use of time and space, the subjectivities represented, and alternative ways of performing the city.

Several of the narratives analysed in this book actively question imaginaries of the nonhuman that encourage extractivist and damaging ways of relating to others and ecologies. Sinha's Animal's People (2007) considers how the impossible ideal of the Paradise or Edenic garden underlies an industry that seeks to remove undesirable nonhumans from the garden at a high price to both human and nonhuman lives. Similarly, in Eng's The Garden of Evening Mists (2013), Yun Ling talks about the beauty of impermanence and changing seasons as preferable to the conceptions of the Garden of Eden that is stable and evergreen. In addition, Bobis's Locust Girl (2016) shows how complicated the relationship is between the human and locust – a symbol of famine but also a phenomenon that is linked to monocultured farming (Wetzel & Thalor, 2016). However, rather than just invert this relationship and present the human as a plague on ecologies, Locust Girl presents the human-locust as a hopeful character – the locust is the only one to give voice to the truths of the 'wasters' that have either been lost or silenced by the colonising force of the 'carers'. Importantly, these colonial forces damage both peoples and ecologies, even as they create separations, so the humanlocust figure provides an alternative way of living relationally with human and nonhuman others. Winch's The Yield (2019) also works to question historical imaginaries shaped by colonial forces that overlooked the non-extractionist forms of gardening in precolonial Australia. The Yield presents more than just an alternative history; it is also an alternative imaginary of Australia where peoples and ecologies coexist in more relational ways:

All my life I've been near the water, and we come from the water too, us people. First, we were born from quartz crystal – that's hard water, we are kin of the platypus, that's the animal of the water, and then, my wife Elsie and I made Missy and Jolene and Nicki, born on the banks of the water, the Big Water – Murrumby. (Winch, 2019, p. 32)

The commitment to truth telling in these narratives enacts one of the aims of critical race theory: retelling the stories of marginalised voices and contesting official histories told from colonial perspectives. This direct questioning of dominant imaginaries provides an opportunity for narratives to then reconstruct imaginaries from other ontological and physical positions, to allow readers to experience the world differently. For example, Animal's People asks readers to consider different kinds of bodies and how they exist in the world with pain and hunger, with stigma, and with both restricted and alternative ways of moving through cities designed for able-bodied humans. The Swan Book and Carpentaria offer a view of the world from an Indigenous Australian ontology, where a range of nonhuman forces shape and direct human lives, from spirits and other animals that assist with mapping place to ancestral beings who shape features and relationships, and ecologies that remind humans of the limits of their control.

Narratives such as Larissa Lai's *Salt Fish Girl* (2002) and Shahrnush Parsipur's Women without Men (2011) present non-heteronormative reproduction through gardens and waters that works to refigure relationships between peoples and places, as well as reminding the reader that other ways of forming relations are possible. In these birthings of life, however, there is hope rather than a fear of human destruction, as has been the common figuration of 'reproducing otherwise' - for example in Frankenstein (Shelley, 1818), where the person, reproduced through science rather than human coupling, becomes 'a miserable monster' (p. 46). The more hopeful representations of alternative reproduction in Lai and Parsipur produce imaginaries that don't restrict bodies to bounded singularities. As Bezan (2021, p. 84) suggests, 'immaculate humanvegetal conceptions' as well as 'fishy labours and births in water' can work to 'oppose the geological and stratigraphical epistemologies of the Anthropocene, conveying it fluidly into an unstable and affirmatively procreative future'. In addition, imaginaries that figure

bodies and relations otherwise can work to resist colonial and patriarchal structures:

The reproductive future conceived by biotechnocapitalism sees a profit in the normative replication of sameness, yet it remains embedded in the cultural imaginary of difference that undergirds the nuclear family, the racially freighted fantasy of whiteness and nationhood, and the teleological narrative of human exceptionalism. But it is this normative replication of sameness – conceptualized in gendered, racial, ethnic, national, and sexual terms – that Larissa Lai reconfigures in her treatment of speculative sex. (Bezan, 2021, p. 84)

Women without Men also questions the way women's bodies have been figured as reproductive machines in much the same way that the nonhuman has been considered to work like a machine. Rather than elevate the human above the nonhuman in order to restore agency to the characters, however, Parsipur depicts new relationships between the female body and the vegetal, with both humans and plants having agency and humans reproducing nonhumans (flowers and pollen) in much the way that a gardener might be seen as a co-constructor of the garden.

