Between bushfire and climate change:

Uncertainty, silence and anticipation following the October 2013 fires in the Blue Mountains, Australia

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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Statement of originality

This is to certify that to the best of my knowledge, the content of this thesis is my own work. This thesis has not been submitted previously, either in its entirety or substantially, for a higher degree or qualification at any other university or institute of higher learning. I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged.

Beth Hill

Acknowledgments

To my supervisor Professor Linda Connor, thank you for your warm and generous guidance throughout this thesis process. I always left our conversations feeling heard, reassured and inspired to continue with this research. To my associate supervisor, Dr. Ute Eickelkamp, your ability to draw together such a wide range of sources and theories such as those of Alfred Schutz and Philippe Descola, and to relate them to my work has been invaluable. I also appreciate the many hours you have devoted to closely reading and editing my work.

I express my deep gratitude to all the people of the Blue Mountains, and especially those who participated in this project. This research has been a collaborative process that you contributed to with generosity, enthusiasm and insight. Thank you for taking me on numerous bushwalks, teaching me about the land, the ecology of the place, and about bushfire, and for warmly welcoming me into your community and organisations, for the many meals, cups of tea, and most of all, for your friendship. Pseudonyms have been used throughout the thesis for all participants.

Thank you to Dr. Sally Gillespie for your thoughtful suggestions and many conversations about the psychoanalytic dimensions of climate change, and to Dr. Neil Maclean for your excellent literature recommendations on the Australian bush. Many thanks to the Anthropology department at the University of Sydney for providing such a supportive and vibrant scholarly atmosphere – your thoughtful questions and suggestions throughout my presentations on this thesis were always thought provoking and helpful. The fieldwork expenses for this research, as well as the final six months of writing up, was assisted by the generous funding from the Carlyle Greenwell Bequest Postgraduate Research Fund.

To my husband Daniel, you have been instrumental to the completion of this thesis. From the beginning, you have been my champion, my sounding board, and the sturdy and nourishing ground beneath my feet when I was most afraid and uncertain. Thank you for cooking me so many meals in these last months, and for your profound advice to listen to my 'heart song' at the

times when I wanted to give up. I am, as always, filled with gratitude and joy that you are in my life.

I would also like to acknowledge my teachers and mentors, Anne Symens-Bucher, Joanna Macy and Subhana Barzaghi, for their wisdom and many lessons in fierce compassion. Much appreciation to the many friends who have supported me over the last four years, thank you especially to Amy Tyler, Zoe Bender, Charli Darling, Morgan Curtis, Jarra Hicks, Claire Dunn, Stefani Cooper, Deepa Gupta, Kate Fritz and Gus Hervey. Thank you also to my family, Mandy, Claire, Chris, Mark, Leighana and Linda, your unconditional love and support is treasured.

Finally, I would like to express my gratitude for the trees, rocks, flowers, rivers and wildlife of the Blue Mountains, I found solace and connection amongst you on my daily walks during my 18 months of fieldwork. Gratitude also for the glossy black wings of the crows who kept me company in the city, flying outside my study window in all weathers, you kept me awake to the rhythm of life occurring all around me.

Abstract

That Australia is facing a growing risk of bushfires has been predicted under climate change models for some time, particularly for South East Australia. Yet the connection between climate change and increasingly dangerous wildfires is only tentatively acknowledged. Based on 18 months of ethnographic research in the Blue Mountains of New South Wales, following the catastrophic October 2013 bushfires, this thesis investigates the local community response to this disaster as they rebuilt their destroyed homes and recovered. The ambiguity and disagreement surrounding the connection between climate change and the bushfires are analysed as a foundational aspect of how climate change was materialising for residents in daily life. I have found that ambivalence, uncertainty, silence and contradiction characterise the public and private discourse about a heating world in this cluster of suburbs in the bush – a largely white middleclass community nestled along the cliff tops against the vast eucalypt forests of the National Park. This thesis argues that people's engagement with climate change is an unstable and iterative process in which local culture and context, in this instance the context of disaster, are of central importance. According to Kay Milton, the concept of anthropogenic global warming changes 'the way local events are framed and understood' (Milton 2008a: 57-58). In the Blue Mountains, the inverse of this statement was also true – local ecological events, such as the October 2013 fires, were changing the way that climate change was framed, understood and spoken about amongst the community. Local frontline workers avoided articulating the ontologically threatening prospect of climate change catastrophe by focusing on a more comprehensible narrative about the prevailing bushfire threat that could be addressed through existing preparedness measures. Such a frame shielded the community, not just from difficult political debate, but also from the existential worry and challenging emotions that arise when engaging with climate change. The lack of shared public narrative that connected local realities with global climate change meant that people continued to relate to it as an abstract and distant phenomenon, even as they confronted its effects in rising insurance premiums, changed building codes, and shifting bushfire seasons. This research contributes to the understanding of a contemporary Western cosmology, that is, to a particular self-world relationship that is implicated in the causes of climate change and that continues to inform local responses to environmental change in Australia. Additionally, as a work focused on a mainstream Australian

setting, this inquiry elucidates the fraught relationship between vulnerability and responsibility for suburban residents in an era of climate change. It shows that responses to acute trauma and suffering brought about by ecological disaster involve reinvesting in the worldview and survival strategies that perpetuate environmental destruction and global warming.

The bushfires start in the mind as well as the mountains.

- Douglas Stewart, Ned Kelly, 1943.

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Abbreviations and Acronyms

App mobile phone application

AFAC Australasian Fire and Emergency Services Authorities Council

BoM Australian Bureau of Meteorology

BAL Bushfire Attack Level

BMG Blue Mountains Gazette

BMCC Blue Mountains City Council

CRC Bushfire Cooperative Research Centre

CCAPs Climate Change Adaptation Plans

CSIRO Commonwealth Science and Industrial Research Organisation

FDI Fire Danger Index

HR Hazard Reduction

IPCC Intergovernmental Panel on Climate Change

LGA Local government area

NPWS National Parks and Wildlife Service

NSW New South Wales

RFS Rural Fire Service

REDD+ Reducing Emissions from Deforestation and Forest Degradation

SES State Emergency Service

UN United Nations

Introduction

Scientific studies leave little doubt that global climate change is increasing the severity and frequency of bushfires in Australia, yet the political and cultural resistance to acknowledging the complex interaction of these phenomena has been fierce. This thesis begins with the recognition that bushfires in Australia and global climate change are each cultural-ecological processes that interact with one another. Aligned with the more holistic approaches to climate change that social sciences and environmental humanities are developing, my research foregrounds how bushfires and climate change are enmeshed in local and global histories of colonialism and capitalism that continue to considerably shape Australian identities, ways of living and constructions of 'nature'. Non-Indigenous Australians are deeply entangled in what Philippe Descola (2013) calls the naturalist ontology, that thrives on the opposition between nature and culture, and what people say and do or not about climate change, or rather, what is sayable, doable and thinkable, is conditioned by these fundamental cultural parameters. From this perspective, changes that might enable a liveable future go well beyond the domain of evidencebased policy development. Indeed, the phenomena themselves appear to be uprooting the natureculture duality: if social, political, economic and cultural processes are implicated in the rise of extreme fire events and anthropogenic climate change, it is also the case that these 'weather events' disorder the naturalist foundations of these processes. Bushfires and climate change are each implicated in the other when a community reacts to their danger on the ground. Implications, of course, are not always articulated. To the contrary, many Australians are caught in political, corporate and social processes of disavowal (cf. Fortun 2014: 319), which act as a barrier to connecting the dots. It is these mutual, but often muted and indeed disavowed, cultural connections between bushfire and a warming planet that animate this thesis.

The connection between climate and weather, between bushfire and climate change, between local acts and global effects, are complicated and distributed to such a degree that they often appear as fundamentally ambiguous and disconnected for those experiencing them. My research investigates ethnographically the uncertain figurations of climate change that emerged in the suburban community of the Lower Blue Mountains in the wake of a severe bushfire event. This is a community in the hinterland of Sydney who were both vulnerable to, and responsible for,

their changing environment, and for whom climate change was both real and not real in their quotidian world. How, I therefore ask, do people grasp and articulate a contingent and paradoxical reality?

* * *

On a hot and windy afternoon on the 17th of October 2013, a bushfire ignited an hour's drive west of Sydney, in suburbs fringing the forested foothills of the Lower Blue Mountains. By nightfall, this fire had destroyed around 200 homes in Winmalee and Yellow Rock and damaged hundreds more. In the subsequent days, as fierce and catastrophic fires raged all around New South Wales (NSW) extremely early in the fire season, some politicians and media commentators were quick to raise the possibility of connections to climate change (Boer 2013; Harmer 2013; Hennessey 2013; Holmes 2013; Howes 2013; Readfearn 2013). Notwithstanding the fact that scientists and the media are now connecting countless events and phenomena occurring around the world with anthropogenic climate change (IPCC 2013; Kelley et al. 2015; Sobel 2013; Trenberth et al. 2015; Vidal and Carrington 2013), Prime Minister Tony Abbott was equally swift in his reassurance that bushfire was 'a part of the Australian experience', that it was 'a function of life in Australia' (Readfearn 2013: para 2). Extreme weather events are varied in character and share a multifaceted train of causality that renders them uncertain and disputed both locally and globally. Bushfire is one such complex cultural-ecological phenomenon in Australia around which there are many unknowns, debates and uncertainties. While there are several scientific papers and reports linking climate change with increased bushfire risk across Australia (Hennessy et al. 2005; Hughes & Steffen 2013, Handmer et al. 2012; Commonwealth Science and Industrial Research Organisation [CSIRO] and Australian Bureau of Meteorology [BoM] 2014), the doubt and conflict around specific bushfire events remain.

Similarly, communities and local governments in Australia are facing changed or intensified environmental, health, social and economic difficulties which are not scientifically 'attributable' to climate change, but which are in line with existing scientific models (Intergovernmental Panel on Climate Change [IPCC] 2014; Torabi et al. 2017). It has been difficult for local councils around Australia to implement adaptation measures in communities where rising insurance

premiums, lowered property valuations, and the politically charged nature of the topic make such measures controversial and unpopular (Measham 2011; Collins 2016; Connor 2016). In the Lower Blue Mountains after the October 2013 fires, it was socially and culturally untenable to consistently or openly link this event with climate change with those who had been affected by the fire. The role of climate change in its severity and timing was one of the most ambiguous and uncertain aspects of the disaster. The dispute over its role in the fires brought climate change into 'actual reach' (Schutz 1975: 118) for some members of the community. For others, the uncertainty helped keep it at bay, irrelevant and removed from the more immediate and urgent situation of recovery and rebuilding.

My relationship with climate change

White middle-class suburban Australia is a culture with stringent codes about public emotional expression. It is also a culture in which knowledge about the world aspires to be firmly rooted in the Western scientific episteme. This same culture also harbours a romantic appreciation for the beauty of the bush that fringes our cities (Davison 2005), as well as a buried alienation and fear of that bush and the Aboriginal people who lived there for millennia before white invasion. I too am shaped by my acceptance and rejection of these cultural values. Climate change as a concept entered my world through classroom lessons at school, animated further as an issue of concern in the documentaries and media I was exposed to as a young adult. My first response to the 'issue' of climate change was to become an activist. I began to advocate for renewable energy quotas at my university, to block coal trains and shut down coal mines, and to call for divestment and carbon trading schemes. Letters were written, protests attended, parliamentary doorways sat in. I could not understand why the subject of climate change garnered so little concern from the vast majority of people I engaged with during this time. Having reached my mid-twenties, I was exhausted and out of ideas. Still, during this period in my life climate change was a thing 'out there' happening to other people, in other parts of the world I had never visited. It was a thing that the future generations would suffer. It was a problem to be solved, an issue to educate people about. As time passed and there was no adequate response from the Australian government and other governments around the world to this 'problem', a quiet grief began to ripen in my heart. I had no words to articulate this pain, which made it hard to share with others.

In 2012, I found myself in a five-day workshop run by American environmental activist and systems theory scholar Joanna Macy that asked us to 'honour our pain for the world' (Macy and Brown 2014). Here, something surprising happened as I cried – climate change for the first time felt real to me. I felt its effects in my body. Not because of heatstroke, or starvation, or the trauma of disaster; my class and racial privilege have insulated me from these experiences so far. Still, I began to wonder at this experience, at my imaginings for the future as they moved my heart and mind, as they changed my sense of what it means to be a human on this planet at this time. I could not have put these words to it at that point, but I at once felt more exposed than ever, and more accountable for what was happening to the world around me. I began to wonder if other people were feeling this way. I began to wonder about the possibilities for transformation - individual and systemic - that accompanied this experience. I wanted to understand how people were making sense of climate change. Specifically, I wanted to understand how white, middle-class, suburban people in Australia, those whose lifestyles, like my own, were so implicated in the causes of climate change, were coming into contact with it in their daily lives. I wanted to know what this contact meant to them. My response to these questions was to become a researcher.

Studying the October 2013 fires as an event connected with climate change has often felt fraught. It was awkward and uncomfortable to wade into a community in the midst of grief and trauma and conduct this research. It was immediately clear to me that climate change, an issue that so animated my own emotional and intellectual life, was a remote concern for most of those recovering from the fire. I began to understand that in order to truly investigate how these people were coming into contact with climate change I needed to focus on the issues that were of central concern in their lives. I let climate change fade from the front and centre of my attention while also observing the cultural and social reasons for this disappearance. Through this process, I began to understand that the ambiguity and dispute surrounding the local impacts of climate change could be explored, not as distractions or obstacles, but as the foundational elements of how climate change materialised for people of the Lower Mountains in their daily lives. Indeed, there was nothing obvious or certain about its impacts, many of which were debated amplifications of pre-existing issues (Crate and Nuttall 2016; Oliver-Smith 2016). Climate change intersected with long-standing environmental and cultural concerns around fire

management and relationships with the bush that could be traced back into the white colonial mindset, and into the naturalist conventions of thought that separated human subjectivity from the material realm of 'nature'. Eventually, I began to see that the origins of this community and the origins of climate change were inextricably intertwined, an interconnection that far exceeded the most recent instance of climate-related disaster that I was ostensibly focused on.

Approaches to the study of climate change

There are two different but related bodies of climate change literature that this thesis straddles. The first is primarily an ethnographic, cultural interpretive and phenomenological examination of the local impacts of climate change, community perceptions, experiences, attitudes and knowledge. Much of the anthropological research that explicitly considers anthropogenic climate change is centred on the lived experience of its environmental dimensions, such as glacier retreat, thinning sea ice, species migration, and rising sea levels (e.g., Crate and Nuttall 2009a, 2016; Cruikshank 2005; Hastrup and Rubow 2014, Strauss and Orlove 2003). This research shows the entanglement of natural and social processes in conceptions of climate change. It indicates that climate change is affecting human life, not only through its impacts on well-being and livelihoods, but also as a dimension of collective narratives structuring memories of the past, anxieties and anticipations about the future, and affecting the meanings that people attach to the weather and environments they experience (e.g. Hastrup 2013, 2016; Nuttall 2010; Roncoli et al. 2009; Wolf et al. 2013). The cosmologies, mythologies and ontologies of these different cultures are shown to decisively impact on the perceptions and attitudes to the weather, disaster events, environmental change and uncertain futures (Connor and Marshall 2016). Cosmologies privilege one kind of knowledge over another, determining which narratives have legitimacy and which narratives are unspeakable or unbelievable for different communities (Connor and Higginbotham 2013; Paolisso 2003; Rojas 2016; Roncoli et al. 2003; Sheridan 2016; Strauss 2009). In this extensive body of literature, participants are more than passive reservoirs of information; they are 'agents with their own ideas about the saliency and legitimacy of different forms of knowledge' (Puntenney 2009: 316).

Climate change is intimately and ultimately bound up with culture – both the Western culture of consumption that drives it, the changes to and losses of cultures as people adapt to it, and the

transformation of culture required to mitigate it (Crate 2008). I complement and deepen the existing anthropological work on encounters with climate change (Crate and Nuttall 2009a, 2016) by more explicitly focusing on the 'less obvious' contours of climate change. These are the profound uncertainty and ambiguity – both conceptual and experiential – that characterised the Blue Mountains residents' understandings of the October fires as a climate change event.

In its attention to a community that is primarily white, suburban and middle class, this research represents a departure from much of the anthropological work on climate change. Through this focus, I intend to augment the sparser ethnographic literature on this demographic (Connor 2010b, 2016; Norgaard 2011) by offering an empirical, discourse-centred examination of the pressures that a heating world is exerting on a contemporary Western cosmology implicated in the causes of climate change. I draw strongly on Descola's (2013) discussion of naturalism as ontological type to show how, in response to environmental change, this self-world relationship of an Australian suburban community reproduces itself in an iterative process, even as this cosmology is under strain in an era of anthropogenic global warming. By describing the experience, difficulty, ambivalence and vulnerability of these social actors who are both 'victims' and 'agents' of environmental change, I provide a window into the reproduction of environmental privilege (Norgaard 2012) that is pivotal to comprehending the perpetuation of climate change injustice. I aim to be explicit in recognising the differently situated subjectivities of my research participants to those in the Global South¹ in relation to climate change. In doing so, I respond to the call for greater attention to the embodied 'weathering' of Western subjects, even as these bodies continue to relate to climate change as an abstract notion – a view that is

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¹ Global North and South are not used here as geographic locations. 'North-South terminology... arose from an allegorical application of categories to name patterns of wealth, privilege, and development across broad regions. The term Global South references an entire history of colonialism, neo-imperialism, and differential economic and social change through which large inequalities in living standards, life expectancy, and access to resources are maintained' (Dados and Connell 2012: 13). Throughout this thesis, I use these terms as shorthand for the historical inequalities associated with colonialism and uneven development. The Global South typically refers to Latin America, Asia, Africa, and Oceania. While the Global North refers to North America, Europe, Australia and New Zealand and developed parts of Asia. Placing the term 'global' before North and South functions as a qualification and acknowledgement that within Northern and Southern societies there are disparities of wealth between elite social classes and marginal groups.

² 'Weathering' is a concept from Neimanis and Walker (2014) that proposes a reimagining of climate change and the immediacy of embodied existence as 'intimately imbricated'. They suggest that weather and climate are not phenomena 'in' which we live (where climate change is merely a backdrop). Rather, they suggest that climate change is 'of us, in us, through us' (Neimanis and Walker 2014: 559).

'closely bound to a privileged Western life that is committed to keeping the weather and its exigencies out' (Neimanis and Walker 2014: 561).

The second related body of climate change research that contextualises this thesis spans the anthropological, sociological and psychological fields. Much of this literature, using survey and interview methods, is concerned with how people are 'engaging' with climate change, that is, their concern (or lack thereof) about climate change and the actions taken (and not taken) individually and collectively in response to such concerns. There is a growing body of literature that studies the relationship between experiences of climate change and people's 'engagement' with the issue, but its findings are contradictory (Wolf and Moser 2011; Moser 2014). Some research shows that individuals who report personal experiences of climate change such as flooding, drought and changing seasons, also show increased concern and engagement with the issue (Akerlof et al. 2013; Demski et al. 2016; Lujala et al. 2014; Reser et al. 2012; Reser et al. 2014; Spence et al. 2011; van der Linden 2014). Other research shows that people who are directly exposed to climate-related environmental change continue to perceive climate change as a temporally and spatially distant phenomenon that is disconnected from their own lives. This research thus posits that political values and beliefs about the world are a more reliable indicator of engagement with climate change than 'personal experience' (Boon 2014; Hamilton et al. 2016; Leiserowitz 2005; Norgaard 2011; Weber 2010; Whitmarsh 2008). Much of this research is qualitative but not ethnographic in nature; nonetheless, it indicates the importance of culture and place in people's engagement with climate change (Reser et al. 2014).

One of the gaps in the existing literature that this thesis attends to then is the need for place-based research that addresses the apparent contradiction between personal experience of climate change and psychological distancing. I do so through an in-depth analysis of interview material with 40 residents of the Lower Blue Mountains, and 18 months of participant observation in the community as they recovered from the October 2013 fires. This analysis moves beyond categories of 'the denier' or 'the engaged', and foregrounds a human subjectivity that is contradictory and ambivalent (Lertzman 2015a). The attention of this inquiry is not centred on whether people 'believed' in climate change – that question leaves the more fundamental problematic of the cosmological challenges untouched. Rather, this thesis is concerned with the

cultural, psychological, affective and bodily terms in which people encountered climate change in their daily lives. An emphasis on this multilayered encounter has brought out that engagement with climate change is not linear or logical in progression; rather, it is an iterative and unstable process in which the diverse elements meet and diverge over and again with indeterminacy. However, the importance of local culture and the context of the bushfire disaster remain a binding force.

What kind of phenomenon is climate change?

'The moment we engage with "climate change" we are already, implicitly at least, seeking to straddle the gap between the particular and the universal' (Hastrup 2016: 54). Translocal and multi-sited, Timothy Morton (2013) contends that climate change is a 'hyperobject' which is massively distributed in time and space relative to humans.³ As such, Morton (2013) employs the notion of the Kantian gap between phenomenon and thing in discussing the experience of the weather and the human capacity to think about climate. That is, we can feel the rain falling on our heads, but we cannot 'experience' the entire global climate system in the phenomenological sense. We can't see it or touch it any more than we can experience the entirety of other hyperobjects such as capitalism, or the solar system. Other authors differentiate between weather and climate by describing weather as the experience, and climate as the idea (Sherratt et al. 2005). In *Weather, Climate, Culture,* Benjamin Orlove and Sarah Strauss (2003) make a temporal distinction between weather and climate. Weather is something that occurs from day to day, while climate is something that occurs over years, or in the case of historical climate change, over generations.

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³ According to Timothy Morton (2013: 1), hyperobjects cover a diverse range of phenomena. Morton (2013) gives several examples, from black holes to the Lago Agrio oil field in Ecuador, the Florida Everglades, the biosphere, the solar system, the sum total of all the nuclear materials on earth, plutonium or the uranium, very long-lasting products of direct human manufacture, such as Styrofoam or plastic bags. Hyperobjects, then, are 'hyper' in relation to some other entity, whether they are directly manufactured by humans or not' (Morton 2013: 1).



Figure 1.1: 'How many weathers make a climate?' Source: Hannam (2016).

There is obviously value in the distinction that needs to be made between weather and climate, and my intention is not to dismiss this perspective, but to point out the limitations of viewing climate change purely in the abstract as a scientific model or conception that cannot be experienced. 'Such distinctions promote a spatialized view of climate time (that is, as something that we are "in" and whose linear progression we are outside observers to), while also suggesting that weather has no temporality at all' (Neimanis and Walker 2014: 562). This perspective positions the scientific conceptions of 'global climate' as the complete (if not abstract) reality, while denying the relevance of local encounters with climate, because of their more partial, uncertain and scientifically contested character. Climate is configured by people through the weather over time in the telling of its 'patterns and anomalies' (Hastrup 2013: 7), and indeed, the weather can be most palpable when it contrasts or interrupts the constancy that people expect from the climate (Neimanis and Walker 2014).

One feature of living in a climate changed world is that people are regularly exposed to climate change discourse (Hastrup 2016; Hulme 2009; Marino and Schweitzer 2009; Rudiak-Gould 2011). Residents of the Lower Mountains made sense of climate change as it was discursively informed and palpably embodied. They watched the nightly news reports during the October

fires when climate change was regularly discussed by politicians and scientists. They felt the disturbingly hot wind against their skin in early spring. The tangible and intangible aspects of climate change were deeply entwined in an intricate dance as people engaged with what it might mean in their own lives. Rudiak-Gould's (2011) study of the Marshall Islands shows that for the Marshallese, scientific narratives and lived experiences of environmental change came together in an assemblage that intertwined with narratives of biblical predictions of flooding during 'End Times'. Finding that informants moved 'freely and easily between descriptions of locally perceived changes and evaluations of scientific predictions, 'triangulating' between these sources of information, and assessing how prediction squares with evidence and vice versa' (Lazrus 2009: 240). However, for the people I interviewed, there was an uncomfortable tension between their experiences of bushfire, changing seasons, storm behaviour, and other environmental disruptions, and the abstract stories they were encountering about global climate change in the media. In the Blue Mountains at the time, to openly or publicly link the intangible global discourse of climate change with the tangible local experience of the October fires was thought to be suspect or even socially dangerous. I believe that this was so because the stories that gained credibility or sustenance through such a linkage - stories of disorder and apocalypse, of unmitigated risk and of culpability - were threatening to their sense of order and safety, to the role of fire in their cosmology and their own place in nature, and to the foundational settler narratives of mastery that still underwrote so much of how the community related to the bush beyond the garden fence. Additionally, these dramatic stories of environmental collapse did not correspond with the everyday grind of recovery and rebuilding.

Global scientific discourse is one more lens through which locals make sense of the environmental change going on around them (Milton 2008a; Rudiak Gould 2011, 2016). This lens intersects with people's specific pre-existing worldviews and their place in the larger scheme of life. Local experiences of climate change of sea-level rise, increasing temperatures, or in the case of my own research, a climate-connected disaster like bushfire, are necessarily 'partial'. They are one side of the coin discussed by Edmund Husserl (cited in Morton 2013). The side that can be touched and seen, while the other side of the coin, in this instance 'global climate change', remains, always, in shadow, inaccessible and withdrawn from our ability to experience it no matter how many times we turn the coin over in our hands. Yet the 'global

climate' of scientists is also a specific conception where local experiences of environmental change are largely inaccessible or ignored in their modelling. Each side of the coin then has its shadow.

Much of the anthropological and sociological literature frames disaster events as 'local' instances of global warming that offer a window into how people perceive and respond to climate change. While this is a useful perspective that I take up more fully in the second half of this thesis, it felt incomplete to only explore the October bushfires as the 'experienceable part' of the so-called 'unexperienceable whole' scientists call global climate. As the title of this thesis implies, the focus of this research is the dynamic *between* catastrophic bushfire and climate change. As I immersed myself in the field, it became clear that the October fires were enmeshed in a complex relationship with climate change that went deeper than being a local or partial piece of a larger global puzzle. Throughout this thesis, I show how the October bushfires in the Lower Blue Mountains could be more aptly understood as a microcosm of the broader historical, cultural and economic processes that are the causes and effects of anthropogenic global warming. Through a detailed exploration of the aftermath of the October fires a more complete picture of what climate change means emerges as well. For this reason, the first half of the thesis is concerned with sketching out the contours of the shared origins of suburbia and climate change.

The Chapters

The Blue Mountains is a cluster of 'suburbs in the bush'. Chapter 1 describes this distinctive character of the Mountains as a place, through the lens of the history of human-land relationships that reaches back into the colonial period and beyond into the era preceding white settlement by millennia. Colonialism, Indigenous dispossession, and the suburban expansion that accompanied 20th century industrial capitalism set the scene for my inquiry into the common roots of modern Australian suburbia and climate change. Using Paul Carter's ([1987] 2010) seminal work, *The Road to Botany Bay*, I analyse the colonial origins of the suburban-bush interface where residents both manage fire risk and appreciate the 'amenity' of the natural world. I argue that a colonialist orientation grounded in what Descola (2013) terms the 'naturalist ontology' endures, both in relation to the Indigenous people's presence and cultural imaginaries, and the environment as object to be explored, exploited, protected, contained, feared or romanticised

(Davison 2005). The demography of the area, a mostly white, mostly middle-class community living within the World Heritage listed National Park on the outskirts of the major metropolitan area of Sydney, makes the Blue Mountains a fertile site from which to examine the idea of nature in modern suburban cosmologies.

Living in the liminal space between city and bush, residents of the Lower Mountains carve out a life, an identity, a safe space to live. They seek a 'balance' that is premised on separation, that is, a duality between their human lives and that of the 'natural life' they perceive all around them (Davison 2005: para 26). With Descola's (2013) naturalist typology as a starting point, Chapter 2 uses ethnographic data from the Blue Mountains to understand how the ontological conventions of naturalism affect modern suburban people's ability to assimilate the concept of anthropogenic climate change into their existing cosmology. This chapter finds that the friction at the suburb/bushland interface where the conservation of the natural environment intersects awkwardly with the pressure to develop and the growing salience of risk management, is not simply an unfortunate side effect of the capitalist imperative for economic growth. Rather, it is a relational tension inherent to the process of white settlement in Australia that is derived from the shared origins of the developer and the conservationist (Carter 2010). Each understands nature as an 'autonomous ontological domain' (Descola 2013: 68–69), encompassing both the view of the developer who exploits nature and the conservationist who believes there is a moral imperative for humans to protect or improve it.

Perceptions of the bush as background scenery, either pleasant and amenable, or dangerous and threatening, underscore the cultural character of the image of the bush held by residents in the Lower Mountains. Chapter 3 investigates how representations of the bush shaped three core narratives used to explain bushfire in the community. It explores the different ways that the community typified bushfire – a dynamic and even unstable process that drew on three main domains of relevancy: scientific, experiential and historical. Alfred Schutz's (1975) phenomenological analysis of social relations is used here to explore the relationship between what was stabilized as a background, in this case the 'normal' or 'natural' fire regime of the Blue Mountains, and what was typified as an object that stood out in relationship to this background, in this case a catastrophic bushfire very early in the fire season. Chapter 3 introduces the concept

of a 'culture of ambivalent expectation', and considers these narratives' social and psychological utility in helping people typify a normal or expected bushfire. Such accounts and their associated symbols operated to manage the ontological instability (Giddens 1991) produced by sudden and significant environmental change and its association with anthropogenic climate change. In such a culture, the idea of recurrent fires was a reassuring fact, rather than a disturbing one. It reinforced rather than destabilised the basic structure of their life world, and meant that previous actions taken simultaneously to prevent, prepare for, and fight fires would remain applicable into the future.

The second half of the thesis takes up the question of the perceived reality of climate change more explicitly. Turning attention to the recovery process following the 2013 fires, I look at how, in the aftermath, the community made climate change real and unreal. It was morally imperative for me that I respected local perceptions of the fires in their layered cultural and historical complexity against which climate change tended to emerge as secondary, irrelevant, or even fictional, while also maintaining my own epistemic commitment to viewing climate change as a critical lens that could elucidate these events. I will argue that my approach indeed brought to the fore connections between people and phenomena that would otherwise have remained invisible, for instance, the relationship between consumerism, vulnerability and attitudes towards anthropogenic climate change.

Climate change became tangible for people in the process of rebuilding, in choosing to move away from the area, and in renegotiating their insurance premiums. In detailing the search for safety undertaken by the community in the aftermath of the fires, the second half of the thesis introduces the centrality of the cultural constructions and practices around vulnerability in Australia that affect modern suburban people's responses to the reality that they could be, or indeed already are, being impacted by climate change. In Chapter 3 I associated this search for protection and agency with what I refer to as a culture of ambivalent expectation. I now extend this association in several directions: in Chapter 4 to consumerism, in Chapter 5 to the conversational conventions that silenced direct talk about climate change in the community, and in Chapter 6 to the unconscious psychological defences used to avoid uncomfortable feelings of fear, sadness and powerlessness associated with global warming.

The charged connection between vulnerability and responsibility for those living in the West who are suffering the effects of climate change even as their lifestyles perpetuate the system of consumption that contributes to global warming, has been observed by several authors. Kari Norgaard (2011), who centred her study on residents of the town of 'Bygdaby' in Norway, found that people sought to avoid the discomfort of their responsibility for climate change by way of using what she calls 'tools of innocence' - ideas, images and activities that helped create distance from responsibility (Norgaard 2011: 215). Psychoanalytic authors like Rosemary Randall (2013) examine the challenging feelings that people in the West encounter as they come to terms with their 'ecological debt'. She describes the conflict for people who live in high consumption cultures like the United Kingdom, of both wanting to stop climate change and wanting all the things that are causing it. Wilk (2009) problematizes this notion of individual responsibility for climate change by pointing to the issues of governance and policy that determine consumption patterns in the West. The compelling context of my research where modern suburban people are directly exposed to climate-connected disaster brings these conflicts into sharp relief. Chapter 4 shows that for Lower Mountains residents, the acute experience of helplessness and trauma in the face of catastrophic bushfires reinforced the avoidance of human responsibility for environmental change locally but especially at the global level, which was understood to be 'irrelevant' to the immediate process of recovery.

Much of my ethnographic data on the Blue Mountains affirm the importance of the political realm in shaping local perceptions of and responses to climate change (Brulle et al. 2012; Collins 2016; Connor 2016). However, the discussions of climate change by frontline workers – council members, the Rural Fire Service (RFS) and recovery workers were anything but straightforward. This suggested additional layers – both cultural and psychological – were contributing to the silence and euphemistic style of talk around climate change after the October fires. The idea that it was insensitive to talk directly about climate change with someone who had just been through the trauma of the fires was prevalent and unquestioned. Building on Chapter 3's discussion of 'domains of relevance', Chapter 5 examines the different contexts where talk of climate change occurred or was avoided. When recovery workers and the RFS members discussed climate change, it was evident that not talking about it was not always a deliberate choice. The

unconscious decoupling of climate from their work with the community revealed their own 'common sense' ideas about its relevance, which in turn appeared steeped in the construction of climate change as a temporally distant and abstract phenomenon. The typification of climate change as distant grew out of a 'socially approved system of relevance' that foregrounded the scientific and political domains. These domains were 'elite' and 'expert', and thus considered apart from the immediate everyday, the personal, the emotional, from the here and now of recovery and preparedness work. Chapter 5 explores how such a frame shielded the community, not just from difficult political debate, but also from the existential worry and difficult emotions that arise when engaging with the idea of climate change.

Kirsten Hastrup (2013) argues that the new knowledge of climate change implies a destabilised ontology: the process of anticipating climate change affects the social imaginary as the 'liquidity of the climate scenarios' becomes a social driver, infiltrating perceptions of the environment, social life and knowledge (Hastrup 2013: 3). Chapter 6 shows how this process of anticipation, and its associated destabilised ontology, was a private reality for many. Lower Mountains residents and those working on recovery and preparedness were navigating the uncertain realities associated with a changing fire regime, but a process of open public anticipation of climate change did not exist in the Blue Mountains. With no shared narrative that supported the community to grasp how their 'mundane now' (rebuilding, underinsurance, trauma, etc.) was linked with climate change, it continued to remain just 'a little bit real' – a distant and apocalyptic flicker on the horizon. The process of engagement with climate change that I discuss in Chapter 6 is akin to the tidal pull of the ocean, where residents moved in and out of contact with the tangled meanings of climate change in their own lives.

Having cast the epistemic net wide, I approach the silences and disconnections, and the ambivalent and hesitant articulations of climate change I have encountered in the Lower Blue Mountains community as indicative of a cultural and ontological challenge. From the naturalists' perspective, climate change and bushfire ground people in their material interconnection with their wider environment, but it is just this perceived connection that strains against the naturalist fallacy of separation. This strain, in turn, reflects that people are vulnerable – ontologically, socially, emotionally and economically – without the means to acknowledge it. The renounced

vulnerability I witnessed as people were privately and cautiously making a connection between climate change and bushfire in the aftermath of disaster stuck with me. I argue that aversion to vulnerability is central to understanding the response to climate change that is occurring amongst the economically privileged suburban populations of the Global North and Western life worlds. Feminist perspectives on vulnerability emphasise the importance of the daily, embodied 'weathering' required to ethically respond to this emerging reality of a hotter world (Alaimo 2009; Butler 2004.2016; Neimanis and Walker 2014). This thesis offers a window into how one community is coming to terms with what it means to 'weather' their exposure to bushfire in an era of climate change.

1

Place: A region of suburbs in the bush

It is this nice sort of feeling of living close enough to the city but not in a city environment. It's nice, there's the bush, it's quiet, you know you don't have to go far to get out of suburbia, you know what I mean?

-Frances, Winmalee resident.

The Blue Mountains as a field site to explore climate change

On October 17, 2013, I was house-sitting an apartment overlooking Sydney Harbour. Out on the balcony, I watched with a mix of horror and awe as a black plume of smoke descended from the Blue Mountains in the west onto the city. Eventually, I had to go inside and close the doors and windows as bits of ash fell from the sky. As the afternoon wore on, I sat in the eerie yellow light that accompanies the smoke of bushfire, reading the anthropological literature on climate change and wondering about what these fires might mean for the people living in the Blue Mountains. Was anthropogenic climate change a reality for those affected by the bushfire?

The Blue Mountains is a region of suburban-bush interface. Separating Sydney, Australia's fastest growing metropolis on the East Coast, from the inland. This southern stretch of the Great Dividing Range hosts a string of small towns surrounded in all directions by vast expanses of protected bushland. Some of the suburbs of the Lower Blue Mountains, like Springwood, started out as small towns on the outskirts of Sydney but with the growing spread of Sydney's population the farms and crown land around these town centres have been subdivided and developed, and are slowly transforming these once distinct townships into 'suburbs'. The noun 'suburb' has quite a loose meaning and it used to denote quite a variety of landscapes that are in general 'predominated by detached housing, that lie beyond urban centres but that are nonetheless integral to the urban whole' (Davison 2005: para 10). Davison (2005: para 11) suggests that 'suburbs are more or less tacitly understood in Australia as an enactment of the Great Australian Dream of affluence, independence, privacy and security: an Anglo-centric dream of certainty in a new world characterised above all by flux... this dream was shaped by

strong proletarian influences and democratic impulses from early on in Australia.' From turn of the twentieth century, Australian settler society has been widely suburbanised, with the majority of Australians making their homes in the suburbs (Davison 2005).



Figure 2.1 Satellite photograph of the City of the Blue Mountains Source: Google Maps

As I explore in this chapter, the Mountains' distinctive nature of place as a cluster of suburbs in the bush reflects a history of human-land relationships well into the colonial period and preceding White settlement by millennia. Figured as a first frontier into the interior of the continent early on in the British colony of New South Wales, the Blue Mountains became a place of colonial exploration, Indigenous dispossession, settler colonisation and subsequent suburban expansion. I will argue that a colonialist orientation grounded in what Descola (2013) termed naturalist ontology endures, both in relation to the Indigenous people's presence and cultural imaginaries, and the environment as an object to be explored, exploited, protected, contained, feared or romanticised (Davison 2005). It is precisely these historical processes that continue to shape the interface which makes the Blue Mountains a fertile site from which to examine the idea of nature in modern suburban cosmologies. My particular interest is in current manifestations and subversions of the naturalist ontological underpinnings as they are emerging

in the era of anthropogenic climate change. Portraying the Blue Mountains through the social, cultural and environmental processes across time, this chapter sets the scene for such an inquiry.

Crises, as Kate Rigby (2004) remarks in relation to the Romantic era, provoke a heightened expression of cosmological concerns. The October 2013 bushfires that ravaged parts of the Lower Blue Mountains forests and destroyed two hundred homes, presented a localised 'natural' disaster that was challenging established beliefs and knowledges about the environment and people's place in it. The event prompted me to select a field site in the midst of destruction – one in which those affected by it were not 'innocent' victims. Like Australian society as a whole, Blue Mountains communities count among the world's highest energy consumers, and there was a chance to see if people were making connections or not between their own lifestyle, the fires and climate change.

The dual position of the Blue Mountains communities as 'victim' and 'agent' of climate change provides a new field of research within the growing number of social and cultural science studies concerned with the effects of a heating earth. The majority of studies to date have taken place in climate sensitive areas of the world where climate change has the most pronounced effects. Places like the Arctic and Subarctic (Cruikshank 2005; Crate 2008; Henshaw 2009; Krupnik and Jolly 2002; Leduc 2007; Marino and Schweitzer 2016; Nuttall 2009), areas experiencing glacial retreat (Bolin 2009; Cruikshank 2001; Orlove et al. 2008; Paerregaard 2016; Strauss 2009), or low-lying Pacific island nations in the process of submergence (Jacka 2016; Lazrus 2016; Rudiak-Gould 2016). Another focus has been on Indigenous peoples and their cultural and spiritual connections to the land or sea (Crate 2016; Green 2009; Leduc 2011; Wolf et al. 2013), and on primary producers and rural populations who are dependent on the land for their livelihood (Connor and Higginbotham 2013; Crane et al. 2010; Head et al. 2011; Minnegal & Dwyer 2008; Paolisso 2003; Roncoli 2006; Sheridan 2016; West et al. 2003). These areas and peoples are held to be at the coalface of anthropogenic climate change. Social scientists have argued that an understanding of their experiences can make transparent the current cultural dimensions of climate change as well as intimations of the varied futures that may lie ahead for people around the globe (Crate 2008). The climate justice lens, which focuses on how climate change perpetuates and exacerbates global inequalities that stem from colonialism and

capitalism, is also a critically important framework informing much of this research (Crate and Nuttall 2009a).

Arising from this climate justice lens, I was interested in studying a white, middle-class suburban community because this demographic matrix accounts for so much of the consumption, behaviour, and voting patterns that are perpetuating climate change and climate injustice. It seemed especially worthwhile to ask if people's varied participation in and identification with environmentally destructive economies were pivotal in forging their relationships with the 'natural' world as well as potentially affecting their feelings, thoughts and experiences around climate change. Currently, more than half the world's population live in urban areas, with a predicted 70 per cent of people to be living in cities by 2050. The ethnographic study of climate change for people who do not have a direct relationship with the environment either because they are residing in a primarily urban environment, or because their livelihood is not directly dependent upon it is comparatively thin on the ground. Much of the work that considers the perceptions of climate change in urban populations of the Global North is undertaken in the disciplines of sociology, social psychology and human geography. These studies have analysed the importance of values and beliefs in developing perceptions of and responses to a changing climate, using survey and structured interview methods. Other multidisciplinary research in urbanised regions (Connor 2016; Gorman-Murray 2010; Hirsch et al. 2011; Norgaard 2011; Pokrant and Stocker 2011) emphasises the need to communicate climate change in locally meaningful ways so that people can engage with it as an issue of relevance in their daily life. By contrast, the idea that people living in cities and without connections to subsistence practices are already perceiving the impacts of climate change on and in their lives has received little attention. Arguably, this neglect contributes to the general perception among 'affecting' populations that climate change happens somewhere far away and to people elsewhere (Leiserowitz 2005).

My fieldwork was set in the Lower Blue Mountains, specifically the suburbs of Springwood, Faulconbridge, Winmalee and Yellow Rock. These were the communities most impacted by the 'Linksview fire'⁴, which occurred on October 17, 2013. While each of these places have

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⁴ Named after Linksview Road in Springwood where the fire began.

distinctive identities of their own, their proximity to each other, their shared identity of residents as belonging to the Lower Blue Mountains, and the practical need to bound the extent of my inquiry meant that these four neighbouring suburbs felt like a feasible space and population to study in the time that I had allotted for my ethnographic research. In October 2013, there were also two other significant fires burning in the Greater Blue Mountains area – the State Mine fire, which began on Australian Defence Force land near Lithgow by an explosives training exercise on October 16. Another was burning in Mount Victoria caused by a tree falling across a powerline in the high winds of October 17. Around NSW at this time around 100 fires were burning, though the most severe were all located in the Greater Blue Mountains area.

By October 20 the premier of NSW declared a state of emergency. On October 22 predictions for worsening fire weather prompted the closure of all schools across the Blue Mountains. Hospitals and nursing homes were also evacuated, and residents were advised to 'leave early' and evacuate as it was feared that the State Mine fire in the Upper Mountains would merge with the Linksview fire in the Lower Mountains threatening many more lives and homes. The broader context of the other fires burning around the Greater Blue Mountains and across the state of NSW with such severity so early in the fire season was a major factor in the ways politicians, the media and locals linked the October fires with climate change. It is for this reason that throughout this thesis I refer to the 'October fires' in the plural, as these multiple fires burning in the Blue Mountains informed the broader context of the particular bushfire, the Linksview fire, that affected my field site.

Knowledge of the potential threat was not absent. A climate change risk assessment study of the local government area of the Blue Mountains had been undertaken in 2009 (Burton and Laurie 2009). This study showed that the most significant risk facing the region was the threat of bushfires (both in regards to human safety and the natural environment), with over 40,000 residents living in the high bushfire risk area. Other threats relating to climate change included damage from extreme weather events such as wind and hail storms as well as heatwaves. After visiting the Lower Mountains in January and February of 2014 and meeting with some locals from Winmalee and Springwood, I felt hesitant about conducting research in a community in trauma following the most catastrophic disaster they had ever experienced in the area. But I was

intrigued by the common response to the fire as a 'freak event', by the resilience of the locals I encountered, as well as by the reported culling of trees that some people were undertaking (in many cases illegally) following the fires. Events like the October fires, disasters that are predicted to occur more frequently and with greater severity in a climate changed world, disasters that are being connected with global warming in the media (Hannam 2016), by scientists (AAP 2014; Mathiesen 2016), politicians (Holmes 2013) and by ordinary people in the community (Davies 2013), are a powerful manifestation of climate change, at once dramatic and obvious as well as remaining deeply ambiguous and disputable.