An urban ecocritical reading of these narratives shows how they are working to update environmental imaginaries for our changing times, to face difficult pasts and past traumas, to confront origin myths and their effects, and to listen to the nonhuman. Australia, like the rest of the world, is faced with a changing climate that is reshaping migrations and ecological conditions, creating more intense weather events, and contributing to species relocation or extinction. In addition, urbanisation is also a force of ecological change as it extracts and concentrates resources, attracting many species in the process and creating new kinds of inequality for both humans and nonhumans based on imaginaries that shape who is perceived to belong in these places and who is excluded or damaged when they enter cities. Therefore, the new imaginaries presented by the narratives discussed in this book provide a valuable way for cities and cultures to adapt to these new conditions and consider alternative ways to reform cities that address some of these inequalities. This analysis can then be used by writers to further develop their practice by identifying common strategies, themes, and structures that support

new ways of representing cities as posthuman. Writers might then use this to develop further writing strategies. In addition, researchers and activists might find this analysis useful for considering how we live in cities and how we might both acknowledge current inequalities as well as reimagining the city. New imaginaries and narratives can also work to influence broader cultural and political imaginaries of the city.

Writing as reciprocity

Reciprocity requires a relational view of life, where we see our well-being as entangled with the support from a range of other humans, nonhumans, and ecological materialities. If we acknowledge the support that is provided to us and the entanglements of which we are a part, then we are more likely to reciprocate by giving something back to support those others. A posthumanist writing practice involves an acknowledgement of those entangled others who support us and therefore act as co-constructors in the work. Narratives that are created from posthumanist practices can therefore expose readers to new imaginaries of the city that attend to these multispecies support networks. However, there are significant challenges in writing storyworlds that acknowledge nonhuman and ecological others. One of these is the ability to speak of the nonhuman in active and agential ways. As Robin Wall Kimmerer argues:

English doesn't give you many tools for incorporating respect for animacy. In English, you are either a human or a thing. Our grammar boxes us in by the choice of reducing a nonhuman being to an *it*, or it must be gendered, inappropriately, as a *he* or a *she* [or a they]. Where are our words for the simple existence of another living being? Where is our *yawe* [the Potawatomi animate verb *to be*]? ... The arrogance of English is that the only way to be animate, to be worthy of respect and moral concern, is to be human. (Kimmerer, 2013, p. 56)

For those writing in English, it is important to consider that the modern English language was shaped through a dominant Western ontological position and therefore embodies values and ideas that continue to direct understandings of the world. However, new imaginaries require relational language that acknowledges the ways humans and nonhumans are entangled. Several strategies might be employed by writers to create nonhuman animacy in their text. Robin Wall Kimmerer (2013) uses particular language to attempt to correct the limitations of English by drawing on Indigenous American language conventions. Throughout Braiding Sweetgrass (2013), Kimmerer refers to humans and nonhumans as different types of people - for example, maple-people or bear-people. Recognising both plant-people and animal-people leads us to imagine these others as having agency, enacting culture, and holding knowledge, just as human-people do. In addition, Kimmerer (2013, p. 54) shows that while we cannot replace nouns with verbs, we can capture the animacy of the land in other ways - for example, when speaking of a particular body of water, the phrase 'to be a bay' could be extended to the water that is a bay and while this provides a translation of a single word in Potawatomi, this added phrasing in English can also get closer to capturing how nonhuman others are also always in a process of becoming other.