The ambiguity of these events reinforces a question that was apparent in local discussions in the Blue Mountains, and that is perpetuated in the survey based sociological literature, namely whether climate change can be experienced at all. The difficulties I witnessed as people tried to talk meaningfully with each other about how to best respond to the shifting risk profile of their community reflected the significance of the cultural and psychological dimensions of their relationship with the environment. Moreover, the acuteness of the disaster and trauma of loss meant that my focus on the topic of climate change in the course of fieldwork could potentially aggravate people's fears and thus be insensitive and even unethical. Keeping the difficulty of 'talking about and around climate change' in mind – which indeed became an important subject of my research (see Chapter 5) – I set out to examine people's experiences of vulnerability in the wake of these fires. I was interested in the threat that the reality of climate change posed to their lives, and to the integrity of their cultural order (Jacka 2009: 207). In other words, I have sought to contribute to an anthropological understanding of climate change that pushes the boundaries of disaster and climate change research beyond the question of belief. Whether belief in climate change is reinforced or disregarded in the wake of disasters (Whitmarsh 2008; Reser et al. 2012; Spence et al. 2011) is an important area of research, but it leaves the question of the cosmological challenges of climate change unanswered.

A liminal place

Limit of the metropolitan area of Sydney, bridge to the rich agricultural land of the Western Plains, on the threshold of the World Heritage listed 'wilderness', the Blue Mountains emerge out of the dynamic relationship between boundary and movement. Its apparently solid and

insurmountable cliff edges and winding valleys that historically marked the edge of the early colony have been shaped over millions of years by the movement of waters gradually wearing down the escarpment creating mountains from the rocky plateau. Today, the global flows of capital (Appadurai 1996) surge up and down the newly widened Great Western Highway in a steady current of trucks and cars that carry people and goods from inland to coastal ports and back again. Coal trains rumble through the night keeping residents awake. Silt and sand run downhill from building sites, road works and gardens atop the ridgeline slowing the current of ancient creeks. Storm waters stream into the valleys carrying rubbish from the gutters, the wind and birds scatter the seeds of noxious weeds. Fire crackles swiftly uphill, germinating and destroying, clearing the thick understorey, razing homes, tearing through communities. Its heat and erosion sculpting the landscape as surely as the humble lyrebird who shifts tonnes of material in the course of her travels each year, as surely as the thousands of bushwalker's feet that bear down upon dirt tracks carved into the sides of mountains. These movements transgress boundaries between city and country, renewal and destruction, barrier and opening, wilderness and civilisation.

The temperate eucalypt forests that carpet the deeply dissected plateau of the Greater Blue Mountains are made up of approximately 100 different eucalypt taxa (thirteen percent of the global total) and have been described as the lungs of the Sydney basin, breathing in the excessive carbon produced in the dense human activity of the city. The Greater Blue Mountains is also the primary water catchment area for Sydney. These essential functions of the ecosystem, these so called 'ecosystems services' (Lele et al. 2013), reveal the Blue Mountains as a larger part of the more-than-human body that sustains life in the Sydney basin. It is not just a place of beauty, grandeur and natural amenity for locals and tourists, although the cultural and ecological values of its unique biodiversity are recognised by law. The varied geology, soil types, climates and altitudes of the area have combined to produce a high level of diversity of flora and fauna within the region. A study by Smith and Smith (1995) revealed that 327 species of native animals and 946 species of native plants occurred in the local government area of the Blue Mountains. Beneath the canopy viewed from above is a colourful understorey of banksias, wattles, peas, and other sclerophyllous (hard-leaved) shrubs. In spring, they are a riot of yellow, pink, red and purple flowers. On slightly more fertile soils, abundant grasses are found among the understorey.

In areas with soils too shallow or nutrient-poor to support trees, the shrubby heathlands are hardy enough to grow; and in frequently waterlogged areas upland freshwater swamps flourish. In spring the heathlands flower profusely providing significant seasonal food resources for many birds and small mammals, while the swamps play a vital role in storing water during wet times, filtering it and gradually releasing it throughout the year (Hammill and Tasker 2010: 8-9). The diversity of habitats throughout the Greater Blue Mountains is part of what led the area to be formally included on the World Heritage list in 2001 in recognition of the global significance of its 'outstanding universal value' (UNESCO n.d.). Urban development occurs mainly on its ridgelines and plateau surfaces but the National Park covers approximately 74% of the landscape, and the total protected bushland area is 88% (Blue Mountains City Council 2012: 19).

The unusual situation of urban, industrial and agricultural development, within and surrounding the World Heritage area, highlights the tension between development and conservation imperatives in the Blue Mountains. Like many protected areas, the Greater Blue Mountains World Heritage Area faces threats to its immediate and long-term integrity (Blue Mountains World Heritage Institute 2016). For millions of years, both climate change and fire have been major driving forces in the evolution of the distinctive and diverse flora and fauna of the Greater Blue Mountains. In more recent millennia, Aboriginal management of the land also influenced the diversity and distribution of species throughout the Blue Mountains. However, increasingly significant human impact on the landscape since the 19th century (through farming, tourism, urban development and plant and animal pest species) and the possibility of unprecedented conditions in the future, mean that many species and ecosystems may be exposed to circumstances beyond those to which they are adapted (Hammill and Tasker 2010). The number of species of animals and plants that are listed as threatened in the Blue Mountains has increased from 67 species to 97 species between 2002 and 2012. Over the same period, the number of ecological communities that are listed as endangered rose from 3 to 7 ecological communities. It is important to note that these increases are mainly due to improved monitoring of ecological communities and plant and animal species, as well as due to ongoing degradation of these communities and species across the state, rather than solely reflecting degradation at the local level (Blue Mountains City Council 2012: 23).

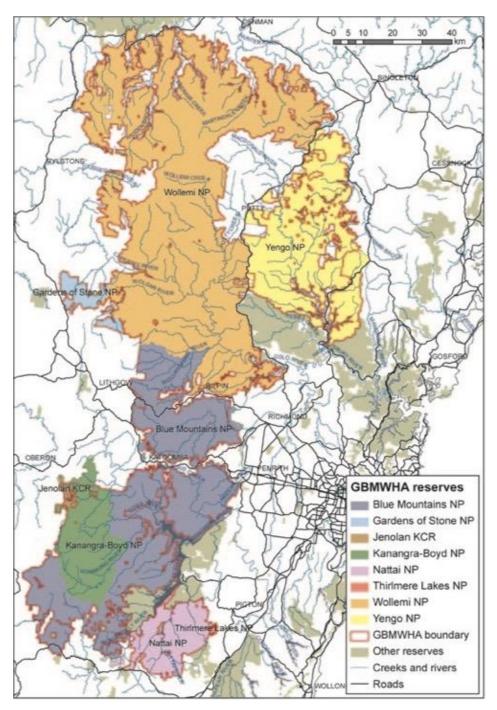


Figure 2.2 Greater Blue Mountains World Heritage Area Reserves Map. Source: Hammil and Tasker (2010: 6).

Colonial legacies

Lift ye your faces to the sky
Ye far blue mountains of the West,
Who lie so peacefully at rest
Enshrouded in a haze of blue;
'Tis hard to feel that years went by
Before the pioneers broke through
Your rocky heights and walls of stone,
And made your secrets all their own.
(Excerpt from *Song of the Future*, Banjo Paterson 1889)

Distant and blue on the horizon, the mountains to the west of Sydney have been alive in the settler imagination ever since they were crossed in 1813 by Gregory Blaxland, William Lawson and William C. Wentworth – who were awarded land grants in return. The young colony was fast outgrowing the harbour settlement of Sydney Cove established in 1788, and European arrivals were in need of more arable land for the grazing of cattle and sheep. A severe drought in 1812 and 1813 added to the pressure to expand westward away from the coastal strip and into the lands of the Wiradjuri and Gamilaroi people. The Mountains thus cast had become a barrier to the success of the colony, and the explorers' crossing was perceived as an 'opening up' of the vast fertile plains beyond. Although little was made of it at the time by Governor Macquarie (Thomas 2004), by the late 19th century the crossing of the Blue Mountains was considered a major turning point in the colony's history. In the wake of Federation in 1901, the crossing came to 'signify a great imperial breakthrough, the breaking of an impassable barrier, and a means of breaking out of the colony beyond convict wall' (McGrath 2015: 99). Cast as an act of liberation, it was revived and romanticised by bush poets, and the journey took on a heroic quality in the Australian imagination (Thomas 2004). Throughout Paterson's (1889) poem a sense of masculine settler agency and ownership is strongly linked to the Blue Mountains crossing as pioneers penetrated their rocky heights to make the secrets of the mysterious land 'their own'.

Historian Ann McGrath writes that '[t]he continuing preoccupation with these Blue Mountains stories demonstrates how this area became a historical site from which emanated one of

Australia's most powerful national histories and historical legends associated with coloniser sovereignty and authority over the land' (McGrath 2015: 108). The themes of discovery and heroism that were popular in the late 19th century created a history that obscured the actuality of Indigenous Australian presence and history in the region. Thus rock art and other archaeological sites were not understood at that time as historical data. These discovery narratives also ignored the reality of relations between the white settlers and Indigenous groups at the time (O'Brien 2010 cited in McGrath 2015: 114-115). By this stage the boundaries of the colony were not clearly demarcated, as escaped convicts and free settlers chose to live beyond existing settlements, with some 'joining the blacks' (Thomas 2004: 50). It was an expansion that colonial graziers like the explorer Blaxland were not inclined to admit or reflect upon, though his journal reveals that their party crossed through areas that had tracks already marked in the European style by cutting the bark of trees, and that they encountered several native huts (Thomas 2004: 50). Unlike explorers of the Mountains who had come before⁵, Blaxland avoided contact with the Aboriginal people at all stages of the journey, never seeking out Indigenous names or knowledge of the area. Furthermore, the so-called 'party of three' was accompanied by four others, including the guide James Burns, a white man who was a kangaroo hunter by profession - one of those whites who 'lived out on the edge' and very likely had contact with Indigenous people (Thomas 2004: 50).

The ridgeline that the three explorers travelled along from east to west was adjacent to, if not crossing over, traditional Aboriginal routes. Local archaeologist, Father Eugene Stockton, underscores this fact when he writes that 'eloquent witnesses to this... are the Aboriginal wells beside the [Great Western] highway... at Hazelbrook with their associated axe grinding grooves and engravings and a nearby shelter campsite... [Wells] that continued to supple early European travellers along the western road' (Stockton 1993: 31).

⁵ Francis Barrallier, a French explorer crossed the Nepean in 1802. Barrallier had close contact with at least two Aboriginal men living in this area – Bungin and Wooglemai – who acted as guides and built bark huts for Barralier's party, as was the custom for strangers being received as friends on their land (Merriman 1993: 87). Barrallier reported witnessing plumes of smoke from several fires in the distance and was informed by Bungin that it was another tribe hunting for kangaroo.

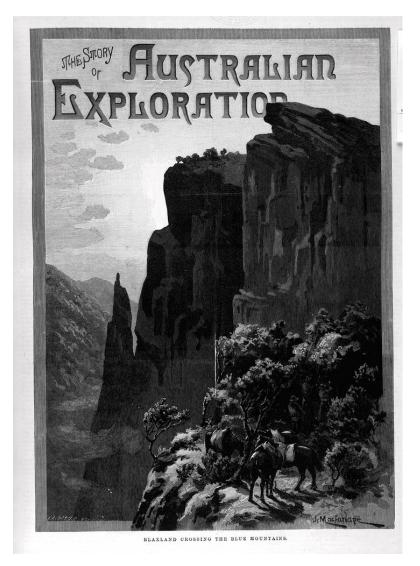


Figure 2.3 A wood engraving of Blaxland's crossing. Source: The Illustrated Australian 1891, National Library of Australia.

In 1815, convicts under the supervision of William Cox finished construction of a road following the route first set out by Blaxland, Lawson and Wentworth, and later by Surveyor Evans, and it is the same path, more or less, that the Great Western Highway follows today. An aerial shot (Figure 2.1) of the Blue Mountains today shows a winding narrow slither of development forking out from this east-west ridgeline along spurs extending north and south. The initial European settlement of the Blue Mountains grew out of the steady flow of travellers moving east to west in search of agricultural and grazing land, and eventually gold. From the 1850s roadside inns and military posts sprung up along the Western Road for these travellers and Springwood became a campground for hundreds of Chinese prospectors as they crossed the mountains (McGrath 2015:

118). For visitors who were passing through, the Blue Mountains was simply 'a tortuous route on the way to the Western Plains, as they led their stock to rich inland grazing' (Stockton 2014: 7). The transformation of the Blue Mountains in the colonial imaginary from 'a road to somewhere else' to a destination in and of itself began with the completion of the railway line in 1867 (Thomas 2004: 41). From around the 1860s, white settlement of the Blue Mountains began to bud in earnest along the spine of ridgelines extending from Sydney to the Great Western Plains. The railway had been built along the ridge line, and the temperate climate and fresh air attracted wealthy Sydneysiders who built weekend country homes. The Blue Mountains began to be considered by 'refined gentlemen' of the 1870s and 1880s, 'a majestic landscape wherein contemplation of nature uplifted the soul' (Burke 1988: 99). Then, as now, the local economy was dependent on the steady flow of travellers and tourists seeking fresh mountain air, the restorative experiences of nature and the unparalleled vistas across the Grose and Megalong Valleys.

Gundungurra and Darug land

An in-depth exploration of the white/Aboriginal interface in the Blue Mountains is beyond the scope of this thesis, and my fieldwork did not include work with the current Aboriginal land councils in the Blue Mountains or with Traditional Owners. Nevertheless, because this thesis is concerned with suburban figurations of environmental change, it is important to recognise that the notion of the empty 'wilderness' of nature and the erasure of Aboriginal humanity in colonial discovery narratives (Wolfe 1999) continues to inform present day relationships with the bush in the Blue Mountains. The crossing of the Blue Mountains and the 'discovery' of the land beyond originated and reinforced key colonial myths about the dormant and empty 'nature' waiting to be awakened and productively used by the British invaders. In Figure 2.3 the sheer cliffs appear like dark walls obscuring the vast Australian 'wilderness' beyond. This narrative of untouched or empty wilderness persists into the current era and was a cornerstone of the earliest conservation movements that emerged at the beginning of the 20th century around sites like the Blue Mountains. According to Fallding (2015: 143), '[t]he campaign to save Blue Gum Forest in the Grose Valley Wilderness... was the cradle of conservation in NSW, and subsequently led to a large number of community campaigns to protect natural areas'.

'Wilderness' is a problematic notion when considering the history of Aboriginal occupation of the Blue Mountains. As Aboriginal anthropologist Marcia Langton points out, 'the Australian use of the term "wilderness" was a mystification of genocide. Where Aboriginal people had been brought to the brink of annihilation, their former territories were recast as "wilderness" (Langton 1996: 20). The apparent absence of Aborigines in the Blue Mountains is inscribed in stories of small pox and influenza. The epidemics of 1789 had devastating impacts on Aboriginal people all around the Sydney area and beyond, and this explanation was used then, as now, to further inscribe the notion of 'terra nullius', empty land available for settlement. Thus inflated, the epidemics also served to obscure the embodied settler experience of direct and sustained contact with Aboriginal communities and the colonial violence towards Indigenous peoples – massacres, the stealing of land, and depletion of food and water sources (Goodall 1995).

Aboriginal people have lived in the Blue Mountains for at least 22,000 years (Stockton 1993). The Darug and Gundungurra people are acknowledged as the traditional owners of the land where the City of the Blue Mountains now resides. The Gundungurra-speaking people are the traditional owners of the southern Blue Mountains and beyond, whose territory extends through the Southern Highlands of New South Wales to near Lake George, not far from Canberra (Blue Mountains City Council 2010: 7). Darug people are traditional custodians of the eastern and northern sections of the main ridge of the Blue Mountains (Blue Mountains City Council 2010: 37). Throughout Australia, Indigenous people are inextricably connected to the land through the cosmology of the Dreaming, and have totemic⁶ bonds to living creatures, plants and many other features. Dreaming stories tell of the creation period when living landscape was created from a formless world⁷. An important aspect of the Aboriginal heritage of the Blue Mountains 'is the

⁶ According to Rose, James and Watson (2003) the terms 'totem' and 'totemism' convey three main meanings in NSW. An identity meaning – the 'totem' is a non-human species or phenomenon that stands for, or represents, the group. A relationship meaning – the 'totem' and the person or group share their physical substance, and share a kin relatedness. A worldview meaning – the relationships are embedded in a view of the world in which connectivity is the foundation of all life. 'Totemic law, summarised in utter brevity as mutual life-giving, connectivity, and respect, offers the basis for ways of thinking about co-management and sustainable futures' (Rose, James and Watson 2003: 3).

⁷One such creation story in the Blue Mountains is the story of Gurangatch and Mirragan. The story describes an almighty struggle between two ancestral creator spirits. Gurangatch, a giant eel-like creature, an incarnation of the ancestral rainbow serpent, and the other, Mirrangan, a large native cat or quoll who was a renowned fisherman and sought only the biggest fish. The chase of Gurangatch the eel by Mirragan, the eager fisherman, carved out the land of the Blue Mountains in the winding maze of river systems and waterholes that we know today as the Cox and Wollondilly Rivers.

landform itself. What European eyes see as 'natural' is understood by Traditional Owners as a complex, cultural landscape forged by creation beings, some of whom remain embodied in the physical features of the places that are there today' (Mackay 2015: 87).

As documented for the rest of Australia (Gammage 2012; Rose 1996), the Darug and Gundungurra people were agents of environmental change in their territories, using fire stick farming and other systematic land management techniques that maximised food supplies throughout the seasonal cycle (Gammage 2012). The extent to which fire was used in the Blue Mountains area prior to white settlement remains a contested issue (Mooney 2007; NPWS 2001). However, simplified or romanticised settler representations of Aboriginal land management practices around fire continue to shape the modern suburban imaginary around current bushfire cycles in the Blue Mountains that are viewed as closely tied to historical Aboriginal burning practices. This is an idea that both re-inscribes and problematizes the nature-culture duality, and will be explored more extensively in Chapter 3.

Prior to white invasion the language groups of Gundungurra and Darug were 'living almost sedentary lives on relatively small, closely settled holdings', places from which they harvested the rich resources of the estuaries and inland wooded areas (Goodall 1995: 61). Archaeological evidence suggests the Darug and Gundungurra were connected prior to European disruption, sharing an inter-tribal ceremonial ground in the Linden area (Stockton 2014). The Blue Mountains had indeed long been settled: According to John Merriman (1993: 98), the Indigenous social organisation consisted of hearth groups from two to twelve people (usually a family with friends and relatives), a band of several hearth groups who controlled a territory and could control access to food and other resources in that area (consisting of around forty to fifty people), and finally the lingual entity of the tribe of around 500 people to whom the hearth groups belonged. The Nepean and the Grose rivers played an enormous part in the life of the Aboriginal people in the Blue Mountains – as a source of food, water and quarries for stones suitable for tool making (Stockton 1993). The varied Mountains ecology from open forests and heathlands, to swamps and creeks and the deep sheltered valleys, offered a great variety and abundance of food. In 1836-37 the colonial surveyor William Govett recorded a great deal about Aboriginal foods and food gathering in the Blue Mountains. He described a two-hour stroll in which he saw

them collect 'possums, kangaroo-rats, a bandicoot, grubs, ant's eggs, and honey, without much trouble' (Govett 1977: 39 cited in Merriman 1993: 92). In 1819 Springwood was described as a place 'abounding in game of every kind' (Merriman 1993: 91) by a party of three Frenchman who travelled over the Blue Mountains. This party also remarked on the effects of fire on the trees at Springwood, noting that in the vast green forests all of the tree trunks were 'blackened right up' while their canopy remained unsinged (Merriman 1993: 91).

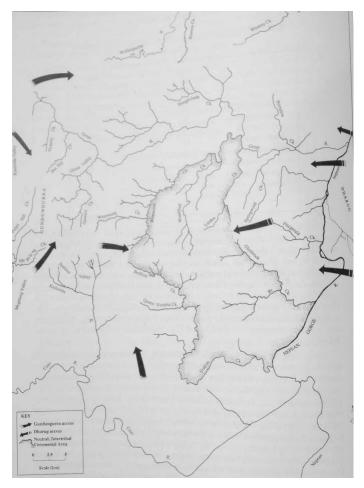


Figure 2.4 Gundungurra and Dharug land and access routes. Source: Stockton (1993: 60).

Historian Heather Goodall's (1995) work on colonial relations between settlers and Aboriginal people in NSW shows that the dispossession of land and the dispersal of self-contained Indigenous communities around the state continued, if not worsened, from the 1890s into the 20th century. As Patrick Wolfe (1999: 3) asserts, settler invasion is a 'structure not an event'. Serious documentation of local Aboriginal culture and history by early amateur and professional

anthropologists was not undertaken in the Blue Mountains until much later, starting around the 1890s (Blue Mountains City Council 2010). By this time many surviving Aboriginal people were living in fringe camps at the edge of properties owned by non-Aboriginal people, missions and reserves in the Blue Mountains (Blue Mountains City Council 2010). There were many restrictions and barriers adversely impacting on cultural continuance, however, despite these difficulties, levels of traditional knowledge and practices were carried on (Blue Mountains City Council 2010: 3). The Gundungurra were exceptionally resilient. After successfully having regained some of their own country in Burragorang Valley in 1876 they developed a farming base that was worked independently until the 1920s (Goodall 1995: 65). At the turn of the 20th century and until the mid 1950s, descendants of the Gundungurra and Darug peoples, other Aboriginal people from around NSW, and some people of European descent were also living in a small settlement in West Katoomba Valley in a place now known as 'the Gully' a short distance from the main centre of Katoomba (Johnson 2007; Thomas 2004).

Today the Blue Mountains Aboriginal community is quite diverse being made up of Darug and Gundungurra peoples as well as Aboriginal and Torres Strait Islander people from other parts of Australia. Two of the forty participants I interviewed for this research identified as of Aboriginal descent, though they were not from the language groups of Darug or Gundungurra. The Darug Custodians Aboriginal Corporation, the Darug Tribal Elders, and the Gundungurra Tribal Council Aboriginal Corporation groups meet regularly for social functions, conduct so-called Welcomes to Country for public events, produce books and maintain a dynamic cultural centre as well as being involved in the management of land and cultural sites around the Blue Mountains (Mackay 2015). The Aboriginal Cultural Resource Centre based in Katoomba has also been established specifically for Indigenous residents from non-local cultural backgrounds. The Indigenous population in the Blue Mountains has steadily grown, which can be attributed to several factors, including relocation to the area, births, and more Aboriginal people identifying on the Census. According to the 2011 Australian Bureau of Statistics Census, 1,317 people identified as Aboriginal and or Torres Strait Islander living in the Blue Mountains Local Government Area (LGA), with the majority residing in the Upper Mountains (ABS 2011a).

Currently, there is no Aboriginal joint management plan⁸ for the Blue Mountains National Park, however, significant cultural sites are managed in cooperation with Aboriginal communities (NPWS 2001). In 2014, an Indigenous Land Use Agreement with the Gundungurra Corporation and Gundungurra Association was established over the areas that have been under a registered Native Title claim since 1995⁹. These areas included Blue Mountains City Council land, Crown land, and NSW National Park land. Thus, ownership of place remains a contested issue while recognition of Indigenous culture is limited and to some extent commodified. As a tourist destination, the Blue Mountains prides itself as a place that 'offers sensational opportunities to experience Aboriginal culture' (Visit NSW 2017: para 1). For example, the cultural centre in Katoomba, in conjunction with the local Aboriginal community, conducts regular cultural activities and events. Walking tours to rock art sites offered by local Aboriginal guides are also available throughout the Blue Mountains. More recently, sites in Katoomba like the iconic Three Sisters rock formation and 'The Gully' historical settlement have been declared 'Aboriginal Places' in recognition of their cultural significance.

The Indigenous presence in the Blue Mountains is vibrant and recognisable, and yet, the workings of the wider public identity are such that Indigeneity in the Blue Mountains is both embraced and erased. Patrick Wolfe pinpointed this dynamic thus:

[S]ettler society required the practical elimination of the natives [sic] in order to establish itself on their territory. On the symbolic level, however, settler society subsequently sought to recuperate indigeneity in order to express its difference – and, accordingly, its independence – from the mother country (Wolfe 2006: 389).

For example, the Three Sisters site is the subject of a legend that illustrates the way that 'Aboriginal occupation has been encoded as both a presence and an absence in the colonial imagination' (Thomas 2004: 150). The legend commonly told in tourist pamphlets is that in the

⁸ 'Under an Aboriginal joint management arrangement, the government and local Aboriginal people share responsibility for a park's management. The aim is to ensure that Aboriginal people have the opportunity to participate in planning and decision making for the park, reserve or area, while maintaining access to parks for everyone' (Office of Environment and Heritage NSW 2012: para 2).

⁹ Native Title refers to the Federal Native Title Act. 1993. 'The purpose of Native title is to recognise the rights and interests of Aboriginal and Torres Strait Islander people to land according to their traditional laws and customs' (Blue Mountains City Council 2010: 37). A native title claim application is made by a group of people who declare they hold rights and interests in an area of land and/or water according to their traditional laws and customs (National Native Title Tribunal n.d.).

Dreamtime, three sisters of the so-called local 'Kadumba tribe' were turned into stone during a battle to protect them from being spirited away by a rival tribe of the Nepean River area. Thomas (2004) explains that although this has been disseminated as an ancient Aboriginal belief, there is no record of the story until 1949, when it appeared in a fishing magazine, penned by Blue Mountains local and white man Mel Ward. Thomas writes:

While we cannot entirely discount the possibility that the Three Sisters legend had an Aboriginal source, it is more than possible, as the circumstances of its circulation tend to suggest, that the story is the creation of white man, intended to bestow upon the landmark some added 'colour' (Thomas 2004: 154).

Not dissimilarly, it is commonly believed that the suburb of Winmalee is named after the Aboriginal (though not Darug or Gundungurra) word for north. However, there has been no evidence that this word is of Aboriginal origin. Rather, the name was coined by a 14-year-old in 1972, who won a competition to find a name for North Springwood when the Geographical Names Board wanted to remove the compass prefixes from the names of towns and suburbs of New South Wales. Non-local Aboriginal words are used for the names of other suburbs in the Blue Mountains including Warrimoo (meaning 'eagle') and Bullaburra (meaning 'blue sky'), and it is speculated that the town name Leura is derived from an Aboriginal world that describes the volcanic activity of the area (Low n.d.).

These town names invoke a mythical, monolingual, homogeneous Australian Aboriginal culture that predates white invasion. Likewise, 'Aboriginal patchwork burning' was frequently referred to by white participants in this research who had no problem equating practices they had seen carried out in the Northern Territory or Queensland with what they imagined happened historically in the Blue Mountains. In one case a participant even referenced the traditional burning practices that occurred in North America to explain that there was not enough 'burning off' happening locally. In these discourses, Aboriginal people are grouped together in the 'timeless backdrop' of the natural world and cannot exist as individuals. Similarly, complex, diverse landscapes are grouped together under the word 'bush' in the Australian vernacular. Aboriginality here becomes a symbolic motif, language is invented or reappropriated to create a feeling of authentic connection with the 'ancient culture' in these primarily white suburban areas,

while diverse cultural land management practices are misunderstood and grossly over-simplified to explain the current fire regime.

'Above the smog and below the fog': The Upper and Lower Blue Mountains

As can be seen in Figure 2.1, modern settlement in the Blue Mountains closely hugs the highway and ridgelines of the escarpment. In total, there are 27 different settlements clustered along 100 kilometres of ridgeline under the jurisdiction of the Blue Mountains City Council. The LGA covers an area of 1,431 square kilometres with 70% of the area comprising World Heritage National Park. Just under 90% of the LGA is protected bushland area with 11% available for settlement. Development thus remains constrained by the space along the ridge top and by the boundaries of the national park (Blue Mountains City Council 2013).

Geologically, the Blue Mountains are dominated by the Hawkesbury Sandstone formation in the east and the Narrabeen Sandstone formation in the west, with some remnants of basalt caps in the West. The Upper Mountains, with an elevation of up to 12000 metres above sea level, are shaped by the outcropping of Narrabeen sandstone that is readily eroded by the streams running into the wide canyons that the Blue Mountains are famous for. The Lower Mountains with an elevation of around 370 metres in the east have some ridge-top caps of Wianamatta Shale overlying the Hawkesbury Sandstone, which softens the profile of the ridges and creates the clayey soil, which is more fertile than the sandstone and more retentive of moisture, supporting tall eucalypt forests and denser undergrowth. The formation of the dissected escarpment has shaped the climates, human settlements and identities that have developed there both before and since white settlement. Some consider the Lower Blue Mountains a misnomer: 'What Mountains? Only past Faulconbridge, most especially between Linden and Woodford, does the ruggedness of the Blue Mountains Plateau capture the eye' writes geologist Gil Jones (2014: 13) in his description of the landscape and bedrock of the Mountains. Of course, the name 'Mountains' itself is a misnomer – geologically speaking they are not mountains at all, but a coastal escarpment eroded over time.

Yet the grandeur of the Upper Blue Mountains – the spectacular views of deep open canyons, of forest edged by the bright yellow cliffs of sandstone, and the sharp, fresh air of the cooler climes

associated with higher elevations – lends itself readily to the romantic imaginings of mountains as a 'privileged site of sublime spiritual experience' and as a 'locus for deep ecological reconnection with that greater self' (Rigby 2004: 131-32). Kate Rigby's exploration of the Romantic's transformation of mountains from 'Earth's warts' to 'God's temple' (Rigby 2004: 132) in 18th century Europe is instructive to an understanding of community identity in the Blue Mountains.



Figure 2.5 The Grose Valley at Govett's Leap in the Upper Blue Mountains. Source: Beth Hill.

The Mountains are understood as a place of exception and specialness, a place above the suburban mundane world of the plains to the east, even though population growth and increased suburban development over the last fifty years have transformed the settlement from a chain of distinct villages scattered along a two-lane road to a city made up of dispersed suburbs spread along a four-lane highway. The distinctive identity of each town remains to some degree, but the key difference that most people in the community reflected upon was that between the Upper and

Lower Mountains, and this difference was often expressed in language that displays the influence of European Romanticism on the Australian psyche. Early in my fieldwork one community worker tried to describe the difference to me by saying, 'You get more natural as you go up the mountain', explaining that people up there were 'closer to nature' and 'more interested in natural products and environmentalism'. Later I heard a resident of the Lower Mountains characterise this same trait in the Upper Mountains community as 'crazies with too much time on their hands to worry about the bush'. This sentiment echoed realist critiques of the Romantics that glorified the common man. The same resident went on to say about environmental concerns, 'in the Lower Mountains we are too busy [working] to worry about that kind of thing'.

The Blue Mountains fall within the Federal electorate of Macquarie – a strong social democratic Labor party seat from Federation in 1901 till the mid-1970s. Since then the electorate has swung back and forth between Labor and the conservative, right-wing Liberal-National Party coalition. From the mid-1990s until 2016 the seat was held by the Liberal Party, with a brief stint from Labor in 1993-1996 in 2007-2010. In 2016, Susan Templeman, a Labor party candidate and Winmalee resident who lost her home in the 2013 fires, won the seat of Macquarie with a 6.7% two-party preferred swing towards her and an overall vote of 52.2% (AEC 2016a). In the 2013 and 2016 Federal elections, the Greens Party won 11% of the vote. A more precise breakdown of the polling booths in the areas of the Winmalee-Springwood area compared with the Upper Mountains in 2016 reveals a consistently higher vote for the Greens in the Upper Mountains. The highest vote for the Greens was recorded for the Katoomba Central polling booth showing a vote of 25.9%, and the lowest for the Winmalee and adjacent Springwood North booths, with a Green vote of 8.8% and 8.5% respectively (AEC 2016b). These statistics do lend some weight to the commonly held sense of difference in the community between the Upper and Lower Mountains with regard to environmental concern.

In 2014, the population of Springwood and Winmalee was 22,467, making it the most highly populated area in the whole of the Blue Mountains (total population 79,443), despite the displacement of people following the fires (Lewis 2015: 4). The Lower Mountains' lesser elevation and rounded hills and their relative proximity to the plains of Sydney set them more squarely within the commuter belt and the suburban culture associated with the city.

Nonetheless, in keeping with the view that elevation and proximity to nature gave them a kind of superior experience of community and amenity, residents of the Lower Mountains did not feel they shared much in common with Western Sydney. They thought of their location between the city and the Upper Blue Mountains as a kind of perfect middle ground. Various comments make this plain. Ian, a resident of Winmalee, said they were '[a]fter the dust, before the rust, above the smog and below the fog. In other words, it's perfect.' Tim, a resident of Faulconbridge, commented that it was 'a bit cheaper than further down and a bit warmer than further up', and people frequently told me that Springwood and Faulconbridge had 'the most temperate climate in the whole world'.

In the late 1960s Winmalee was 'North Springwood', which was a few houses on the road that took you down to the town of Richmond on the Hawkesbury River. Many of the people living in Springwood and Winmalee today had moved up from the plains and places in Western Sydney like Emu Plains in the 1970s. Towns in the Lower Mountains doubled in population between 1971 and 1991 (Goodlet 2014: 81), and much of the development of Winmalee and Yellow Rock occurred in this period. Many older residents I met and spoke with moved and built their own homes during this time and reported that their children had remained in the area, buying or building houses and raising their own families since. Farmland and logging areas were subdivided and developed into suburban streets. As a result, the gap between houses and the bush rapidly diminished during this time, and this change in land use and development, combined with the poor management of subdivisions along fire prone ridgelines, is one of the major factors affecting bushfire risk in areas like Winmalee and Springwood today. As the gap between houses and the bush has been shrinking, so has the gap between the Blue Mountains and Sydney. Ian also spoke of an old restaurant in the Lower Mountains called Wonderlights. It looked out over the plains to the east towards the city of Sydney which at that time was far in the distance, its lights like 'twinkling little stars' on the horizon: 'Not like it is today', he shared, 'when the stars are right there outside the front door!'

So far the council, with a great deal of local support, has successfully fought off policies to change the zoning of the Lower Mountains to that of a metropolitan area, which would make way for far more medium density housing and change existing local environmental planning

structures that protect much of the national park along the boundaries of the city (McKenny and Ziaziaris 2015). Yet the feeling of metropolitan encroachment remains imminent as the local council recently lost the battle against the federal government proposal for a new international airport at Badgery's Creek to the south east of the Mountains. Without a comprehensive environmental impact assessment and notwithstanding community protest, there soon will be a substantial increase in air traffic over the Mountains (O'Sullivan 2015). At the same time, property prices in the mid-Mountains are rising sharply, partly as a result of the widening of the highway, which has led to more people from Sydney moving further up as the commuting time shortens and the real estate market in Sydney continues to boom, pushing young professionals and families further west. Newer residents frequently reported moving to the Mountains for the natural beauty, community and local character that is missing from the more affordable suburbs in Sydney. However more recent residents also often underestimated the risks and responsibilities entailed with living in a high-risk bushfire zone that long-term residents have learned through their contact and experience with bushfires over time. Newer residents tended to live in their house as if they were residing in a city suburb. For example, RFS members shared anecdotes of people having water pumps installed in their new homes because of the bushfire regulations, but with no knowledge or understanding of how to use the pump.

While dependent on Sydney economically in terms of the tourism as well as because of a large number of residents who commute there for employment, Mountains residents are very clear about their distinct identity separate from the city. They tended to self-identify as more community oriented, more concerned about the protection of nature as well as valuing nature more highly, although research participants also stated that more affordable housing and accessibility to Sydney were key factors in their initial decision to move to the Blue Mountains. 'Nice garden, nice house for half the price of what we could have in Sydney', said Dee, a newer resident whose Winmalee home burned down in the October fires.



Figure 2.6 Protest against the metropolitan zoning of the Lower Blue Mountains. Source: Blue Mountains Gazette, 14 January 2015: 3.

When I asked Jennifer, a Winmalee local who lost her home in the October fires, why her family initially moved to the Lower Mountains in the 1990s, she said:

So it was money, and it was living in a beautiful place where we thought it would be a lovely place to raise kids, and cheap. That was still, (*bangs table*) comes back to being the core, really decisive part of the decision.

Residents would usually go on to state that they have stayed in the Mountains because of the natural beauty and the sense of specialness or exceptionality about the place itself compared with 'the suburbs'. Jasmin who grew up in the Lower Blue Mountains explained: 'Like we don't see ourselves as city [...] we just sort of categorise ourselves as well we're just from the Mountains. We make our own little thing.' Similarly, new Springwood resident and architect Phil told me:

Definitely wouldn't want to live in Penrith and be associated with that sort of idea, but being in the Mountains, it has a different persona even though they're so close geographically together, you're associated differently [...] I like the idea that I'm living in a place where I can feel inspired and also um, eventually my children can feel inspired.

It is evident that places like Springwood and Winmalee are distinctive in character and location from their suburban counterparts of Glenmore Park and Penrith in Western Sydney, yet the statistics emerging from the 2011 census indeed reveal the eminently suburban and middle-class lifestyle enjoyed by those living in the Lower Mountains. The 2011 Census of the Springwood-Winmalee Statistical area (see Figure 2.7) shows that 92.6% of the population live in a separate house, while 85.9% of these houses are three bedrooms or more (ABS 2011b). 32.7% of occupied private dwellings had one registered motor vehicle garaged or parked at their address, and 59.6% of the population had two or more registered motor vehicles (ABS 2011b). In Yellow Rock, more people live on 'acreage' where the house is situated away from the street and surrounded by property. In Springwood and Winmalee most residents live on the classic 'quarter acre block', a large family home with a backyard, neighbours on both sides and often behind as well, though many properties back directly onto the bush.

People in the Blue Mountains stated that they felt they lived 'in between... not quite city, not quite bush', which is apt given that evolution of Australian suburbia is rooted in the 'two-way intercourse between bush and city' (Carter 2010: 278). Rather than seeing the frontier spirit of the nomadic bush man as foundational to the Australian character, Carter points to Patrick Morgan's thesis that the selectors who took up land in the bush often found it was too hard to work profitably and returned to the city. Morgan 1983 (cited in Carter 2010: 278) points out the smallholder middle-class ethos, their ambition to be respectable, to achieve security and to own property is perhaps equally if not more important than that of the bush nomad to the formation of contemporary Australia: '[T]he detached, self-owned house on its quarter-acre block, surrounded by its high paling fence, is an urban memory of the country farm. The emphasis on being independent and self-contained is common to both' (Morgan 1983 unpublished manuscript, cited in Carter 2010: 278-279). Carter (2010: 279) shows that suburbia 'exactly resembles the signs of living in the bush'. This is most prominent in what he describes as the 'chaotic horizontality' that is 'the primary spatial experience of the suburb'; it elicits a similarly 'baffled response' in the suburban newcomer to that of the pioneer surveying the endless undifferentiated wilderness of the bushland. 'The single-storeyed horizontality of suburbia, its minimalisation of public spaces, its repetition of sentinel trees, its paradisal gardens, its verandas and plaster fairies: these are equally the qualities of bush dwelling' (Carter 2010: 280). Indeed, standing at lookouts in the

Lower Mountains facing east, the terracotta sea of roofs beneath the brown smog can be an equally dizzying experience to taking in the rugged landscape of winding valleys extending as far as the eye can see when facing north or south. It is true that no such sea of horizontality can exist in the settlements of the Blue Mountains, and that the spatial character of the suburbs in the Lower Mountains is necessarily different because of the unique topography on which they are built. They do not suffer from the same obvious 'vertical deprivation' (Carter 2010: 291) of their fellows on the plains (though there are certainly no high rise buildings in the Mountains), and their elevation 'above the smog' implies a kind of escape from or superiority to the suburbs below. Yet to drive down any street in Winmalee is to witness the private colonisation of the bush block with a striking rate of visual repetition. Each house resembling the other in their 'intimacy and closure, in their burning of symbolic trees and their erection of others' (Carter 2010: 281), in their cars parked in the garage and their neatly trimmed lawns. Public space in Winmalee is limited to the Coles shopping centre, to the sporting fields, scout halls and of course to the bush itself, where one might stroll at their leisure and take in 'the amenity' of the place.

White and middle-class: the Lower Blue Mountains community

The 'amenity' of the bush was a notion I first encountered in the Lower Mountains at a community meeting in Yellow Rock to discuss the proposal to build a road that would offer an alternative exit to the community in the event of bushfire. The meeting was held on an early summer evening under the bright lights in the hall of Winmalee High School. There were around two hundred people in attendance, with another meeting planned for Saturday afternoon. More than a year had passed since the October 2013 fires and the initial fervour that had apparently prompted the proposal to build a road linking Yellow Rock to Penrith LGA seemed to have dissipated. The meeting was broken into small groups of around ten people to discuss the pros and cons of the proposal. We then came together to present to the whole group a summary of our discussions. Overwhelmingly the community was against the building of a link road, with the strongest concerns relating to the change in the 'amenity of the place'. People were concerned about an increase in crime and traffic and the massive change in the character of Yellow Rock that would go from being a quiet cul-de-sac in the bush to being a ten-minute drive from Penrith. Pros discussed were having an alternative exit in an emergency such as the October fires where upwards of seventy people were trapped after the fire cut off Singles Ridge Road, the only exit

out of Yellow Rock. Other people were tentatively positive about a quicker trip to Penrith to do the groceries and the reduction of traffic through Springwood. One comment that summed up the sentiment of the evening was, 'What about a one-way road to Penrith with a locked gate?'

The proposal to build the link road was subsequently abandoned. It is revealing that for residents of Yellow Rock and Winmalee amenity was ultimately a more compelling argument than safety, even just 14 months after hundreds of homes in their own neighbourhood had burned down. The etymology of amenity, from the Latin, *amoenus* meaning 'pleasant', is instructive in understanding the high value that many Lower Mountains residents attribute to the 'lifestyle' that accompanies residency in the Blue Mountains compared with the outer suburbs of Sydney. The attendant commodification of the bush as scenery will be explored in greater depth in Chapter 2, but for now, such an attitude is also telling of the middle-class culture that predominates in these areas and is reflected in their demography.

The 2011 census statistics show that on many indicators – household income, car ownership, educational levels – the Upper Mountains is more disadvantaged relative to the Lower Mountains on a per capita basis (ABS 2011a). In the Springwood-Winmalee Statistical Area, 36.5% of homes were owned outright, 44.6% were owned with a mortgage, and just 15.3% were rented (compared with 29.6% rented across Australia, 30% in the Upper Blue Mountains and 49.4% in Penrith). The most common occupations in Springwood and Winmalee included Professionals 28.0%, Clerical and Administrative Workers 15.5%, Technicians and Trades Workers 13.4%, Managers 11.9%, and Community and Personal Service Workers 10.8%. While there were a significant number of households in both the lowest income bracket (17.7%) and the highest income bracket (14.2%), the majority of households in Springwood and Winmalee fell squarely into middle income groups. The median household income for the area was \$1530 per fortnight (ABS 2011b), roughly \$200 above the national median household income.

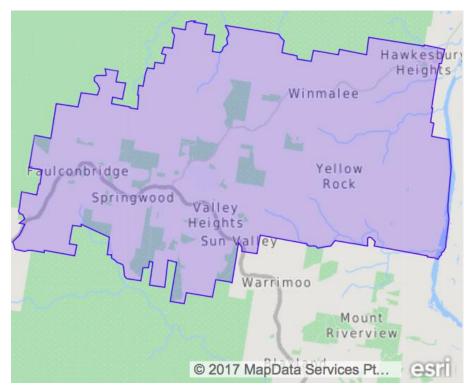


Figure 2.7 Springwood-Winmalee Statistical Area Level 2. Source: Australian Bureau of Statistics (2011b).

People in the Lower Mountains are younger than their Upper Mountains counterparts. The median age of people in the Springwood and Winmalee was 40 years (ABS 2011b), while the median age in Katoomba and Leura was 45 (ABS 2011c). In the Lower Mountains more people identify as Christians than in the Upper Mountains (ABS 2011a), and there was a higher vote for the Christian Democrats in the 2016 elections (AEC 2016b). It is an overwhelmingly Anglo-Saxon and 'white' area, with the most common ancestries in Springwood and Winmalee being English 31.1%, Australian 30.4%, Irish 10.1%, Scottish 8.2% and German 3.1% (ABS 2011b). The cultural homogeneity was striking when compared with Sydney and particularly the western suburbs of Sydney. It seemed taken for granted since very few people overtly or explicitly discussed race with me, and the handful of times it did come up, it was to comment both positively and negatively on the whiteness of the area, though often in a relatively indirect fashion. One woman, who had immigrated from Eastern Europe, commented that when she first moved up to Springwood from Sydney, it was like 'moving to a different country'. When I asked her what she meant she explained further: 'It's more Aussie, I like the Aussie culture.' Several participants in formal interviews mentioned that they struggled with the 'WASPy' (White

Australian Protestant) element of the Lower Blue Mountains community, with some deliberately sending their kids to high school in Western Sydney so that they would have more exposure to a diversity of backgrounds and cultures that they felt were enriching. Another man who had grown up in Winmalee explicitly expressed what others referred to more obliquely, that was, his appreciation of living in a mainly white area, even though his father was born in the Middle East: 'You get used to living around a certain type of people.' When I asked him what type of people he told me:

Probably the, the race, the demographic, it's hard for me to say because I'm from um, obviously my background is different. But I've always grown up here, so I see myself as living in an Anglo community. I think, I just think it's important, I like it. Used to it. It's what I know.

Another participant from Winmalee said that he liked that when you are in Winmalee, 'you see people you know and identify with.'

The strength of the community was a much-cited advantage of living in the Blue Mountains over a more impersonal suburb of Sydney. Immediately following the fires many people shared the sense that the community had pulled together to offer support to those who had been worst affected. Bill, a local member of the Winmalee RFS, appreciated that it was 'a family orientated community and when the fires come, we couldn't ask for a better community - they all just dig in and help.' The necessity to be prepared for bushfire also meant that neighbours tended to be more in communication with each other about evacuation plans and the maintenance of gardens, a critical aspect of bushfire preparedness.

However, longer-term residents also discussed the changes they were experiencing just walking down the main street of Springwood where these days they might not see anyone they know. They perceived that the place was acquiring a more anonymous and city-like quality and decried the fact that people were less friendly than they used to be. In contrast, newer residents from Sydney celebrated how friendly and warm everyone was compared with their previous location. Springwood is certainly in the midst of a gentrification process. Property prices are rapidly rising (Frost 2016) despite the fires. New inner city style cafés are popping up along the main street. These cafés bring out the contrast between new and older residents with wonderful accuracy.

One longer term resident spent much time complaining about the amount of money they were charging for simple things like avocado on toast. She ended her rant by saying, 'Where do they think they are, Double Bay?' (a very expensive harbour side suburb in inner Sydney). Later that day my housemates arrived home from dinner at the same establishment exclaiming happily, 'It's great! Like a proper café in Sydney!'



Figure 2.8 Cartoon from the Blue Mountains Gazette that featured a story on population growth in the Blue Mountains.

Source: The Blue Mountains Gazette, 7 April 2015: 2.

The number of boutique stores lining the main road of Springwood too was growing. Some residents embraced this change, seeing it as modern and more attractive than the older shops. Others questioned the authenticity of the character of the place if its sole purpose is to market to tourists. They were concerned that their town might 'turn into Leura', a village in the Upper Mountains which has become so designed for visitors that it has become overly 'quaint', thus losing its authentic local character. As one woman put it, 'I mean the sign says, "Welcome to Leura", but it was probably made in Taiwan!'. However, there is also a revival of the old chamber of commerce who are starting new initiatives for people to 'shop local' in order to keep

the local economy of Springwood alive. One of the issues with so many people commuting down to Sydney each day is fewer people spend their day to day money in Springwood.

Environmentally, the Blue Mountains City Council (BMCC) has a history of being progressive and sustainability focused, particularly with regard to land management in the national parks. Many of their local planning schemes are focused on maintaining the World Heritage status of the area as a part of the development process. One of the planners for council discussed the high level of community engagement as a reason for this. Compared with other areas he had worked in, he described the local community and conservation society in the Blue Mountains as very engaged, organising large petitions around technical provisions and principles of the planning process, and holding the council and the NSW government accountable for changes that watered down environmental protections. The council remains under pressure from the NSW government to reach various targets around growth and development such as a threefold increase in housing production each year. This increase would be an extraordinary change in any urban environment but seems unthinkable in the context of the Blue Mountains where they have already reached the 80,000 or so residents that the city planners set for the population of the area back in the 1950s. There remains a lot of community resistance to multi-unit housing and higher density development and while research participants in the Lower Mountains were keen to show that they were not 'anti-development' in their interviews with me, they also found comfort in their sense that development would be 'naturally' limited by the realities of the space available on the ridgeline and the national park boundaries.

As is evident from the discussion above, the Blue Mountains has been subjected to the growing pace of economic, industrial and urban development occurring around the world in the second half of the 20th century. Residents' responses to climate change cannot be separated from these forces any more than the phenomenon of climate change itself – a product of the industrial growth society. Climate change appears locally in different guises. It presents as an environmental problem endangering the unique ecosystems of the Blue Mountains that make it a World Heritage Area (Hammill and Tasker 2010). For the council it is a growing risk management problem. This includes the intensification of existing issues of property insurance, management of asset protection zones (Burton and Laurie 2009), and the complex regime of

hazard reduction burning (Bradstock et al. 2012; Hughes and Steffen 2013; NPWS 2004; Phillips and Malone 2014). Climate change occurs in casual conversations about the weather, and more obliquely in discourse about bushfire preparedness. The threat of bushfire entailed in the huge suburban-bush interface must be continually managed by residents, council, NPWS and the RFS. As I have sketched it above, this interface that defines the Blue Mountains is a legacy of colonial exploration, Indigenous dispossession, settler colonisation and subsequent suburban expansion. Each of these processes has elaborated upon and extended this interface, making the Blue Mountains a particularly fertile place to explore modern suburban cosmologies about nature. Indeed, this constellation of suburbs in the bush is a compelling place to empirically examine the 'naturalist' (Descola 2013) ontological underpinnings of this evolving life world in an era of anthropogenic climate change.

2

Friction: Living in between

You hear all this stuff on talkback radio about how people shouldn't live in the bush... I don't know where they're supposed to live but if you look south, west or north of Sydney it's bush so... If we're going to continue to grow our population, they have to be able to live in bush areas, but with a bit more protection in place, I think. [...] Which doesn't mean you should be able to bulldoze trees, you know like, willy-nilly. But a bit of common sense doesn't go astray.

- Eliza, Winmalee resident.

The friction of living in between

Residents of the Blue Mountains dwell in a mutable space where city pushes up against bush. Here at this interface, they build a life, an identity, a safe space, all the while seeking a 'balance' that is premised on the separation between their human lives and that of the 'natural' life they perceive all around them. I found that people had a sense of living 'in between' these worlds, and this both required and subverted the duality between nature and culture. This chapter expands upon the initial study of the sources of this dualistic view undertaken in Chapter 1, with the aim to thereby uncover how naturalism, this unstable dualism between nature and culture fundamental to the project of modernity (Descola 2013), operated in this quotidian setting. It will become evident that, as Blue Mountains residents recovered from and made sense of the October fires of 2013, the nature-culture dichotomy manifested as 'friction', in the sense Anna Tsing (2005) uses the term. At a more general level, my ethnography illuminates how the ontological constitution of naturalism shapes modern suburban people's ability to assimilate the concept of anthropogenic climate change into their existing view about the place of humans in nature.

In the Blue Mountains, the conservation of the natural environment intersects starkly with the pressure to develop and the growing salience of 'risk management' as a policy framework for the local council in an era of neoliberal economics and climate change. For the most part, it is the local council that is left to manage the tension that arises between the radically different needs of human settlement, the economic imperative of growth and development, and the importance of

protecting the World Heritage listed natural environment. This natural environment is protected for its symbolic and cultural value, as a source of revenue through tourism, and as an essential ecological asset that provides clean air and water to the human communities embedded within and beyond it in the city of Sydney. Complex tensions are inherent to the structures of the existing systems to manage fire. Under the *Rural Fires Act 1997*, the NSW National Parks and Wildlife Service (NPWS) is both a fire fighting authority and a public authority and therefore has dual responsibilities; protecting human communities through firefighting and protecting flora and fauna through the land management of the national parks surrounding those communities. Asset protection zones must be intensively maintained regardless of the endangered ecological communities they intersect with (NPWS 2004: 30). As one RFS member and bush regeneration expert expressed it:

My whole life is the fires coming up the hill, and the people's rubbish is going down the bush [...], and I'm fighting both. That's my job, you know. I act at the interface, I'm there between the people and the bush, trying to protect the people from the bush and the bush from the people you know?

Ridgetop development has created an urban/bushland interface that a local city planner estimated to be around 750 kilometres (personal communication), which is expensive for the council to manage and maintain. Many residents throughout the Blue Mountains live in high-risk bushfire areas that are the result of subdivisions from the 1960s through to the 1980s. As a Blue Mountains city planner told me, 'You couldn't design a worse subdivision in terms of bushfire [...], perimeter roads weren't built in. They were these isolated fingers on these ridgelines.' Perhaps unsurprisingly in an era of neoliberal capitalism, it is individual households who must bear the financial brunt of preparing their houses for this risk. Residents regularly grapple with what it means to live between the beauty of the National Park and the hazard of bushfire. As later chapters (5 and 6) demonstrate, these questions tie into deeper existential dilemmas about responsibility and vulnerability in relation to the natural world and are also at the heart of many debates about the human role in climate change.



Figure 3.1 Aerial photograph of Springwood town centre Source: Murphy (2015).

In December 2015, the subdivision and development of a further 36 lots on property owned by St Columbus High School in Winmalee were approved by the council. This was despite strong submissions from local conservation groups arguing for the ecological value of the area (Blue Mountains Conservation Society 2014). Moreover, there was a commonly expressed ill feeling toward the subdivision in the community because of the increase in traffic it would represent for the already slow-moving Hawkesbury Road. Residents also worried about the risk of bushfire (the 2013 fires burned through bushland around St Columbus near where the subdivision was proposed). To my mind, these were 'sticky engagements' born out of friction unfolding across the scales of the local and the global. I here take inspiration from Anna Tsing when she writes that 'attention to friction opens the possibility of an ethnographic account of global interconnection. Abstract claims about the globe can be studied as they operate in the world. We might thus ask about universals not as truths or lies but as sticky engagements' (Tsing 2005: 6). In the Lower Blue Mountains, environmentalist claims about the inherent value of endangered ecological systems met the countering capitalist claim of beneficial economic growth and development. New and old residents of Winmalee were left to negotiate the material reality of

these universal claims as they came alive on the ground in the risk of fire that they each entailed. Engagement with preparedness and human responsibility for the surrounding environment occurred at the intersection of these claims, and was fraught and awkward – there was no obvious right or wrong answer, there was no clear, indisputable truth.

Some trees planted at the back of St Columbus High School in Winmalee as a part of a bush regeneration project caught alight in the October fires which led to homes burning down on Paulwood Avenue behind the school. Residents were angry and one participant said to me, 'Look how big the Mountains are, why did they need to choose that patch on the school grounds directly behind people's houses?' At issue in this instance was a disagreement about *where* it was appropriate to be cultivating and protecting nature – for this resident the back of the school grounds directly behind people's houses was a clear boundary where 'nature' should not be prioritised above human safety. Residents often felt a lack of community control and consultation over spaces that affected their safety. Hannah from Valley Heights wanted to emphasise that she appreciated the bush but felt that council took it too far: 'They take it to the nth degree here, because it's lost at the cost of people... I wouldn't put the bush before someone's life. And that's what happens [...] I think council is the bugbear.'

People were keenly aware of the immensity of the bushland around them, and often envisioned it as one large undifferentiated space of 'nature', but many were unaware of the fragile, locally specific ecological communities in their own backyards. One exception was Tim, a Springwood local who worked as a bush regenerator. He mourned the fact that rare plants were endangered further by development and asset protection zones required to manage bushfire risk in residential areas. He gave one example based in Winmalee,

You know out the end of Whitecross Road right next to Ashton Park there, there's rare plant, *Leucopogon fletcheri*, and there's been these half a dozen houses built out there. This subdivision, it was all just bush and... there was a sort of a buffer up the top of woodland above this swampy area. Well now the woodland's gone, the houses are there and here's the *Leucopogon* directly below the houses you know, and what hope's it got? It's sad... it's got to be an asset protection zone. You know, there's the bush, there's the *Leucopogon*, there's the house. You know that's gotta be maintained for bushfire safety

for this house. The answers not to say you can't clear for bushfire, because you've put the house there, so that's part of the impact of the house, but its, the impact means, yeah that plant is very threatened you know, that's sad to see past decisions that have been made in zoning land many years ago, you know, when we didn't know that rare plant was there. We didn't think about, gee, it's not very sensible to put a house right at the top of a steep slope, you know?

In his exploration of white settler relationships with the bush, Paul Carter (2010) illuminates the shared origins of the environmentalist and the developer that are foundational to the creation of the friction zone that characterises suburban life. In a detailed examination of various settlers' diaries, Carter shows that the proliferation of boundaries between home and bush (the cutting down of trees, the building of walls, doorsteps, gates and fences, the transformation of wood into furniture, the sealing of walls to keep the wind out) were not just physical necessities; they served 'the symbolic function of making a place that speaks, a place with a history' (Carter 2010: 155). The settlers created a space that was sufficiently differentiated from the surrounding bush, where a symbolic zone called 'home' could be established. What Carter recognises is that 'nature' or 'the bush' as a valued 'cultural object' arises as a part of this process, he states: 'before nature could be loved, it had to be conceptualised as a place, a visible object. A distance had to be created between the observer' and what they saw. The observer needed 'a secure vantage point' from which to view 'the inexhaustible wealth of nature' (Carter 2010: 154). Carter thus explains that the building of a home does not shut out the forest but 'transforms it into a special place that can be appreciated' (Carter 2010: 155).

So too, when modern developers set their sights on a tract of land to subdivide it into a suburb in the Blue Mountains, the goal is not to destroy the bush, though as with earlier settler society, destruction is entailed in this process. Developers seek to transform nature into a cultural object that can be commoditised and paid for, so that in this scheme, residents might enjoy its amenity from the apparent safety of their back deck, or out the kitchen window. Through a similar process of boundary drawing – not with brick and mortar but by way of compiling data about the the bush – conservationists transform the Blue Mountains 'wilderness' into a cultural object of world heritage value. They 'make a place that speaks' (Carter 2010: 155) and as such can be

commoditised through tourism, a place where people go to reflect on their human condition from the lofty heights of a wooden lookout above the Grose Valley. The act of enclosure permeates both the development and conservation of the Blue Mountains, and, as Carter would argue, arise from the same colonial tradition:

[The boundary] enables places to appear and be named. It allows the settler to establish who and where he is. This is my clearing, that beyond is not. But this difference does not imply an exclusive opposition. You grasp the settler and the place that declares his presence by seeing them in relation to the surrounding bush Carter (2010: 158-59).

Rather than viewing the friction between suburbs and bushland in the Blue Mountains as an unfortunate side effect of development, or seeing suburb and bush in exclusive opposition to each other, relational tension emerges as inherent to the process of white settlement in Australia. Through the inhabitation and destruction of the bush grew love and appreciation for it, as well as fear, knowledge and romanticisation (Davison 2005).

In his exploration of the naturalist ontology that forms the basis of modern Western cosmologies, Descola (2013: 68-69) shows that the emergence of the notion of nature as an 'autonomous ontological domain' separate from that of human culture, was a precondition for the rise of modern scientific inquiry. This separation underwrote both the systematic exploitation of nature and the belief that there was a moral imperative to protect or improve it. Again, these apparently opposite attitudes to nature spring from the same source that separates one from the other. The process of separation occurred materially and symbolically in the creation and transgression of boundaries in daily life in the Blue Mountains as people attempted to 'find a balance' between their own welfare (physical and economic) and the protection of bushland. Assumptions about where 'nature' ended and 'home' began, and the activities that took place in these apparently different domains, showed clear traces of the ontological conventions of naturalism in the microcosm of the suburban Lower Blue Mountains. I next take a closer look at these traces emerging from two dominant images of the bush: as background scenery, and as 'outsider enemy' (Douglas 1994).

The bush as background scenery

Community relationships with the bush were far from homogeneous and ranged from deep appreciation and romanticism to ambivalence, antagonism, or even fear. The bush gave their suburb an 'amenity' lacking in the city, threatened to burn down homes, inspired a sense of resilience after the fires, and attracted the tourists and their money that kept the community afloat. The bush was changing because of residential development and climate change, it was a timeless and eternal backdrop, a contrast to the minutiae of daily life. The bush was somewhere to dump rubbish, and it was fragile and needed to be managed and protected. Individuals made ambivalent and contradictory statements about the bush, but the diversity of perceptions also reflect the spectrum of the Mountains population, ranging from those who had moved to the Mountains for the natural environment and were highly motivated about environmental protection, to others with lower socio-economic backgrounds who were residing in the area because it was cheaper than Sydney. The multiplicity of relationships – from vandals to caretakers – make it hard to generalise about how people enacted the boundaries between backyard and bush. This section considers one of the more prominent conceptions of the bush as 'the scenery' separate from the foreground of human activity in the suburbs.

The Australian bush is a product of the settler imagination about place. Carter (2010: 149) aptly summarises the reversal of Doreen Massey's open and manifold vision of place¹⁰ in the contraction of the multiple 'bushes' into the collective 'bush' in the colonial period. He writes:

From early on in the post-1788 period, 'bush' came to replace 'bushes' as a description of the country which lay beyond the bounds of settlement. We may speculate that the contraction of bushes into one collective bush had much do to with the rhetorical establishment of the open place of settlement. As the boundary between one and the other grew clearer, as the distinction between settled and unsettled areas, lawful and lawless zones hardened, so the beyond of nature was seen to close ranks. To call what lay out there 'the bush', was to urge colonists to a comparable sense of unity and common destiny.

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¹⁰ Massey contends, 'Place itself is an event of configuration. It is 'the coming together of the previously unrelated, a constellation of processes rather than a thing. This is place as open and multiple. Not capturable as a slice through time in the sense of an essential section. Not intrinsically coherent' (Massey 2005: 141).

As touched on in Chapter 1, the idea of the bush as pleasant backdrop to daily life, an amenity that made life in the Blue Mountains distinctive and superior to that of the city was prevalent and much discussed. Such a view necessarily contracts the multiple sensory experiences of the bush into something that is experienced as primarily visual; out the train window, from the back deck, from the lookout, or even in the imagination. For some, simply knowing that it was there was a soothing or uplifting concept even if they rarely had time to 'set foot' in it. As Belinda from Springwood shared:

I hate going into the bush. [...] So moving up here, the whole preface of my design... was that I wanted an indoor/outdoor feel, I want to actually feel that I can be in my lounge room and still connect with the environment, [...] I'm not a massive spider fan and snake fan, so there's elements of just nature that isn't for me. But there's still that appreciation of it and that, there is definitely beauty I just don't necessarily want to always be amongst it to appreciate it.

Jennifer, a fire-affected resident of Winmalee told me:

It is so important to me that we have World Heritage, that doesn't mean that I go and walk in it very often. In fact, two-thirds of our property is bush, backing into a gully and a creek. I can't remember the last time aside from the fires where we, you know, sort of looked to see what the damage was, I can't remember when I last went in there. So, for me, it's about looking at it, and knowing it's there and knowing that we're part of keeping it safe. [...] We look at it, we go and watch the sunset from a rock with the sun settling over the mountains [...] on the train, every day when I catch a train or the days when I catch a train to Sydney [...] I get to see those sweeping vistas [...]. It's about appreciating it, every glimpse I get of it, that's what's special for me. I think oh, who else gets to have that sort of view at seven o'clock in the morning or six o'clock in the morning on their way to work?

The colonial vision of the unified bush arose in other subtle ways in my fieldwork. Damien, who grew up in Winmalee and now lives in Faulconbridge, was a regular bushwalking companion of mine and he was passionate about opening the bush up and making it more accessible for people.

He loved being out in the bush – on foot, on his bicycle, his motorbike or in his four-wheel drive. For many residents in the Lower Blue Mountains, the bush was a space for recreation. Damien spent a great deal of time building and maintaining mountain biking trails. He regularly left bushwalking trails and fire trails behind to discover new ways to navigate the valleys and the ridges, or to walk a particular distance in a record amount of time. Damien certainly 'set foot' in the bush, and it was certainly more than a view out the window. On a mountain bike ride with Damien down Grose Road, I was struck by his intimate knowledge of the landscape of the area. Particular spots were saturated with personal meaning and memory for him – a rock placed in an old dead tree trunk to mark the ridge line you can take down to the bottom of the valley, a cave where you can sleep, the special spot where he cemented in a stainless steel pyramid to reflect the sun's rays back to him from across the valley in the morning light, spots along the river where he camped with friends as a teenager. Yet his understanding of the plant life and wildlife was limited; he never pointed out species of plants or trees to me, and at one point when I wanted to stop to admire the beautiful abundance of flannel flowers on a trail it was hard to get him to slow down. When I explained that they only germinate after being smoked, so they only grow after a fire, he was impressed with my knowledge, but it seemed like new information to him.

For Damien, the bush was a space to be mapped and explored, conquered and marked. It was also a space where he told me that he felt most 'alive and connected' and he wanted to share that with others by building more trails or making existing fire trails more accessible by car. But it was not a place he depended on for food or livelihood. He did not understand or partake in the complex web of relationships between flora and fauna in order to feel a sense of 'spiritual connection' to the place. But at the same time, his lack of understanding and experience of this aspect of the place rendered his perception of it as more of a backdrop to the drama of his own life. No doubt it was a backdrop that he loved and valued, but it was different to Tim, the bush regenerator who spent much time walking through the bush closely observing it, drawing conclusions about how it has been changed and affected by fire or invasive species. For Damien, and many other participants in this research, the bush was a timeless and unchanging background against which the less certain and more ephemeral or impermanent activities of human life took place. When I asked him what he felt the value of the bush was, he told me:

Well it's timeless, isn't it? [...] If I take you down to Faulconbridge Point now, take you down the bottom now, take you to the water hole there, go swimming, it's going to be the same as it is in two hundred years. [...] It's timeless, I could go down there, scrape you know 2015 in the wall down there and in two hundred years you could come down and go, oh, someone scraped 2015 in that wall, but the water's still there, the same type of rainforest is still there, it's still running down the hill, it's not running the opposite direction.

From this imagining of eternal and unchanging nature people drew strength. At the one year anniversary of the October fires event in Springwood, Stuart Ayres, the Minister for NSW Police at the time, made a speech where he called on this specific quality: 'Our resilience begins with the spirit of the land that has been here thousands of years.' This sense of the bush as timeless was very much connected with it being robust, resilient and generally unaffected by human settlement. It was necessarily a separate and different place from the townships that could be called upon in times of need to tell a deeper more ageless story about destruction and renewal, about the natural cycle of things that would continue and repeat regardless of human influence or activity. Here too, the visual representation of the bush took precedence over other sensory experiences that might have told a different story. Around six months after the fires, a book called As the Smoke Clears (2014) was put together by three members of the local community. This book is a compilation of photographs collected from the community, mainly of the bush, showing the resilience and beauty of the natural world as it recovered from the fires. The shoots of green breaking forth from blackened trunks, or from the ash covered ground were a popular motif for regeneration and resilience in the community and were also prominent at a community art exhibition, 'Fireworks', held in October of 2014. Tales that received less public prominence, stories that I heard only after living in the community for some time, were that of the smell of dead animals that carried on the wind, or the unsettling silence of the bush for months following the fires.

The view of the bush as a scenic backdrop entailed a temporal representation that rendered it as a distant object – timeless meant resilient and even indifferent to human settlement. This made any suggestion of changes to the bush, actual or imagined, human-caused or otherwise, quite

threatening to the stability of people's cosmological order. History was associated with the human realm only, and it was challenging to elicit statements from people about how they felt their environment might have changed in the time they had lived here. My queries would be met with responses that excluded the possibility that the bush *could* change in any noticeable way in the span of a human lifetime. Or I would hear a detailed discussion of the ways that the town had changed but with no connection to how this might have impacted the surrounding bush. For instance, Anne from Winmalee told me, 'But the Australian bush is the Australian bush [...] I mean the area, the trees and the native fauna and everything else, the flora and fauna, will always be, that's not something that changes, and that's one of the things that makes you move here.



Figure 3.2 A coppicing tree in recovery, photograph series from the Fireworks Art Exhibition 2014. Source: Springwood Neighbourhood Centre Facebook page.

When I asked how the fires had affected the local environment, Ursula from Springwood affirmed:

You know bush re-grows itself, and it's a part of regeneration... I mean, that's how Australia always lived, you know for thousands of years. You know it comes and goes and now when you're driving past it was like a little bit eerie seeing through in the night time [...] but um, now everything's re-grown and it's, no... I'm not really, yeah. I'm really not concerned.

Modern environmental management practices in Australia have traditionally focused on a 'year zero' fixed baseline of ecologies that were 'intact' before white invasion in 1788 (Head 2016b). Geographers Aidan Davison and Stewart Williams observe that '[r]ecognition of ecology as a dynamic process rather than a fixed state is difficult in Australia because it destabilises the space/time of Australian modernity' (Davison and Williams 2017: 38). They argue further that the task of colonisation in Australia was to confront the strange, 'alien' and unpredictable environment and 'render it a stable, discrete object capable of being managed by universal reason', namely by holding it at arms' length (Davison and Williams 2017: 31). It was an ontological task of separation that fixed the Australian 'wilderness' to the margins of modern order, where it was understood as both 'wild' and 'containable in timeless spaces of protection' (Davison and Williams 2017: 40). Yet as the wild frontier retreated in the face of modern progress, Australians began to romanticise and yearn for the timeless nature, 'a uniquely Australian nature anchored in a precolonial order' that could 'hold out the prospect of authentic Australian-European belonging in the aftermath of invasion' (Davison and Williams 2017: 38). Especially pertinent to my exploration of the suburban figurations of climate change is their insight that, from a Eurocentric perspective, the human imprint upon the earth at its farthest reaches that looms in the spectre of climate change and the Anthropocene, makes the idea of Australian wilderness even more alluring. With the cultural roots of the Australian nation still anchored in Europe, this symbolic significance of the 'remote' and thus secure object helps explain why the acknowledgement of unstable and evolving local environments are threatening to suburban identity and belonging. Alarming ecological changes are therefore disavowed or ignored, while the grandeur of nature becomes a signifier of eternal being unspoilt by human action:

I think it's somewhere, I think knowing it's there and we haven't fucked it up. That it's consciously being kept as something that, as Australians that we value, um... you know we've put our footprint on so many places it's really nice to know that there's these stretches where we're just saying we're not. I think what's also great about it is it's much bigger than us. And it'll last a lot longer than we will and it'll bounce back a lot faster than we will.

Jennifer, Winmalee resident.

Where it was acknowledged, environmental change tended to be thought about in a detached way, and rarely linked directly with human activity. The loss of bird species, lizards or insects was often ascribed to drought or an unexplainable natural cycle that was larger than a human lifespan. Occasionally this was accompanied with sadness or unease, but it was not dwelt on in the context of our interview. Damien, who struggled with a direct question about his observations of environmental change in the Blue Mountains, later recounted a vivid memory to me that reflected a personal sense of loss that was poignant for him, but that he did not connect with the concept of 'environmental change' more broadly. His response to my question about environmental change was:

Fires and things like that, you do notice that they only last there only cyclic they only last a year because the growth is so good, it comes back [...] And places like Long Angle, that was a humungous four-wheel drive area and the bush there has just come back amazingly, so my formula's always been the bush always wins, no matter what's done to it it'll always come back. I don't know if that answers your question, but it's kind of what I've noticed.

Later in the interview when I prompted him about the loss of specific animals or birds he said:

There's a particular bird in Winmalee that I used to whistle to every Saturday morning and I haven't heard that for many years. When we were at Mount Kosciusko¹¹, in January of this year, I heard the same bird. Exactly the same bird. And so I whistled to it, and I even said to my sons, 'I used to whistle to that bird when I was younger and I haven't

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¹¹ Mount Kosciuszko is a mountain on the main range of the Snowy Mountains in Kosciuszko National Park located in southern NSW about 500 kilometres away from the Blue Mountains.

heard it for years!' So, I've always wondered what that bird was, that's one bird I can remember, where I think, well, where did that bird go to? Did it move away, did it...? You know you'd always hear it every day... yeah. [...] I whistled to it for about half an hour [at Mount Kosciusko]. And then it stopped, and that was that.

For Damien, less well-versed in discourses of death and extinction, his questioning, 'Where did that bird go to? Did it move away, did it...?', gestures at the possibility that he was aware of endings, but he makes no claim to knowledge or understanding of what might have happened to this bird species in the Blue Mountains. In this deflection, he also keeps his vision of the bush as fundamentally robust and unaffected by human activity intact.

The view of the bush as background scenery was entangled with less celebrated ways of using the bush – as a place outside of adult surveillance where teenagers went to let off steam, vandalising trees, rocks and plants, and where people deliberately dumped old car batteries and other household items no longer needed but too expensive to take to the dump. Waste was indeed a boundary marker between home and bush. This was further reflected in the practice of residents disposing green garden waste – leaves, sticks, branches and weeds – into the gullies behind their backyards. Here, home and garden were to be kept 'tidy' and safe. Sticks and leaves around the home and in the gutters are a fire hazard, while the bush, an exterior 'messy' assemblage of plants and animals, was already a place that had 'naturally' evolved to burn, and would not be affected by the additional detritus from around the home. A clearing around the home, a defined line between backyard and bush, was the responsibility of residents. But in this vision, the bush itself was somebody else's responsibility – either the council, or the NPWS, or the RFS.

The outsider enemy

The 'city on the edge' is a council slogan describing the City of the Blue Mountains that envisioned the community as a sliver of human civilisation extending out along the narrow ridgelines flanked on every side by 'wilderness'. This notion dwarfed any sense of human impact and was employed to great effect in justifying, and in many cases soothing people's anxieties about the level of destruction being enacted by individuals in their own back gardens following

the October bushfires. Some argued that the scale of tree removal taking place in some areas of the Mountains amounted to deforestation that was robbing the wildlife of critical green corridors and radically altering the character of the neighbourhoods. Others felt it was a sensible response to the bushfire risk (Curtain 2015: 6). Mary Douglas' (1994) work on blame is evocative here: she sees that for any misfortune afflicting a community there is a fixed repertoire of possible causes, among which a plausible explanation is chosen, and that a fixed repertoire of obligatory action follows the choice. As Douglas explains further, people do not necessarily consciously choose to have one or another pattern of blaming, but that dangers affecting life and limb are drawn into the cultural dialogue¹² 'spontaneously' and fall into regular patterns according to the kind of cultural structure that is being maintained (Douglas 1994: 7). The naturalist ontology lurked behind the cultural dialogue of the Lower Mountains community and shaped the specificity of the compensatory actions that were considered 'reasonable' preventative action following the October fires. It is therefore not surprising that the vision of the bush as background scenery had real implications for the management fire risk undertaken by residents in their own backyards. Jasmin, a resident of Winmalee, explained:

Like most people don't think see the bush, they don't see the bush like really, really close to them, they look out over the valley, cause most of them are on ridges and they see the *whole* bush and go, 'Look at all that bush!' But they don't realise that it's stuff that's actually in your yard, or it's your own non-native plants that are planted right round your house that is going to be the problem. And I think there's a concept that if we get all... if we can push the bush back a bit then it's going to be okay.

Creating a wider clearing around homes was a popular idea, and in many cases, this necessitated the felling of 'dangerous' trees which was greatly facilitated by the new '10/50' *Rural Fires Amendment (Vegetation Clearing) Bill 2014*, which amended the *Rural Fires Act 1997* passed by the NSW government in response to the October fires. The 10/50 legislation allowed property owners to remove trees on their own property within ten metres of their home, and to clear the understorey within 50 metres. The bill was based on similar legislation that passed in the state of Victoria following the catastrophic Black Saturday fires in 2009, and on research by the RFS that

¹² Douglas (1994: 7) uses the term 'constitutional dialogue' and 'constitution' in the original quote that I have paraphrased. Here I use the term 'cultural dialogue' and 'cultural structure' to capture the same meaning.

concluded it was important for the key fire prevention goal of reducing fuel loads around homes. Prior to the introduction of this legislation property owners in the Blue Mountains needed permission from the local council to remove any trees on their property and applying for this permission was a costly and lengthy process. When the legislation was passed in June 2014, it was widely commended in the communities of Winmalee and Yellow Rock, and welcomed by the Mayor of the Blue Mountains as 'sensible' and a 'life saver'. Roza Sage, Liberal Party state member for the Blue Mountains at the time, described it as 'a great boost for residents', who deserved the right to protect their properties against bushfires. She added that people in her community were 'tired of jumping through unnecessary hoops simply to take reasonable action to protect their families' (Lewis 2014b: 41). The premier of NSW Mike Baird stated, 'We're putting people before trees... This is empowering individuals' (Lewis 2014b: 41). This new entitlement, in concert with the Bushfire Attack Level (BAL) rating process (which calculated property risk level based on proximity to the bush and the classification of the nearby bush) reinforced the idea of the bush as a hazard, a danger, and an 'outsider enemy' (Douglas 1994) to the community.

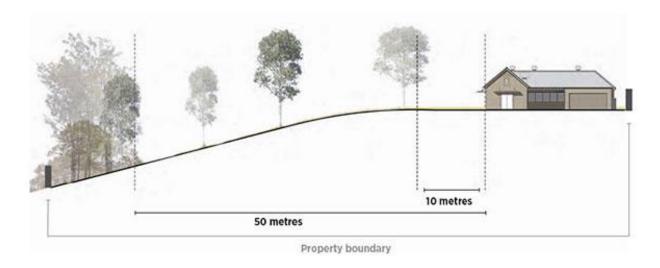


Figure 3.3 10/50 Vegetation Clearing Entitlement Area Source: NSW Rural Fire Service n.d.

The clearing activities that took place in the Lower Mountains both before and after the 10/50 bill was introduced, echoed the destruction entailed in the massive land clearing that took place

in the colonial era. Carter (2010: 166) has described how squatters and later selectors utterly transformed the country, as they individually went about establishing their farms and properties: '[T]he cumulative effect of these uncoordinated local acts was the creation of a landscape from which difference had been excluded. A new uniformity of blandly smiling slopes came to replace the inscrutable impenetrability of the primaeval bush' (Carter 2010: 169). Evidently, in the Lower Mountains, the transformation of the landscape was limited by the existing boundaries of private properties and was by no means as complete as that of the Gippsland rainforest Carter writes about. However many streets in Winmalee were denuded to such an extent that residents felt the character of the place had been fundamentally altered, that it felt 'more like a housing estate'. These acts undertaken by individuals in the Lower Mountains were not a systematic program to destroy the bush. Blame of the trees was absolutely a factor, but it was a side effect of a 'risk management' and 'preparedness' strategy underpinned by a cosmology that viewed nature as robust, vast, and fundamentally unaffected by human action. The bush, here imagined in the singular and valued as an expansive landscape out the window, was different from the multiplicity of individual trees that residents encountered in their gardens.

Millions of acres of trees have been cleared from the Australian landscape to make way for agricultural crops and livestock in the 230 years since European settlement. In urban areas, native trees have also been systematically removed, a phenomenon that has been attributed to the 'arboraphobia' that Australians experienced when confronted with the 'undisciplined' nature of eucalypts in comparison to trees from Europe' (Boyd 1968: 93 cited in Trigger and Mulcock 2005: 317). In the Blue Mountains, the subject of how to manage the bush and your own property is a tense one for many people. I heard it compared with immunisation: it is your public responsibility to ensure that your yard is fire safe so that the fire does not 'spread' like a disease to neighbouring properties, that it only takes one 'irresponsible person' for a whole street to go up in flames. It is an emotional issue: 'I hate them!', my neighbour said to me vehemently when I asked her why they were cutting down the trees in their back garden. The 10/50 clearing code had given them the opportunity to take the controlling action they had wanted to for years. I asked why she hated them: 'Because they drop their limbs wherever they like.' Residents complained about the messiness of native trees. Their continuous shedding of leaves and bark required a weekly upkeep of the garden for reasons of aesthetics and safety. But what my

neighbour seemed to take real issue with was an agency on the part of the trees to do whatever they liked. It was something she could not control. Control was very much at issue. The bush was a known hazard, and there was very little that residents could do to neutralise the threat. This left people feeling both helpless and entitled to take whatever action was necessary to protect homes and lives. In their work on forests as spiritually significant places in Australia, anthropologists David Trigger and Jane Mulcock state:

In Australia, whereas we might identify an historical, deeply entrenched societal desire for the absence of trees, native trees have also held special significance – partly valued as an economic resource, but also as sources of inspiration and intellectual reflection, symbols of place and metaphors for life (Trigger and Mulcock 2005: 308).

It is against this backdrop of contesting values that debates over the 10/50 clearing activities took place. For people in the Lower Mountains community, trees were not only a potentially life threatening hazard; they were also a potent symbol of resilience and hope. In October 2014, the Springwood Community Arts Centre hosted an exhibition to celebrate the resilience and recovery of the Blue Mountains community a year on from the catastrophic fires. Seventy artworks by local artists filled three rooms and the majority of works depicted fire-affected residents and trees. Trees aflame, trees in the process of regeneration, tree-filled landscapes, peaceful, wise trees, senescent trees, tiny saplings, sinister burnt out scenes. It was a veritable forest of imagining, celebration, mourning and reflection about bushfires and living in the Blue Mountains. One artwork (see Figure 3.4) from a Winmalee local aptly captures the latent quality of combustion contained within each tree. The leaf shapes hanging in front of the quilt moved in the air as you looked at them. In the exhibition program the artist described the work as interactive: 'You can turn the leaves to show a different story from being a leaf to a flame.' For many people recovering from the October 2013 fires, the trees that remained on their properties both dead and alive took on this new dual character; they were no longer just a benign source of shade or beauty but a potential flame thrower, ignition point, an enemy outside the window, a danger to home.



Figure 3.4 'Leaves and Flames', artwork by Winmalee local, Tracey Greenaway. Fireworks exhibition 2014. Source: Springwood Neighbourhood Centre Facebook page.

Douglas' (1994) outsider enemy blaming pattern is particularly salient for the interpretation of responses to the October bushfires. Douglas (1994: 6) explains that in the case of the outsider enemy, people forge the explanation that disaster happened because of an enemy outside of the community, not necessarily one who actually comes from outside, but a hidden disloyal traitor (or, as illustrated below, instead of the outsider enemy people in authority might evoke a punishing god to explain a nonetheless contingent event). The action following such an explanation is to seek out and inflict a communal punishment on the foe and to exact compensation. Two clear outsider enemies emerged in the aftermath of the fires – the first was Endeavour Energy company, and the second was the trees. A tree falling across exposed electricity wires on Linksview Road in Springwood was commonly acknowledged in the

community as the ignition point for the Linksview fire in the Lower Blue Mountains, and in June of 2014 fire-affected residents launched a \$200 million class action against Endeavour Energy who were responsible for the maintenance of the power line in question. A key contention in their case was that the owner of the property on which this tree grew had received a notification from Endeavour Energy to trim the tree back and had not done so, and this issue had not been properly followed up by Endeavour Energy before the fire. The coronial inquiry into the fires that occurred in June 2015 heard from a police detective in charge of the Springwood investigation who declared that the falling tree which caused the fire was 'an act of God and could not have been foreseen' (Curtin 2015: 6).

However, in my conversations with locals, the shared understanding that the fire had been ignited by the tree falling on the power lines at Linksview Road was rarely followed by vehement recrimination or blame. It was mentioned more as 'a fact of life'. Most people agreed that power lines should be underground in fire-prone areas, but the prohibitive cost combined with the historical lack of political success of legislating such a regulation meant there was a significant amount of apathy and resignation about the likelihood of this ever happening. People seemed nominally angry about the negligence of the electricity company, but discussions did not have the emotional charge that tended to accompany talk of dangerous trees on people's properties. One Winmalee recovery worker said:

They don't talk about that. I know we've had Madden's lawyers here and they're coming again tonight, around the case, the electrical fire that started it all... none of them have come in and said, this shouldn't have happened because that bloody... Nobody has said that. A lot of people are saying, well we live in this environment... there's no blame, not with who I've spoken to. It's a done deal. It's happened... they're peeved at Council because the trees were very close to their properties, you weren't allowed to take your trees out and a lot of them have said if those trees would've been allowed to be taken out that were so close to the house, we would have had some sort of break.

The outsider enemy that garnered more emotional charge, community attention, and action was that of the trees themselves, and in the debates over how best to manage the danger they presented to the community. Trees had come to stand for a hidden disloyal traitor. As discussed,

the relationship with trees in the community was complicated – they were both the reason people lived up there as well as the hazard marked in red on the map in the community forum on bushfire preparedness. They were the beautiful sea of green-blue eucalypt forest that could be appreciated out the window, but they also dropped branches unexpectedly, blew over and crashed into people's roofs and windscreens in windstorms. Hidden within them was the everpresent possibility of traitorous fire. Even in the class action launched against Endeavour Energy the focus was on the responsibility of the energy provider to adequately maintain the trees growing adjacent to the power lines, rather the problem that the power lines existed above ground. This photograph (see Figure 3.5) taken during the class action proceedings aptly captures this constellation of blame. Any discussion of government funding to put power lines underground was notably absent from the political conversation following the October fires. Where this conversation did happen, in the Royal Commission following the Black Saturday fires in Victoria, the state government rejected the recommendations as 'too expensive' ('The cost of putting power lines underground' 2010).



Figure 3.5 Lawyers and the judge from the supreme court inspecting the site on Linksview Road, believed to be where 2013 October fires started.

Source: Daily Telegraph (February 23, 2016).

Putting power lines underground was certainly a conversation that was more active on the ground in the community. But there was little encouragement from their local member of state parliament, who was running in an election where the key platform was the privatisation of the electricity grid ('poles and wires') across NSW and people turned to areas where they were politically empowered to address their safety. Looking to an outsider enemy that they could exact an effect upon. This was encouraged by the neoliberal rhetoric employed by politicians during the implementation of the 10/50 clearing entitlement, which emphasised the responsibility of individuals to protect their own private property and disregarded the potential collective ecological costs of doing so.

The constant whine of chainsaws that I could hear in my neighbourhood was a relentless reminder of how people were responding to the perceived danger of trees. It was not widely accepted as appropriate action across the whole of the Blue Mountains community, but it was very popular in bushfire affected areas. It superficially presented itself as 'reasonable preventative action', but it was an emotional issue. While no one I encountered openly framed their actions as punishment, an underlying tone of retribution and fear accompanied much of the tree clearing. As Matthew from the Winmalee Rural Fire Brigade shared,

They're just chopping everything down you know? [...] Taking advantage of the 10/50 rule, probably calling it more like a 30/300 rule and chopping down everything in sight... they were quite adamant that this new rule had given them carte blanche to go and chop everything down. And that was going to make them safe you see.

Another recovery worker said:

You will talk to someone about a particular tree or an issue, and then you'll realise that they're, they're actually you know they're very fearful about the bush and the risks of things happening, it's almost like some people get put into a heightened sense of um, hazard. So, they're kind of like, 'Oh my neighbour's house burnt down and now there's a tree there that got burnt, and it's going to fall on my house', and you can tell that they're thinking about that all the time. And they're really thinking that their house is going to be destroyed...

Like the new building regulations to be discussed in Chapter 4, the 10/50 legislation communicated to the community that the level of risk they were living with was changing. What had previously been considered safe was now in question. Reasonable action to ensure one's safety had taken on a new character, and it was an individual's responsibility to respond effectively to this shift. Brian, whose Yellow Rock home burned down in the 2013 fires, reflected on his changing sense of what constitutes an appropriate clearing:

I loved living how we did for all those years in the bush that we had surrounding us, um, the fact that it now turns out that the bush was too close to us... um... is probably, well it obviously has, it's taught me that okay, to be safer I've got to clear more of an area around the house. By the same token, we didn't have trees hanging over the house like a lot of areas, uh, we had a reasonable cleared area.

Much of the clearing after the October fires disregarded or ignored the fact that most of the homes lost were lost due to ember attack, which is not something that is best addressed through the removal of trees. As huge piles of woodchips, branches and tree stumps amassed on the kerb sides in front of people's homes, sometimes for weeks or months after the trees had been cut down, the rationale of 'sensible risk reduction' wore thin. In the event of a bushfire, such detritus along the street would be extremely hazardous compared with mature living trees in the garden. The 10/50 bill represented a quick and empowering fix that enabled people to feel that they had 'done something' in the wake of feeling helpless and vulnerable. Some viewed the 10/50 bill as the latest example of mismanagement of the bush that was contrary to 'Mountains values' that respected the bush environment. These views could be held simultaneously, and people regularly recounted cutting down trees in their gardens reluctantly, as an unfortunate but necessary action.