New imaginaries also require new forms and structures to better reflect the complexity of entanglements. As Plumwood (2002, p. 6) argues, 'while we remain trapped within this dominant narrative of heroic reason mastering blind nature there is little to hope for'. Therefore, in order to address the environmental crisis, Plumwood suggests we need new narratives. Dominant narratives have been facilitated through particular storyworld structures such as linear chronologies and omnipotent narrators that create distance between the human (including the person reading) and the histories, ecologies, and nonhumans of the narrative. These structures can reinforce dominant Western ontologies as well as anthropocentric ways of understanding the world. James offers an example of this:

While a view of the Atlantic Ocean from a mountaintop may be a sublime sight for an American or British nature writer, the very same sight may evoke painful memories of transplantation, exploitation and death for a Caribbean descendent of an African slave. These two differing perceptions of the ocean view may also lead to drastically different literary representations and narrative strategies: the nature writer may wish to depict the view as realistically as possible as a means of preserving its beauty, while the Caribbean writer may look to collapse time in a phantasmagoric representation of the same view to highlight the horrors of slavery and its continuing legacy. (James, 2015, p. 27)

Similarly, many of the narratives discussed in this book use nonlinear structures that allow for the renegotiation of histories, the self-representation of cultural memories of place, and the reimagining of uncertain futures. In Chapter 3, I discussed narratives constructed with a braided or entangled narrative structure, such as *The Yield* and Braiding Sweetgrass, which allow for multiple subjectivities, ontologies, and imaginaries to be held up together. In *The Yield*, Tara June Winch uses this structure to show the contested history of Australian garden practices - combining familial memories, the gardening practices reflected in Indigenous language and the colonial history found in the official record to show how Indigenous practices of gardening were misunderstood by colonial settlers. In Women without Men, the telling of several women's stories of oppression works to question the many different ways in which women's bodies are controlled. The characters' journeys towards the garden allow the women to find freedom and transformation in a range of ways. This works in much the same way as the notion of the inhuman – where, through forming a community of difference, new (multiplicitous) ways of living can be imagined. In Chapter 4, watery structures carried stories across time, leaving traces of the past in characters' future journeys through cities. Narratives such as Salt Fish Girl, The Swan Book, and Locust Girl use structures that collapse contested pasts and uncertain futures to create narratives that tell 'the-past-as-to-come' (Zong, 2020). Such structures allow the writers to reclaim cultural memories and question dominant environmental imaginaries. These watery narratives also mimic the hydro-logics that Neimanis (2017) describes, where water picks up and carries materials, mixing them up, leaving some along the way, and laying those left down in new configurations on another shore (or in another time). In Chapter 5, narratives took on the rhythm of walking as they were told either *in situ* on a walk or imaginatively as characters journeyed through the narrative as posthumanist *flâneurs* providing the reader with an experience of walking otherwise. This can be seen in narratives such as *Animal's People*, where Animal walks on all fours due to his disability, or in Locust Girl, where Amedea is forced to walk as a refugee of both environmental conditions and bomb attacks from the city. In addition, writers might also refigure the narrative through their own engagements with place using critical

place-based methods. In Chapter 2, I discussed the way that writing is impacted by the writer's engagement with place. Some writers speak of their resulting writing being impacted by the rhythm of that activity - for example, Baker's (personal communication, 12 October 2020) 'aquatic energy', Bradley's (2009) ocean rhythms, or Pitt's (in Liptrot et al., 2019) 'language of the aquatic'. Further, gardening is suggested to encourage hybridity in the writing structure where genres might be 'grafted' together (Collett, 2006). Perhaps this is why braided narrative structures are often employed in narratives that foreground gardens and gardening practice. In addition, Ryan and Chen (2019, p. 12) suggest in Chapter 4 that engagement with swamps might work to culture a text, alluding to the way Thoreau's narrative Walking (1851) presents the reader with a 'felt presence of the wetland' as well as an 'embodied immersion in swamps' - although they don't quite tell us what new forms or structures the swamp-cultured text might give rise to.