This course of action reflected the community's attempt to reconstitute itself by restoring a clearer ontological boundary between the bush (nature) and their homes (culture), which the fire had so radically transgressed. In her analysis of the 1994 fires in Oakland California, disaster anthropologist Susanne Hoffman (2002: 121) argues that such actions often take place following a catastrophe that demonstrates the fallacy of human separation from nature. When people are confronted with their fundamental grounding in the physical world, they feel 'the urge to vault themselves apart from that material purchase. They must again impose separation between nature

and themselves.' The return to grounding in the material world hailed by a bushfire, or by the recognition of anthropogenic climate change, precipitated the urge to reinstate separation, disavowing such connectedness. This urge is immediately apparent as one strategy to avoid the feelings of vulnerability and the attendant overtones of mortality that accompany a confrontation with humanity's material existence (Becker 1973). An equally compelling reason to disown connection to the material realm is the responsibility entailed in recognising one's actions as having a substantial impact on the local environment and on the planet at large. That which had been positioned as 'out there', a different and separate place from actions 'in here', returns ferociously to disrupt a sense of safety and innocence.

In her critique of modernist classifications of the object world, Kim Fortun (2014) points out that even philosophers like Bruno Latour seeking to forge new ontological schemes, have not escaped modernist habits of mind and language, or the instrumentalist industrial logic. These habits, including, I add, those of building homes, identify property and boundaries 'in a way that systematically discounts transboundary migration' and 'privileges what goes on inside bodies, products, and fence lines' (Fortun 2014: 313). This logic assumes that things and bodies are what they were intended to be – pesticides kill insects, but pose no harm to other bodies or ecologies. Likewise, tree clearing legislation protects lives and homes inside the fences of private properties but poses no broader threat to the ecology of the Blue Mountains. 'Things are considered in themselves rather than connected and enmeshed; direct, linear connection between separate things – the bullet as the source and cause of violent injury' (Fortun 2014: 313) – just as much as the tree falling on the power line as the origin of the October fires. What Fortun refers to as 'distributed causality' – here the effects of hazard reduction burning regimes, climate change, planning regulations – are often disguised or lost in this view of the world. When evidence of these distributed causalities and connections come to light, Fortun argues further, the strategy of disavowal is used to reseparate one thing from another, rejecting the perception of connection because of its potentially traumatic associations (Fortun 2014: 319). However, it is also important to recognise that connections between climate and weather, between local acts and global effects, remain complicated and distributed to such a degree that they do appear as fundamentally ambiguous for those experiencing them. This is precisely what makes it challenging for people, both socially and psychologically, to acknowledge the connection

between their quotidian worlds and that of global climate change. These avoidant processes of disconnection as a strategy to protect people from further trauma is considered in greater depth in Chapters 5 and 6.

Porous boundaries of the inhabited bush

In community preparedness meetings the possibility of a clearer boundary between nature and culture, between bush and home, was regularly raised as a way for residents and council to ensure the safety of the community and the bush. The ideal boundary would be wide enough to minimise human impact on the natural world, and conversely prevent the dangerous aspects of nature, like fire, from disrupting human lives. In practice, such a boundary was impossible to maintain. Indeed, the human world seeped extensively into the local bush of the Lower Mountains. To illustrate: Sassafras Gully near Springwood town centre echoed with human voices and the barks of dogs in back gardens that backed onto the bush. This gully was not the remote wilderness of the Blue Mountains that was sold in calendars and on postcards for tourists. Martins Lookout was the closest part of the National Park to where I lived in Springwood, and I went walking there regularly. A wide fire trail led all the way out to the lookout, and it was not uncommon to encounter a car or two on any given afternoon, but it was not a busy spot. The view from Martins Lookout was described in one of my guidebooks on walks in the Mountains as 'no big deal... I would not suggest that anyone should go there just for the sake of the view' (Paton 1987: 13). Like many of the walks around the Lower Mountains it is not a tourist attraction, and the people I had conversations with there were locals. There were other regular visitors at the site who I did not talk with – mostly teenagers who drove out after school with McDonald's to watch the sunset. The word that kept arising in my mind as I spent time in the bush around the Lower Mountains was 'inhabited'. There were signs all over of human use – graffiti all over different rocks, the homemade commemoration for a deceased baby, purple balloons thrown over the cliff dotting the landscape below, old fire spots, the rubbish stuffed under rocks. The upper part of the track at Martins Lookout felt more like an extension of people's backyards or the streets than a national park. I saw more rubbish dumped in the bush than I ever did on the residential streets of Springwood, signifying the bush's enduring role as an externality to suburbia.

It was very late into my time living in Springwood that I heard the hum of traffic, almost constant, from my much-loved sunset rock at Martins Lookout. It surprised me so much that I initially thought it must have been a day of unusually heavy traffic, or that perhaps the wind was blowing in an unusual direction, carrying the sound further than normal. As I returned each day, my ears newly attuned to this noise, I noticed that the hum was always there. It had probably always been there, but I had been unintentionally excluding it from my experience 'in nature' because it did not fit with my existing ideas or desires for what this time 'in nature' meant for me. This moment was a humbling experience akin to a much earlier time in my fieldwork when I realised that I was unconsciously excluding from my 'official ethnographic activity' the times I was driving out to a local lookout for a bushwalk each day. This omission from my logbook occurred despite the fact that some of the richest ethnographic moments had been occurring for me out there. On these walks, I encountered other locals, explored the rock formations, learned about the pea plants and grass trees and when they flowered. I began to distinguish between different eucalyptus tree species, and I watched the sun moving along the ridgeline as it set in a slightly different spot each day. I noticed the ways that this place was being used and inhabited by the people, animals and birds that moved through it, listened to the rushing of the river below after a big storm. Tim Ingold (1993: 156) asserts that 'no feature of the landscape is, of itself, a boundary. It can only become a boundary, or the indicator of a boundary, in relation to the activities of the people (or animals) for whom it is recognised or experienced as such.' Gradually, the boundaries I had been imposing on this place were illuminated. These were boundaries that ran not so much through the physical space, but through my imagination influencing my perceptions and experiences that were shaped by my own culture and life experience that told me the bush was for leisure, relaxation and reconnection, not for work or research, not a social space for meeting people.

As discussed in the previous two sections, conceptual boundaries of bush and town had concrete material outcomes for these spaces. This section considers the effect of these conceptual boundaries on people's ability to perceive or name experiences of hybridity between bush and home, human and more-than-human, in their daily lives. The bush as background scenery was by no means the only conception of nature in the Blue Mountains. And this view was regularly challenged in people's daily interactions with possums, lyrebirds, bowerbirds and wallabies who

got into their veggie patches or garden beds; by trees that dropped branches on top of cars and roofs; by spiders who crept into boots sitting at the back door, and snakes that were encountered as they sunned themselves on concrete pathways. The smell of the eucalypt forest that permeated the streets after rain, the stench of dead animals after the fires, the screeching cockatoos overhead, the hot dry wind at the back of the throat on a day of high fire danger all penetrated the apparent boundaries between internal and external, of bush and town, of nature and culture. The concept of the natural world as background scenery emerged primarily as a visual account of the bush in people's descriptions. By contrast, though not necessarily in direct opposition, were the narratives of sound, smell and animal contact that people related to me. These experiences could have been fertile ground for challenging the separationist paradigm, but as Head and Muir (2006) also found in their research on suburban relationships with nature in Australia, there was a cultural resilience and vernacular appeal to the nature/culture dualism that has remained largely unaffected by environmental philosophers' scholarly disruption and subversion of such notions. There was a remarkable tolerance for contradiction and inconsistency that characterised people's descriptions of the bush that seemed reflective of the lived experience of liminality in suburbia (Head and Muir 2006) and what I will later explore as reflective of the ontological instability in naturalism.

When I asked Georgia if she spent much time in the bush and what she did there, she told me about regularly returning to the building site of her new home after the October fires, and of a treasured spot out the back where she remembered sitting before her original house burned down. She answered my question about the bush by describing a place in her home and garden of deep significance for her:

I sit and look. I think where the house is. I sit and look. I smell it. [...] Almost every day particularly during summer you could sit, you watch by the time the breeze comes up the valley, and you hear it come [...] Since the fires it's going to be interesting to see what the sounds are like because there's so much gone... you know, birds from the time we've lived there, we've had families, you know, generations of birds that have raised their young. You know magpies that would follow Terry around mowing the lawn and kookaburras that teach their babies their territory, you can watch them fly their territories, so all that's gone, but there's new stuff coming. But I just love the colours. I

love the colours and the Angophoras and the colours in the barks, and the trees, and the cockies eating everything. [...] You know I can sit there and read and be totally immersed in what I'm reading, and the smells and just everything around me [...] when friends come up we always gravitate to the same spot, and everybody's been coming, friends just gravitate. So, the expectation when we rebuilt was a nice big deck out the back. So, now it's there. Beautiful.

Other activities and groups that articulated a more enmeshed relationship between bush and suburb were Bushcare and Rural Fire Service volunteers. Various Bushcare groups were active throughout the Lower Mountains. They were made up primarily of volunteers organised by paid and experienced bush regenerators hired by the council. These groups spent their weekends out in the local bush, collecting rubbish, weeding and cutting back invasive species. During my fieldwork, I was involved with a Bushcare group in Faulconbridge that met once a month on Saturday mornings to care for the bush in the gully behind several homes on the northern side of the Great Western Highway. In the area where we undertook most of our weeding the boundary between back garden and the bush was visually indecipherable. The whole area was treated by those I was working with as being in their custody or care, and there was certainly no fence or gate to walk through when we headed out to do the regeneration work.

Stewardship of the local bush was a value articulated by members of this Bushcare group as well as by the local Rural Fire Brigades. RFS members regularly volunteered their time on the weekends to conduct hazard reduction burns and other work in the bush considered necessary, not just for protecting homes and lives, but for supporting the ecology of the bush that was dependent on fire. These activities in the bush were also based in the Western scientific episteme - the sophisticated fire modelling, the taxonomy of different plant species and their invasive or supportive roles in the existing ecology were critical to the rationalisation of their various activities. Even as these activities and attitudes destabilised the dualism of nature and culture, the notion of humanity's exceptional interiority (Descola 2013) that separated people from other animals and plants gave residents of the Blue Mountains a responsibility to protect and care for the natural world that reinforced another kind of dualism. The separation of nature and culture was configured differently in these undertakings. Rather than made visible through clear spatial

boundaries between home and bush, the human and the natural were separated through relational processes that rested on assumptions of agency (underpinned by a modern scientific epistemology) in humans that was understood to have no equivalent in nature.

What I witnessed in people's relationships with the bush in the Lower Blue Mountains was not as straightforward as the 'alienation' from nature that is often ascribed to the suburban experience in Australia. Lower Mountains residents would describe their sense of being embedded in the bush even as they articulated their separation from it. For people I interviewed, spending time in their backyards, or even in their living rooms with large windows, felt to them like 'time *in* the bush'. People relished in the sense of space, privacy and freedom that came from backing onto the bush. Connection with nature was valorised and seen as an integral part of both a person's interiority and the community's identity. This was clearest in anecdotes where the Mountains (including people's homes) was envisioned as 'nature' because of its contrast with Sydney, 'the city'. Belinda, a new Springwood resident, described how peaceful she felt when she looked out her window at the bush even amid the noise of trucks rumbling past on the highway in front of her home:

Even though we're right near main infrastructure, when you look out that window, you feel like you're lost in just... nature, you don't feel like you've got a wall to wall neighbour and your neighbours about two metres away from your fence line, you feel like you're in the wider space.

Greg, another Springwood resident, similarly described his feelings of joy and peace in nature when he sat in the backyard with his cup of tea, or on his back deck:

I like watching nature take its course as the sun comes up, and I just don't think you get the same sort of experience in the city. I'm watching it come over the trees or coming out onto the deck. When you come out onto the deck you can see trees, the fact that I can sit here with those blinds open with those trees blowing in the wind [...] I like to think it's a healing process. [...] I like watching the natural wildlife, birds just coming along all of a sudden, we have kookaburras just plop down. Though we don't get them much, but when you hear possums of an evening, I just think that's actually quite cool.

But even here where a shared space with nature and the beauty and agency of wildlife are acknowledged, a fundamental gap remains. I see this is so because, in the words of Davison and Williams, 'for those of us reared within modern ontologies, the proposition that reality comes to be known through acts of mutual encounter rather than our active description of passive objects is difficult' (Davison and Williams 2017: 30). What seemed to be lacking for Blue Mountains residents was an adequate shared language of connection, a coherent mythology and ontology that could capture their experiences of 'living in between'. Rather, 'living in between' was articulated as a fraught and difficult thing that had to be continually managed. It was a 'trade-off' for the beauty that surrounded them, a continual process of 'finding balance' between two separate wholes. Nature was schizophrenically divided into a dangerous, hazardous place that was 'basically trying to kill you' and a benign healing place of peace and renewal. Nature was a fragile thing passively awaiting human impact and interference. Nature was ascribed with the power and agency to destroy whole lives and homes.

The complex legacies of naturalism

I want to conclude by sketching out the inner contradictions of naturalism as modelled by Descola (2013), illustrating the way that these contradictions manifested in people's discussion of bushfire and climate change. On the one hand, in the naturalist view humans are part of nature, biologically speaking in terms of our evolution and our material existence and therefore subject to its laws. On the other hand, humans are held apart from this order because of our apparently exceptional interiority that gives us the capacity to act outside of this order or even change this order. In my view, this internal contradiction is at work in how people in the West respond to environmental change and anthropogenic global warming, producing contradictory statements around responsibility such as these:

I think it's [climate change] just a natural part of earth. I think we had, the industrial revolution obviously brought changes to our climate with things... I don't think there's any doubt about it, um... you can't have this many people living in a bubble and it not having some sort of effect [...] I don't know I think as an intelligent species the time has come where we can do a lot better than fossil fuels.

Georgia, Winmalee resident.

I know that the bush will look after itself, I know that. I have nothing but the greatest of faith in nature and God about that kind of stuff. You know, how many billions of years have we been going? How many times have we had heat? Excessive, or greater than could ever be imagined and then all of a sudden we get an ice age, it cools everything down again, then we start again whether it wipes out the dinosaurs, or wipes out the human race or wipes out the oceans or whatever I really don't care. I just want to make sure that... I... I don't want to make sure, I know that nature will take care of itself, and I'm not shutting my eyes towards other stuff that's going on because we're the greatest proponent of climate change... ever. And we need to do something about that.

Ian, Winmalee resident.

To presume a human ability to control or affect the weather, the climate, even the 'natural' fire regime in the Blue Mountains was often expressed as an unsettling violation of the natural order. On the one hand, this precluded it as a possibility at all, and on the other, it created a contradictory human imperative to restore this order through climate change mitigation, or the implementation of better fire management strategies. The unstable logic of these two responses seemed an effort on the part of participants to account for their experience in the Blue Mountains as both the subjects and agents of environmental change. It was also illustrative of this more fundamental instability within the ontological conventions of naturalism, where humans are both inside and outside of the so-called natural order.

Naturalism positions humans as subject to 'nature's universal laws' (as discovered through scientific inquiry), and yet outside of them because of our apparently distinctive interiority and agency which gives us a degree of 'mastery' over this same non-human world rendered passive and awaiting our 'heroic models of creation' (Sahlins 2013: xiii). However, as Latour (1993) has argued, this so-called divide between nature and culture has never been conformed to in practice. The modern scientific project, well before the advent of climate change science, has been producing blended processes of nature and culture in increasingly complex networks that undermine the very divide upon which the discipline of natural sciences is premised. The persistence of naturalism's contradictions are evident in tree clearing behaviour that took place

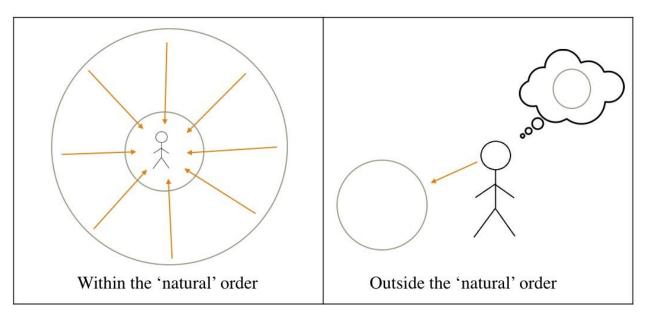


Figure 3.6 Naturalism's contradiction Source: Author.

after the fires where people felt entitled to master and control nature, while concurrently seeing themselves as victims of a fire that was an 'act of God', where fire is 'an essential part of the Australian bush' and within the natural order of things. This debate over the 'naturalness' or 'normality' of the fire, its relationship with climate change and the justification of subsequent actions taken by the community to ensure future safety is further interrogated in Chapters 3 and 4.

Naturalism, as described by Descola, produces a blind spot that keeps the capitalist system of production functioning and contributing to anthropogenic climate change. It does so in two differing ways. First, resources, wilderness, ecosystem services and other notions continue to articulate nature (and also some humans) as external object to be managed or left alone. Even less benign is a focus on nature as external resource to be utilised and monetized for human society, obscuring the view of the actual costs to the earth (and to humans) of such resource extraction. This view is related to the image of the humans as outside of the order diagrammed in Figure 3.6. The perception of humanity as ultimately subject to the so-called 'laws of nature', and especially as victim to this larger more powerful system of natural laws, obscures the ability to perceive, understand or even care about the environmental impact of our collective agency in the world. In the context of the October fires, people were overwhelmed, distressed and in awe

of the immediate and palpable destructive power of this fire over their lives. The fire was often referred to in ways that implied an agentic, even vengeful nature. Lower Mountains residents were caught by surprise by the irrefutable physical laws of nature at its most devastating, and in this context, it was hard for them to experience themselves as agents responsible for environmental change concurrently. This discussion will be further taken up in Chapter 4 to understand how this view shaped the process of recovery and rebuilding.

Of course, naturalism's influence in the West has been far from total, including in Australia. Linda Connor's (2016) recent ethnography of Hunter Valley residents in NSW found that 'there are different and enduring modes of being that situate humans in a cosmos where non-human nature has an ordered intentionality of its own, exerting powerful forms of agency.' As Simon Donner (2011) points out, the idea of human influence on the realm of the weather has been difficult to assimilate into existing Western cosmologies about the place of humans within the 'natural order' that also stemmed from Christian doctrines where God controls the weather. In my own research, people's attitudes to environmental change also belied a mode of being that situated humans within a nature that had 'an ordered intentionality of its own' (Connor 2016: 91). Like the weather, global climate change might be accredited with wilful personality if not personhood:

Yeah, um, climate change is yeah, just the changing seasons. Um, that we see, not just here but around the world. I mean I think earth is getting back at us finally. For the damage that's been done to it.

Lindsay, Winmalee resident, former RFS member.

As a society, we really can't compete against mother nature no matter what we do. Mother nature's going to, still going to hold reign over us. And force us to do, you know, look at the way we live in different ways.

Anne. Winmalee resident.

I contend that as events like the October fires occur more frequently, the naturalist cosmology will be pushed to its limits. Certainly, the data I gathered in the Lower Mountains revealed a worldview under strain in an era of climate change. Climate change and bushfire both destabilise

modern notions of human separation from the natural world, inviting an encounter with the reality of our interdependence and of our power to affect the environment and the planet on a geological timescale that was once reserved for the gods. This is not to say that Blue Mountains residents (or global corporations for that matter) are bound to accept such an invitation, acknowledge responsibility and change their behaviour accordingly. Indeed, as was evident, the effect of the climate change connected fires was a reinforcement of the sense of human subjection to the natural order of things, and a subsequent amplification of local efforts to heroically re-impose the separation between bush and town that would ensure their future safety. As one council worker involved in bushfire management put it:

I think the Blue Mountains will be a very different place in you know 50 or 100 years' time, as we try and separate ourselves from the natural hazards that we face because of the change in climate and you know the greater occurrence of these extreme events.

One of Descola's aims in *Beyond Nature and Culture* is to expose the specificity of modern Western cultures. He strove to situate 'our own exoticism as one particular case within a general grammar of cosmologies rather than continuing to attribute to our own vision of the world the value of a standard by which to judge' other civilisations and cultures (Descola 2013: 88). The term naturalism, for Descola, connotes a schematization of experience as 'natural' and spontaneously self-evident, its self-evidence stemming from the idea that it is 'founded upon nature' (Descola 2013: 199). I have explored the contradictory and partial ways that this schematization is at work in the context of the Blue Mountains community. I have found it plays a compelling role indeed: these suburban people are caught up in the web of naturalism's contradictions, even as they are trying to extract themselves from it. Their inconsistent and contradictory responses to the bush and their own place in it are founded in the unstable character of naturalism itself. What this might mean for their emerging thoughts and imaginings of environmental change and a heating world is taken up in the following chapters.

Fire: Reflections on normality

There've always been fires, and they've always been large and severe, so what's the difference? And that, that to me will always be a difficulty around the notion of the impact of climate change. How can it be, how do we measure that, or have any sort of definition around the fact that, what's going to be the difference? How do you see it or feel it?

-Ron. RFS member.

Questionable fingerprints

Cultural constructions of weather and climate have a bearing on how people experience climate change, and it is, therefore, important to develop an informed perspective on such existing and emerging constructions. Kirsten Hastrup (2013) points out that, although analytically people may distinguish between weather and climate, both events are experienced within a larger pattern of regularity, framing the average as well as the extreme. As I show in this chapter, the privileging or discounting of certain patterns and anomalies of weather events reveal cultural assumptions that also shape people's perception of climate change. Many residents situated the October 2013 fires within the broader pattern of known fire events in the Blue Mountains and emphasised how unusual or freak the event was. They were grappling with the question of what is normal or unusual in relation to fire disasters in Australia, which, even without the complicating influence of climate change, is epistemologically fraught. Scientific data and ways of knowing are, so to speak, in conversation with local mythologies and experiences, in public meetings and the media, and in the everyday construction of narratives about the events. These multilayered discourses display a dynamic tension between what is scientifically considered 'normal' and what is culturally accepted as 'normal' regarding fire regimes in the Blue Mountains. Similarly, there are the scientific models that explain the causes of anthropogenic climate change, and there is the quotidian human realm where lay people make sense of climate change.

Against the background of my discussion of residents' diverse relationships with the bush in the previous chapter, I here analyse three core narratives that Blue Mountains locals typically used to

explain bushfire, paying special attention to the cultural influences, contradictions and inconsistencies of these explanatory myths. My intent is to examine in a phenomenological key the shape and origins of these narratives. I will draw on Alfred Schutz's (1975) exegesis of the 'life-world', of 'situational defined events', and of 'modalities of relevancy' in order to elucidate first, how the October fires were typified as an object of experience, and second, how such typification relates to people's understanding of climate change. Put differently, my focus here is on the relationship between what is stabilised as a background, in this case the 'normal' or 'natural' fire regime of the Blue Mountains, and what is typified as an object that stands out in relationship to this background, in this case a catastrophic bushfire early in the fire season. Throughout this phenomenological analysis my interest is in recognising 'the presence of the social and historical' within residents' consciousness, observing 'forms of self-deception and distortion, without devaluing local claims to knowledge' (Good 1992: 42 cited in Desjarlais and Throop 2011: 96).

On the 13th of October 2013, the Australian Bureau of Meteorology (BoM) reported that September 2013 had been the warmest on record for NSW, with the daily mean temperature 3.4 degrees Celsius above the historical average. Warm, dry weather contributed to several early season bushfires in September, primarily along the coast. During this period, a bushfire took off in Hawkesbury Heights, the neighbouring suburb to Winmalee, after some hazard reduction burning by National Parks and Wildlife (NPWS) had got out of control. There was some property damage in this fire, though no houses were lost. For many in the Winmalee and Yellow Rock communities this fire was a warning of things to come, though some wrongly perceived it as 'their fire for that season'. A month later, there were a series of bushfires across the state of NSW. At the peak of this disaster, over one hundred fires were burning across the state, and the NSW Premier declared a State of Emergency giving emergency services the power to forcibly evacuate residents or exclude them from a particular area. These fire events were collectively referred to as the Red October Fires.

¹³ The BoM maintains the Australian Climate Observations Reference Network. It consists of 112 locations across Australia that provide high-quality, ground-based temperature records. The Australian Climate Observations Reference Network – Surface Air Temperature (ACORN-SAT) is one of the first national homogenised datasets of daily temperatures back to 1910 (BoM 2012).

The most severe fires that burned during October 2013 were all in the Greater Blue Mountains area. On Wednesday, October 16, the State Mine fire in the Upper Mountains was ignited by the army during an explosives training exercise. This fire burned through the bush in the surrounding area for weeks destroying five homes and significantly damaging several more as well as the historically significant Zig Zag railway. On October 17, another fire began at Mount Victoria in the Upper Blue Mountains, destroying seven properties and moving in the direction of Blackheath. Later, firefighters deliberately merged this fire with the State Mine fire to avoid it merging in an out of control situation. The Linksview fire began on October 17 in the Lower Mountains, when it is alleged that a tree fell onto a power line on Linksview Road in Springwood, which, as unravelled in the previous chapter, played an important role in the construction of human and non-human 'culprits'. Ultimately this fire would destroy 193 homes and damage a further 200 across the towns of Winmalee and Yellow Rock. By October 21 there were fears that the State Mine fire would move east down the Grose Valley and merge with the Linksview fire creating a mega-fire that would threaten townships throughout the Blue Mountains. Authorities moved to shut down all schools and day care centres in the area and urged all residents to evacuate.

People across the Blue Mountains were affected by these fires to differing degrees. In the Lower Mountains, the term 'fire affected' was generally used to denote those who had lost homes, pets, or gardens, or who had significant property damage in the October fires. Some recovery workers used the term reluctantly as there were many people affected by the fires who did not lose material property. 'Fire affected' was also thought by some recovery workers to be too benign a term to capture the devastation and loss that people had gone through with the fires. Where I refer to those who were 'fire affected' in this research, I include those who had children at the schools who were stuck in the fire, and those who were at home and had to evacuate at the last moment – these were significant and traumatic experiences for many residents. Ten of the forty formal interviews I conducted for this research were with 'fire affected' residents, five of which were with residents whose homes were destroyed by the Linksview fire. Arguably, many more people that I interviewed were significantly psychologically impacted by the experience of the October fires, but for simplicity and clarity, I have kept the term 'fire affected' restricted to those in the situations described above.



Figure 4.1 Smoke from the Linksview and State Mine fires in the Blue Mountains shrouds the Sydney skyline on October 17, 2013
Source: Morgan (2013).

Increased incidence and severity of fires has been predicted under climate change models for some time (Handmer et al. 2012). The first major report by the Australian Climate Council in 2013 discussed in depth the increased fire risk across Australia as a result of climate change, exploring the link between climate change and the three factors that start bushfires – ignition, fuel and weather (Hughes and Steffen 2013). As the October fires were burning, some citizens and politicians too articulated this connection. 'This is what climate change looks like', tweeted Australian Greens member Adam Bandt with an apocalyptic image of the Sydney skyline shrouded in black smoke, adding that Prime Minister Tony Abbott's policies on climate change meant there would be more of these tragic disasters to come. Christiana Figueres, the executive secretary of the UN Framework Convention on Climate Change, warned Australia that there would be more events like this without action on climate change (Ireland 2013). Yet some scientists were reluctant to link the event with climate change directly. In an interview (*Lateline*

2013) David Bowman, Professor of Environmental Change Biology at the University of Tasmania, said:

This question of the fingerprints of climate change is a real – um, the devil's in the detail. The fact of the matter is that there is an enormous amount of variability in fire seasons and the duration of fire seasons. And unfortunately, because the history of Australia, the instrumental history of Australia is very shallow, we've got a very poor ability to discern departures from what we would call historical variability. But I would say that when highly experienced firefighters are saying they're seeing things that are unprecedented, you've got to sit up and listen.

Two facets of this statement that point to the complex intersection between scientific data, lived experience and culture in the interpretation of climate change and its associated disasters. First, the question of climate change in relation to this fire event is taken to be sound and valid; it cannot be dismissed out of hand, even if the limited historical data on fire in Australia and the enormous variability in fire seasons make it difficult to discern departures from the norm. Second, the accumulated knowledge of bushfire behaviour by frontline workers is recognised on a par with scientific data. The 'fingerprint' metaphor anthropomorphises climate change, but leaves unclear whether a benign or wilful transgression is meant: is it a thief leaving evidence of their presence that is invisible to the untrained naked eye? Or is it a child making patterns on a car window with their sweaty hands, something anyone might discern who is they're familiar with car windows and children?

Scientifically speaking, rarely can any natural disaster be unequivocally linked to climate change, though this is beginning to change as climate downscaling modelling improves and the effects of climate change become more pronounced (Flato et al. 2013; Handmer et al. 2012). This became painfully clear three years after the October fires, in an extreme bushfire event on the southern island of Tasmania. In February 2016, vast swathes of World Heritage forest were burning across the North West of the state. The glacial alpine forests of the Tarkine region have trees over 1000 years old that are remnant fragments of the ancient Gondwana ecosystem that were burning or under threat from bushfires. These trees grow in peat bogs or moist rainforest dells, areas traditionally too wet to burn. Fires in such areas are extremely rare, maybe once in a

millennium. Unlike Australia's eucalypt forests that use fire to regenerate, these plants and ecosystems have not evolved to live in a fire cycle. If burned, they die. These fire sensitive vegetation communities can take hundreds or thousands of years to recover following a bushfire (Tasmanian Parks and Wildlife 2013). This event was ecologically devastating, and scientists linked it with the advent of a new fire regime caused by the changing climate (Morton 2016). Though the fires were started by lightning strikes, Tasmanian Parks and Wildlife stated that lightning fires in the area should no longer be viewed as 'natural'. Because of the influence of climate change on storm activity, fires ignited by lightning have doubled in the last decade. Lightning has become the leading source of fire in the area, which is a departure from the historical sources of fire such as arson, farming, and planned burns (Tasmanian Parks and Wildlife 2013). This time, David Bowman made a more definite statement about the role of climate change, in a news article about the Tasmanian fires: 'We are in a new place, we just have to accept that we've crossed a threshold, I suspect. This is what climate change looks like' (Mathiesen 2016: para 8). He continues:

It's a bit like knowing someone you love's got cancer. You have to get your mind around the inevitability, I suppose. You grieve. It's a sadness. It's going to be pretty hard for this stuff to survive, certainly in the 100-year time frame. It stretches my mind to believe that there'll be much of this stuff left in 50 years (Mathiesen 2016: para 17).

What was striking about the fires burning in Tasmania was their irreversible damage, and their clear departure from what was considered 'normal', by the scientific community and in the Australian culture. The more definitive role of climate change also gave scientists like Bowman more room to freely express not only his scientific opinion but to vulnerably acknowledge his profound grief about climate change.

The unquestioned background

Alfred Schutz (1975: 117) made the simple but important observation that 'all problems arise on the background of what had been given as unquestionable'. In other words, to share a common narrative about what is exceptional, there must be some agreed upon ideas of what is to be expected, from what has come before and will come again. Applied to the context of this discussion it means how a community makes sense of a fire event is shaped largely by the

existing cultural narratives about fire that form their 'unquestionable background'. This background of the taken-for-granted is not simply there; rather, it flows from living in the world where we always experience ourselves as 'being within a certain situation' that we must define (Schutz 1975: 122). The concept of a 'situation to be defined' contains two aspects, one originating in the ontological structure of the pre-given world, the other from the 'actual' (that is within actual reach) direct perception, but including the existing 'stock of knowledge' about the world. The 'certain situation' that Blue Mountains residents found themselves in during and after the October fires, and how they defined that situation, is the focus of this chapter. The effects of the pre-given structures of naturalism described in Chapter 2 are evident in the narratives outlined below. But the main focus of this discussion is on the residents' existing stock of knowledge – the intersection of their direct experience of bushfire and the cultural myths prevalent in the community that singled out objects, words and concepts from the event in order to define the situation. As will become evident, the situation was variously perceived as typically alike to a situation previously defined, as a variation on a similar situation, or as entirely novel.

Typifications, as Schutz further explained, are learned in the course of socialisation in relation to 'structures of relevancy', and they can take many forms, including labelling and language. Typifications are habitual or traditional conceptual tools for dealing with the situations and problems that emerge in everyday life:

We do not experience the world as a sum of sense data, nor as an aggregate of individual things isolated from and standing in no relations to one another. We do not see coloured spots and contours, but rather mountains, trees, animals... this typification takes place according to particular structures of relevancy (Schutz 1975:125).

Social and cultural groups establish their own 'domains of relevance', and individuals act in a social world that has already provided these broad domains in which they orient themselves accordingly. Typification and relevance are closely connected; thus people would be unable to recognise what is relevant and what belongs to which domains of relevance, were it not for their acquaintance with the 'socially approved systems of typifications and relevances' (Schutz 1970: 122).

In locals' interpretations of bushfires, scientific explanation formed one of the most important domains of relevance. Most typifications of bushfires in the Blue Mountains were at least superficially predicated on scientific research that translated into laypersons' 'common sense' understandings of why and how bushfires occurred. Other domains of relevance that typified the October bushfires were historical (archival newspapers, film footage and formally recorded accounts) and experiential. Scientific, historical and experiential accounts were often situated in relation to a concept of 'deep time' that was rooted in the colonial imaginary – an era predating white colonisation when mythological Aboriginal people lived in harmony with the land for thousands of years and had an 'innate' knowledge of fire and how to control it. These accounts are both reinforced and contested by scientists and geographers who specialise in fire ecology and analyse human impacts on the landscape in Australia preceding European occupation (e.g., Black and Mooney 2007; Black et al. 2008; Head 1989; Mooney et al. 2007; Williams et al. 2012; Williams et al. 2015), and by historians, anthropologists and archaeologists who study Indigenous practices around fire throughout Australia, (e.g., Gammage 2012; Hallam 1975; Horton 1982; Jones 1969; Bird et al. 2016).

For those experiencing environmental change, the normal is often equated with what people – family, friends and neighbours – have previously experienced in that environment. This has been called 'a shifting baseline' (Papworth et al. 2009 cited in Lindenmayer and Laurence 2012: 13). As David Lindenmayer and William Laurence explain, on a larger temporal scale it means the environmental management practices occurring over long periods of time that substantially modify environmental conditions, which in turn influence human perceptions of what is 'natural' in a region (Lindenmayer and Laurance 2012). For example, they write of wet forests in south eastern Australia that have been hugely impacted by recurrent logging, frequent high-intensity wildfires, and post-fire salvage logging that has led to widespread even-aged regrowth stands. This meant that forest managers failed to recognize that multi-age stands were once widespread, in part because evidence of them had largely vanished from wood-production zones (Lindenmayer 2009 cited in Lindenmayer and Laurance 2012: 13). The shifting base line blends with powerful mythologies and cosmologies about the bush, although this blending is not without tension. In the face of scientific evidence that challenges such cultural wisdom about

how an ecological system functions, lived experience holds greater relevance for people than scientific data (Connor 2016).

In May of 2015, I attended 'Science at the Local', a public event run by the local neighbourhood centres with the aim of improving scientific literacy for young and old people in a community building context. This session's talks were given by two fire scientists, the first titled 'Human-Fire Interactions in Australia – Folklore Vs. Science', the second, 'Bushfire and climate change: known unknowns and unknown unknowns'. On this Sunday afternoon, one of the large function rooms of the Springwood Sports Club was filled with people mostly over 40 years of age. Set up like a university lecture, both speakers were granted authority of knowledge as they began to unpack what they saw to be myths about the historical fire regime in the Blue Mountains and around Australia. One scientist showed through analysis of charcoal core samples that there has been more fire activity over the 200-odd years of the post-European period than in 70,000 years prior to it (c.f. Mooney et al. 2011). He was particularly keen to point out that his core samples taken from the Blue Mountains showed the pre-colonial fire cycle was one major fire roughly every ten years throughout the Greater Blue Mountains region, while a fire that burned through the exact same spot in the Blue Mountains was likely to occur just once every five hundred years.

For some, the scientists' accounts provoked puzzlement. After the talk, I ran into an acquaintance who had grown up in the Blue Mountains and currently lived at Winmalee. She shook her head in disbelief as she reflected on the statistics that the scientist had shown about the fire cycle in the Blue Mountains. 'I mean, that's just not right. I've seen a fire go through the exact same spot in my area twice or even three times in my own life. We expect a fire in our area every five to ten years.' I did not get the impression that my friend was disputing the scientific validity of the information. The way she spoke indicated a kind of shock or attempt to manage her own cognitive dissonance as she tried to make sense of her lived experience of fire in relationship to this scientific data. She moved back and forth between her own sense of what was normal and what was considered normal in the scientific research, finding she simply could not reconcile the two. It was a short exchange between us, and we did not discuss the reasons behind these differences, or even the implications of the difference. But I was struck by her

understandable investment in her own experience of the fire cycle in the face of abstract contradictory evidence, and more so by the way that she linked her experience to what was normal.

The inevitable tinderbox

Bushfire powerfully reveals the extent of human entanglement with the natural world. Unlike an earthquake or a violent storm, the ignition of a bushfire is frequently from a human source – a cigarette butt, a campfire that has not been put out correctly, an arsonist, illegal hazard reduction burning, or in the case of the Linksview fire in Winmalee, a downed power line. According to the NSW National Parks and Wildlife Service, approximately 75% of all fires are attributed to human causes (NPWS 2004: 34). A severe or catastrophic bushfire emerges from a dynamic cultural-ecological process; its causes and conditions defy dualistic categorizations of natural and cultural, and the explanations about fire that emerged from the community in this context both challenged and reflected this unbounded and unstable process.

As I learned quickly, to ask a long-term Blue Mountains resident about their experiences of bushfire, would regularly mean there will be a long tale to be told. Over time, people become familiar with the years of the major fires, the ones of significance that have permanently singed the collective cultural calendar. I would often hear phrases such as: 'bushfires come in patterns,' 'if they start here they end there', 'if the wind's blowing this way they'll head that way'. 'this year's going to be a bad one,' 'there's plenty of fuel out there, dry like a tinderbox, just waiting to go up.' When discussing the chances of a bad fire season Mountains locals frequently invoked the metaphor of a tinderbox. Before the 2013 fires, a long-term resident told newer resident Greg that the bush was a tinderbox, and warned him: 'We're heading for something big.' Paula from Springwood told me how she felt climate change would impact the Blue Mountains: 'Overall things are going to be a hell of a lot drier, we're going to be living in a tinderbox.' Contained within the term tinderbox is the potent proximity of fire, a landscape so dry and combustible that it could catch light at the slightest spark. A real tinderbox is something that has been put together deliberately – collected and arranged by a person with the purpose of creating fire, typically containing flint, or sulphur tipped matches to make that tiny but critical spark, as well as a small amount of dry materials for tinder. The tinderbox metaphor implies that the forest is similarly

designed to burn, touching on one of the contentions around fire in the Blue Mountains, the fraught question of who or what is the invisible entity behind the creation of the tinderbox forest?

Three fire narratives

Perhaps the most prevalent narrative about bushfire in the Blue Mountains that structured the collective experience of any fire event was that bushfire had always happened, that bushfire was inevitable. One recovery worker told me, 'Australia burns. That's what we do best. We burn. And we have the trees that burn.' Despite this consensus, the underlying causes of fire, its ecological role and how frequently it should be occurring, and where, were contested ideas that came to define the 'situation' of the October fires for Lower Blue Mountains locals. Below, I consider three different narratives about bushfire, and what this meant for how climate change came to be included or excluded from the situational definition of the October fires, that is, whether it had, or could attain, relevance in the community. These latter differences have shaped particular narratives about fire, which can be grouped into three main types.

Narrative one: Natural fire cycles

A regular, even predictable, pattern of fire is at the centre of the natural cycles narrative. Responsibility for fire events was set outside of human control – fires were correlated with the natural climatic cycles of the Southern Oscillation Index: they were more likely to occur during the droughts of El Niño, and could be expected at particular times of the year. In this narrative, the cycle of fire was associated with the natural rhythm of an ecological system that had been dependent on fire for thousands of years. Here, it was thought that fires would be happening every ten years regardless of human habitation as they were a part of a 'natural system' that preceded European colonisation. Complicating the exclusively 'natural' character of this pattern were the local understandings of traditional Aboriginal land management that included burning off areas of the bush – either to clear the lower storey of the forest for travelling and hunting purposes, or to assist in the regeneration of the bush for farming purposes (Gammage 2012).



Figure 4.2 'Once, not so long ago'. Artwork by Blue Mountains local, Darug artist Leanne Tobin. Source: Fireworks Art Exhibition, Springwood Neighbourhood Centre Facebook page.

For the natural cycles narrative, this pre-1788¹⁴ practice was associated with 'deep time' and hence categorised as a natural process, rather than as a cultural practice associated with 'historical time' after white invasion (Head and Muir 2006). In the natural cycles narrative 'nature' is the invisible creator of the tinderbox – both through climate and drought, as well as through the evolution of the fire dependent ecology. There is a boom and bust impression of growth, where fire is seen as the natural regulator for when the bush has grown too thick, when certain species of plant need to germinate when particular weeds grow too thickly in the understorey. Here fire comes to restore the 'natural balance':

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¹⁴ The year of European invasion and settlement in Australia.

I think the type of environment we have here is, you know, through evolution is designed to burn. And to regenerate through burning and things like that, so... you can't have the bush we have without that aspect of it.

Georgia, Winmalee resident, Fire Affected.

It [the bush] was so thick, and I remember saying to my husband at the time, this is not going to go well for us later on, because these things are all growing so thick and lush [...] And, and then, of course, you know the fire came through, and it's cleared much more back to how I remember it when we first started walking it. But then also over that period of time when we were walking that trail, we'd also had the 94 fires come through. I had been walking it in high school prior to the 94 fires, and then it was all cleared again, and I'm wondering if maybe this lush regrowth is just part of the cycle.

Jasmin, Winmalee resident.

The natural cycles narrative crafted a knowable container in which any fire event takes place. The notion of a cycle created an atmosphere of expectation that was both reassuring and anxiety provoking. It was a useful tool for creating a culture of preparedness — one should always be prepared for a fire because we live in an environment where fire is a natural part of the ecological process. It was not linear but cyclical, so the occurrence of a fire event should always be expected and more so at these particular times in the wider cycle as people had come to understand it. Conversely, because so much of the emphasis was on the process of fire lying outside of human control it also produced apathy and resignation in the community. The understanding of fire as inevitable and predictable could over time diminish your sense of danger. As the following two statements convey, fire events tended to be experienced differently by those who had lived through several 'cycles' of fire and for those who had never experienced a bushfire:

It seems like every few years we have a big fire go through. I think in 77, and then 87 and then 94 and you know, oh and 2001 there were big fires. So, it's I guess, you know, if you live up here you kind of get used to that.

Anne, Winmalee resident, Fire Affected.

It's sort of reassuring to hear them [longer term residents] talk about it because if they've lived through a few bushfires, and you know, they're like, it comes in cycles, you know, so it's probably going to be ten years before we have one again that sort of thing. [...] You know it's all burnt out now, so there's nothing left to burn you know that sort of thing.

Louise, Winmalee resident, Fire Affected.

The natural cycles narrative emphasised and celebrated was the natural capacity of the bush to recover from a fire. Evidence of regeneration and recovery of the natural world received more attention than signs of irrevocable ecological damage, which tended to play out on a longer time scale and in less obvious ways than the visible regeneration of plants and trees in the immediate aftermath of the fire. Signs of early recovery of the bush were taken as heartening symbols of resilience in a context where the recovery and rebuilding process for people is seen to be far longer and more complex. In this narrative, the bush was intrinsically connected with fire in a life-affirming way, whereas houses and the people were considered outside of, and negatively impacted by the fire's destructive path. Here is revealed a cosmology where the bush, or 'nature' and its historical evolution was larger and more powerful than the humans who inhabit it. Human agency or ability to impact the overall functioning of this ecosystem is minimised, and this was experienced as both reassuring and threatening. As discussed in Chapter 2, a belief in nature's robust and timeless resilience affected the behaviour of community members following a fire in the measures taken to protect property and reduce their exposure to fire risk in the next cycle.

The primary domains of relevance that typified bushfire in the natural cycle narrative were experiential, privileging recent (in the last fifty years) and direct experience of fire, and local anecdotal histories. Scientific and formal historical accounts were secondary domains of relevance, selectively drawn on to bolster the credibility of local claims of knowledge. Pre-given ontological structures of naturalism were manifest in the separation of the natural dominion of the bush – where fire was seen to originate – from the cultural sphere of the suburbs that were 'impacted' by the fire. The emphasis in this narrative on the familiar, comparable and repeatable aspects of the October fires meant that climate change received little or no attention.

Narrative two: Fire can be controlled

The use of fire by Indigenous peoples to hunt, farm and manage the land throughout Australia for millennia complicated the notion of what was thought of as 'natural'. In this narrative about human control, culture had an important role to play in the ecological health of the area where they lived. In many ways, the 'fire can be controlled' narrative was reliant on many of the same ideas as the 'natural cycles' narrative but with one critical difference. It included the concept that fire can and should be managed by humans, that fire can be a tool of culture as well as nature that creates, sustains and protects cultural-ecological systems. The belief that the source of bushfire can be human, not just 'natural', complicates the natural cycles dualism of nature and culture. My purpose here is not to weigh in on the historical or scientific accuracy of this narrative – a debate which is ongoing (Altangerel and Kull 2013; Gammage 2012; Williams et al. 2015). Rather, I seek to understand how Lower Mountains residents used the 'fire can be controlled' narrative to construct and manage their experiences of fire, and to shed light on their sense of belonging in the bush.



Figure 4.3 A drip torch used by the RFS in hazard reduction burning. Source: Lisa Maxwell, Blue Mountains Firewatch and Recovery Facebook page.

The Australian settler sense of belonging appears in uncertain and inconsistent ways in the many different attitudes to plants, animals and environmental practices that 'belong' in their backyards and the bush (Trigger 2003; Trigger and Mulcock 2005; Lien 2005; Head and Muir 2006). Practices around fire and hazard reduction burning also exist in this ambiguous terrain – not just scientifically regarding best ecological practice, but culturally in terms of how settler Australians enact their 'belonging' to the Australian environment through its stewardship, management and protection. Locals and RFS members often justified hazard reduction burning as continuance of an Indigenous cultural practice that the Australian bush had evolved with and depended upon – a common rationalisation that has been noted elsewhere (cf. Black and Mooney 2006). Fire became a symbol of nature's interdependence with humans, rather than a wrathful outsider wreaking havoc on human civilisation. The increase in severity and frequency in out of control bushfires was seen by many in the Lower Mountains as a problem associated with not enough 'burning off' activity. In this view, the interruption to the 'natural fire cycle' caused by white settlement could be remedied by reclaiming traditional Indigenous practices of regularly burning the bush:

Aboriginal people managed the land with fire, and we seem to have overlooked that fact at our own peril. So, allowing um, ground fuel to develop to you know really quite ridiculous quantities because we don't want to, I don't know, threaten someone's habitat, is um, foolish. And I think you know, Aboriginal people knew that, and used it very careful, carefully, it was carefully used to ah, manage areas rather than having something that is out of control from the go.

Eliza, Winmalee resident.

I appreciate the bush as much for just going out, walking in it, and I don't feel any different when I walk along with a drip torch and light it up and burn it out. Because I know that that's how the bush exists, it regenerates through flame and the Aboriginals have been doing it for hundreds of years before we decided to stick our noses out here, and in fact, we're doing more damage by not burning huge tracts of land as they did.

Matthew, Winmalee resident and RFS member.

Much like the natural cycles myth, the 'fire can be controlled' narrative regarded the bush as a hazard. This assessment was aptly contained in the term 'hazard reduction' (HR) used to describe the deliberate, controlled burning of areas of the bush by the RFS and NPWS. It also shares the understanding that the bush will inevitably burn because it has evolved to do so. The hazard reduction narrative situated humans in a position of responsibility to ensure that the bush burned in a controlled way so as not to threaten human life and civilisation. This was often extended to include the protection of wildlife as a slower and cooler burning fire is easier to escape for wallabies, birds and other creatures inhabiting the bush. Hazard reduction burning in the Blue Mountains was an emotional topic. People expressed conflicting feelings about its effectiveness, with some expressing concern that it did more harm than good, speculating that it was humans contributing to the tinderbox, encouraging and even exacerbating a fire dependent ecology. Even those who privately expressed their opposition to the practice also articulated their own resignation to its necessity in the context of the Blue Mountains – the survival of the human community was paramount. Individual doubts about the effectiveness of hazard reduction burning, as well as expressions of sadness and anxiety in relation to hazard reduction burns were heavily policed by the community. I witnessed this on several occasions in social contexts, in the Letters to the Editor section of the *Blue Mountains Gazette* (BMG), and on the Blue Mountains Firewatch and Recovery Facebook page. Questioning the practice of hazard reduction burning was seen by many as tantamount to a betrayal of those who had lost their houses in the October fires. Any suggestion that the lives of plants and animals should be more deeply considered was often simplistically interpreted as a blasphemous argument to put 'nature' before human safety.

These disputes occurred along the familiar fault lines of the environmentalist and the developer, leaving intact the separating line between nature and culture. This policing of publicly expressed doubt about hazard reduction was connected to the suppression of more uncomfortable existential questions about the place of modern humans in nature, or the belonging of white settler society in the Australian bush and even broader ideological or philosophical debates about the human right to exploit or destroy nature for their own benefit. When people posted on Facebook questioning the necessity of HR burning, responses were often hostile, with comments being removed and blocked by the different pages' administration. When one woman questioned

the necessity of hazard reduction burning in the Blue Mountains Firewatch and Recovery Facebook page, she was met with several attacks:

You have to be joking! HRs are essential and nowhere near enough are allowed to be done! I don't like to see blackened bush, but would much rather see... 'controlled smoke' than a bushfire with 'uncontrolled smoke', I feel for the animals of course but I also feel for my friends who lost their homes last year. The Indigenous people of this fantastic country that we share have burnt the bush for thousands of years to regenerate the trees and plants and the animals instinctively know what to do.

Jenny Richardson, Facebook comment, 11 October 2014

This narrative constructed fire as a knowable and manageable force that could be harnessed and used by people in order to benefit the whole cultural-ecological system. Here human agency and choice in relation to fire were more emphasised than in the natural cycles narrative. While fire remained inevitable, there was a choice for the community to make between an unexpected and uncontrollable fire and an expected, controlled burn. Another commenter on the Blue Mountains Firewatch and Recovery page wrote:

Feeling rather emotional tonight. Can see the glow from the HR burn... from my house, and while rationally I know it's a controlled burn, and I welcome all the hard work the RFS are doing, and the safety that will come from it once it is completed. It has stirred up a lot of feelings I didn't realise were there.

Amanda Schuler, Facebook comment, 10 October 2014.

Control and safety were central tenets of this account with emphasis on the human capacity to both prevent and manage fire events. It also introduced the idea of 'good' fires and 'bad' fires. A good fire is planned, slow moving and entails no damage to human property or loss of human life. A bad fire is unplanned, unpredictable, fast moving, life threatening and destructive to property. Much of the perception in the Blue Mountains community was that more hazard reduction should be conducted as it was the primary line of defence for preventing 'bad' bushfires. The narrative that fire can be controlled necessarily begets the moral imperative that fire should be controlled, and fuelled the various debates and perspectives on how that control should take place. Those who believed that fire can and should be controlled argue that one of

the reasons for the increasing number and intensity of fires occurring in the Blue Mountains was the effect of growing bureaucracy and middle management control of how and when a hazard reduction burn could take place. Some RFS members mourned the days when, as a local brigade, you could make decisions about where and when to carry out hazard reduction burns.

The shift in the management of fire itself coincided with a shift in how the RFS was managed, and what was seen by some RFS members as a shift away from 'common sense', experiencebased local training and management to a stricter model of certificates and training requirements that affect people's ability and authority to even conduct hazard reduction. The locus of control had shifted from a local level based on experience and environmental knowledge to a regional level where decision-making was premised on scientific modelling and regulated bureaucratically. This tension in the RFS reflected the competing domains of relevance used to 'define the situation' of bushfire in the Blue Mountains – scientific and regional versus experiential and local. Scientific modelling of fire behaviour and fire regimes was the dominant way that hazard reduction burning was now managed in the Blue Mountains, and scientific rationale was used to allay community disquiet about their necessity, scale and timing, constructing fire as a knowable and controllable entity in the modern world. Typification of bushfire occurred in the modelling of fire seasons mapped over decades and regions. Fires (both wild and controlled) were identified, compared and diagrammed in geographic information systems computer programs. Nonetheless, the earlier quote from scientist David Bowman (Lateline 2013) also captures the contested domains of relevance between science and local experience in the typification of bushfire in the Blue Mountains: '... I would say that when highly experienced firefighters are saying they're seeing things that are unprecedented, you've got to sit up and listen.'

The cultural myth of 'fire can be controlled' emphasised local experiences of successful hazard reduction burning practices, as well as past fire events that were effectively fought by the RFS and community. The relevance of local technical experience of the RFS in the typification of bushfire was privileged above the average community member's assessment. Criticism or questioning of hazard reduction was frequently met with queries about the individual's experience of 'actually fighting a fire'. The effects of naturalism were apparent in this narrative's

basis in human mastery over nature, yet the hybridised account of the origin of fire in the cultural-ecological process also subverted naturalism's duality between nature and culture. The scientific basis of the 'fire can be controlled' narrative meant that climate change tended to appear as a data point to be incorporated into the future modelling of hazard reduction burns and out of control bushfires, though not necessarily directly pertinent to individual fire events like the October fires. The spectre of climate change occasioned the necessity for further management of the surrounding bush (larger clearings, more frequent HR burns) to ensure human safety under increasingly threatening conditions.

Narrative three: Humans are the fire risk

The third narrative was concerned with the negative effects of human interference in the natural world. Human settlement, especially recent urban expansion, was understood to be the central factor in the increased frequency and severity of fires in the Blue Mountains. People who embraced the 'humans are the risk' narrative typically expressed concern about the detrimental effects of hazard reduction burning, the new 10/50 legislation, the inappropriate development of ridgelines, and the spread of invasive weed species. If it was socially unacceptable to publicly criticise hazard reduction burning, it was a heartfelt concern for many of the people with whom I spoke. Publicly, especially in Facebook forums and the *Blue Mountains Gazette* letters to the editor, this narrative was associated with those labelled 'greenies', a term that was usually invoked as an insult or dismissal of a person's perspective in debates about how the urban-bush interface should be managed. In this narrative, the human ignition points of bushfires – deliberate arson and accidental ignition by locals burning off rubbish, the cigarette butts of ignorant tourists, electricity wires and hazard reduction burns gone wrong, received greater attention. The 'humans are the risk' narrative focused on what was characterised as the 'unnatural' sources of many fires that occurred in the Blue Mountains, particularly fires that threatened human life and property:

And we've got Katoomba, deliberately lit. Yeah, that's a pattern you know, that's almost like an annual event. You know there's people around that, that are interrupting... these aren't natural fires... And, you know, power lines — they're not natural! Is the risk, a natural risk or is it, you know, you don't get a fire without an ignition point and ignition

points have been mostly human related. Be it cigarette butts, be it deliberately started, or through power line management.

Robert, Valley Heights resident

The notion of 'good' and 'bad' fires was also evident in this narrative. A fire that was not 'natural' had moral implications. Particularly destructive bushfires were the result of poor town planning and badly designed houses. This perspective foregrounded human greed, ignorance and mismanagement in the creation of higher fire risk:

It would come every couple of years, always was a fire up on Singles ridge road, god knows why they put a community there, it's such a huge fire risk [...] the blocks used to go cheap because people would go, oh no, that's a fire funnel I don't want to buy there. [...] Yeah, they had all the warnings I don't think that ever should have been built out there. It's just pure greed.

Kylie, Springwood resident

Occasionally, people who invoked this narrative questioned the historical accuracy of Indigenous management of fire in the Blue Mountains, which, together with doubts about the soundness of contemporary 'back burning', was an otherwise taboo opinion to be had. One participant told me that I should interview him solely on the basis that I was unlikely to encounter anyone else who openly held the opinion that hazard reduction being conducted by the RFS was causing the increase in fire frequency and severity.

It's convenient for us to think that they [the Indigenous people who lived in the Blue Mountains] burned it all off. But they didn't. Some of my conservation society mates used to say about hazard reduction that when you do that, what you do is create, is an ecology that is fire prone.

Harry, former Winmalee resident, Fire Affected.

In fact, I regularly encountered people with doubts about the efficacy of hazard reduction burning and its historical precedent, though no one argued that the current hazard reduction regime should be stopped altogether.

Well, I would say this myth... is a myth, this stuff of... Aboriginal people did all this and it prevented wildfire is nonsense. I know that what we're doing is not working, but I think it's mostly because we've got more ignition sources. But you know feral animals... ecosystems have changed so much and fragmentation and yeah... I think it's fair to say we don't understand it.

Tim, Springwood resident and RFS member.

To return to the tinderbox metaphor and natural cycles, I point out that the 'humans are the risk' narrative placed a great deal more emphasis on the human contribution to the design of the tinderbox. Poorly designed houses placed in risky positions that had a known fire history, hazard reduction burning, and the more frequent occasion of deliberately and accidentally lit fires because of human settlement, were seen to be creating a more fire dependent ecology, leaching out the soil and creating the 'dry as a tinderbox' conditions associated with severe bushfire events. Akin to the 'natural cycles' narrative, the 'humans are the risk' narrative grew out of a cosmology that placed humans outside of nature, although by contrast, nature was generally viewed as fragile rather than resilient and powerful. 'Humans are the risk' also shared commonalities with the 'fire can be controlled' narrative, in that it perceived nature as something which had already been mastered or controlled by modern civilisation, in this instance with a detrimental outcome. This narrative suggested that humans had significantly impacted the 'natural' fire regime and were responsible for the mitigation of these impacts. This perspective, less determinate than the other two, attempted to account for both human control over, and subjugation to, nature. The chief domain of relevance in this narrative was scientific. Biology, ecology and even archaeology were drawn on by residents to question characterizations of modern bushfires as a natural or normal part of the fire ecology of the area. Humans were at best stewards of nature, at worst the source of its destruction. Given that science was the primary domain of relevance for the typification of fire in this third narrative, scientific modelling of global climate change sat most comfortably amongst other 'humans are the risk' explanations for fire in the Blue Mountains. However, climate change frequently figured in this narrative as a parable about the consequences of modern civilisation's unmitigated destruction of the environment, rather than as a 'scientific fact'.

Freak or Normal? The relevance of climate change

Each of these fire narratives is premised on the idea of an 'existing order' of things, which humans either had no impact on, had some role in maintaining, or were disrupting. These three perspectives variously informed people's experiences and constructions of any given fire event. Though they are separated out above for analytical clarity, it is important to note that in daily life they were often used interchangeably by the same person, even within the same conversation or sentence. Partly, this inconsistency reflected the complexity of causes and conditions that contribute to fire events that hence cannot be easily explained within a single coherent narrative framework. Nonetheless, as I witnessed people expressing these apparently contradictory stories about fire within the one conversation, I began to consider their social and psychological role in helping people typify a normal or expected bushfire. Precisely through their refractions, such accounts and their associated symbols served to contain the disorder produced by sudden and significant environmental change and its associations with anthropogenic climate change.

A bushfire destabilises people's notions of nature and culture in a very similar way to climate change. As Susanna Hoffman (2002) explores in her work on the Oakland firestorm of 1991, the re-emergence of dualistic schemes of nature and culture often occurs after a fire as people find ways to re-establish their sense of agency, control and order in the world. A fire connected with climate change can quickly become a multifaceted beast, in terms of its symbolic representation by the community in the aftermath. Hoffman's (2002) discussion of the Oakland firestorm shows how the community immediately positioned the fire as something outside of culture, something belonging to the wild disarray of nature. Causes were seen to be either natural or a misuse of nature for solving what was seen to be a cultural problem: weeds. In the Blue Mountains, the key contention around the October fires was not so much whether or not it was 'natural' but whether it was normal – a part of what was to be expected if you lived in the Blue Mountains, or unusual - beyond what had been previously experienced and what could be expected into the future. Secondary to this, in describing the fire's normality or abnormality, residents would draw on the complex armoury of tropes described above about the naturalness of the bush burning, or on the cultural history of fire in Australia, or they pointed to the cause of the fire as the spark of power lines and the extreme destruction as a problem of urban planning. Conversations around the fire were often slippery in this regard; they shifted between a discussion of causes, which tended to

be more centred on the natural or unnatural dichotomy, and a discussion of the character of the fire, which focused on precedent and the weather conditions of the day. Each account attempted to fashion an ordered explanation from the midst of the chaos and destruction of the fires. However, the unusual traits of the fire were not consistently aligned with the 'unnatural' causes, nor were the 'normal' qualities of the fire aligned cleanly with the 'natural'.

Schutz (1975: 117) asks, '[H]ow does it happen that a problem arises at all? How does it happen that that which has become questionable for us appears as worth being questioned? What is relevant for the solution of a problem?' In other words, at what point do things stop being 'normal'? When do things move from being problems that can be solved with the existing range of solutions at hand, to problems that require new knowledge to solve, to unknown problems beyond an individual's or culture's existing tacit horizons? The October bushfires were clearly defined as a situation to which people of the Lower Blue Mountains had to react, but people reacted and defined the situation differently based on both their biographical background and their belief or investment in their various understandings of bushfire described above, that is their existing stock of knowledge. How did it happen that the October bushfires became worthy of being questioned, and what was relevant for making sense of them? As different people and groups in the community strove to make sense of the October fires, different elements of the event were singled out.

Some people situated the October fires within a pattern of fire behaviour that they had either personally previously experienced, or heard about from others, and thus designated it as 'normal'. The fires were seen as a situation whose general features were sufficiently familiar to be addressed and made sense of using the existing tools at hand. In Schutz's (1975: 123) terms, for these people, the fires had a 'motivational relevancy'. Certain familiar situational elements – the lack of preparation in the community, poorly maintained gardens, the path of the fires and what they understood to be the natural fire regime of the area, were recognisable elements to come to terms with and resolve, where possible, by better preparing for future events in their own garden and home. Motivational relevance works adequately only in situations whose general features are familiar. For other residents, the new or unusual aspects of the fires – their speed, their occurrence so early in the fire season, the scale of their destruction – meant that the

fires and the subsequent recovery process were not simply a 'situation' in which to act. Rather, the situation had become a 'problem', one that could not necessarily be pragmatically solved with the existing tools. People were thus concerned with the recognition and definition of this problem they had on their hands – were these fires a one-off freak event, or was this the new normal that people must adapt to? Here, the individual shifts from 'actor' to 'problem solver'. To solve the problem one must define what the problem is. The problem, therefore, becomes centrally relevant, it is a theme of people's cognitive efforts – it has gained 'thematic relevancy' for the individual and feasibly the community at large.

The third kind of relevance, what Schutz called interpretational relevance, is an extension of thematic relevance. The recognition of the problem demands further interpretation. This new interpretation is attained through a process of broader contextualization, where the 'problem solver' situates the problem in the larger context of their existing stock of knowledge that may have a bearing on the understanding of the problem. If the theme of the problem can be easily explained by 'routine knowledge', interpretation occurs quickly and action can be taken. If the problem is not solvable by way of routine knowledge the individual must make additional efforts towards a solution, and what she singles out for these extra deliberate efforts fall into the domain of interpretational relevance. These systems of relevance - motivational, thematic and interpretative – are to some extent socially and culturally conditioned and do not necessarily come into the conscious view of the individual at all (Schutz 1975: 131). The selection of material from the background that becomes interpretationally relevant is learned. From childhood people learn what to pay attention to and what to bring into connection to define the world and their situation in it. Thus the conditions under which problems are seen to be adequately solved and explained is also 'socio-culturally co-determined' (Schutz 1975: 129-131). As pointed out by Kim Fortun (2014), and discussed in Chapter 2, the functionalist industrial logic born of the naturalist ontology is evident in late industrialism where 'things are considered in themselves rather than connected and enmeshed' (Fortun 2014: 313). It is therefore not surprising that climate change, with its complex distributed causality, squarely in the scientific domain of relevance requiring technical knowledge, was not often seen as interpretationally relevant or brought into connection with local experiences by participants:

Oh, I don't know that much about it [climate change]. I'm sure that it probably is a contributing factor, but I don't know enough about it... lucky you said you don't need us to be experts!

Nicky, Springwood resident.

The October fires were a situation that became a problem with thematic relevance in the community of the Lower Blue Mountains. Residents singled out unfamiliar problems in need of further interrogation, including: their occurrence incredibly early in the fire season without warning; the unexpected timing that caught residents off-guard and vulnerable; their speed and destructive capacity, which left many running terrified for their lives; their intensity that melted steel and left little to be recovered; and, the fact that the Linksview fire had started in a residential area, not in the bush. Many people expressed feeling really afraid of fire for the first time, despite having lived in the Blue Mountains many years. As different individuals in the community strove to make sense of the October fires, different elements of the event were highlighted. To draw on Schutz (1975: 123), this selection served to define the situation in light of their purposes on hand – be it a decision about rebuilding, preparing for future fires and recovery processes, or decisions to leave the area altogether. Below, two residents grapple with how to typify the fires, comparing them with previous events and applying their existing stock of knowledge about how and why fires happen, yet for both, the fires were 'incredible'. In other words, not credible, surpassing their beliefs about what they thought was possible. They became a problem that was not easily recognisable, requiring further definition:

Oh, look, certainly that last one was something incredible. That was something we've never seen. I've never seen. Whether that's a one off, or that's going to be... Look that happened down in Victoria, it was like that, these are the firestorms, that was yes, I guess. Yes, they seem to be... worse now. Although having said that I don't know there's the one in 94 that was pretty big, the ones... yeah but nothing like that, no, that was huge, that was so big and so intense. That's scary you know. That's nothing we've come across before.

Chloe, Springwood resident, Fire Affected.

I think, I mean we will always have fires because we have colonised an area that is a high risk and we have things that create fires like people who smoke and throw their butts out the window. Or we have exposed power lines and you know people who burn things in their backyard (...) but that day the wind was incredible. Just incredible. And not normal. At all.

Jasmin, Winmalee resident.

In order to explain its scariness, its intensity and the abnormal wind, people looked to a context of interpretation that moved beyond their existing horizons of experience. It was here, as the problem of the fires gained an interpretational relevance, that the subject of climate change would arise. Very rarely did people explicitly mention climate change as a contributing factor to the unusual or freakish character of the fires. However, questions of cause, responsibility and blame, and characterizations of normality or freakiness became indirect ways to talk about what was socially unspeakable.

Now whether people say it is definitely because of climate change, I don't know, but the conversations were happening everywhere and even in my office. And they'll say, and I'll say, 'how are you going', and they will relive it. And they'll say, 'we just can't, that's just never happened, we've never experienced that before, why? This is so out of our experience of living here so it must be linked to something else because it's not normal'. Yeah, so it's not so much people thinking of it, as like a freak random event, but wanting to put a something on it to say, well climate change is why that has happened to us. They want to have a something to say, and it does seem to be a logical explanation.

Kim, Recovery worker.

I mean I've heard people say um, you know there's going to be more bushfires, so acknowledging that perhaps something is different in the environment, but not saying, like I guess, labelling it climate change. I guess that would be both residents affected but also the organisations involved. Sort of acknowledging very much that this is not the last

bushfire and there will be another big one and there will be more than we've had in the past, but not explicitly.

Rebecca, Recovery worker.

In the media, Shane Fitzsimmons, Commissioner of the NSW RFS, made clear links between the 2013 fire season and climate change (Philips and Malone 2014), yet in the local community climate change was referenced obliquely. For example, there was debate about the use of the terms recovery versus resilience in discussing the process of healing and rebuilding after the fires. One of the recovery workers said in a speech to the community, 'Recover means to return to normal which is a bit of a misnomer in the current environment where there is no normal.' Many perceived the October fires as much more serious and damaging than anything they had seen or heard of before. As the mayor said in a speech on the anniversary of the disaster, these were 'the fires that changed the Mountains forever'. Jason, who lost his Winmalee house, said, 'I guess the thing is that was a bit of a freak fire, but... you know freak fires... I think could be becoming more frequent. May not be so freak anymore.' On the Blue Mountains Firewatch and Recovery Facebook page people discussed the likelihood of future fire disaster where the October fires set a precedent. One commenter wrote:

I have a horrible feeling... it will not be the exception. It could easily happen again. The weather just seems to be getting worse every year.

Michelle Webster, Facebook comment, 21 November 2014.

It was the embodiment of difference that was most relevant to the discussion that ensued after the October fires. People debated with one another whether or not the fires transgressed the category of a normal fire, and they also pondered for themselves what this might mean for their future living in the Blue Mountains. Notably, talk about the fires *not* being unusual or freakish also directly addressed climate change. As one long-time local said, 'Fires are a part of living in the Blue Mountains, nothing to do with climate change.'

While all people experientially understood the link between weather and bushfire and most grasped the scientific link between climate change and weather, they were often reluctant to acknowledge or look at the role of climate change in their recent experience of bushfire.

However, like other communities undergoing events and environmental changes related to climate change, it was clear that global climate change discourse was affecting the local explanatory narratives of this event (Milton 2008a; Rudiak Gould 2011). Climate change was buried beneath talk of the fires in euphemisms and silences, in the residents' expectations for the future, and also in the community's behaviour around rebuilding and recovery, which will be taken up further in Chapters 4. Superficially though, climate change had little relevance for those addressing what was characterised as the typical situation of bushfire destruction and recovery. For those who were questioning the reason for the fires' severity and timing, climate change was a new concept that was added to the existing stock of knowledge regarding fire behaviour. For those planning for future fire disasters, such as the RFS, NPWS, the BMCC and those in the community sector, there was recognition of climate change as a problem that demanded further interpretation. However, this process of further interpretation was not elaborated on in public because of its politically touchy standing in the Australian context. The process by which climate change was made irrelevant to the local conversation about the October fires will be more comprehensively investigated in Chapter 5.

A culture of ambivalent expectation: everyone is always expecting a fire, except when they're not, which is a lot of the time

So always that difficulty of coming to terms with that that's always a possible threat and risk but at the same time, it's only a, a likelihood, it's not a definite, so...

Belinda, Springwood resident.

During the fire season in NSW, which traditionally runs from October to March, the possibility of fire simmers almost constantly in the background, whispered in the rustling of gum leaves, bright green and lush in the boundless growth of the bush, hot and dry in the back of your throat at 10 am. Casual and stoic in the conversation on the street, tentative and paranoid in anxiously typed missives on Facebook, ever present under sweaty fingers swiping through the Fires Near Me app as people check for any new warnings about fires occurring in the area. In the introduction to an edited compilation of Schutz's work on phenomenology and social relations, Helmut Wagner (1970) explains that typifications also play a role in anticipation. Drawing on

Husserl's work, Schutz explained that anticipation depends on two typical idealisations – the first being the assumption that what happened in the past can and will recur in the future; and the second, that your own response or action can be repeated. Using these idealisations, people express their assurance in the basic structure of the life world, even though any experience has its 'horizon of indeterminacy' (Schutz 1970: 138) that makes absolute certainty impossible. After the October fires, conversations were centred on whether or not the event was a recurrence – that is typically alike – of previous bushfires experienced in the area. For many people the idea of recurrent fires was a reassuring fact, rather than a disturbing one, it reinforced rather than destabilised the basic structure of the life world. It meant that previous actions taken to both prevent, prepare and fight fires would remain applicable into the future.

I now turn to the role of expectation in the suppression of anxiety or other emotional expressions regarding environmental change, something that I will take up again in relation to climate change in Chapter 6. People's expectations and anticipations around bushfire were intimately linked with the notion of cyclical inevitability that was foundational to each of the three narratives about bushfire in the Blue Mountains. Because of this, discussing prevention, or even the idea of prevention, could wind up feeling at best very abstract and at worst completely redundant. The cyclical thinking of disaster victims leaves people feeling 'powerless to alter overall or underlying circumstance. Preventative acts allay nothing' (Hoffman 2002: 134).

In a workshop that I attended about extreme climatic events and bushfire in the Blue Mountains one of the facilitators asked the group of council workers, RFS, State Emergency Service (SES) and community development workers about the difference between prevention and preparedness activities in the community. What transpired was general confusion about these two terms. People said that preparedness never really stopped occurring. Where did prevention end and preparedness begin? One person commented, 'We are always expecting a fire.' Despite this, many people were caught by surprise on the day that the Linksview fire hit. The stories emerging after the event were of near misses and lucky breaks, sprinkler systems not working because the town water supply was being used to fight the fire and they had no pump, people with pumps but no knowledge of how to use them, people fleeing for their lives with nothing but the clothes on their back.

RFS members I spoke with discussed the ongoing difficulty of engaging the community in a meaningful way that led to concrete, widespread preparedness activity. RFS research and communications strategy point to the fact that people widely underestimate their own risk exposure (Eriksen and Prior 2011; Mowska et al. 2016). Or even with awareness of the risks, people do not undertake necessary preparedness work promoted by fire authorities (Eriksen and Gill 2010), particularly residents who are a part of an 'amenity-led migration' from city to more rural areas (Eriksen and Prior 2011). Many people I interviewed and encountered in the community expressed their ambivalence about preparedness. They expressed, on the one hand, an increased anxiety on high fire risk days and desire to be more prepared following the shock of the last fires, but also admitted that they had done little or nothing concrete towards being more prepared in the future:

Those days make me nervous 'cause of what, I mean we didn't lose anything, but because of that, and really conscious too of how bad our fire plan was and how I have to really get my shit together when it comes to that stuff, which by the way, I still haven't done.

Chloe, Springwood resident, Fire Affected.

I think as a community, people that have been here a long time are really blasé about it, but I think that was part of the shock, was that 'holy shit all these houses burnt down'. We were really lucky that no one got killed. Maybe we probably should take it a bit more seriously? But even as I'm talking about it, it's like, yeah it'll be right.

Nicky, Springwood resident.

Most of what the RFS is dedicated to outside of directly fighting bushfires is educating and motivating the community about fire preparedness, and they report great frustration and difficulty with this task. Many people are complacent; they know the dangers but cannot really engage with them. Discussion of risk, or the choice to live in the Blue Mountains, often shifted quickly from the more practical or mundane considerations of clearing out your gutters and

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¹⁵ 'Amenity-led in-migration (popularly referred to in Australia as 'tree- or sea-change') refers to the movement of people away from urban centres predicated on desires for lifestyle change, affordable property, and/or the attraction of natural environmental settings' (Eriksen and Prior 2011: 612).

having a fire plan, to a conversation about how many times your house would have to burn down before you would consider moving. People expressed resignation about losing their homes at some point. My housemate said something to the effect of, 'Well, if the house burns down, it's just stuff, we're insured, you can replace stuff.' These discussions frequently lacked detail and nuance and demonstrated people's wish to avoid a thorough discussion of bushfire more than a real acceptance of the level of risk they were living with. Expectation and ideas of normality were employed not in the service of preparedness and engagement, but to avoid, deny or manage the uncomfortable feelings of fear and vulnerability associated with living in a bushfire prone area. This meant residents were surprised when their houses burnt down, even though they had been 'expecting' it:

You do sort of acknowledge that it's quite possible that it could happen to yourself at any time, but... I think there's always sort of like, I think it's kind of human nature in a way almost to think, oh she'll be right it won't happen to us.

Jason, former Winmalee resident, Fire Affected.

Yeah, it was a big surprise. One thing I didn't think it would be really in danger, there was always the chance there would be a fire but I always thought if there was a fire it'd be more likely to come up the Grose Valley, not to come from where it did, the speed it did and also yeah to just be such a localised fire, but uh, yeah so that um, it really did take me by surprise and I guess there's always the thought, oh it won't happen to us, it'll happen to someone else.

Dee, former Winmalee resident, Fire Affected.

When I asked Brian, who had lost property in the 2001 fires and his house in the 2013 fires, if he thought it might happen again, he replied:

No, not really. But I didn't expect it again to happen again after last time either. But you've got to look at things realistically. Um... it was 2001 that that last fire went through and we hadn't experienced a fire out here since '82, so that's approximately twenty years, uh then the next fire was then uh, thirteen years later, so you can probably think maybe there might be another fire in fifteen years' time. Um... if you ask yourself

where will you be in fifteen years' time, probably still here, but that is a question you ask...

Brian, Yellow Rock resident, Fire Affected.

These comments capture a culture of ambivalent expectation that is analogous with what is described as 'disavowal' in the psychoanalytic literature (Weintrobe 2013a). People moved between two opposite beliefs at once without apparent contradiction, a sort of expecting/not expecting dance that meant fire was bound to catch them by surprise, and at the same time remind them that they had always known that fire was a real danger and possibility if you chose to live in the Blue Mountains. Indeed, in a similar way to climate change, the expectation that bushfire was inevitable could also induce a feeling of ultimate impotence that contributed to inaction, disengagement or apathy. As one participant living in Faulconbridge shared, 'I was busy clearing out all the leaves from our gutters and picking up all the dry leaf litter from the ground in our garden and then I just looked out across the valley at all the bush and thought, what is the point of this when we're living next to that?' The expressions of ambivalent expectation were articulated differently by newer and longer term residents. One man who had grown up in Winmalee and still lived locally told me that his whole life everyone was always predicting a bad fire season, it was part of the local talk leading into any summer and that this had resulted in a scepticism for him about the reality of the danger each year:

That um Kansas feel to it where everyone's sitting around talking about when the next big wind. [...] It's the same in the Mountains where you, you know you'll see an old bloke, you know that you haven't seen for a while and he'll say, 'this year's going to be the big one, this year's gonna be the big one, you know there's plenty of fuel out there' and they use all the same phrases.

Damien, Faulconbridge resident.

One of my mates from the conservation society said we're going to have an inferno. So that's a scary prospect.

Amy, Springwood resident.

I encountered this kind of conversation many times during my time living in the Lower Mountains which spanned over two fire seasons. In several interviews before and during these fire seasons, people regularly commented on their sense that they were 'due' for another big fire somewhere in the Blue Mountains. Recovery workers said that people's sense of risk was quite elevated following the 2013 fires, leading to the proliferation of such discussion. Another unseasonably early fire in August 2015 had many people fearing another severe fire season for 2015/16:

We're heading into... someone's going to cop it this year. May not be us, but it's going to be somewhere in the Mountains.

Lindsay, Winmalee resident, former RFS member.

Looks like it's going to be a fairly bad sort of summer, but it's been doing that for all the time that I've been in the brigade, and the fires have just been worse.

Matthew, Winmalee resident, RFS member.

Longer term residents emphasised the 'knowable' and recurrent features of fires that they had lived through, emphasising the regularity of the fire cycle and the predictable routes of fires based on topography and wind direction. Anxiety about fire for longer term residents was expressed in disapproval or concern about newer residents moving up from Sydney who 'frankly have no idea' about how to prepare for the fire season or respond in a fire event. Newer residents who had not experienced a major fire before October 2013 felt their lack of experience with fire had led to an underestimation of risk, while the cyclical narrative about fire employed by longer term residents or 'locals' was taken as fact by newer residents who did not have their own experiences of fire to normalise the risk and worry associated with it. Local experience was the principal domain of relevance for individuals in the community when it came to allaying anxiety about future fire events:

I try to rationalise it by I suppose looking at the history of bushfires in the Blue Mountains and I talk to locals, like about these things and they say every five years or so it burns, it regrows (...) It's still worth living here compared to worrying about it. And as I said I don't worry about it all the time, it's only if um there is that threat. I suppose what

happened in 2013 changed it [...] I don't think about it too much. I only get concerned about it if the conditions are probably ripe for it.

Greg, Springwood resident.

The use of cyclical thinking to both stir up concern about the coming fire season, as well as to allay fears about the danger of fire, generated a culture of ambivalent expectation as residents swung between two differing accounts of what the cycle of fire meant for their lives. People use cyclical thinking to 'culturally manipulate catastrophes so that they appear, both in prediction and certainly in aftermath, to be anticipated and normal' (Hoffman 2002: 133). The unexpected becomes expected and typified. Typification is used to 'defang the monster' no matter its intensity or destructiveness. No matter its unseasonability or speed. If it can be made 'typically alike' to previous fires (a process connected with the hierarchy of domains of relevance) then it can be retrospectively seen as 'expected'. This illuminates the reciprocal dynamic between expectation and typification – in a culture of ambivalent expectation, if it can be expected then it can be characterised as normal or typical. According to Schutz, anticipations are based on 'typical expectations' in 'typical contexts', actual behaviour and events, however, at best only approach these 'typicalities' (Wagner 1970: 27). There are always deviations in the actual outcomes from the anticipated results.

Perhaps even more relevant to the discussion of 'normal' fire regimes and climate change, is the way that the individual's system of relevance undergoes changes over the course of their experiences. Accordingly, they see the event after it has happened in a different light from their imaginings beforehand. Their hindsight differs from foresight, but hindsight may also affect their recollection of foresight. Thus, the recollection of anticipated 'typical' outcomes may retrospectively be altered to avoid the discomfort of uncertainty produced by the deviations from what was originally anticipated. Over time, this process can lead to fundamental alterations in what is thought of as 'typical' without conscious effort on the part of the community to re-define what can or should be expected in a fire event.

The suppression and management of fear about bushfire was common in the community. For some, reduction of fear was based on their experience of regularly encountering fire, and feeling

that they understood how it worked and what its dangers were – either as a resident or a volunteer fire fighter. For others, however, fear was treated as optional – something they could choose to engage with or not, and many stated that they had made a conscious choice not to be afraid. Below I explore three different participants' perspectives and their experiences of fear in relation to bushfire which were reflective of broader trends I observed in the community.

Eliza, a Winmalee resident, expressed her experience of terror during the fires of 2001, which ran through much of the same area of Yellow Rock and Winmalee as the 2013 fires and destroyed much of her garden but not her home.:

Yeah it was Boxing Day, we were at home, it was quite terrifying (*laughs*). You know, to look out your dining room window and see the fire burning at the end of your veranda, um, however, the result of that was that I felt I could deal with a fire, we were prepared, the gutters were full and ah, yeah. That was alright, (*laughs*) it was frightening, it was very frightening. I didn't want to ever go through that again, so I don't, we sold Yellow Rock before the 2013 fires but that wasn't a factor in moving out of there. It wasn't the fear of bushfires. I think you live here long enough you just, learn to live with it really. I don't think I spend my years feeling threatened you know? And I've had people from outside the Mountains say, I don't know how you live in that sort of fear thing, and I, I don't.

Eliza, Winmalee resident.

Her fear is effectively contained within the experience of bushfire itself, but not permitted outside of it – even to the point of negating its impact on later decisions about where to live. She states very clearly, 'It wasn't the fear of bushfires', and goes on to share that 'you just learn to live with it'. It is not clear if she means living with the threat of bushfire or living with the fear, but implies that, for her, learning to 'live with it' involves an awareness of the threat of bushfire without feeling fear. Discussing experiences of fear and terror in the midst of a bushfire event was certainly acceptable. Discussion of anxiety on high bushfire danger days was also common, particularly on social media platforms like Facebook. But discussion of general anxiety or fear that was not correlated with a specific trigger or event, but with simply living in the Blue Mountains was met with mixed reactions. Some people attempted to shut down such discussions

as 'not useful' while others encouraged people to be more supportive of those who might be in trauma after losing their homes the October fires.

Other people may look at us and think they are some kind of lunatics you know, how could you? [...] It doesn't affect me one way or another. I don't feel anxious. Like yes, I've decided five years ago, consciously I knew that this is the environment where you really take a chance and I was thinking, okay, I hope it doesn't happen. But if it happens, I know we are going to look after this corner because the substation's not far away. So, they are going to look after the substation, so I'm safe (*laughs*).

Ursula, Springwood resident.

The feeling of exceptionalism expressed by this participant in terms of the actual safety of her house compared with general level of risk in the area was pervasive. People I interviewed often discussed their astonishment at where some people chose to live in the Blue Mountains and the risks they chose to live with. Most would then go on to explain why their choice of house was safer, with reasons varying from their proximity to a famous gallery, to the local high school, to the telephone exchange, or the electricity substation, to discussing the space they had cleared of trees around their house and other preparedness measures they had taken. Many felt they were safe simply because their house had survived other bushfires so far. This attitude to danger also reflects the community's understanding of risk that emphasised individual agency over the social or economic structural influences and limitations involved in people's decisions to reside in the area. The choice to live with bushfire risk was commonly expressed by the community as 'the trade off.' Many felt they had decided to live with the threat of bushfire as a necessary corollary of the choice to live in such proximity to the beauty of the natural world 16. It is easy to see how the suppression or denial of fear is endemic to such a worldview – if you are ultimately responsible for where you live and you are choosing to live with risk, you are also ultimately free to choose your feelings about the matter. Here, a brief exchange to illustrate the point:

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¹⁶ Eriksen and Gill's (2010: 818) research on bushfire and everyday life also found that high bushfire risk in was outweighed in residents' mindset by 'favourable real estate prices, geographical location, high amenity values, and the space and privacy that make it possible for city careers to be combined with rural lifestyles'. (See also, McCaffery 2004).

Nicky: It is really bizarre, isn't it? It's like this, oh yeah, it'll be, it'll be okay (*laughs*). It's really bad, like yeah, that's it actually. [...] I hate watching anything to do with fires, I think last year there was a big fire in America and I had to turn the TV off, like I couldn't watch it, and I thought oh there's obviously something sitting there, something going on, but um, yeah.

Beth: But certainly, on the surface you're not experiencing greater anxiety or fear of the future risk?

Nicky: Nope. Cause it won't ever happen to me Beth! (*Laughs*) That's the thing, that's the mindset.

Nicky, Springwood resident.

In this last statement, Nicky is more aware of her denial strategies and the 'something sitting there' underneath her attitude of 'it'll be okay'. In looking over the data from the interviews and field observations, laughter was common whenever people began to speak about their fear, or lack of fear about fire, and there was generally an acknowledgement that outsiders wouldn't understand their attitude that is also reflected in the excerpts above. I asked people that they found difficult about living in the Blue Mountains. In the forty formal interviews I conducted, five with people who had lost their homes in the 2013 fires, fire was raised explicitly as a difficult aspect of living in the Blue Mountains by just four participants. Two participants also brought up fire in response to this question to make clear that it was not one of the difficult aspects of living in the Blue Mountains for them. The commonly raised idea that outsiders might find it bizarre, crazy, or not understand their attitude to bushfire, actually points to the participants' reflexive grasp that they belonged to a culture specific to their locality that allowed them to live more comfortably with the threat of bushfire than others who do not belong to that culture.

My point is not to question whether people felt fear about bushfire – it seems likely that around the community there existed a full range of experiences from terror, to denial of fear, and genuine lack of fear in the face of the bushfire threat. What was interesting to observe in these interviews, and during my time living in the Blue Mountains, was the regulation of the expression of fear – about when, where and how it was acceptable to express fear of bushfire and

the widespread notion that fear led to inaction, that it was a pointless, or even disempowered response, given the inevitability of bushfire. The deflection of fear and the disavowal of vulnerability as a means to realise empowerment and agency proved to be central, not just to living with bushfire threat, but to the community's ability to grapple with the concept of climate change. I analyse this dynamic in more detail in subsequent chapters.

In the culture of ambivalent expectation that had developed to manage the experience of living with bushfire risk, interest in 'defining the situation' of the October fires was driven by the need to dispel fear and anxiety about the future. Local experience was the principal domain of relevance for individuals in the community when it came to allaying anxiety about future fire events. People became understandably invested in accounts that singled out aspects of the fires that were 'typically alike' and recurrent, and that curbed the significance of more ambiguous, uncertain or threatening features of the fires whose implications might cause alarm or additional fear. Bushfire is an object of experience that is intersubjectively constituted. For tens of thousands of people living in suburban areas in the south east of Australia, it is an experience within 'actual reach' (Schutz 1975: 118). Climate change exists as a scientific fact and operates in a domain of relevance where technical knowledge reigns supreme. At the same time, it is an object of experience in the motivational human realm where people make sense of their world. As community members grappled with the unusual features of the disaster, and the fires gained an interpretational relevance, the subject of climate change would arise.

The role of climate change in the severity and timing of bushfire was one of the most ambiguous and uncertain aspects of the October 2013 fires. The dispute over its role in the fires brought climate change into reach for some members of the community. For others, the uncertainty helped keep it at bay, irrelevant and removed from the immediate situation of recovery and rebuilding. Climate change was rarely explicitly named, but questions of cause, responsibility and blame, portrayals of normality or freakiness each became indirect ways to talk about what was socially unspeakable. The October fires became a way for community members to 'talk around' climate change. This practice of 'talking around' and its consequences for the saliency of climate change in the community following the fires is further examined in Chapter 5.

4

Vulnerability: Searching for safety in uncertain times

Georgia: When you look at you know, carbon footprints and stuff like that, when I look at how much concrete's been poured and things like this, for these homes and some of the ludicrous things that have supposedly gone in, it's a bit of a contradiction to be, you know, eco-friendly homes, but... the construction hasn't necessarily been that eco-friendly! (Laughs). But you know they're supposed to be solar passive and all this, and we invested a lot of money into making the house like that, you know all these things that you can't see that we've put in, so we've done what we can.

Beth: So that was important to you? That the house would be sort of sustainable?

Georgia: Safe and sustainable.

-Georgia, Winmalee resident, Fire Affected.