Econarratology shows that story worlds can impact readers' feeling and understanding of place. Engaging with diverse storyworlds can also help readers to understand conflicting views and ontological positions, and introduce them to alternative understandings of place - leading to a more empathetic engagement with both human and nonhuman others. James (2015) and Weik von Mossner (2017) show that readers can connect empathetically with a narrative and feel transportation whether the narrator and characters are human or nonhuman. This suggests that narratives can present nonhuman subjectivities that ask readers to consider what it might be like to inhabit the urban for other animals and ecologies. As discussed in Chapter 5, narrative applications and audio-tours allow readers to experience the narrative in situ while engaging with specific places, and so can encourage readers to overlay the narrative on a physical place and therefore form that connection with both the narrative and an actual locality at the same time.

The posthuman city to come

The conceptions and strategies discussed in this book add to a body of research concerned with reconstructing environmental imaginaries of the contemporary and future city. A focus on narratives and ecologies from Australia and the broader Asia-Pacific region provides new ways of thinking about urban ecocriticism and the strategies that writers might use to construct new environmental imaginaries about the city. Australia's ecology has a different history and a different relationship with people than in the Northern Hemisphere. Therefore, this focus provides a counterpoint to the body of urban ecocriticism that has focused largely on Europe and the Americas. In addition, a reversal of seasonal weather patterns in the Australasian region works to subvert traditional Western imaginaries. Seasons vary across the Australian continent, but in many places, they are experienced very differently from dominant Western imaginaries with Australian plants that shed their leaves in spring rather than autumn as they prepare to endure harsh summers of intense sun rather than a lack of sun in winter. Australia is also the only continent with a marsupial-based ecosystem that has many endemic species who have reproductive cycles that are very different from the Northern Hemisphere, with marsupial mammals who give birth to young and then carry them in pouches or, for monotremes, mammals who lay eggs rather than give birth to live young. Writers might draw on such alternative ways of being in these ecologies to present new kinds of stories that contest the dominant environmental narratives and present new environmental imaginaries that offer reciprocal and relational alternatives.

In addition, urban ecocriticism and creative writing practice can make a valuable contribution to thinking in broader research disciplines in climate, urban, and environmental studies as well as activism. Ghosh (2022, pp. 196-97) argues that in the wake of phenomena like floods, fires, and pandemics, these 'other beings and forces - bacteria, viruses, glaciers, forest, the jet stream - have also unmuted themselves and are now thrusting themselves so exigently on our attention that they can no longer be ignored or treated as elements of an inert Earth'. The scale of these phenomena is now so obvious that many disciplines are moving towards global and holistic ways of conceptualising the many interdependent aspects of climate change, species extinction, or urbanisation leading to more transdisciplinary research and collaborations between research, communities, activists, industries, and political bodies (see Harris & Lyon, 2014). I would also argue that ecologies and nonhumans themselves might be called to act as participants and co-constructors of these knowledges and practices. This work is important if we are to find ways to build new cities and to adapt our current cities to become places where all might thrive. Widespread damage by humans, particularly in urban landscapes, as Buell's (2005) 'brownfields' suggests, is often framed as exhaustion. However, Ghosh (2022, p. 77) argues that 'the imagining of the Earth's exhaustion occurred long before the absolute depletion of its resources was even distantly envisaged as a possibility ... Which is only to say that what the Earth is really exhausted of is not its resources; what it has lost is *meaning*'. Therefore, if we are to give meaning back to the nonhuman as well as a place in our cities and our lives we must look to the arts and humanities along with the hard and social sciences to do so: 'The planet will never come alive for you unless your songs and stories give life to all the beings, seen and unseen, that inhabit a living Earth' (Ghosh, 2022, p. 84). Looking to paradigms such as posthumanism that account for relational and entangled knowledges and practices are helpful for considering how this kind of transdisciplinary and holistic work might be generated.

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