After the October fires, locals of Winmalee and Yellow Rock began the long process of recovery. The community undertook a search for safety amid uncertainty about the future and the effects of a changing climate on their local fire regime. This chapter examines how the residents grappled with the changing risk profile of their locality, specifically in relation to the material and symbolic implications of the kinds of houses that were being rebuilt in response to this risk. In the first instance, I investigate the changing landscape of insurance and regulations that residents had to adapt to and comply with and the confusion and anxiety that accompanied this process. Second, I explore consumerism as a heroic cultural project that helped to deny the mortality message of the fires and climate change (Becker 1975 cited in Connor 2010a, 2010b). Here, protection and refuge did not just come in the form of mandated steel shutters and double glazed windows, but in the grandiose house designs and new commodities that made life easier, more pleasurable and comfortable. Finally, building on the exposition of consumerism and denial, I consider how the search for safety was tied to the disavowal of vulnerability. Drawing on Judith Butler's (2004, 2016) feminist critique of discourses of invulnerability that pervade

modern preoccupations with security, I discuss the effects of this ideology on residents' responses to their own vulnerability and responsibility in the face of bushfire and climate change.

Georgia, who lost her house in the 2013 fires, took me down to her property to have a look around. As we drove down the hill in separate cars, I saw again that her whole street was severely affected by the fires. It was not my first time there, but I experienced a kind of dread at uncovering which broken piece of land belonged to Georgia, a woman I had come to know and like very much. My friendship with her rendered the familiar scene of wreckage and half rebuilt houses differently, as each place could be hers. Even though I knew it was absurd since I knew she lost her house in the fires, I was still thinking, please don't let this be her place, as we approached an especially barren corner of the road. We got out of our cars and scrambled down the eroded side of the hill to where her house would have been. Broken bits of brick and roof tiles were scattered across the ground and intermingled with old soft drink cans, coffee cups and cigarette butts, the rubbish left behind by builders working on neighbouring properties that had drifted across in the wind. Neither of us bothered to pick any of it up, though I did kick a giant ball of glass that testified to the intensity of the fire. The water in the pool out the back was dark and dirty.

They are rebuilding, Georgia told me, but there had been significant delays in the process because of a watercourse that ran through their property. It was hard to imagine that a house once stood here. I could barely begin to comprehend the totality of the material loss, or what it must have been like for Georgia to return to this. We did a tour of the property, taking delight in some daisies that had popped up since she last visited. She showed me a lemon tree growing back next to the pool, and where her favourite jacaranda once was. She took me to a large burnt stump and told me about the beautiful tree it used to be and shared her plans for turning it into a commemoration of the fires. Along the verge lots of different native plants were growing back, tea tree saplings sprout from old stumps, some other ground cover we couldn't identify, a beautiful purple pea flower that she'd never seen before. What was left of the garden was the only tangible remnant of her former life here. Perhaps I was too enthusiastic about the new plants coming up, saying they gave a kind of

heart to the place. I felt the need to be optimistic, not wanting to express my shock, but maybe it would have been respectful to acknowledge the enormity of her loss.

White clouds skidded through the big blue sky that surrounded us, and there was no structure, no home, or roof above us to demarcate ground from sky or to protect us from the wind. As Tim Ingold (2007: 31) has observed, 'In the open world there are no insides and outsides, only comings and goings'. The rubbish blew through, the ducks visited the blackened pool and departed again, weeds flourished and died back. There was nowhere to hide from the excoriating experience of impermanence. Desolation was carried cold on the wind against my skin. We were exposed and immersed in the emptiness of this liminal process illuminated by the fire. Georgia was desperate for the building to begin. 'It'll happen, something will happen soon,' she repeated over and over as if to ward off the anxiety produced by the indeterminate wait for her safe inside to exist again in this pervasively uncertain space. 'The main thing is the house,' she told me when I offered to help her with the garden in the coming months, 'the main thing is the house'.

A more-than-environmental phenomenon

Climate change is becoming part of everyday life. I here follow Susan Crate and Mark Nuttall who have pointed out that '[c]limate is having impacts on culture, ways of life, spirituality, and in other arenas that are not "obvious." Anthropologists are finding evidence/effects of climate change in "unexpected" places' (Crate and Nuttall 2009b: 21). One example of research tracing effects in less 'obvious' places is Graeme Macrae's (2010) work on the development of a waste recycling plant in Bali. Macrae is concerned with highlighting the convergence of the confused meanings, interests and agendas that were a part of developing this recycling plant and that also characterise current community and government responses to climate change. Drawing on Tsing's (2005) (anti)model of global process, Macrae (2010) shows that through ethnography anthropologists are well positioned to document the 'zones of awkward engagement' that characterise the ambiguous and complex local contact with climate change. He even proposes that climate change is not simply a meteorological phenomenon impacting on people's everyday life and their cultural practices, but that it constitutes a complex interplay of technological, ecological and political economic processes as well as cultural understandings and motivations.

Thus the research on the impacts of climate change on local cultures must move to include phenomena occurring beyond the weather world. This approach opens the view onto several spheres where climate change is brought within actual reach for people in arenas outside of their observations of environmental change and the weather. In order to understand the effects of climate change on my own field site, it was necessary to situate climate change beyond the subfield of environmental anthropology that is primarily concerned with 'global warming as a locally and presently experienced ecological hazard' (Rudiak-Gould 2011: 9). I have sought to include its perceptible effects in the community as a globally communicated scientific narrative, as a discourse of risk, and as a local suburban reality – that is, as a cultural object (Rudiak-Gould 2011; Hulme 2008). For instance, after the October fires in Winmalee, a person might sit for hours on the phone to their insurance company trying to understand how and why the building regulations have changed meaning that they cannot afford to rebuild their home. Another person begins to wonder if they can continue to live in the area and insure their home as insurance premiums rise, while yet another family is rebuilding their house so that it is energy efficient and solar passive, installing solar panels and using an eco-friendly building company.

Local engagements with climate change can assume many guises. In much the same way that climate change exacerbates existing risks and weaknesses in ecological systems, its impacts on social and economic life manifest in uncertain and contingent ways. And this makes it difficult, for both the researcher and the affected community, to isolate and perceive its effects. As discussed in Chapter 3, climate change rarely achieved interpretational relevance for residents making sense of the fire event. If I here view the recovery through the lens of climate change, this is not intended to eclipse other aspects and dynamics at play, but to make real the stickiness, conflict and complexity of climate change in its local contextual and cultural specificity.

The changing insurance situation

For people in Australia as elsewhere, climate change is materialising, literally, in their diminishing capacity to appropriately insure their home. A report on home insurance and climate change in Australia by the Climate Institute discussed the risks faced by home buyers and homeowners as insurance premiums rise to account for the higher probabilities of loss in the context of climate change (Mallon et al. 2014). This report found that a market failure in the

property sector, as well as historically poor governance around town planning, had seen many homes built in locations around Australia that were known to be high-risk. They report warns that climate change could be expected to worsen the situation for homebuyers and owners through increases in frequency and intensity of many hazards. It also estimated the price impact of climate change, finding that at the high-risk end, projections for some hazards associated with climate change could lead to insurance premium increases of up to 92 per cent. The combined effect of extreme weather and higher insurance premiums could mean that property value would decline by around 20 per cent or more over the term of a 30-year mortgage relative to the rest of the market (Mallon et al. 2014: 3). The Blue Mountains Climate Change Risk Assessment Report also highlighted the strain of increasing insurance premiums on the council's budget as a result of climate change (Burton and Laurie 2009: 38). In the Blue Mountains, after the October fires, this prospect was clearly on people's minds:

One thing I think is going to happen is that insurance is going to become a thing of the past because I don't think it'll be affordable, I don't think it'll be a commercial proposition.

Amy, Springwood resident.

I think they'll [insurance premiums] go through the roof up here, um [...] It is what it is, I mean, you can't change it. I mean it's going to be expensive to have to live with it, or to move somewhere [...] it will be what it will be, and it will have to I guess. I mean that's another thing to do with climate.

Jane, Springwood resident, Fire Affected.

The report also developed five 'insurability risk indicators' with which homebuyers could assess the risk of their property using online insurance quoting systems. These indicators were: underinsurance, heightened premiums, absentee insurers, price sheer and non-covered exposure, of which three were evident in the Lower Blue Mountains – underinsurance, increased premiums, and absentee insurers. One of the major causes of underinsurance are changes that occur in building standards to account for increased risk (Mallon et al. 2014). In a report on barriers to effective adaptation, the Australian Government Productivity Commission (2012: 191) notes, '[A] formalised program to incorporate climate change impacts into the National

Construction Code over time is required.' The Climate Institute asserts that 'building standards will continue to evolve as increasing climate change impacts are factored in, and in many cases will require more costly design specifications, materials and building techniques' (Mallon et al. 2014: 9). Homeowners are often unaware of these evolving standards and mistakenly insure their houses for the cost of rebuilding to their home's existing specifications, and such issues are expected to proliferate with climate change.

We were over insured. Our house was over insured by about \$100,000, so we thought we'd be right. But you see we had no idea that we'd be flame zone, so every bit of that money would have gone back into rebuilding but we still would've been behind I think [...] I think the main issue was if we were going to rebuild how much it was going to cost, what we would have to do to make the house fire proof. Well, I mean it's not going to be 100 per cent fire proof, but to meet those standards.

Dee, former Winmalee resident, Fire Affected.

For the residents who lost their houses in the 2013 fires, the process of rebuilding meant a total reassessment of what they could afford to build. Already in place were the changes to building regulations that had occurred following the 2009 Black Saturday Fires in Victoria. The new standard was designed to match construction requirements to the likely bushfire risk, and it includes improved methods to assess the fire fuel loads, and to make the outside of houses more resistant to ember, heat and flame attack. The single biggest determinant of the cost of rebuilding is the assessed Bushfire Attack Level¹⁷ (BAL) of any property. Following the October fires, many people in Winmalee and Yellow Rock found that their properties were categorised in 'BAL 40' or 'BAL Flame Zone' levels of bushfire risk. These are the two highest categories of risk and increased the cost of rebuilding often by more than \$100,000. For many people, this meant they were underinsured and it could be the difference between being able to stay and rebuild and having to leave the area. Of the 196 homes that were destroyed, Phil Koperburg (Blue Mountains Bushfire Recovery Coordinator), estimated that around 120 or more owners

¹⁷ BAL ratings are designed to estimate the risk of your home burning down in a bushfire and is calculated by the region where you live, the slope on the property, your home's proximity to the bush, and the vegetation type near your home (whether it's forest, open woodland, scrub, shrub land, grasses, etc.). There are six attack levels, and these are; BAL Flame Zone, BAL 40, BAL 29, BAL 19, BAL 12.5, and BAL Low (AS 3959 n.d.)

were underinsured (Templeman 2015). Calculating a BAL rating is notoriously difficult, and the standard online industry calculator has nowhere for residents to input their BAL. Susan Templeman, a resident of Winmalee who lost her house in the fires, found that when she input her details into these online calculators, they still underestimated the rebuild cost by around \$150,000 (Templeman 2015). Templeman found that when she spoke to various insurance companies' sales people, they did not know what a BAL rating was. Many smaller insurance companies are now refusing to insure people in the Blue Mountains, which Templeman connects to the difficulty in accurately calculating risk of the area (Templeman 2015). As noted, absentee insurance companies are also one of the five 'insurability risk indicators' in an era of climate change. Although there was minimal public acknowledgement of climate change as a part of the underinsurance difficulties that arose in the aftermath of the fires, it was evident that residents in the Lower Mountains were already contending with a shifting insurance landscape that was related to climate change. The effect of climate change as a future oriented discourse of risk was certainly apparent in people's choices to rebuild, insure or move elsewhere.

Living with uncertain risks

Harry showed me around what remained of his property in Winmalee. It was a cold grey day, unseasonal for that time of year. The black trunks of burnt trees around us were slick and wet in the chill air. 'We used to call it the ruin, we're not allowed to anymore,' he said wryly. When the 2013 fire hit, Harry and his wife were away on holidays. Their home, which had survived a previous bushfire in 2001, burnt to the ground and they lost everything. What was left behind revealed the complexity of the fire experience for many residents of Winmalee and Yellow Rock. Harry took me to an old blue shed that was still standing near the front entrance of the property. It was the only thing to survive the fire. Inside the shed we looked at the wall that must have been exposed to the most radiant heat during the fires; it was veined with light where the metal had melted thin. In one corner a wooden beam had blackened, but the rest of the beams remained unscathed. Harry's theory was that the fire just ran out of oxygen. In the middle of the shed is an old piano completely intact.

'Next to this shed, there was a big steel shed. Everything made of steel,' Harry said as he pointed at the air where the shed used to be. 'I used to joke that it would survive a nuclear

holocaust' he added with hollow laughter, as the strain of being back at this place showed on his face. As we stood in the open space where his house used to be, he pointed out across the gully to a house on the other side, which did not burn down last year despite being surrounded by bush. In small and bizarre details, Harry offered up his story and his 'ruin' to me, and I found myself, like many of the Winmalee residents I had encountered, trying to make sense out of the senseless, this time by scrabbling amongst the broken glass and rubble seeking meaning or logic in the way the fire burned, for lessons to learn for next time, for some moral to the story.

Harry was unhappy about the new regulations around building in a flame zone that made it so expensive to rebuild. It was one of the reasons they decided not to rebuild and, he believed, also the reason they were having such trouble selling the land. His complaints centred around the need to have shutters on the windows as well as double-glazing; he could not understand why you would need to have both. He felt the same about having plywood under the tin roof. It is supposed to provide extra protection from ember attack, but it just seemed over the top to him.

Such detailed gripes about regulations and bureaucracy revealed more fundamental questions about whether or not fire risk in the context of these new infernos could actually be mitigated. It came back to Harry's blue tin shed, the one still standing, against all the odds, even though the better-protected steel shed metres away from it went up in flames. Harry expressed a sentiment I had heard a lot from those in the community who had lost their houses: an incredulity at the randomness of fire, a loss of ontological security (Giddens 1991) as the soundness of the mechanistic view of the natural world determined by lawful behaviour melted away. Residents questioned the capacity of existing human systems to plan for and prevent such indiscriminate destruction. As Harry said, 'Anything can happen. You know... you do A, and you think B is going to happen, but C happens.'

The complexity of the fire event, the unpredictability of how and why certain houses caught alight while others did not, and the loss of control and reason during the event, all extended into the recovery and rebuilding process and was exacerbated by the changes in the regulation and the

widespread problem of underinsurance in the community. For many, the new regulations seemed an excessive response and a knee-jerk reaction to the fires. The BAL rating determined the building standard of the new houses, and thus on the cost of the rebuild. For many, the BAL system seemed arbitrary, or even too 'ordered' in the face of the experience of chaos and randomness that accompanied the bushfire. There was bewilderment at the bureaucratic logic underpinning the new regulations: extensions on existing houses must conform to the expensive and complex regulations, while the rest of the house, a wooden weatherboard structure, could remain completely unaltered. Many people who lost their homes felt that they were being unfairly punished by being forced to rebuild to standards for a fire that they did not believe would happen again in their lifetimes. Other residents living in older homes feared that their home would go up in the next fire. As people came to terms with the radically changed logic and approaches to risk assessment since their home was originally built, the latent question underpinning the conversation was around exactly why the risk profile of the community had changed so much. For many, there was disbelief that the risk could be so bad as to require such excessive measures, but on the other hand, if the risk were indeed so high what actions would make a difference during a severe fire anyway?

I mean, okay you can build it to you know, um, flame zone or whatever, but it doesn't sort of guarantee you're not going to lose your home anyway.

Jason, former Winmalee resident, Fire Affected.

There's a lady across the road from us, she had a house that was built to the most current (*laughs*) restrictions, and it still went up.

Georgia, Winmalee resident, Fire Affected.

I'm a bit resentful about the fact that I'm going to have this incredibly robust house which will be more resilient to fire and yet there are other houses which have no, not a single different thing about them even though they're at greater risk than mine. [...] So it feels like there's an inequity being built into the system. And that the people who really need the information are relieved that they didn't need it that time, and some will actively seek it. But no, nobody, no governments, no insurers, nobody is proactively helping

people find a way to feel that they've done what is reasonable. And no one can really tell you what's reasonable.

Jennifer, Winmalee resident, Fire Affected.

The question of what could be considered 'reasonable' remained unanswered, and this caused anxiety and uncertainty in the community. Nobody who I spoke with who was rebuilding their house put much stock in the new regulations being able to protect their property in the event of another catastrophic bushfire. Most people just avoided the idea that such a fire would happen again in their lifetimes in this area of the Blue Mountains. As discussed in Chapter 3, many people who bought land and built their houses in the 1970s when much of Winmalee and Yellow Rock was established, reasoned about what kinds of fires could be expected in the area in accord with historical evidence and their own experience. This understanding then informed what kind of house should be built to mitigate the risk of it burning down. Many people had lived through more than one fire without substantial property loss, and often with assistance from the RFS during the fire; they had taken this to be the norm.

In the aftermath of the October fires, people shared a shifting sense of the risk of catastrophic bushfire based not only on their own direct experience but also on the Black Saturday fires in Victoria in 2009, as well as on other unseasonable or severe bushfires occurring around Australia. In recent memory, there had been the fires in the Adelaide Hills that occurred unseasonably late in May of 2013, or the unprecedented six month fire season of 2013 in Tasmania. Prior to 2009, advice to residents from Australian fire authorities emphasised staying and defending (Handmer and Tibbits 2005; McLennan et al. 2012). This policy differed from those in most North American fire jurisdictions that encourage evacuation (McLennan et al. 2012). Following the Black Saturday fires, the new category of 'catastrophic' was added to the Fire Danger Index (FDI), indicating conditions that houses were not designed to withstand, making them essentially undefendable, and making leaving early the only option for all residents. After these fires, the Australasian Fire and Emergency Services Authorities Council (AFAC), also revised aspects of its official community bushfire safety advice, giving more weight to the 'leave early' option (McLennan et al. 2012: 923).



Figure 5.1 FDI sign on the corner of White Cross Road in Winmalee. Source: Author.

Because of the enormous loss of life in the Black Saturday fires, ¹⁸ the prevailing attitude in the Lower Mountains was that the best approach to bushfire these days was to be properly insured and leave early. Residents felt that it was irresponsible and dangerous to 'stay and defend' unless you were truly well equipped to do so. Leaving early was certainly the strategy strongly promoted by the RFS in the 'More than a Fire Plan' community meetings I attended in Springwood and Katoomba, and fact sheets on leaving early produced by the RFS stated, 'The safest option in a bushfire is always to leave early, well before the fire threatens.' However, a premise of leaving early is that the house is adequately insured and the family can financially afford to lose their home, yet as discussed, adequate insurance is an expensive enterprise with moving goal posts in an era of climate change. After the October fires, the risk that many people believed they had accepted and insured for had altered. Leaving early was also different for different people. Leave early triggers in the Lower Mountains had been based on their historical experience of bushfires that started in the Upper Mountains and moved down the Grose Valley giving people time, sometimes days, to prepare and leave. The time of year and the speed of the

¹⁸ There were 173 fatalities, and 414 people were injured because of the fires (Victoria Police 2009).

October fires caught many in the community off guard, with people fleeing for their lives with just the clothes on their back as they saw the fire front approach their house out the back window. Now some residents questioned what the appropriate 'leave early' trigger might be, what the time of year to begin instigating preparedness actions, and how this might continue to change as the risk of bushfire increases with a changing climate:

I do think that we also need um, to think about, if there were conditions that arose that led to the fire in October 2013, you know, very dry weather, previous fire in the area — like we all went, 'Oh that's Winmalee's fire for the year, we'll be right now'. Um, that people are given some practical advice about you know what is the sensible thing to do if there is another October 17th day, you know, do you stay home? Do you go? Do you keep your kids home from school? Do you think about it? Do you change your behaviour, and under what circumstances do you change your behaviour?

Jennifer, Winmalee resident, Fire Affected.

We kept thinking we have to ring the real-estate and get them to organise the gutters to be cleaned and we thought, oh you know, it's only early in the fire season, you know, we've got plenty of time. You know we weren't expecting something like that in October, but now I know, yeah, be ready all the time.

Dee, former Winmalee resident, Fire Affected.

In her work on risk and blame Mary Douglas asks, how safe is safe for this culture? 'Acceptable risk', she explains, is always a political question (Douglas 1994: 44). The decision to rebuild, to take 'a second spin on the wheel of existence' (Hoffman 2002: 133), was for some an immediate and straight forward decision; they 'simply couldn't imagine living anywhere else'. For others, the decision was complicated by their financial situation, their age, their concern about future bushfires, the difficulties and complications involved in the process of building a house.

I sort of thought, do I really want to go through this again? I didn't really want to invest

all this passion and energy and stuff to building something that could just be wiped away again.

Jason, former Winmalee resident, Fire Affected.

So, after it happened I thought actually the chance of having a new house is not too bad. But then uh, yeah it did um, worry me that you know another fire could go through there because being on the steep slope with the bush coming right up to the house we were now flame zone. [...] What worries me too with um global warming, I know that you know, fire seasons are changing, and there's going to be more prevalence of fires. So that was a worry.

Dee, former Winmalee resident, Fire Affected.

For some, the fire had been too traumatic, their sense of safety too compromised to consider rebuilding. Interestingly, people often moved elsewhere but stayed in the Blue Mountains area, perceiving other properties or other areas to be safer than Winmalee and Yellow Rock. A substantial number wanted to stay and rebuild but could not afford to; they had been pushed out of the area by the cost of insurance and rebuilding. Some built without a commitment either way, waiting to see how they felt once the house was up and they were living in it to decide whether or not they would stay or go. Others built with a five-year plan, and no emotional attachment to the house itself: 'I'm building it to sell. I don't want to live here. I'll be gone before the next fire.' Recovery workers heard many such deliberations:

There's people telling me straight out, I'm building this house, I don't love it, I don't have any attachment to it, but I know that's what will sell. And then there are people who are saying like I know those people who definitely don't want to stay, but are going to finish it. And it's a sense of, I'm not going to let that fire beat me. I'm going to build this house, so there, it's back. But now I can leave it. Because I know that's not my home and I'm going to leave it.

Kim, Recovery worker.

Whatever the reasons to stay and rebuild their home, those who chose to rebuild were also making a choice about what they regarded as acceptable risk, about what they considered to be

safe. What was now considered safe had changed since they had first built or moved into their home. Moreover, the new power that was given to them by the NSW government to clear their land also changed their perception of what was dangerous, about not only what acceptable risk was, but what kinds of measures were acceptable and even mandated to ensure the future safety of their homes and the community. Residents were actively supported in their choices by the insurance companies who continued to insure them provided they rebuilt their home to the new standards, and by the state government passing laws that enabled them to remove the 'danger' associated with trees growing within ten metres of their property. They were also passively or indirectly supported by the existing property laws and historical planning decisions that made it far too expensive for the council to buy back particularly risky areas of land.

The predominant perception in the community was that if you could afford to rebuild, you would do it and that the only people not rebuilding were those who had been underinsured. The pressure or imperative to rebuild was subtle but persistent; in the statistics published and publicised by the council about how many development applications had been approved each month, in the local newspaper stories that focused exclusively on those who were rebuilding and choosing to stay, and in the 'good on yous' that were awarded in conversation with bushfire survivors who declared their intention to stay and rebuild. By popular accounts in the community, one could have been led to believe that around 90 per cent of people were staying and building their new lives there. In fact, as of December 2015, the figure of fire affected residents who had submitted new dwelling applications was around 43 per cent of those who had lost their homes (Blue Mountains Local Community Recovery Group 2015). Positive community identity, a sense of strength and resilience were an important part of the recovery narrative, and this meant that other more complex or negative aspects that threatened agreed upon ideas of safety, strength and recovery were more hidden.

As the dusty and blackened landscape was gradually patched up with slabs of concrete, as the skeletal steel frames were filled in with bricks and mortar and the shining Colorbond™ tin roofs were installed atop these impressive structures, the community grappled uneasily with the new character of their neighbourhood. 'Bushfire Fortresses' these houses were called, both admiringly and with derision. Building a new home to replace the one lost is one way of finding

resilience and empowerment in the face of disaster. Rebuilding is imbued with the idea of building better, something more suited to current needs and desires, something more appropriate to the risk profile of the local environment, something safer. The homes that rose out of the ashes were material and symbolic testaments to the changing beliefs about what was considered safe. They were an undeniably present visual force that signalled to the rest of the community, 'there was a worsening fire risk'. Older houses, before their eyes, were turning into relics of a former time, when safety meant something else, and bushfire risk was handled differently. During this time, the survivors' guilt changed to fear that their homes would not survive the next fire that these new buildings were being fortified for.

The October bushfire disrupted the sense of control and safety for residents of the Lower Mountains, revealing the unpredictability and irrationality of both the natural agents and the bureaucratic protocols they had to negotiate. Safety was compromised not just through the physical danger the fire presented, or in the financial risk it produced for people, but in the loss of security that accompanied the struggle to make sense of the senseless, both during and after the fire event. People were left feeling vulnerable and exposed, eager to restore the familiar order and safety that had been destroyed by the fire. Yet the kinds of houses that were being rebuilt were additionally disquieting as they changed the established contours of the neighbourhood. Even after rebuilding to all the new regulations, there remained no way for residents to know with certainty that they had done enough to manage the risk they were living with, or that this risk could be effectively mitigated. Other, more symbolic means, such as consumerism, were thus employed to allay feelings of insecurity and exposure in the wake of the fires.

Building back better

Georgia's new house was a red brick building with a dark blue steel roof that gleamed brightly in the midday sunshine like many of the newly constructed houses around it. 'They're calling us the silver tail end of the street,' she joked, because of all the new large and expensive houses being built. The building process took much longer than most people had anticipated. Part of the problem, she explained further, was that the builders themselves don't have experience with the new fire standards and the building techniques or adjustments required. The people rebuilding their roof had to undertake a course on how to

do it so that it met Flame Zone standards. She knew one person who finished building all their walls only to discover that there wasn't enough space above the windows for the shutters. Even with an architecturally designed house, like theirs, you can run into unforeseen problems rebuilding in the Flame Zone. So far, they were \$200,000 above the planned budget.

Georgia took me on a tour of her recently completed home. Her voice bounced off the tiled floors and into the big open spaces of the kitchen, dining and lounge areas, which were furnished, but did not feel quite lived in yet. 'It's kind of ended up bigger than we planned', she explained as we walked down the long hall to take in each of the five spare bedrooms. 'The plans kept changing, and in the end, the architect wanted it to be even', she added, somewhat ambiguously, not explaining what 'even' might mean. 'I suppose I can get my daily step count up walking up and down this hallway!' she laughed, and I laughed along with her, eager to dispel her unease about the size of the house.

In truth, I was a bit stunned at the size myself. But I also enjoyed Georgia's delight in the new spaces that did not exist in her old home, like the big walk-in pantry, the ensuite bathroom, and walk-in wardrobe about the size of an inner-city bedroom in Sydney. Five spare bedrooms might sound like a lot, but Georgia has a big family, her children are grown with their own partners and children dispersed across the country. One of the hardest parts about losing the family home was losing the place where they could all gather. Whenever she spoke about the plans for her new house with me, this was always her focus. She was looking forward to Christmas when they could finally be a family together in the house again. Georgia was not a materialistic person, and for the most part did not enjoy having to brave Penrith Plaza in such a regular way to replace all the furniture and household basics that were lost in the fire. Still, part of the healing process had been repopulating her new life with the new furniture, artworks and décor that were considered necessities. The house felt stylish and modern. There was a separate entertainment lounge with a big leather couch and massive television where the kids could hang out when they stay, a formal dining room with a table big enough for the whole family. And then there was the open plan kitchen and living room replete with a second enormous television, smaller dining table, and two armchairs for

her and her husband. She cooked me a delicious lunch using her new ThermomixTM, which we discussed the merits of at length. But I could not quite square the space I was sitting in with the person I had come to know in the last year.

Georgia was struggling to feel that this house really was their home. 'One of our friends said, "Oh it's just like one of those display homes!" But I don't want it to feel like a display home.' She was still coming to terms with how to use all the new modern technology that came with the new house - the new microwave, the multiple switches that must be on for the oven to work, the very complicated air conditioning system, the long drama of getting the gas heater installed - all these items have features that seem unnecessary or unnecessarily complicated to Georgia. The heater for example, had different flame settings, including one for Summer, which was a light display that mimicked the look of flames but with no heating. 'Why would you want that?' she asked me incredulously. We spent the most time on the house tour looking at the objects of significance that were not new, photos salvaged from other family members' albums, things that had been in her office and so were not lost in the fire. These items were displayed carefully on shelves and in new frames.

Outside there remained much work to be done in the garden, but the pool was blue again and free of ducks (mostly). It had been a long process of gradually adding extra chlorine, so they do not want to swim there anymore. We sat in fold out chairs on the back verandah, which was more like another room of the house as it had a proper ceiling with large silver fans fitted as well as a big kitchenette unit and barbeque waiting to be installed along one side. From our spot, we could see out across the valley which burnt out 18 months ago, its trees still blackened matchsticks with the strange fuzz of new green growth emerging from their trunks and branches. We sat quietly for the most part, comfortable and sheltered as we took in the peaceful afternoon and the birdsong. I could understand why Georgia said this was her favourite part of the house, and that sitting here was her favourite thing to do in her last house as well. 'We get the beauty of nature but also the luxury of 21st-century living,' she told me, 'I can't imagine living anywhere else.'

Following the fires, the communities of Winmalee and Yellow Rock were faced with the task of self-reconstruction. Choices made by those who stayed and rebuilt their homes were about reaffirming the way of life and identity they had valued before the loss of their homes, while also acknowledging that they could not 'go back to normal' or 'go back to how it was before'. In the process of psycho-social recovery, there was a strong emphasis on people regaining agency and control in their lives as a way to heal the trauma of the fires and the material loss they had experienced. People re-engaged with their lives and were empowered to do so through the rebuilding of their homes, places they had loved and lived in for many years, places of deep emotional significance. These places were priceless to them, and it is not surprising, given the high symbolic value of material culture in the Australian middle class, that the way such importance came to be represented and expressed was in the building of substantial, modern houses from the templates of display homes that were equipped with the latest technology, furnished expensively and at times ostentatiously. As some participants also perceived, diminished social capacity in the face of the destruction was remedied through the fulfilment of materialist needs:

I said to one of the ladies who's rebuilding, I said, yours is very Italian, those columns, she said 'yes'. [...] Now they're putting up these things that I don't quite understand, and it's all about moving everyone away from each other. Have a big room here, that's the adults room and the big room there's for the kids, and everybody says, 'Oh I've gotta have this room', and 'I've gotta have another bathroom'.

Hannah, Valley Heights resident.

In their mind, they're building up the house they had, this was their home, this was everything was here, their whole identity was here, and you know it was like the best place and we loved it. And you know, anything bad about the property you don't really remember [...] And so there's a sense of wanting to have a sense of justice for that place and building, you know, a beautiful, a big beautiful home because in their mind this was everything. My whole life was there and now I'm building this structure to represent my house [...] If I'm going to do it I'm going to have all the things I didn't have before.

Kim, Recovery worker.



Figure 5.2 A rebuilt home in Winmalee.

Source: Davidson (2014).

Here was 'the opportunity to build back better in line with legislation and construction standards that address bushfire risk' (Streater 2014: 2). But 'building back better' was in practice about more than risk and preparedness, it was an opportunity for people to build the home they had always dreamed of, an opportunity to get things just how they wanted them – that extra garage, a new kitchen, spare rooms for friends from Sydney to stay in. Except for having to stick to much stricter building regulations around fire that people were in many ways attempting to recreate a new and improved version of the life and house they had before. For those who lost their property in the fire, the sense of loss extended beyond the material; it aroused primal fears of failure and regression that affected the sense of self and status (Rust 2012 cited in Gillespie 2014: 153). Buying new things was a way to make the best of an awful situation in a culture that equates material acquisition not just with happiness, but also with power, safety and freedom (Randall 2012). Some of the most common conversations that I witnessed and participated in with those who were fire affected centred around the plans for their new home and the new appliances and goods that were being purchased to fill it. I do not think this was indicative of a vacuous materialism in the community, rather it was safe conversational territory, positive and

hopeful, something that focused on things rather than feelings, on the future rather than on the trauma of the fire event. It was an opportunity for people to connect over shared interests in home making and decorating. In a culture of consumerism, shopping and talking about shopping are life affirming activities undertaken in the context of the stark death message delivered by the fire and its attendant associations with climate change (Connor 2010a, 2010b).

The building of these new houses revealed the community's new interpretation of 'everyday pleasures' or even necessities – the entertainment room, the air conditioning system, the large television and ensuite bathroom. At the time when most of Winmalee was developed in the early 1970s, a home was a three bedroom one-storey building with a bathroom, a kitchen, a dining room and a lounge room, and you might have had a separate single garage in the back garden. Since the 1970s the average Australian home has increased by 100 square metres, almost doubling in size. The average size of a new free standing home in 2015 was 245 square metres (ABC Fact Check 2015). The growing presence of these sorts of houses over the last fifty years can be visually traced in Springwood and Winmalee; older houses that are closer to town are much smaller, made of different materials (often from wood that had been locally logged), and far more eclectic and varied in style. Further away from the older town centre of Springwood, the size of the houses increases exponentially, shifting from one storey places with external garages to two storey residences that take up the whole block, often with concrete veneers, big tinted windows, and attached multiple garages.

The new homes were labelled with varying degrees of denigration as project homes, McMansions, or as one resident shared, 'alien creatures plonked down on the street with no reference to the environment that they're in'. Others said:

It's a bit like a housing estate where everything is so beautiful and perfect and everything else.

Georgia, Winmalee resident, Fire Affected.

You go down the street now and it's not the same street. You know, it's alien, it's all the new houses, all Hotondo, or Macdonald Jones, ¹⁹ and it doesn't look the same.

Lindsay, Winmalee resident, former RFS member.

The growth in size was the most immediately noticeable feature of the new homes being built in Winmalee and Yellow Rock. The explanations for this change were diverse. Prevalent was the fact that it had become impossible to obtain a house plan in the sizes that people used to build. As one participant pointed out, 'There are no two-bedroom houses available from any spec builder²⁰ anywhere.' 'You can't buy one, you would need to hire an architect, which is far more expensive', another resident informed me. Others were concerned with building a house that 'did justice' to the proportions of the land: 'A small two bedroom house would look funny on this big block.' Even though there were only two of them living there now, they remembered their home as a family home, and so they wanted to build a family home to replace it. Only what constituted a family home had radically altered and was thus out of their budget or required dipping into their contents insurance to cover it. People wanted to build houses that would do well in the current property market, which meant having at least four bedrooms. Others said that if they were going to spend all this money to fit the house out to the new BAL regulations, it would almost be a million dollar property, so why not make it a million dollar property?

Certainly, the reasons offered were more complex than any one individual's consumerist zeal. Rather, they show the influence of deeper systemic and structural economic aspects of how houses are built in a consumer society where bigger is better, material possessions are status symbols, and more room is needed to store the higher number of goods and appliances people are sold as 'necessities'. People need more space to live out their highly individualised lifestyles that are not compatible with small shared rooms (Hamilton 2010). Stacy Alaimo suggests that such homes are the product of 'parodically hyper-masculine modes of consumerism in which bigger is better' (Alaimo 2009: 26). Even if one does not consciously identify with such values, building this kind of home is more accessible economically because it is cheaper to build than a

¹⁹ Hontondo and Macdonald Jones are both companies that offer a suite of standard home designs, available as display homes that they build for their customers.

²⁰ A person or company that builds houses to sell to anyone who will buy them rather than individual architectural designs for a particular customer or site.

two bedroom architecturally designed house. You get 'more bang for your buck'. These houses are the easier, quicker, cheaper and more marketable real estate option, which is important for someone who is in crisis and trauma and seeking not only physical but financial security.



Figure 5.3 A rebuilt home in Winmalee.

Source: Author.

Yet it cannot be ignored that these kinds of buildings and consumer activities are intimately connected with anthropogenic global warming, given that the extraction of fossil fuels and carbon underwrites much of the wealth that citizens of the Global North share (Connor 2010b: 254). The shift away from the production oriented work ethic of early capitalism to the 'aesthetic of consumption', underwrites the cultural character of late capitalism: here 'the task of 'self-construction', that is, the building of one's own social identity if not fully from scratch, at least from its foundation up' (Bauman 2005: 27), is undertaken through acts of consumption. Connor (2010b), Reuter (2010) and Hamilton (2010) each interrogate and explain the behaviours

occurring in Western culture that seem contradictory or even self-destructive in the face of climate science. Linda Connor (2010b) approaches climate change as a cultural crisis set in train by the hegemonic consumer culture of capitalism. Using the work of psychoanalyst Ernest Becker (1973,1975), Connor explores the 'heroic projects' of consumer culture that are used to gain symbolic immortality and repress anxieties about death 'through values and practices of acquisition, affluence, endless exploitation of nature, novelty and perpetual renewal' (Connor 2010b: 252). Clive Hamilton also focuses on the psychology of 'normal overconsumption' in Australian society, exploring the addictive and pathological qualities associated with consumerism and the connection between such patterns in the perpetuation and denial of climate change (Hamilton 2010). Hamilton's discussion centres on the relationship between meaning and identity for the 'consumer self' in the acquisition of goods that makes any suggestion of austerity threatening to a person's sense of self and meaning in the world.

Thomas Reuter (2010: 7) similarly offers a 'systemic cultural critique of the destructive behaviour patterns enshrined in the most basic cosmological assumptions of late modern consumer society', what he calls a 'crude oil cosmology' (Reuter 2010: 14). In this world, the use of fossil fuels has generated an abundant supply of cheap energy that

increases our ability to manipulate, control and consume... thus artificially enhances our sense of being alive. This additional life force is not authentic, however, and comes at the cost of alienation. It is borrowed from petroleum and coal... Our appropriation of a separate energy source other than food and wood... has made it possible for us to entertain cosmologies that, likewise, portray man as a subject separate from and largely independent of the life processes of planet Earth (Reuter 2010: 21).

Reuter's (2010) description of a 'crude oil cosmology' shows that the prolific use of fossil fuels is fundamental to a way of life that is completely normalised in modern Western cultures. Both Hamilton (2010) and Reuter (2010) draw the connection between the alienation or separation from the natural world that began with modern industrialisation and the pathology of consumerism which exploits that world. Connor underscores the fact that 'the consumption of the wealth from carbon (such as mass produced goods and foodstuffs from all over the world,

and fossil-fuel based energy that gives modern life such ease for many) is the prerequisite of *cultural inclusion* and *everyday pleasures* in Australia [emphasis added]' (Connor 2010b: 254).



Figure 5.4 Winnie the Pooh joke cartoon created by a fire affected resident and stuck on their fridge in their temporary home.

What is striking about each of these analyses are the connections made between consumerism and the affirmation of life, of self, identity and power, as well as social acceptance. These associations are pertinent to understanding how the Lower Mountain's community sought to heal and recover from the material and psychological devastation of the October fires. Social research conducted in the aftermath of Hurricane Katrina in Florida found that 'disaster victims engage in distinct purchasing behaviours to manage emotional states, recoup losses, and restore their sense of self' in the aftermath of traumatic events (Sneath et al. 2009: 45). Julie Sneath and colleagues (2009) differentiate between impulsive buying where disaster survivors, feeling deprived of their possessions and/or formal social status, may partake in consumer activity that helps return them to a sense of normalcy, and compulsive buying where pleasure is derived from the act of buying to manage difficult emotional states, rather than the utility of the object itself. They determine that impulsive buying can be rational and beneficial following a disaster; whereas compulsive buying is not (Sneath et al. 2009). Yet in an era of anthropogenic global warming, consumption in the Global North is a far from neutral act. Disaster survivors must live with the irony that 'the

very thing that is causing our crisis – overconsumption – has become our palliative, to soothe away our anxieties about the damage we are doing to the world' (Rust 2008: 161).

Richard Wilk (2009) similarly argues that insight into consumer culture is integral to understanding anthropogenic climate change. But he is critical of arguments that simplistically suggest the solution is a 'global belt tightening' – an assessment that tends to put the burden of change on individuals rather than on the structural, legal and social causes of high consumption. Wilk (2016) urges caution in making sweeping moral arguments about good and bad forms of consumption, which have a tendency toward 'blaming the victim'. He points out that a lot of the ways individuals consume are beyond their control – many consumption decisions are made by governments, regulatory agencies and businesses. The planning of suburbs like Winmalee or Yellow Rock means that you need a car to live there, and the designs of the enormous houses rebuilt in the wake of the fires were not solely down to an individual's proclivity for ostentatious architecture. Psychoanalyst Rosemary Randall states that 'just as the hungry infant does not ask how the breast has acquired the milk, so the traumatised public does not question how the market has acquired its goods, nor who or what may have been damaged in the process' (Randall 2005: 168). Each of these perspectives on consumption and consumerism point at a contradictory tension for those living with the impacts of climate change in countries like Australia who are also significantly contributing to global carbon emissions through the export of coal and in the high consumption habits of its citizens. People are asked to encompass the reality that they are both responsible for and vulnerable to climate change.

All the recovery workers I spoke with emphasised the importance of agency and control for those who had been most impacted by the fire. In a highly individualised consumer society, conceptions of a person's responsibility and agency privilege self-initiative, both to improve their own lives and to affect social change by way of their consumption decisions. In an interview with one recovery worker, I asked whether or not she had found people discussed climate change beyond the initial impact of the fire. She told me that she often found that people who were rebuilding were putting a positive spin on the rebuild regulations around limited windows or multi-layered roofs. Suggesting they were additionally beneficial because of what

the future might hold, both in terms of more extreme heat days and also in terms of energy efficiency and the benefits to the environment:

I think there's been some, not justification, but some, aligning that, well I've had to have that for bushfires but I can see how that's going to benefit me because I expect that the weather is going to do this... I think most people expect, um, extreme weather events to be more frequent.

Kim, Recovery worker.



Figure 5.5 A rebuilt home with solar panels in Winmalee Source: Author.

Several people I interviewed discussed the idea of 'doing their bit' for the planet by recycling, by installing solar panels, or as Georgia mentions in the quote opening this chapter, in the rebuilding of a sustainable, solar passive homes with the latest green appliances and credentials. People in the community felt some sense of responsibility for creating a more 'sustainable' world, despite

or perhaps in response to their suffering. Yet the size of the homes they were rebuilding can also be read as a response to their suffering and a defence strategy against the perceived threat of an unsustainable and chaotic world. American architect Ann Surchin discusses the growth of house sizes in the U.S. as representative of a fearful public: 'We are very tenuous... these houses represent safety – and the bigger the house, the bigger the fortress' (Adler 2006: para 11). The notion of 'building back better' was thus interpreted in complex and at times contradictory ways as residents grappled with the nexus of responsibility and vulnerability in their own lives following the October fires.

Between vulnerability and responsibility

Bushfire reveals the vulnerability of a life world whose cultural and ecological parameters become unsettled. The October fires exposed the vulnerability of both bush and built environment, as much as it revealed the danger they both presented. Such an event cannot be so easily reduced to simple dualities, such as weak and strong, victim and attacker. Rather, people are confronted with the paradox of their own existence being at once dangerous and vulnerable – vulnerable to the dangers they have created. Climate change takes such a paradox and amplifies it on a global scale. People must simultaneously come to terms with their power to affect the planet on a geological time scale, heralding in the new era of the Anthropocene (Crutzen and Stoermer 2000), while at the same time confronting their ultimate dependence upon, and interconnectedness with, the biosphere that they are changing. This is the reality of the raw vulnerability that runs underneath the mod-cons contributing to both their comfort and their destruction. A fire blazes and they are at its mercy. It is fuelled by heat, the wind, the dry leaves and the living wood of trees and plants. It is fuelled by poorly designed houses built in the wrong places, by poorly maintained gardens and broken sprinkler systems. Its danger is in its unusual speed and heat, in people's lack of preparation and their denial that this could happen, and in their waiting till the last minute to leave.

Many traditions and disciplines – psychology, anthropology, human geography, economics, engineering, ecology – use the term vulnerability. In the field of human-environment relationships, the concept of vulnerability has a common, though contested meaning (Adger 2006; Taylor and Butterfield 2011). It emerged out of the disaster research by geographers and

anthropologists that was concerned with the severity of disaster events occurring in the developing world (Oliver-Smith 2013). Vulnerability became the organising principle for this field of study, situating the causes of natural disasters within the social conditions of poverty and inequality. Historically embedded and spatially distant processes were seen to constitute 'the normal order of things' (Hewitt 1983 cited in Oliver-Smith 2013), which made certain populations far more vulnerable to disaster than others. Concomitantly, the concept of resilience began to appear in ecological science, referring to the 'capacity of an eco-system to undergo disturbance and maintain its functions and controls and may be measured by the magnitude of disturbance the system can tolerate and still persist' (Wallington et al. 2005 cited in Oliver-Smith 2013). The concept of resilience was transposed to the social environment to describe the ability of social groups or individuals to respond to change and variation without collapsing. Both vulnerability and resilience established a new perspective on the relationship between society and environment as mutually constitutive – a vision that has only become even clearer with the advent of anthropogenic global warming (Oliver Smith 2013: 277).

My more specific interest in vulnerability in the context of the October fires is the cultural construction of vulnerability as synonymous with weakness and passivity. I seek to discern in particular the potential effects of such a view on those who are recovering from climate change connected events that disrupt masculinist ideals of invulnerability (Butler 2016). The destruction of home and all treasured possessions within is no doubt one of the most significant and confronting experiences of loss, pain and impermanence that anyone can experience. The capacity to respond to that loss has significant impact on your resilience and ability to recover. This includes having sufficient insurance, being adequately prepared and able to save what was most important as you fled, maintaining your psychological health, and being able to access sufficient financial and social support through the time of stress and trauma. But favourable socio-economic conditions cannot erase or undo the exposure to, and experience of vulnerability. Although feminist theorists hold different views about the political efficacy of understanding vulnerability as either an ontological or a social condition (see Butler 2016; Fineman 2008; Hirsch 2016), a strong case has been made, by Judith Butler, for the recognition that vulnerability is an existential and social condition that is relationally produced. Climate change

and its associated effects on human bodies and cultures around the world bring this into sharp relief.

In her discussion of the political possibilities that emerge when we connect vulnerability with resistance, Butler (2016: 3-4) argues that it is imperative to 'track the way that power operates to establish the disenfranchised as "vulnerable populations". We are called to examine the logic of disavowal that projects and distances vulnerability from 'prevailing ideas of agency and mastery'. When vulnerability is projected onto others, it seems as if the first subject is entirely divested of vulnerability, having expelled it from the self. Meanwhile the capacity to act politically of those who are designated vulnerable and in need of protection is negated in favour of expanding governmental forms of regulation and control (Butler 2016: 5). Both these approaches to vulnerability – projection and disempowerment – were present in the Lower Blue Mountains. A third possibility discussed by Butler is vulnerability's capacity to 'contest liberal forms of individualism primarily, implicated as they are in capitalist concepts of self-interest and masculinist fantasies of sovereign mastery' (Butler 2016: 3). As the protective walls of their individual private homes literally burnt to the ground, those in the communities of Winmalee and Yellow Rock were faced with their identity as a collective. Many drew strength in the initial phases of recovery from the revelation of their interdependence and connection with each other amid their shared suffering and vulnerability. Each of these three responses to vulnerability has implications for the community's response to climate change.

In the Lower Blue Mountains, disavowal of vulnerability operated through 'distancing', a topic that has been extensively considered in the social research literature on perceptions of climate change in affluent Western nations like the USA, where people view climate change impacts as geographically and temporally distant (Leiserowitz 2005: 1433), as well as in the psychoanalytic literature (Cohen 2013; Randall 2005; Weintrobe 2013c). People in the Lower Blue Mountains who expressed concern about climate change tended to do so about people that they perceived to be more vulnerable or powerless than themselves, and did not necessarily connect this concern to their own recent experiences of fire. For example, Georgia told me,

As far as climate change goes here... mmmm more concerned about climate change in places like Africa where they're actually starving and things like that, and the change

like deserts taking over countries and things like that. You go back in history and these places were lush and everything else. That aspect of climate change I find more disturbing. Um... than... you know fires and stuff.

Those living on low lying islands in the Pacific tended to be seen as 'victims' of climate change, whereas fire affected people in the Lower Blue Mountains were referred to as 'survivors', exhibiting their mastery over the fire through the defiant rebuilding of their homes and communities.

Such a divide is perpetuated in the literature on climate change where the study of the causes of climate change focuses almost exclusively on the Global North (the climate culprits), while studies of the impacts of climate change have been more weighted toward the Global South, or so called 'vulnerable' populations who are seen to be 'climate affected'. In drawing attention to this imagined divide between the so called 'responsible' and the so called 'vulnerable' I do not intend to ignore or downplay the reality that those who are most affected by climate change are those living in regions and countries who have contributed the least to global emissions (Skillington 2017; Climate Justice Now 2009). Or to overlook that those with environmental privilege²¹ (Pellow and Nyseth-Brehm 2013) are not more insulated from the effects of climate change. Rather, I seek to highlight the way that privilege enables and reinforces the projections of vulnerability onto the Other, reproducing denial and apathy about climate change as an immediate concern in affluent, white, suburban communities like those of the Lower Blue Mountains (see also Norgaard 2011; Lertzman 2008).

Stories in the Lower Blue Mountains that were most prominently shared publicly were those of survival and lucky breaks. Such stories became legend and conveyed values of foolhardy bravery and self-reliance as people defended their own houses for themselves, despite road blocks, despite the danger. Newspaper articles inevitably focused on those who were rebuilding and 'determined to stay', and not those who had been forced to move away because of issues with

²¹ Sociologists David Pellow and Hollie Nyseth-Brehm (2013: 237) explain, 'environmental privilege allows access to coveted amenities, such as forests, parks, green space, healthy food, coastal properties, and elite neighbourhoods.' Environmental privilege is about freedom from exposure to air pollution and various other forms of toxic contamination and environmental degradation that other groups are forced to contend with every day (Murphy 2016).

underinsurance, and certainly not on those who were too afraid to move back or just undecided (Baker 2014; Desiatnik 2014; Feneley 2013a; Feneley 2013b). The metaphor of 'rising from the ashes' was especially popular, and miraculous stories of survival both human and animal were featured in the weeks following the fires (Cunningham 2013; Keating, Bigalowe and Templeman 2014; Lewis 2014a; Partridge 2014). As discussed in Chapter 2, images of the bush regenerating, of exotic new plants blossoming and fruiting in fire ravaged gardens were also prominently celebrated aspects of a strong and resilient bush that the community drew strength from. In white middle-class culture under capitalism, self-worth is vested in self-reliance and autonomy and economic success; heroic narratives of strength and resilience are valorised, while notions of struggle or failure - being underinsured, choosing not to rebuild, moving away from the community – are individualised and experienced as shameful (Bryant and Garnham 2014). When, at the 2014 community fire memorial, NSW Liberal MP Stuart Ayres said, 'As a nation we look to the Blue Mountains for a sense of strength for what it means to be Australian', he was connecting the October fires with the mythical stoic Australian identity where, as he put it, 'nature continually tests us - each time making us stronger', invoking the Aussie (white and male) battler on the frontier, conquering nature and pulling together in times of trouble. In such an environment sharing stories or experiences of fear and uncertainty can become shameful because of their associations with the vulnerable subject which must be projected onto the Other – the Third world, the feminine, the elderly, the lower class, the Aboriginal.

The second approach to vulnerability in the community following the fires was one that sought to ameliorate feelings of exposure and fear through the protection of those considered most vulnerable. Those working on the community recovery process were extremely protective of those who were 'fire affected'. This was unmistakable in my early interactions with recovery workers; they took very seriously their responsibility to protect the fire affected from the intrusions of the media and researchers. Indeed, they were often acting as self-appointed gatekeepers to the community. Around a year after the fires, I witnessed an exchange between an RFS member and a local recovery worker that is illustrative of how this approach of protection could negate the possibility of agency or power for those who had lost everything. In this conversation, the RFS member asked the recovery worker about how the community was going with fire preparedness and inquired about when they might hold a 'More than a Fire Plan'

preparedness event to help with future preparedness. The local recovery worker responded defensively saying, 'People aren't ready to think about preparing! Most people are still saying, "We've got nothing to protect yet." They just want to return to normal. They don't want to be thinking about all that!' This answer seemed to infuriate the RFS man, as he responded quite angrily, 'Yes but another fire might happen and it could be worse! They will still be affected!'

The response of this recovery worker to the suggestion that it was time for Winmalee residents to begin actively preparing for fire belied an attitude that I regularly encountered in my interviews and conversations with recovery workers about those who were fire affected. That is, the sense that as long as the community was still 'in recovery' and thus in an extremely vulnerable place, they needed to be insulated from exposure to discussion of danger or risks that were beyond their control, be it in the form of bushfire, or, climate change. Those who were vulnerable were 'in need of protection' (Butler 2016: 5), and the emphasis on consolation and support of the individual in this context excluded the idea that experiences of vulnerability could lead to constructive engagement with the issue of climate change. Critically important for those working in recovery was that their organisations receiving state funding could enable people to feel individually 'empowered' to rebuild their own lives and homes with a sense of 'agency'. Collective empowerment or political engagement was not a part of this process.

The third response to the shared experience of vulnerability that emerged in the immediate aftermath of the October fires was one of community solidarity and support between neighbours. This is a phenomenon that has been well documented in the disaster literature (Solnit 2009), spanning a diverse range of disasters – hurricanes and floods (Rodriguez et al. 2006), bombings (Drury et al. 2009) and earthquakes (Oliver-Smith, 1999a). It has been given various names, including rebound fusion (Gordon 2004), euphoric mutuality (Hoffman 1999) and post-disaster solidarity (Oliver-Smith 1999b). Residents of Winmalee and Yellow Rock, especially those who were fire affected or those who worked directly with the RFS, reported feelings of profound connection and camaraderie amongst the community brought about through the shared experience of vulnerability. Georgia described an experience that she had not long after the fires on a day when she was feeling particularly low:

Melancholy was just the best way I could describe it, and it was a yucky day, like it, if it had been that sort of day three weeks beforehand there wouldn't have been a fire and I went up to the coffee shop and it was still very subdued up there and I walked in and there were three other men, three men, myself and the staff... And I knew them, they knew me, but we're all sitting there having our own little cry, and the staff were so lovely. You know, cause they've seen us all coming in, they just came with some tissues. They knew our order, so they just came and gave us, you know my vanilla latte, their teas, just a rub on the shoulder. We just acknowledged one another, you know one fella got up to leave first and he gave me a kiss on the head, and I walked out next and it just felt... and... you know like, even though like, I know their faces I wouldn't know their names, but it was a moment in time, and I've seen them many times doing the same thing and, you know how sometimes you do something and afterwards there might be a little bit of embarrassment? There's no, there's never been a feeling of that, that they saw me when I was vulnerable or crying or, had I brushed my hair that day? [...] So... I remember that so beautifully and thinking that you weren't alone.

A year on from the fires one recovery worker publicly wept as she described her experiences of working with fire affected people while making a speech to open the Fireworks exhibition. There was a tenderness in the community as people came to terms with their dependence on each other and bore witness to each other's loss and strength in the face of that loss. Yet the 'altruistic communities' (Baron 1969 cited in Vezzali et al. 2015) that develop directly after a disaster are usually short-lived, as needs of those affected begin to outstrip the support available, and because disasters amplify existing social stratifications of class, gender and race which return to the fore following the immediate recovery response (Vezzali et al. 2015). This was also true in the Lower Mountains. As people rebuilt or moved away, it became visible that those who were financially or socially most precarious prior to the fire had less agency in their recovery process. Each person negotiated the terms of their insurance individually rather than coming together as a community to look at the problem of underinsurance as a collective battle as has been described in other instances (Hoffman 2002).

Kari Norgaard (2012: 98-99) argues that to understand the reproduction of environmental privilege we must attend to the experiences of privileged social actors themselves. Especially the ambivalent mental and emotional landscape of denial, guilt, responsibility and hopelessness that arises for people in this social location. She writes, 'Despite being in positions of power, privileged people may feel very powerless', encountering "invisible paradoxes", awkward, troubling moments which they seek to avoid' (Norgaard 2012: 98-99). After the October fires, people did feel powerless, afraid and vulnerable. Many people were temporarily dislocated from their experience of privilege. As the recovery process began and people started to rebuild their homes or moved away, they also encountered this awkward paradox – that they were at once very vulnerable to the threat of catastrophic bushfire now more imminent with climate change, but also responsible for managing, mitigating and adapting to that threat. Moreover, they began to see the need to adapt both in the specific local context through adequate fire management and preparedness strategies, and also in the more general or global sense, in terms of their energy use and carbon footprint. People sought safety, rebuilding houses that would protect them from future fire events, they also built houses that were supposed to be more 'environmentally responsible' and would lessen their contribution to dangerous global warming emissions. Vulnerability was to be ameliorated through new bushfire building codes and better insurance coverage, it was to be forgotten and projected elsewhere, and it meant that they needed to be insulated from the scarier realities of the world beyond their control. And yet people also expressed feelings of guilt and responsibility for the deteriorating quality of the environment both local and global that was beyond their immediate control:

I would hate to think that you know because of, you know our lifestyle and things that we've chosen and our Western style of living that we have endangered the thing that we have grown to love. And I mean, and it's probably true, we have because we live there.

Jasmin, Winmalee resident.

Yeah so, I think, we're very lucky to live here and I think it's quite irresponsible that we're not looking after it really.

Nicky, Springwood resident.

The binary in masculinist culture between vulnerability and agency (Butler 2016) presumes that those who are vulnerable cannot also be responsible – for themselves, or for the state of the world around them. It is reflective of the schizoid split in naturalism discussed in Chapter 2, where humans are either powerful agents of environmental processes able to reflexively control and understand the effects of their actions on the world which exists 'out there'. Or, humans are powerless victims to the 'natural laws' of that world in which they are physically subsumed. These two orientations miss the fundamentally relational quality of both agency and vulnerability which emerge out of the process of interaction between humans and their environment. Each enfolded within the other, each vulnerable – that is, open to being affected, each agentic – that is, able to affect. I concur with Marianne Hirsch when she argues that 'an acknowledgement of vulnerability, both shared and produced, can open a space of interconnection as well as a platform for responsiveness and resistance' (2016: 80). Hirsch goes on to explain that there are 'ways in which we can practice vulnerability as a form of attunement and responsibility – responsibility not as blameworthiness, but... as the ability to respond' (Hirsch 2016: 84).

Being placed in a position of vulnerability is new for a lot of people. Like I think we spend a lot of time insulating ourselves from vulnerability and a lot of the practices that we have as a society to do that kind of make us less resilient because we're not, we're not actually kind of creating resilience but getting away from vulnerability and they're not on a one sort of linear scale, and so the people who are moving away from vulnerability are you know, maybe kind of you know creating lifestyles that seem affluent and successful, but at the same time are, something like a bushfire kind of levels that.

Alex, Recovery worker.

This chapter has investigated the recovery process using climate change as an analytic lens to observe the connections that come alive between people and phenomena that would otherwise be ignored or overlooked. Understanding the October fires through this lens reveals underinsurance, and the subsequent displacement of people, not as an unfortunate one off event or disastrous bureaucratic bungle, but as a structural weakness that will be a recurrent feature of a system and culture that is not facing the very real, immediate, and future risks posed by climate change. The

influence of climate change as a discourse of risk was apparent in the convergence of the confused agendas of economic and environmental responsibility in the building of houses whose green credentials allayed the guilt of their (literally) concrete ecological impact. These were houses that promised to insulate residents from the rising power bills and the rising temperatures associated with climate change. They were an attempt to shield people both materially and symbolically from the fierce and unstable world of bushfire and its attendant mortality message, and from the shadowy prospect of a climate change. The designs of these bushfire fortresses were a testament to the enduring vision of mastery over, and separation from, the natural world that is foundational to the modern fantasy of invulnerability and control. As this illusion becomes progressively less tenable, how privileged social actors approach their experiences of vulnerability in a climate changed world could be the difference between effective adaptation and mitigation grounded in an ethos of 'response-ability' – or, as was evident in the Lower Mountains, the re-establishment of strategies for security that endanger the planet and all life upon it.

Hesitation: Talking around climate change

So yeah, that's what I think, it's [climate change] not overly spoken about. I drink at the local tavern, I'm not going to bring it up. [...] It's just... like it's not okay to talk about politics, religion and you could say the same thing, everyone'll whinge about it, but won't actually have a conversation about it.

-Roger, Winmalee resident.

What are the social and cultural conditions that inhibit or foster open public debate about contentious and anxiety-provoking problems in Australia? Who can speak about climate change? When, where and how? What is the relationship between discourse and in/action? These are the broader questions guiding the ethnographic exploration in this chapter of how the Lower Mountains community articulated climate change as a distant or proximal reality on the horizon, and the impact of their recent experience of catastrophic bushfire on such articulations. Most people were hesitant to name climate change, both in the context of conversations among community members as well as in the professional discourses of frontline workers. I will argue that such hesitation flows from a complex intersection of epistemic uncertainty, psychological disavowal and political sensitivity that inhibit the social production of frank discussions. These inhibitions in turn appear to be ingrained in a larger cultural pattern characteristic of the mainstream Australian political habitus around 'vexed problems'. This is a habitus that simultaneously demands symbolic recognition of an issue and silent practical ability to 'get on with it' (Russell 2011). The material presented here shows the protective and at times defensive reasoning that leads to typical splits – between thought and action, discourse and conversation, expertise and common knowledge - found in social contexts and emergency situations more generally.

My main task in this chapter is to analyse the layers of hesitations and cautious silences in a range of contexts: first I comment on how these shaped my fieldwork, second I identify where climate change was either openly discussed or otherwise attended to, and third I explore the

tactful comportment regarding the discussion of climate change in the community as indicative of an ethic of care that was superficially about avoiding political conflict, but that ultimately sought to protect people from feelings of fear and powerlessness by distancing the ontologically disturbing character of climate change from the recovery process. As I will show, this intersection of fear and care occurring beneath the surface proved pivotal in shaping the community's diverse perceptions and articulations of climate change. Hesitations and inhibitions are not intrinsically a negative force; at the very least, their purpose requires carefully situated interpretations. From this perspective, questions about how community members' inhibitions about articulating climate change are socially benign or destructive become centrally important.

Treading carefully: methodological choices regarding talk about climate change

Elizabeth Marino and Peter Schweitzer (2009) raise an important methodological question about how to talk about climate change with research participants from communities who are experiencing environmental changes that are consistent with global climate modelling. Marino and Schweitzer (2009: 209) define global climate change as 'changes in overall climate patterns over a given space and time... a distinct phenomenon of global scale that has local effects.' Global climate change is also a discourse in the Foucauldian sense. It is not something that emerged into 'worldwide consciousness' primarily through local experience but through public discourse, becoming a new part of the lexicon around the globe (Marino and Schweitzer 2009: 209). For instance, working in Nepal, Sascha Fuller's (2016) ethnographic research on environmental change revealed that villagers were regularly exposed to climate change discourse from the United Nations (UN) about the REDD+ (Reducing Emissions from Deforestation and Forest Degradation) program, which in fact disrupted local knowledge about environmental change (Fuller 2016: 141).

Similarly, Marino and Schweitzer's (2009) research with During Inupiaq people in Alaska documents a marked disconnect between, on the one hand, people's detailed observations of local change and, on the other, generalisations when asked about climate change directly. These observations clearly suggest that direct questions about climate change tend to elicit answers that engage with the discourse of climate change rather than the lived experiences local

environmental change, and this can really limit the scope of anthropological research on the ground (Marino and Schweitzer 2009: 216). When anthropologists assume their study is about climate change and use this term without reflexivity in their fieldwork, they potentially limit the space for the multiplicity of worldviews. Thus obscuring the divergent explanations around environmental change that have little in common with the Western modern scientific epistemology underwriting the concept of climate change itself. Given that my fieldwork was conducted with Western-educated participants this was less of a concern, though as Chapters 2 and 3 examined, the cosmological dimension of human-nature relationships and the explanations for environmental change or unusual fire behaviour were contradictory, multiple and often in a fraught relationship with scientific facts.

Marino and Schweitzer (2009: 210) found that 'not talking about climate change proved the best method for understanding local conceptions of change', and this perspective informed my fieldwork. Seeking to understand how people chose to express and organise their experiences of environmental change and bushfire, I was cautious about imbuing the topic of climate change in these discussions with a 'salience that it may not have most of the time' (Connor 2016: 90). Given the politically charged nature of discourse about climate change in Australia, I was also interested in engaging with participants not just as 'reservoirs of local knowledge' about their environment, but also as 'political agents with their own ideas about the saliency and legitimacy of different forms of knowledge' (Puntenney 2009: 316). I sought to understand how climate change was occurring in both the embodied experience of changes in environment and weather, and as a cultural object that shaped and mediated people's emotional and cognitive experiences of their world. It thus became necessary to occasionally raise it as an explicit topic in ongoing conversations with those I had built a longer-term relationship of trust with, but also in the formal interviews I conducted with people later in my fieldwork.

Admiring the impressive pile of donated quilts in the Salvation Army recovery shop front, I commented to the volunteer on duty that there seemed to be a lot of them left over. She explained that this was not the case and that fire affected people were just hesitant in collecting them: 'It's just a big thing to do anything that reminds them of the fires.' From the beginning, I was put on notice to tread carefully when discussing the fire with people, especially those who

had lost property, pets and gardens, those who were labelled 'fire affected.' In the community spaces where I was volunteering, I was welcomed with an air of caution; staff and other volunteers were very protective of those who had lost their homes in the fire. And there was wariness, both towards me because of my status as researcher and outsider, but also in the careful approaches that different community workers took with their planning of commemoration events and outreach. For instance, they frequently deliberated about how much to reference the fire directly in the promotional materials and whether to call it an anniversary or a remembrance or something else entirely.

As trust built among those I was working with in the community, the wariness towards me and my intentions dispersed markedly. However, sensitivity and protectiveness remained potent issues for community workers, and this shaped my approach to interviews and interactions with those who had lost property in the fires. I carefully deliberated what I could ask or not. If my questions about the fire generally were delicate, questions about climate change in relation to their experience of the fire began to feel to me potentially hostile and tactless. Worse, as was implied once or twice, I could be seen to have a 'political agenda'. Early in the research process, I decided to not explicitly bring up climate change unless the person I was talking to did so first. When people I had just met asked about my research I told them I was exploring environmental change and bushfire in the Blue Mountains and soon began to attune to the distinctive habitus of tact – what people caught in this situation of shock, trauma and public attention considered to be a polite, sympathetic, relevant or practical form of communication. From the beginning, in my ethnographic encounters with counsellors, recovery workers and friends, tact emerged as an acute concern and it quickly became a decisive reason for my caution about naming climate change. The social awkwardness of discussions about climate change thus became important in piecing together an account of people's experiences of a climate-connected disaster.

Where climate change was openly discussed

Before detailing how talk of climate change was avoided, I first describe the contexts where it was openly discussed – in the initial aftermath of the fires, and in more bureaucratic settings. According to two different locals who worked closely with fire affected locals as members of initial response teams, climate change was a common topic of discussion in the community and

especially with those who had lost their homes. When I asked each of them in their separate interviews about the link between the fires and climate change and whether that was something people spoke about, they responded:

I think a little bit more after the last fires. I think it came up a little bit then, about how you know, the fire was so bad because of climate change, but I don't think there's any scientific evidence around, I think it was a feeling. I think people were hearing, they were watching, like myself, 24/7 watching the news was on, constantly watching the updates and hearing, you know, experts come on saying how climate change is creating these fire infernos and these kind of things. I think that was the general feeling in the community. I do know there was a lot of discussion about Abbott at the time. About you know, how can he not believe in climate change? I think that was becoming frustrating for people when there was, they needed recognition.

Chloe, Recovery worker.

Yeah. That was a big topic of conversation. Absolutely. [...] Um, yes, the topic of climate change, you hear it all the time. You hear it, like, not so much now, but immediately after the fires you go to Coles [supermarket], or you go to the post office and people are saying, you know, 'Oh my goodness this weather and it's crazy.' And you know, we've got, we're burning here, um, it's on fire in Perth and Queensland were having floods and all at the same time and somewhere was having snow. And you know people were saying this is you know, this is crazy, this is all because of... climate change and that conversation was happening all the time.

Kim, Recovery worker.

Of the ten fire affected people that I formally interviewed, five connected the October fires with climate change in some way. Two of those were curious about it, reflecting that they had not given it much thought and that it was something they would think more about because of talking with me. One person was unsure about the connection, and two did not connect climate change with the fires at all. Of the remaining thirty people whom I interviewed who were not fire affected, twenty made some connections between the fires with climate change, though with various degrees of certainty and ways of discussing this. Seven people did not link the fires with

climate change, and three people moved back and forth between yes and no over the course of our interview. The number of people who connected climate change with the fires was quite surprising to me, given the lack of public discussion I had heard on the topic. While this is not a quantitative study, and there is no argument for statistical significance, the gap between what was occurring in public discourse and people's private considerations is worth noting, especially given how consistently I was told by those working on recovery or preparedness that climate change was relevant to how they thought about their 'work' but not relevant or useful to those who were fire affected.

There were two different contexts where climate change was more explicitly discussed in a public way. Yet each of these examples also contains strategies of avoidance that are instructive in understanding just how prevalent the silence around climate change was, in that it even affected spaces specifically set up to address climate change. When I first began investigating the Blue Mountains as an area where I might conduct my fieldwork, I became aware of the lack of prominence afforded to climate change on the Blue Mountains City Council (BMCC) website. There were three tabs at the top of the council homepage; 'Your Council', 'Your Community' and 'Sustainable Living'. I clicked on the tab 'Sustainable Living', which seemed a likely place to find information on climate change and the Blue Mountains. In this section of the website, there are several tabs along the left-hand side that include things like 'Coal Seam Gas', 'Environmental Health', 'Environmental Information', 'Bushfire and Emergencies'. However, none of these pages mentions climate change, let alone a local plan related to it. Eventually, after scouring the entire website, I discovered that information on climate change could be found from the homepage of the council website by clicking on 'Your Council', and from this page you needed to go to 'Policies, Plans and Strategies'. Here, climate change has a tab you can click on. This tab led me to a page that discussed the Blue Mountains Climate Change Risk Assessment Report (Burton and Laurie 2009). The page contained a link to the report and the following text:



Figure 6.1 Blue Mountains City Council web page discussing climate change Source: Blue Mountains City Council (2009).

It is clear from this web page that the council regarded climate change as an important concern for those in local government who must come up with 'strategic, coordinated action', but not necessarily of concern or interest to the general public. This is evident in the language on the page itself, and the fact that it is buried under the council's policies, plans and strategies section of the website, which is not immediately or intuitively accessible to a member of the public looking up information on climate change in their local area. Moreover, none of the key recommendations or findings of the report are listed on the page for the public to access easily. When I asked someone from the council about this, they explained that the council website was badly organised and out of date. It was thus presented to me as a technical issue rather than a deliberate choice to bury the subject. This explanation was consistent with what I observed with those who worked with the community after the fires. There was not a deliberate attempt to bury the subject, but an avoidance of its relevance to the work they were undertaking, and an evasion of a conscious choice about how to communicate about it with the local community.

In October 2014, I attended an event titled 'Extreme Climatic Events and the Community – Bushfires', run by the Institute for Sustainable Futures in conjunction with the NSW government, and funded by money raised from the Federal Government's the recently abolished carbon tax. The workshop targeted members of the Blue Mountains local community, and those working with them like the Rural Fire Service, the State Emergency Service, council workers, and community sector professionals. It was run in the format of a participatory workshop

encouraging conversations among community members about what climate change would mean for them, how they currently managed fire emergencies, and how this might need to change into the future because of climate change.

The presenters were frank about the reality that Mountains locals could expect according to the current science. One of them opened with, 'We're now banking on a four-degree temperature rise.' Such information was met with whistles and sighs in the audience, but there was no debate about its truth, no outcry or questioning of the science. Some expressed their despair that it seemed clear that we had already lost the battle on climate change and asked the facilitator why more was not being done on a federal level to mitigate it. Others joked about the fact that the workshop had been partly funded by the now defunct carbon tax. Some were suspicious about this focus on adaptation for the workshop, feeling that this meant giving up on mitigation strategies. It was strange for me, after five months of not hearing climate change discussed in any explicit or extensive way in the community, to suddenly be surrounded by open and frank conversations about fire risk, emergency planning, community engagement and the future of insurance premiums. Underpinning each topic was a shared agreement about the importance of climate change impacts on life in the Blue Mountains and to the community work that many were already undertaking in relation to it.

A lot of discussion in the workshop was devoted to the current difficulties of effectively engaging the community with the reality of the fire risk, and the various preparedness measures that many people do not necessarily understand or undertake. When the facilitator asked in closing, 'How can we improve resilience?'. People pointed out the huge turnout of people at community meetings following the fires and wondered how to sustain that interest outside of a crisis. There was a general agreement that talking about climate change was not the way to do it. One participant said it was 'not necessary or useful given some people's conceptions of climate change'. Another referred to the problem of the 'Alan Jones listeners'. Jones is a right-wing radio 'shock jock', who is openly sceptical of climate change science and critical of government efforts to mitigate global warming. Though everyone agreed that people's knowledge of changing conditions was not translating into better personal preparedness and that ultimately people were 'just not prepared for two fires in spring'.

This workshop constituted the most detailed and open discussion of climate change amongst Blue Mountains locals and the community sector that I witnessed during my fieldwork, but a lot of the talk was as punctuated with the awkward silences and familiar axioms of the local daily talk I was witnessing elsewhere. It was an incredibly hot day outside, with the cicadas singing loudly, and it felt more like a day in mid-December than October. When, in the early afternoon, a massive storm rolled through hailing down, people started joking with each other, 'It's climate change!' During a smaller group discussion, a representative from the Insurance Council of Australia mentioned that in thirty or forty years the Blue Mountains might well be uninsurable and this comment was met with complete silence at our table before someone tactfully changed the topic to talk about the kinds of gardens people have in the Blue Mountains.

The bureaucratic contexts of the council website and the Extreme Climatic Events workshop make evident the positioning of climate change as an 'elite' or 'technical' issue appropriate in very specific and managed contexts. The brief eruption of climate change talk reported by locals in the initial aftermath of the fire is perhaps emblematic of how crisis permits the transgression of cultural conventions around all kinds of behaviour. Outside of these contexts, however, talk of climate change was tactfully avoided. The manner and reasons for this avoidance make up the substance of my analysis below.

Tact and euphemism in polite conversation

Residents and frontline workers in the Lower Mountains were cautious in their public discussion of climate change. Direct or detailed conversation about climate change was rare, but not entirely absent. Certain kinds of talk about climate change were more acceptable than others, and the context (private versus public, casual versus official/professional) determined how climate change was spoken about. Locals rarely spoke of climate change directly. However, they regularly talked *around* it, which in Australian culture is normal behaviour in sensitive situations (Russell 2011). Imagine visiting a friend in the hospital after a recent leg amputation and asking, 'How are you feeling now with just one leg after that very painful operation you had to remove it?' The more likely discursive behaviour would be to offer something politely benign, as in

'How are you feeling today?', even though both know you are talking about this new one-legged reality for your friend.

A common way of talking around climate change was to share observations of environmental change people had noticed in their own lives. Only very rarely did I hear climate change explicitly mentioned in relation to these observed changes. This did not seem to be because people were denying that climate change was happening; the tone and context of these conversations indicated that climate change was *evidently* why these changes were happening. There was no need to explicitly preface discussions of the snakes being out a lot earlier this year with 'I believe climate change is happening because...' These observations would arise as part of a general conversation unusual behaviour of the local weather, plants and animals. As Connor's (2016: 90) surveys show, 'people are usually confident in talking about local environmental change and long-established understandings of weather, but less willing to express opinions on scientific theories that generalise about planetary changes and ignore local conditions.' Observations of local change were not presented neutrally. They were instead framed as a problem to worry about: 'There shouldn't even be ticks this far up the mountain, it's unheard of', one woman told me during one of our Bushcare meetings. The topic of climate change was subterranean, evident in the choice of words and anxious tone, but otherwise unmentioned. These conversations happened at social events, over meals, or in gardening workshops. It was a polite way of sharing concern where climate change was a 'given', but that avoided the political charge and associated social awkwardness attached to directly using the term 'climate change'. Roger, a local business owner who witnessed and participated in a lot of talk with locals told me, 'They're probably aware of climate change, and most people probably think that the climate is changing, so there's no point talking about it.'

Flippant talk that did explicitly name climate change was common in daily banter regarding strange weather. For example, extreme heat, big storms or large hailstones were generally joked about irreverently as 'climate change'. Another popular refrain that popped up when conversation about climate change moved beyond the weather and into discussions of the future was the joke that the Blue Mountains would be 'coastal once more!'. As one participant said to me during an interview, 'We were joking last night at a meeting that we'll have the beach here

soon. You know, okay maybe a couple of generations, you know, prime real estate.' Such talk was distant and ironic in tone and avoided genuine consideration what climate change might mean for people in their and their children's immediate lifetime. No one ever made jokes about bushfire and climate change. It would have been tactless. As discussed in Chapter 3, some residents did directly link climate change and the October bushfires, but the connection was seen by many as insensitive, simplistic or even politically exploitative of tragedy. What was regarded as appropriate local conversation in relation to the fires, and what was expected to be ignored was enforced through a 'soft' form of taboo that was identifiable as tact or social etiquette. Tactful conduct around the October fires dictated that people should not 'bring up' climate change directly, particularly with the fire affected residents. Thus, people often resorted to various forms of euphemism.

While the use of euphemism is traditionally associated with taboo topics (Durkheim 1897; Freud 1953), Allan and Burridge (1991: 11) point out that euphemism is often simply 'an alternative to a dispreferred expression, in order to avoid possible loss of face: either one's own face or, through giving offense, that of the audience, or of some third party.' The distinction between tact and taboo is porous and movable. The social tact I observed during informal daily conversation among locals was also present in the euphemistic language of public officials like the mayor, members of the RFS, those working on the recovery, and even members of state parliament who spoke at the anniversary events a year afterwards. Euphemism is a milder form of verbal avoidance than outright silence that allows people to invoke taboo subjects while also avoiding them. The power of euphemism, nodding to a topic while simultaneously avoiding it, derives from its communicative reach across incommensurate views. Those who want to understand your meaning will feel acknowledged and understood. Those who disagree cannot attack you for bringing up something 'inappropriate', and those who do not understand will miss that a reference has been made to that topic at all (either because they too are complicit in a kind of denial, or because they are genuinely ignorant).

At the one-year, delicately titled, 'recognition' event for the October fires, the mayor stated that the fire was an 'unprecedented natural disaster in the Blue Mountains and indeed in the state of New South Wales.' The term 'unprecedented' proclaims something fundamentally new and

different about these fires. It is more formal than the more colloquial term 'freak' explored in Chapter 3, but it denotes a similar idea. When MP Stuart Ayres at this same event said, 'You inspire us. We need you to inspire us because we know there's more to come', he may have been referring to the increase in severe fires in NSW because of climate change, or it may just easily refer to fires occurring in the Blue Mountains and around Australia as they always have. Either way, both speechmakers avoided any direct language about climate change.

The most common kinds of euphemism for climate change I heard were: circumlocution (where a much longer phrase is used to explain one word); quasi-omission; general for specific substitution; technical jargon; and, understatement.²² The preferred way of publicly discussing climate change was to talk almost exclusively in euphemistic terms – a part for whole substitution, where instead of saying 'I need to go to the toilet' one might say 'I need to go'. Words like 'severe', 'extreme' and 'frequent', regularly used in scientific communication about climate change were invoked so that people could allude to climate change without risking the perceived minefield that arose when climate change was named explicitly. The local workshop I attended titled 'Extreme Climatic Events and the Community Workshop – Bushfires', substituted the more ominous term 'disaster' for the more neutral 'event', and used the scientific jargon 'extreme climatic' instead of climate change. The workshop could well have been titled 'Climate Change Disasters and the Community Workshop – Bushfires', and it would have aptly captured what was discussed there. Similarly, as a part of the bushfire recovery program, it was announced in the Blue Mountains Gazette that people would be able to access the allied psychological services under the 'extreme climatic events' program that enabled doctors to refer patients who had been emotionally affected by the recent fires (Blue Mountains Gazette, 2 April 2014: 29).

Direct and open discussion of climate change was notably absent from all the October Fires anniversary events I attended. It was absent from the community forums in Springwood and Katoomba on bushfire preparedness titled, 'More than a Fire Plan', and from the recovery information night hosted by psychologist Rob Gordon who is a disaster recovery expert. If I had been drawing conclusions about the relevance of climate change to the community in terms of

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²² See Allan and Burridge 1991 for a full list of terms.

how they thought about fire, fire preparedness and recovery from these scenarios alone, I would have concluded that those working on preparedness and recovery did not feel it was relevant to their work at all. But in my private conversations with frontline workers (both recorded and unrecorded), it became evident that climate change was a topic that arose in their work in relation to the October fires. And that climate change especially affected how they thought about the future of their various roles. Here in the professional setting, as in the local daily talk, climate change was treated as a 'given' fact about the way the world was now:

It's a, I think it's a given pretty much. Uh... and I, whether we would actually use that term in say a community forum like 'More than a Fire Plan'... I don't know whether we've ever used it, but you know we talk about more severe, more extreme, more frequent um, extreme weather events you know, and the RFS and the other emergency services are there talking about the same kind of language as if it is a given.

Rachel, Recovery worker

Nevertheless, it was apparent that this notion of climate change as an unspoken 'given' both in daily conversation amongst residents and in bureaucratic discussion, was a means to avoid direct and meaningful confrontation with the uncertain and difficult realities associated with climate change.

Perceived Irrelevance

The perception of the irrelevance of climate change has been regarded by some researchers as a problem of 'attention' – either a denialist redirection of attention away from climate change (Norgaard 2011), or a scarcity of attention in an era of multiple global crises that vie for saliency and public engagement (Connor 2016). The context of the October fires begs for a deeper interrogation of how climate change becomes positioned as relevant or irrelevant for particular publics in the interpretation of local events. Chapter 3 considered how cultural systems of relevance and ambivalent expectation persistently directed people's attention away from the relationship between bushfire and climate change in their locality in order to avoid anxiety. Here I explore how the indirect and euphemistic public talk of climate change further contributed to the dismissal of climate change as locally relevant in the public communication about recovery and preparedness.

In Living in Denial, Kari Norgaard (2011) describes conversational patterns associated with the 'socially organised denial' of climate change in the daily life of the rural community 'Bygdaby' in Norway. The conversations she observes show characteristics of 'knowing and not knowing', what Stanley Cohen (2001: 22) terms 'disavowal' – a more complex form of denial than the outright refusal of reality (Weintrobe 2013a). Drawing on the work of Eviatar Zerubavel (2006), Norgaard explains socially organised denial as a deliberate effort to refrain from noticing the highly conspicuous matters that 'beg' for attention' (Zerubavel 2006: 10). Given the 'noticeably' warmer weather in Bygadaby, Norgaard (2011) found it significant that climate change was not more prominent in local conversation. However, this view requires that the effects of climate change are unavoidably present for people and then actively ignored. What my research has highlighted so far is rather the centrality of ambiguity, uncertainty and dispute around questions of climate change impacts, as well as the cultural character of people's images and understandings of the bush, all which suggest a more refracted pattern than 'actively ignoring' climate change.

Linda Connor (2016), in her research on the quotidian aspects of climate change for Hunter Valley residents in NSW, found that for many people climate change is an issue that is simply not ranked amongst the 'most salient problems' (Connor 2016: 74). Her research was within a community confronting the harsh reality of the resource-extractive industry in a daily way. She argues that 'lack of concern about climate change may be at least partly understood as a problem of attention', which can be 'a very scarce cognitive resource' (Elke 2010: 334 cited in Connor 2016: 74). This view is substantiated by surveys that correlate a decline in concern about climate change with higher concerns about pollution or water shortage (Nielson 2011 cited in Connor 2016: 75). Yet, one might think that living through a climate-connected disaster of unprecedented proportions, such as a catastrophic bushfire or flood, might give the topic of climate change a new salience, which it might at least for a time, gain more attention or importance for those suffering its effects.

²³ 'Bygdaby' is an expression in Norwegian that means halfway between rural hamlet and city, it is a pseudonym used by Norgaard for the name of the town where she conducted her research.

A person's 'experience' with weather related phenomena has often been seen as a means of engagement with climate change (Lorenzoni and Pidgeon 2006; McDonald et al. 2015; Reser et al. 2014; Weber 2010). Such research on people's perceptions and attitudes towards climate change following direct personal experience of a natural disaster connected with climate change has had varied results. Lorraine Whitmarsh (2008) found that although direct experience of flooding in the UK led people to perceive flooding as a genuine personal risk, their attitude towards climate change differed little from that of non-victims. More recent research shows that direct experience of flooding in the UK led to an overall increased salience of climate change, pronounced emotional responses and greater perceived personal vulnerability and risk perceptions (Demski et al. 2016). Research conducted in Norway showed that personal experience of damage caused by natural hazards such as flooding and landslides has the largest impact on people's belief that climate change will be threatening to them personally, though this does not necessarily translate into concern about climate change for their country overall (Lujala et al. 2014). Other research shows that perceived risk of climate change is more affected by emotional factors, broader values and political preferences, and less by analytical reasoning and rational choice (Leiserowitz 2006, Myers et al. 2013). Reser et al. (2014: 521) find evidence that perceived direct experience of environmental changes deemed to be manifestations of climate change influence 'psychological responses such as risk perception, acceptance, belief certainty, distress, and psychological and behavioural adaptation'. This research suggests that for many people such experiences promote a 'contextualised' and more 'personally meaningful realisation' of what climate change portends both locally and globally (Reser et al. 2014: 521).

I have argued for the importance of a full recognition of local cultures and ecological contexts through in-depth ethnographic inquiry, seeing that engagement with climate change is more than the sum of 'attention' and 'experience'. In the context of the aftermath of the October fires, there was not a 'socially organised denial' of climate change in the sense that Norgaard (2011) describes, or even a scarcity of attention; the October fires were for many months central in people's minds. There was, however, a junction of genuine ambiguity about climate change's role in the fires that intersected with the idea that discussion of the issue would be harmful and politically divisive. Here, for analytical purposes, I have separated out four inhibiting concerns that commonly arose during interviews when I asked people how they spoke about climate

change with each other in the community. These concerns were: too political/contentious; need to prioritise being practical; too uncertain/ambiguous; too traumatic/disempowering. These main reasons people put forward interacted with one another and are best characterised as a self-reinforcing constellation that affected perceptions of the local relevance of climate change and precluded open discussion about it. A diagrammatic elaboration (Figure 6.2) might best capture this dynamic constellation:

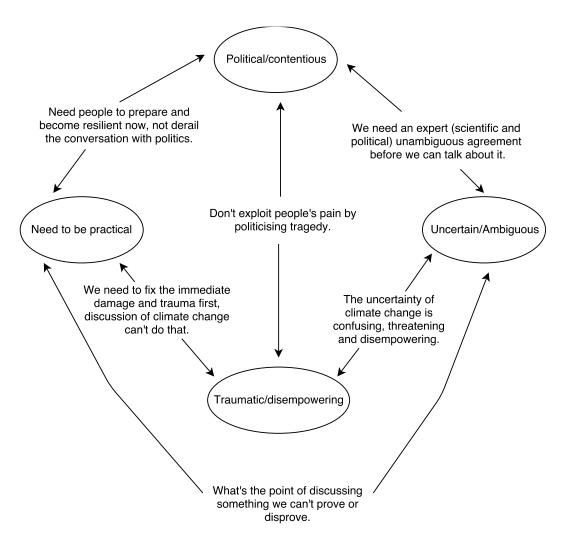


Figure 6.2 Relational network that reinforces the perceived irrelevance of climate change. Source: Author.

It was rare to encounter one isolated reason for not talking about climate change. Perhaps, if that had been the case, an overt public conversation about its local significance and impacts would

not would not have been so difficult to begin. Some of the questions that emerge from this diagram have been examined in this thesis so far. The diagram shows the interdependence of some of the questions dealt with in their own right in earlier chapters. Thus, Chapters 3 and 4 explored the uncertainty and ambiguity around the practical and discursive management of fire risk and climate change, while Chapter 4 examined how disempowerment, trauma and vulnerability were constructed in the aftermath of the October fires. I here provide a fuller picture of the various dimensions inhibiting the articulation of climate change and then bring into view the relationships between them.

Politically contentious

Local councils across Australia are interested in how to successfully adapt to climate change. While funding and attention around climate planning are directed towards risk assessment, the facilitation of public conversations about what climate change means for their communities is hardly a priority (Collins 2016). Lisette Collins' (2016) extensive research on local council Climate Change Adaptation Plans (CCAPs) from around Australia included the compilation of a database of information on 558²⁴ local councils from 2008-2014 with 97 plans and 183 councils involved in the development of CCAPs. Her research also included twenty qualitative interviews with elite informants who together accounted for the creation of over 70 CCAPs with 100 different councils. Collins' comprehensive study elucidates many of the same patterns and strategies around talk about climate change that I uncovered in the Blue Mountains. Her key argument is that the biggest barrier to effective adaptation is the political context in which this work is taking place: '[T]he seemingly innocuous combination of two words 'climate' and 'change' have been co-opted by key political leaders and the media to create a political minefield where the science of climate change is repeatedly questioned' (Collins 2016: 32). Collins (2016: 187) maps how the two words 'climate change' have become 'unspeakable' in many Australian local government areas.²⁵ This has rendered traditional methods of council community consultation and education particularly difficult with 8% of all councils who now have CCAPs

²⁴ This accounts for all local councils at that time in Australia. As of 2017, there are 546 local councils due to council amalgamations that have occurred since 2014 (http://regional.gov.au/local/, viewed 1 May 2017).

²⁵ For Moreton Bay Council, the Deputy Premier of Queensland instructed the council to remove the term climate change from all planning documents (Solomons and Willacy 2014). The open discussion of climate change at a local council level has shifted over time depending on the state government, for some areas the terminology has shifted to 'natural hazards management' and 'emergency response', in other places sea level rise has become 'flood management', (Collins 2016: 202).

that do not include public communication programs at all (Collins 2016: 196). She was told by interviewees that the term had become so political that councils and consultants chose terms like 'a changing climate' or 'climate variability' or 'changes in weather over time' which were less provocative despite the very similar word use and general meaning Collins (2016: 197). Similarly, I was told by one recovery worker:

Oh, very contentious issue that one. It's like politics, it's like religion, it's become one of those one's that you just don't talk about unless you have to. Have you found that? [...] Because it used to be, oh we don't talk religion or politics, but now it's we don't talk religion, politics and climate change.

Veronica, Recovery worker.

Connor (2016: 90) also found that climate change was a 'touchy subject' for residents of the Hunter Valley in New South Wales. The antagonistic character of the political discussion over the last ten years in Australia had led to a real scepticism in the community about the value of trying to talk about it with each other. Undoubtedly, there was a perception of political controversy in Blue Mountains communities that was fuelled by the way that the discussion about climate change was occurring in the media and between politicians, but this perception did not seem substantiated by the local reality I observed. The Blue Mountains has a high green vote — with some electoral booths recording it as high as 25.9% in the 2016 federal election. The median vote for the Greens was around 16% across booths located in the Blue Mountains LGA, compared with the 9% of the vote that the Greens received across NSW (AEC 2016b). Local conservation, Bushcare and bushwalking groups are extremely active across the Blue Mountains area, and the local council is well known for its forward thinking and progressive stance on issues of environment and sustainability. Although the Lower Mountains where I conducted fieldwork are less 'green', I came across less than a handful of people who were actively sceptical about climate change²⁶.

As Brulle et al. (2012) explore in a time series analysis of 74 surveys collected between 2002 and 2010 in the USA, 'elite cues' that come from prominent politicians have the most impact on

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²⁶ Here I use the term 'sceptic' as opposed to 'denier' to denote the difference between the more common 'knowing and not knowing' (Cohen 2001) style of disavowal, and those who asserted that climate change was definitively not occurring and was a hoax or conspiracy of some kind.

people's concern about climate change – more so than extreme weather events, access to accurate scientific information, media coverage, and movement/countermovement advocacy. Much of my own qualitative data on the Blue Mountains support the importance of the political realm in determining how the community relates to climate change. Certain Liberal National Party members and some media commentators encouraged the public to associate the mentioning of climate change in relation to the bushfires with political incorrectness and insensitivity. The federal Environment Minister Greg Hunt stated after the fires: 'There has been a terrible tragedy in NSW and no-one anywhere should seek to politicise any human tragedy, let alone a bushfire of this scale' (Wroe 2013). Adam Bandt, a Greens member of federal parliament who tweeted during the fires, linking them with climate change and with the proposed repeal of the carbon tax, was widely censured on Twitter, on talkback radio, and in unsigned opinion pieces on news.com.au (Holmes 2013). Bandt was variously attacked as 'disgusting', 'hysterical', and 'a traitor to Australia' (Grant 2013).



Figure 6.3 Various tweeters responding to Adam Bandt's original tweet. Source: Holmes (2013).

As mentioned in Chapter 3, the occurrence of an extraordinarily high number of severe fires in NSW during the month of October in 2013 sparked a great deal of discussion about climate

change in the media (Boer 2013; Gilding 2013; *The Australian* 23 October 2013; Wallace and Hannam 2013). It was, for the most part, a quasi-scientific discussion that was ultimately a political debate about climate change policy. Australian Prime Minister Tony Abbott, who famously declared that climate change was 'absolute crap', was in office at the time attempting to implement regressive climate policies while also professing his new found 'belief' in climate change as it was also politically untenable to openly reject the scientific evidence. This strange political dance between ostensibly 'acting on climate change' while repealing effective carbon reduction policies, and vilifying those who made links between the fires and climate change, dampened such discussion on the ground, including in Blue Mountains communities in the aftermath of the fires. Where it was considered at all, climate change continued to be viewed by participants as a primarily political problem. I do not want to dismiss the influence of elite cues in the tenor of the local climate change talk (Brulle et al. 2012; Collins 2016). Rather, my field research revealed that the positioning of climate change as an elite political and scientific issue was itself a cultural process of typification that shaped its intelligibility for locals.

Ambiguity and uncertainty

Chapters 3 and 4 have already extensively catalogued the nature of the ambiguity and uncertainty surrounding the role of climate change in the October fires. Here I briefly consider how the ambiguity and uncertainty intersected with the typification of climate change as a complex elite political and scientific issue which the average community outreach worker did not have the authority to talk about. My conversations about climate change with people who worked either with the RFS, with the recovery effort in community development, or with council, tended to follow a certain dynamic revealing the connection between uncertainty and the readiness to bring the topic up with locals. The following exchange between myself and a Winmalee RFS volunteer captures this pattern:

B: Is climate change something you think about as a part of your work in recovery and preparedness for the RFS?

M: Yes. Most definitely.

B: Would it be something you would feel comfortable talking about with the public? Like, with local community members or people who have lost their houses?

M: Um. I wouldn't, I wouldn't be comfortable talking about climate change because I don't know, I don't know about climate change, I'm not an authority on climate change

[...] I'm comfortable talking with people about their risk and about the, you know, okay there's the end of the cul-de-sac and I know that street gets hammered every time, and I'll say to the residents [...] 'This is probably one of the worst spots you'd be in', and I don't have a problem putting the wind up residents because sometimes you have to, you've got to give them a bit of a shock [...] But if they said to me, 'Oh, why?' You know, I'd say, 'Oh look El Niño's telling us that it's going to be a high, above average temperatures and below average rainfall and all that sort of stuff and that's fire weather.' To me, fire weather is the word that comes into it. And when you get fire weather you get October 2013'. And if they sort of said, 'Oh well, why is that? Is that climate change?' Then I'd probably say, 'Who knows?'

Matthew, RFS member, Winmalee resident

'Worsening El Niños' was a common euphemism for climate change amongst the RFS volunteers I spoke with, but Matthew's account is cogent in its revelation of the gap between his own private considerations of the climate change threat and what he feels is publicly permissible to discuss with residents. Below, Alex, who worked on the recovery process, shares a similar perspective but for almost opposite reasons:

How do you make it [climate change] relevant for people who don't necessarily have my experience and don't necessarily believe NASA or you know, anyone else who's doing research that shows significant changes.

Alex, Recovery worker.

Alex, a university educated community worker, had a confident understanding of climate science which we discussed quite extensively in our interview. But the notion of trying to communicate the complexity of the issue with people who do not understand or 'believe' NASA becomes a reason to avoid talking about it with those in the local community. Both of these frontline workers thus continue to relate to climate change as a contested domain for elite experts, not a topic that would be easily broachable in everyday conversation with locals, and certainly not a topic that they feel they should be responsible for communicating about.

Let's be practical

One of the key ways that climate change was positioned as irrelevant was in the emphasis that people put on 'getting things done' locally in the here and now, on *practically* helping people to get better prepared for the fire season, as well as assisting those rebuilding and in recovery from the most recent fires. This value, which I have labelled the 'need to be practical' in Figure 6.2, led to the exclusion of climate change as an overt topic of conversation because it was equated with 'the political', 'the uncertain' and 'the traumatic'. These were all aspects that were seen to slow down the expediency of useful practical action in the present moment. This approach echoes what Bruce Kapferer has identified as an Australian 'egalitarian individualism' (Kapferer and Morris 2003: 84), where individual action of a certain kind is valued: action that is loyal to the Australian experience, and not governed by the speculative future oriented musings of global elites (scientists, politicians, activists). Satirist Michael Leunig aptly captured this outlook in a cartoon he published in the weeks after the October 2013 fires (see Figure 6.4). Psychologist David Russell (2011: 159) also analyses this attitude of 'getting on with it' as a foundational feature of early settler culture in Australia. Bare survival was at issue for homesick British officers, free settlers and convicts, and '[a]ny reflective and sedate culture was for the privileged few'. Russell (2011: 161) goes on to state:

Right from the first of settlement, the locals had a love for talk but were suspicious of language. Reflection and conscious discipline had no place in the pragmatic, if not desperate contingencies of those times.

During the afternoon tea of the Extreme Climatic Events workshop, I chatted with a Winmalee local and school counsellor who had been working with fire affected children. She shared that this work was taking a significant toll on her and some of the other workers. When I asked her what she thought others would make of the workshop, she said they might be critical of it as 'talking

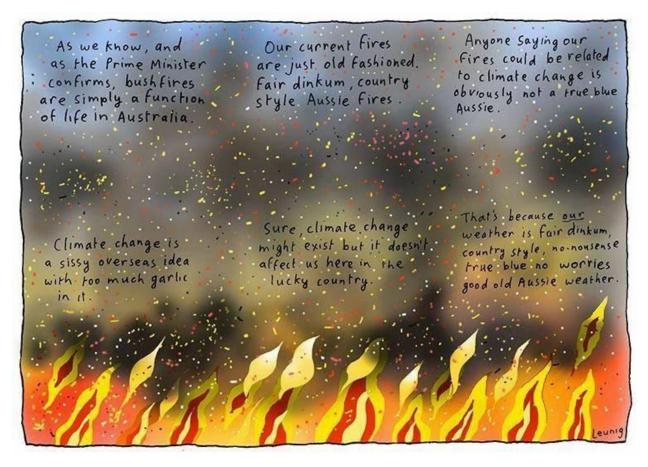


Figure 6.4 Leunig cartoon published in the weeks following the October Fires of 2013. Source: http://www.leunig.com.au/cartoons/recent-cartoons/505-soil

not doing'. Another example of this attitude was revealed in an anecdote from an RFS member who told me that in 2007 the RFS had undertaken some fire modelling work to better understand what the social and environmental impacts of a catastrophic fire in the Upper Mountains would be. He told me that at the time undertaking this modelling was frowned upon as 'too speculative' or even 'dangerous', its practical application was questioned. Later, after the Black Saturday fires of 2009 occurred this work was viewed as 'forward thinking' and 'useful'. Recovery and preparedness workers were concerned with equipping the community with tools to effectively respond to the immediate threat and trauma of a fire event, conversation about climate change in this context was considered too big, abstract, esoteric and distractingly ideological:

I don't want community forums in particular to get derailed by naysayers who can completely change the conversation into how can you say that that's caused by... you know, which is in a sense irrelevant to the 'are you prepared, are you resilient?' conversation. Um... not irrelevant, but like it doesn't actually matter, and if they're going

to divert the entire discourse of the three-hour session which we've taken all the time to set up into something that's a philosophical issue if you like, rather than a practical issue.

Rachel, Recovery worker.

B: Is climate change something you think about as a part of your role in the recovery process?

J: (*Pause*) No. No. Yeah (*laughs*). Should it be? I mean in an ideal world, yes probably. But has it been? No. And is it likely to be? (*Pause*) If I had more days in the week and more capacity yeah.

Joanna, Recovery worker.

In her book, Avoiding Politics: How Americans Produce Apathy in Everyday Life, Nina Eliasoph (1998: 24) discusses the way that people do not want to waste precious time complaining about issues that they perceive cannot be fixed. She uses an example of a parents group arranging for voluntary supervision of children early in the morning before school hours to cover those parents who were stuck with the long commute to work by car each day. This group did not misunderstand the broader issues of longer work hours and lack of a decent public transport system that contributed to this issue:

In any meeting, the discussion could have widened out to broader questions like this, possibly encouraging citizens to begin permitting themselves to imagine broader solutions. But volunteers assumed there was no sense sacrificing precious, scarce time *complaining about feeling bad* about something that could not be fixed; and here was a *small, upbeat, hands-on solution* that could work right away if enough people would help [emphasis added]' (Eliasoph 1998: 24).

Equally, in the Blue Mountains, it was not that the topic of climate change was dismissed out of hand or seen as completely unrelated to preparedness and recovery efforts. Rather, thinking and talking about climate change in a real way with Blue Mountains locals was positioned by those working in preparedness and recovery as something that might happen in an 'ideal' world, if it wasn't so politically contentious, if the science was more settled, if there were more 'days in the week', if it was a topic that didn't evoke such 'difficult feelings':

In terms of the preparedness work in these events that we're doing, it doesn't matter whether they believe in climate change or not, what matters is [...] that they might need to take steps to be better prepared for it.

Rachel, Recovery worker.

Collins (2016: 33) calls this the 'no regrets' approach, where adaptation and mitigation measures are designed and presented in such a way that the community and environment benefits even if predicted climate change does not occur. This way, adaptation planning can be justified even to those who are sceptical about climate change. According to Collins such an approach is 'borne from the need to justify climate action in a difficult political context' (Collins 2016: 200), its utility frequently espoused in the adaptation literature (Heltberg et al. 2009 and Siegel 2010, cited in Collins 2016). It has been key for Australian adaptation policy makers (Collins 2016), and the 'no regrets' approach may well have political expediency. But it also functioned in the community to incorporate the ontologically threatening prospect of climate change catastrophe into a more comprehensible narrative about bushfire threat that could be contained and understood through an existing preparedness narrative.

Trauma and protection

I don't ever bring up anything that is a reminder or something that is about lack of control. Cause they're experiencing a lot of that in their life and it's not helpful. It's not helpful to come to someone like me and to walk away saying 'she said this about climate change and I don't know, should I be, you know that's really got me worried now.' [...] Nobody needs that from me. Um, there's plenty of other sources of, that they can talk about that with. But not from here, it's just not helpful.

Kim, Recovery worker.

This kind of 'protectionism' has a cultural history. Russell (2011) suggests that un-reflective talk performed a protective function for those in the 'desperate circumstances' of early colonial life in Australia, holding raw emotions at bay. He points out that it is not that words were unspoken, but that reflective language that invited deliberation threatened the illusion of 'owning' this new land

(Russell 2011: 164). A culture of silence²⁷ emerged in response to the unspeakable pain experienced by first settlers, who preferred the comradery of 'unreflective talking' amongst fellow sufferers to a 'conscious engagement with the emotional loss: mourning' (Russell 2011: 161). According to Russell, this attitude remains prevalent in Australia today, and this assertion is certainly supported by my findings in the Lower Mountains following the devastation of the fires. In the month following the fires *Hut News*²⁸ featured an article titled 'Don't mention the war!'. In it Blue Mountains local Christine Davies reflected, 'As the bushfires raged we were told it was insensitive to talk about global warming, but it was hard not to make the connection' (Davies 2013: 3). Lesley Head discusses how the political debate occurring after the October fires also sought to separate grief from climate change, 'not while people are grieving said many people from the Prime Minister down' (Head 2016b: 81).

Susan Moser (2013) writes that the terrain of climate change is political on the surface, but personal, psychological, spiritual and cultural deep underneath. The political nature of climate change was one explanation for the necessity of tactful in the community, but it was evident that there was a deeper psychological and cultural terrain to this avoidance that frontline workers unconsciously articulated in their explanations of avoiding direct talk of climate change with the community. Those working on recovery and in the RFS were uncovering difficult information about the predicted realities of climate change that they felt people had to be protected from, and anxieties about climate change lingered at the edges of my conversations with them as they anticipated the future:

My concern is if climate change creates even one of those you know, the low humidity or the high temperatures or the wind to increase, then that increases our risk of a catastrophic fire. And not just a catastrophic fire but one with no warning like that. A very, very sudden event, that's what's going to be, that's my biggest concern, a sudden

²⁷ David Russell (2011) is not the only scholar to comment on the culture of silence in early Australian life. Anthropologist William Hanley Stanner also referred to 'the Great Australian Silence' to describe the attitude of non-indigenous Australians to their history as innocent and unblemished rather than acknowledge the frontier violence of settlement (Manne 2009: para 7). Historian Robert Hughes (1988: xii) also writes of the 'amnesia – a national pact of silence' that worked to forget the convict origins of colonial Australia.

²⁸ The monthly publication of the local Blue Mountains Conservation Society.

event like that. Fires will always happen, but you know, if an event like that happens in North Katoomba then it is going to be catastrophic.

Kim, Recovery worker.

Kim's anticipation of such an event leaps outside of the narrative of 'fires will always happen' and into a much more sinister and unstable reality labelled 'catastrophic'. As Kirsten Hastrup's (2013: 3) work on the role of imagination and anticipation in the experience of climate change elucidates, there is a destabilised ontology implied in the new knowledge of climate change. The process of anticipating climate change affects our social imaginary as 'the liquidity of the climate scenarios is itself a social driver; it infiltrates the perception not only of the environment, but also of social life and knowledge'. This process of anticipation and its associated destabilised ontology was a reality for many who I spoke with - both residents and those working on recovery and preparedness. Yet there did not seem to be a sufficiently robust story or narrative that could be agreed upon to talk about such a threat, and so people were left to deal in euphemisms and silence. The idea that it was insensitive to talk about climate change with someone who had just been through the trauma of the fires and lost everything, was prevalent and unquestioned. Such a frame shielded the community, not just from difficult political debate, but from the existential worry and the difficult emotions that arise when engaging with climate change. It became clear in my conversations with recovery workers that polite talk and euphemism around climate change was a means to avoid the social and emotional discomfort of overtly acknowledging of additional vulnerability and helplessness.

The theme of protection is prominent in the literature that considers denial and climate change (Lertzman 2015a; Norgaard 2006; Randall 2009; Rutledge 2015; Weintrobe 2013c). Norgaard (2011) found that the complex and difficult emotions of guilt, shame, and helplessness can stifle public talk about climate change. The additionally traumatic context of a disaster event can, therefore, affect people's engagement with climate change in at least two directions simultaneously. In this context, climate change gains a new salience in the affected community (Demski et al. 2016). At the same time, climate change is subsumed and buried as a side concern by the harsh day to day reality of loss, destruction, trauma and anxiety that people must navigate in the aftermath of disaster (Clayton et al. 2014). So far, research comparing responses to climate

change for people following extreme weather events is primarily concerned with the cognitive and affective aspects of risk perception following 'personal experiences' of climate change (Akerlof et al. 2013; Demski et al. 2016; Krosnick et al. 2006; Lujala 2014; Spence et al. 2011; Van der Linden 2014). The nature of this research orientation has limited capacity for an analysis of the role of culture in how risk, recovery and vulnerability are understood and managed on the ground after disasters connected with climate change. It also offers only a limited understanding of the influence of local government framings of the event. Yet as my case study shows, culture plays a significant role: in the Blue Mountains, a culture of ambivalent expectation regarding fire risk, characteristically Australian responses and framings of vulnerability, the politicisation of climate change science, and the uncertainty of its local environmental impacts, all contributed to the perception of recovery and preparedness workers that discussion of climate change was something that disaster affected people must be 'protected' from.

Should we talk about it?

As discussed in Chapter 3, social and cultural groups establish their own 'domains of relevance'. Individuals act in a social world that has already provided these broad domains of relevance, and they orient themselves accordingly. That is, people would be unable to recognise what is relevant and what belongs to which domains of relevance, were it not for their acquaintance with the 'socially approved systems of typifications and relevances' (Schutz 1970: 122). Those working on recovery and preparedness were aware of the marked difference in fire severity and speed that might be coming under a climate change scenario, even as they evaded the need to talk about it publicly, and it was evident that not talking about climate change was not always a conscious or strategic choice. Rather, there was an unconscious decoupling of climate change from their work with the community that revealed their own constructions of 'the way things were', a kind of 'common sense' idea about the relevance of climate change steeped in the construction of it as a temporally distant and abstract phenomenon. This typification grew somewhat out of 'socially approved systems of relevances' that foregrounded the scientific and political domains in the discussion of climate change, domains that were seen as the purview of elite experts. These domains were considered to be apart from everyday personal experiences and emotional life, from the *here* and *now* of recovery and preparedness work:

From our community engagement side, climate change is not discussed. Not, not deliberately, it's just not really in our space of thought. Um, and it's sort of on the run of thinking, now I'm wondering whether that's around, we're about, in terms of risk, we're about the here and now.

Ron, RFS member.

Another Australian study underscores the wider reality of what appears to be an Australian cultural pattern. Minnegal and Dwyer (2008) showed in their analysis of narratives about climate change among East Gippsland fishermen and high country cattle grazers that these stories serve to reinforce what people already know and believe about the world 'in the here and now'. Actors find security and certainty in the stories they tell about that which they understand to be 'given' in the world, which casts climate change as a local phenomenon caused by fickle Nature. They also find that, in contrast to the constrained discourse at community level, for many politicians, climate change provides abundant rhetorical opportunities to promote their own or denigrate others' short-term agendas. In the context of the Blue Mountains, an already fire prone region, the frontline workers understandably doubted the utility of introducing climate change into the existing challenging conversations about community preparedness:

I don't think it's every um, you know, table this discussion let's just discuss climate change, but all of us are working on our, you know we all have um, you know procedures and protocols for the next thing. And we are all, whether we are doing it as a conscious conversation, or subconsciously, we are all preparing for more of that. Um, you know we work a lot with the RFS and they say you know we're looking at the maps and the weather systems and we are preparing for something bigger, you know we're preparing for more of these events. [...] So... without even necessarily having that conversation we all say, well you know like 'for the next time, you know we won't do this'. It's always the next time... preparedness is certainly, I'd say that's brought up at every meeting.

Kim, Recovery worker.

In the interviews I conducted with recovery and preparedness workers about climate change it was clear they had difficulty engaging with their own difficult emotions of sadness, fear and guilt that arose around the topic, which likely also prevented them from translating their concerns into

a meaningful public conversation (Norgaard 2006, 2011). Matthew from the Winmalee RFS spoke about his fear for residents knowing that they do not have enough volunteers, vehicles and fire fighting equipment to 'handle the sorts of fires that we're starting to get now as a result of climate change'. When I asked recovery worker Rachel how she felt about climate change she said, 'a bit despairing to be honest'. Recovery worker Joanna spoke about her feelings of guilt that her generation had contributed to climate change, while Rebecca told me, 'I think I think about it... I don't necessarily integrate it into my practice'.

What was evident in my discussions with frontline workers was that there was a complex intersection of uncertainty, psychological disavowal and political sensitivity and an ethics of care for those in trauma that led to questions for them about whether climate change should or could be explicitly addressed in their own work. Sometimes the reasons behind not talking or deliberately thinking about climate change in relation to their work were conscious and openly stated as a method to encourage community engagement:

I guess my view up to date if we call it more severe and more frequent, extreme weather events instead of calling it climate change, I don't care, you know? If that works, if that's jargon language that people are willing to engage with, who cares?

Rachel, Recovery worker.

Not bringing up climate change was a means for frontline workers to stay in connection with the fire affected people they were helping. It was critical that they did not alienate those they were trying to assist, and climate change, seen as fraught and political, was not thought to be a topic that would build trust with those they were helping to recover:

I do... I do um, do it in, I do a lot of things in a very windy way. Because I want to get a message out there, but I want to make sure it's not in someone's face. So, my role I feel at the moment is, advising people how to plant. And I can do that, because it's not in your face.

Veronica, Recovery worker.

Collins (2016) found that most councils' preferred policy frame for climate change adaptation was around the creation of a better and sustainable 'lifestyle'. Public communications focused on

local food production and gardening, recycling and energy efficiency. The problem is thus not defined as a 'climate change' issue, but rather as a lifestyle choice. In her own words (Collins 2016: 199):

The benefits are defined in terms of their relationship to the economy, general health and the environment, but not explicitly linked to climate change mitigation or adaptation. The process has become so politicised that to acknowledge the vulnerability of the community to climate change has become taboo... In this case vulnerability, not only to climate change but to anything, is eliminated.

While local councils like the Blue Mountains City Council obviously recognise climate change as a problem and had put adaptation on the agenda by developing a CCAP, like many other councils in Collins' (2016) database they did not 'require that the public goes through the same process of acceptance. Instead, after placing climate change on the agenda, many councils define the problem to carefully avoid explicit mention of the issue' (Collins 2016: 200).

It was not as if these community workers had collectively sat down and come up with a strategy about how to talk or not talk about climate change in their work. Each had simply inferred from the information and cultural cues available to them that it was not a 'useful' topic to get into publicly. Recovery worker Rebecca said, 'it's probably more that ah, just a word that we throw around (*laughs*), um... rather than, and you know, I guess accept that we have a common understanding.'

In the Lower Blue Mountains there was a more nuanced kind of distancing than that in the community of Bygdaby described by Norgaard (2011). It was clear that many working on the recovery process thought about climate change in relation to their work in the future: 'I had to write a business plan recently and put that in and put links to something about climate change that you know, it's a reason for us to continue here,' said recovery worker Helena. The distancing behaviour I witnessed related to whose responsibility or role it was to include climate change as a part of the community discussion:

Talking about climate change is not going to help them now. But the preparedness group might be a whole other story.

Kim, Recovery worker.

I think it needs to sit at a more strategic bigger picture level rather than one on one with a client talking about climate change.

Joanna, Recovery worker.

Frontline workers frequently directed me towards somebody else whom they felt might be considering the issue more explicitly than they were. Those working on recovery felt that those working on preparedness were probably discussing it more, while those working on preparedness directed me towards university experts researching fire regimes or conservationists. As Zerubavel points out, 'the social foundations of relevance are particularly apparent in bureaucracies, where officials' attention is formally confined to the specific functional niches they occupy' (Zerubavel 2006: 26). Those working in recovery and preparedness had questions about how climate change might become relevant to the locals they were working with but behaved as if its perceived irrelevance in the community was beyond their control. They did not see that their ways of talking about it, even amongst themselves, framed climate change as a distant phenomenon by continuing to use euphemistic and indirect language around its local effects.

The purpose of this chapter has not been to dismiss or devalue the very real wisdom of those I encountered working on recovery and preparedness in the Blue Mountains in their choice to not discuss climate change openly with their community. Rather, I have sought to show that this was a *choice*, one that made sense to them operating inside a particular culture, not an inevitability, as they often presented it. Such a choice has consequences for how climate change comes to be perceived and understood in the community. The potential transformation in how climate change might be perceived, understood and acted upon if it was approached differently in daily conversation and public communication is beyond the scope of this research. But this chapter has shown that *not* talking about it contributed to the ongoing perception that it was irrelevant to the here and now of daily life, and to bushfire recovery. It was frequently clear in my conversations with those working in recovery and preparedness that frontline workers had very little idea about what anybody else was experiencing or really thought about climate change in relation to their own work. As Matthew from Winmalee RFS shared at the end of our interview, 'I'll be really

interested to hear the results when the survey is finished. Because I'd like to know, you know, whether my thinking is sort of like, yeah it's sort of in the general area of what everyone's sort of thinking? Or am I right off the planet you know?' At the end of our interview Louise, a young woman who had recently moved to Winmalee, wanted to know more about what I had found out about climate change from other community members', enquiring, 'Am I allowed to ask if there are other people who have had like similar answers to me?'

As Collins (2016) writes, it is important to acknowledge that local councils are undertaking significant climate change adaptation planning work, often with little support from state or federal governments, and that this national political context shapes the space where local leaders operate to address climate change. However, she also emphasises that the lack of attention to cultural and processual aspects of climate change adaptation is creating slow and ad-hoc responses on the ground. Euphemism, silence and polite 'talking around' climate occurred, not only because of its politically charged nature (see also Connor 2016) and its scientific complexity, but also because of the scary, traumatic or disempowering associations that a heating world holds for those who were already vulnerable following the bushfire disaster. Cultural practices associated with 'negative' emotional topics of conversation, therefore, become central to understanding how local responses to climate change occurred. As Russell (2011) contends, the silence in Australia 'is not a passive silence, rather, it is a force to be reckoned with, a pervasive, ever-present demand: Do not speak of troubling emotional matters!' (Russell 2011: 162). If, as Kay Milton asserts, the concept of anthropogenic global warming changes 'the way local events are framed and understood' (Milton 2008a: 57-58), the inverse can also be true: for the Blue Mountains community, the recent experience of catastrophic bushfire – its attendant uncertainty and trauma - was impacting the way that residents framed, understood and spoke about climate change in the aftermath.

Anticipation: Well it's a little bit real...'

You know well climate change, we don't know precisely what the effects are going to be. You know, maybe we get, maybe fires won't be as bad, maybe we'll get more frequent fires and that will mean lower fuel loads, maybe we'll have a drier climate which will mean less growth, um, maybe it will mean, but we'll have some extremes of wet years where we get a lot of growth and there'll be a lot of fuel for the fires, we really don't know you know?

-Tim, Springwood resident, RFS member.

The horizon

Anticipation is not the same as prediction, but more akin to imaginative horizons 'that determine what we experience and how we interpret what we experience' (Crapanazano 2004 cited in Hastrup 2016: 43). This question of horizon also figured in Alfred Schutz's work, where horizons are discussed as both determined by culture, as well as open and susceptible to the possibility of exploration. While any experience has its 'horizon of indeterminacy' (Schutz 1970: 138) making certainty impossible, 'horizons' usually have a tacit existence until what has been taken for granted becomes questionable and 'we have to enter into its horizons in order to explicate them' (Schutz 1975: 117). Chapter 3 examined this process in the typification of the October fires, concluding that anxiety connected with the indeterminate horizon of future bushfire threat was contained and avoided through the culture of ambivalent expectation, even as explanatory narratives of climate change strained against this tacit cultural horizon. Climate change takes the hidden indeterminacy of a tacit cultural horizon called 'the future' and makes it explicit. The horizons that determine what people experience, and how they interpret that experience, are shifting, buckling, and being remade as people anticipate and encounter climate change in their present.

'When you imagine the future... you of course do so from your present condition. This condition delimits what you see as vital, what you view as impossible, and what you think is a plausible

reality' (Feldman 2016: 3). How the community reacted to the changing environmental and social conditions occasioned by the October 2013 fires was bound to an imagined future, as well as inextricably tied to a colonial past and naturalist cosmology that shaped the imaginative and explanatory horizons for individuals in the aftermath. Yet a process of public or shared anticipation of climate change was absent in the Blue Mountains. This chapter is an exploration of people's imaginative horizons in flux as they privately anticipate the future. It is an attempt to tease out the ways that people were connecting and disconnecting with climate change in their ordinary present. I examine movement between states of engagement and disengagement for the individuals I interview, 'a zigzag process with many phases and cycles, as this deeply horrifying awareness makes its way through many modes of perception and knowing' (Gillespie 2014: 233). Moving beyond categories of 'the denier' or 'the engaged', this chapter foregrounds a human subjectivity that is contradictory and ambivalent (Lertzman 2015a). My concern is not whether people 'believed' in climate change, but with the terms in which they encountered it (Feldman 2016) and the affective and emotional dimensions of these terms.

Addressing contradictions

Much of what people shared with me when I asked them about climate change during our interviews was inconsistent and confusing – people would often contradict themselves within the one interview, if not within the one sentence or paragraph. Responses would weave in and out of seemingly distant 'factual' understandings and deeper emotional wells of sadness, fear and anger and then back to expressions of apathy or indifference. Conversations entered into spaces of epistemological uncertainty as people questioned how they 'knew' about climate change in their own lives, and into ontological insecurity as people grappled with their sense of what it meant to be human at this time. Linda Connor (2016: 171-172) also found that in quotidian worlds, responses to climate change occurred on unstable terrain where 'feelings, practices and beliefs are often unaligned.' She discusses participants who were sad or angry about pollution and biodiversity loss, while also supportive of the coal industry for jobs and growth. Such realities are seen to be inconsistent from an environmentalist perspective, but were not experienced as contradictory from the standpoint of those 'who hold them and in the contexts in which they are expressed.' Similarly, Renee Lertzman's (2015a) psychosocial research conducted in Green Bay, Wisconsin found that resident's grief and anger about the pollution of their local environment

from the paper mills was in a complex relationship with their genuine support for the local industry. Lertzman (2015a: 105) discerns an ambivalence in the vacillation between 'talking about objects positively or negatively, notably associated with industry in the region' that emerged in her data.

A significant amount of the existing literature that explores the psychological dimensions of climate change is focused on these contradictions, or what is characterised as the 'gap' between people's knowledge of climate change or other environmental problems, and their 'engagement' with it in terms of committed behavioural change or political action (Frantz and Mayer 2009; Lorenzoni et al. 2007; Stoll-Kleeman 2000; Takàcs-Sànta 2007; Whitmarsh 2008, 2011). Lertzman (2015a: 4) finds that the idea of a 'gap' ignores the importance of social influence on individual action and perpetuates the notion of a rational actor. Paul Hoggett (2013: 57) points out that a lot of this research,

... is not based upon a particularly complex understanding of the human mind and necessarily operates with rather simplified models of human behaviour. It tends to assume a unitary and rational self, not one that is torn, ambivalent, and in two minds (or several minds for that matter); nor one whose sense of self, other, environment and so on is governed by powerful narratives, meanings and imaginings; not one besieged by potentially overwhelming emotions such as fear, despair, anxiety, guilt, love or hope.

While my interview schedules were not framed using an explicitly psychoanalytic approach, I have found it particularly useful to draw on a psychoanalytic understanding of subjectivity in analysing participants responses to questions about climate change. This psychoanalytic lens allowed for the contradictions, ambivalence and internal conflicts that arose over the course of the interview to be explored as a process of constructing meaning and coherence for participants (Lertzman 2010) rather than direct or straightforward representations of their 'attitude' to climate change. The depth psychology research that explores people's defensive responses to climate change from disavowal, denial, projection, splitting, to numbness, apathy, and apocalyptic imaginings, offered a great deal of insight in the analysis of my interview material, showing how such seemingly contradictory assertions become tenable, even rational, for those who utter them (Dodds 2011; Dickinson 2009; Gillespie 2016; Hoggett 2011; Lertzman 2015a; Randall 2013;

Weintrobe 2013a). Yet my emphasis and concern remain on the role of local context and culture in the formation and sustenance of these contradictory views, which is often under examined in the psychoanalytic literature on climate change. As Chapter 5 established, many of the views about climate change were expressed in ways that indicated the social pressure for expediency and simplicity as it related to the context of the conversation. These conventions around talking about climate change were very much alive in the interviews, and I believe these cultural and social forces produced fractured responses within individuals that arose in concert with the psychological process of splitting²⁹ and disavowal³⁰ discussed in the psychoanalytic literature (Dodds 2011; Lertzman 2015a; Randall 2005; Rustin 2013; Weintrobe 2013b).

Susan Moser (2014) suggests that further research is needed to explain the contradiction emerging in the research between the stated 'experiences' of climate change along with research showing psychological 'distancing'. This chapter seeks to address this apparent contradiction through an exploration of the relationship between psychological distancing and experiences of climate change following the October 2013 fires for residents of the Lower Blue Mountains. During our interviews, people shared their feelings and thoughts about climate change with a changeability that was often difficult to track from moment to moment. In this analysis, I let go of the question of whether people 'believe' in climate change and instead turn to the complex and fascinating ways that people wrestled with their own ideas and experiences of climate change during our conversation. I expand the field of analysis to include what I witnessed as participants engaged in a process of connecting with and disconnecting from climate change. This dance of engagement was fascinating to observe in the context of the October bushfires. People in Winmalee and Yellow Rock were brought into contact with a stark reality of climate change. Albeit a disputed, uncertain and ambiguous form of contact, the fires could not be easily dismissed as an event happening elsewhere, to someone else, at some other time. As this thesis

²⁹ Splitting is a process whereby individuals manage their anxiety through a 'temporary split in the ego – what is known in one part of the mind is unknown in another, thus allowing ordinary life, in some form to continue' (Randall 2005: 167).

³⁰ 'Disavowal involves radical splitting and a range of strategies that ensure that reality can be seen and not seen at one and the same time' (Weintrobe 2013a: 38). Disavowal enables people to eliminate anxiety by erasing the sense that 'facing reality entails facing any loss. Reality may be seen to be there, but the loss that it signals has no or little significance in this state' (Weintrobe 2013a: 39). Disavowal aims to block mourning and can also entail the loss of proportional thinking. Emotions of anxiety, guilt and shame are minimised through omnipotent thinking (Weintrobe 2013a: 39).

has explored, the experience of the fires and the process of recovery and rebuilding in the context of climate change brought an embodied immediacy to what climate change could be and this complicated participants' attempts to hold it at a distance.

One other thing that stood out during these recorded conversations was the role that I played in facilitating and initiating a private, even intimate, conversation about climate change with people who, as explored in Chapter 5, were living in a community who were not in the habit of openly talking about it. A participant like Harry who lost his home in the 2013 fires, was used to playing the 'knowing scientist' with his friends who generally 'poo pooed' him about climate change. He was relieved of his role briefly with me as I upheld the role of 'knowing researcher' and gave him to space to explore his more complex and contradictory views and feelings about climate change in the Blue Mountains. At one point Harry was discussing the realities of tipping points, methane and global greenhouse gas emissions, and his difficulty talking with his friends about these. Later I asked about the impacts of climate change locally. Harry reflected that climate change was a bit of a 'cop out' that people used to avoid responsibility for the damage of too much hazard reduction burning. He also drifted into territory that contradicted some of his initial certainty about climate change as he tried to come to terms with his own experiences of hot weather during summers past.

H: I know the statistics keep coming out saying this is the hottest year since... ever, I don't believe it. It was hot when I was a kid, it was really hot. I was a postman while I was on holidays from university and school. It was really hot pedalling that bike around, delivering, it was burning hot.

B: So, you don't believe the statistics?

H: (Long Pause) Mmmm...

B: Cause that's a tough position you're in there I mean with your background as a scientist which is...

H: That's a tricky question too, I don't believe the statistics, I guess not. (*Long pause*) It was really hot. It was terrible.

My conversation with Georgia, who had lived in Winmalee almost forty years until her home burned down, also traversed untrodden territory in connecting with climate change. Back in the 1990s Georgia had followed the development of the Kyoto Protocol with close attention and had expressed concern about state of the global environment (the whales, the floating island of plastic rubbish in the Pacific) during our many unrecorded conversations. When I initially asked her about the connection between climate change and the fires during our formal interview, she responded by detailing the already fraught terrain of how to manage the trees and the local bush, ending with 'Um... I think, I don't... (Sigh) It's not a conversation that seems to happen... so...'. At the end of our interview when I asked if she had anything she wanted to add, she began to approach the connection between her own life and climate change through her experience of the fires saying,

Probably for the next week I'll probably be thinking about climate change and where I really sit on it. Um... yeah... I'd never actually made a thought of it in connection to the fires. It had more been a case of... responsibility, and like the whole thing about um, the class action and all that on responsibilities, is it just passing the buck and responsibility, like, if you know council had done the job that they expect, would it have happened? Well, you can do your head in trying to think about that. Who would ever have thought that on a day in October you would have weather conditions like that? Very, very, unusual. It has happened obviously, but as far as making the connections to climate change, I don't know...

This was by any standard a tentative move toward connection with climate change. Georgia was cautious and then doubtful. She then hesitantly connected with climate change again in her consideration of how *unusual* it was to have such conditions in October. Certainly, the purpose of our conversation was not to convince Georgia one way or another about the fires, or about climate change, but inadvertently it opened a space for her to consider what the connection could be, and what it might mean in her own life.

Sally Gillespie's (2014) depth psychology research centred on a group of seven people who met over the course of eight months to explore and reflect upon the psychological terrain of what

engaging with climate change meant for them. Over the course of the eight months, the container of this group enabled participants to work with the 'contradictions, messiness, ambiguities and uncertainties within ourselves, others and the world' (Gillespie 2014: 193). Gillespie found that out of this process new understandings arose that supported 'insightful and innovative responses to the... ecological, socio-political and psychological tensions of climate change' (Gillespie 2014: 193). While the intention and design of my interviews was not to support any such process, it was interesting to notice that people often used their interview with me as a means to approach some of the messier or uncertain aspects of their thoughts and feelings about climate change. Outside of the social pressure to 'take a position' on climate change participants moved towards a more personally meaningful engagement with how it was real and not real for them in their own lives.

The next section will consider the responses of three participants – Jennifer, Frank and Helena – in greater depth and detail to really illuminate the contradictions and internal conflicts that arose over the course of the interview. I have used these three interviews out of the forty I conducted as they offer clear (and relatively concise) examples of patterns that occurred throughout my discussions with locals about climate change and their own lived experience. Jennifer is a professional woman and mother in her late forties who lost her family home in the October fires. She had moved to Winmalee in the early 1990s and had experienced both the 1994 fires and the 2001 fires. When I interviewed her, she was renting elsewhere in the Blue Mountains with her husband, and they were in the process of designing their new home in Winmalee. Frank grew up in the Lower Blue Mountains and was living in Faulconbridge when I interviewed him. He is the father of three young children, and when the October fires happened he evacuated with his family to Sydney. Frank learned after the fires that they (and many of their friends) had been underinsured, and was grateful that he had the opportunity to fix this before the next fire. Our interview took place in his garden that backed onto the bush of the Grose Valley. Helena, a woman in her twenties, grew up in the Lower Mountains and had evacuated with her family in the 1994 fires. She had recently moved back to the Upper Mountains after living in Sydney for many years. Her work was based in Springwood and Winmalee, and she was active in some local environmental groups.

A little bit real

With many participants, our conversation about climate change began in the 'ordinary' way people tended to take a stance on whether they thought climate change was happening or not. In the Lower Blue Mountains (as elsewhere in Australia), this was perceived to be the central question to have an opinion on. Many were quick to list 'facts' as they knew them. This listing was an understandable response to the status of climate change as a controversial issue that needed to be pinned down in the realm of scientific 'facts' that is, statistics and evidence for its existence and impacts, though such listing also functioned to keep climate change at a distance. Marshall (2011) similarly reflects on the compulsive listing of climate change facts that he dealt with during the process of editing chapters for the book *Depth psychology, disorder and climate change*. Even when irrelevant to the subject matter of their own chapter many authors devoted reams of words to detailing the scientific facts of climate change as introductions to their research on the social, cultural and psychological dimensions of the phenomenon. Much like many of the papers written by sociologists, anthropologists and psychologists, only after listing the facts of climate change as they understood them, could participants wade into the more complex waters about its 'realness' and meaning in their own lives.

When I asked Jennifer what climate change meant to her, she went into great detail about all the different effects of climate change across the planet:

So, for me, it means that human activity is contributing to the climate changing in a way that it might not have changed without our human input. So... um, I think about it in as becoming, um, oceans becoming warmer, environment becoming warmer, tropics moving south, um, mosquitoes moving south, um, water levels rising, snow not being so snowy [...] I think about it as more extreme weather patterns. Less cyclones, but more intense for instance, cyclones heading further south [...] more heat waves [...] dislocation of people, um, uh, you know natural disasters, increase in natural disasters whether it's flooding, cyclones, and the intensity meaning human displacement and destruction [...] I think human movement and need for asylum is going to be one of the key issues [...]. So that's what it means to me.

It was striking to me that in this comprehensive list of climate change effects that she had not mentioned anything to do with bushfire, especially since she mentioned extreme weather and disasters but only named flooding and cyclones, and because she had so recently lived through the October fires and lost her own home. So, I said, 'I notice that in that list of things that you mentioned about climate change that you didn't mention bushfire. And I'm curious to know if you see a link between bushfire and', she cut me off before I could finish my sentence saying,

Yeah, I do. I see it as an extreme weather thing [...] That feels like it's going to be the most, one of the most dangerous things that we face locally, so I do. I just take it as a given that, that part of extreme weather means more intense heat, more intense fires [...] I can't, I can't not connect bushfires to it.

This struck me as a curious response because by unconsciously omitting bushfire from her first extensive list of what climate change meant to her, she had just very successfully not connected it with climate change. She went on to say:

J: If you're on the coast, you don't necessarily face bushfire, but I see our coastlines being eroded by fierce storms and waves. I wouldn't want to be living in Cronulla. We were joking last night that we'll have the beach here soon. You know, okay maybe a couple of generations, you know prime real estate (*laughs*).

B: And when you think about all of those things, and yeah, it's a lot (*laughs*), um, what would you say are the kind of key emotions or feelings that come up for you?

J: I just think problem-solving. I don't... I don't think of it in an emotional, I don't think I get emotional about it. Ah I mean, I think individual stories are going to be heartbreaking, and you get that from Tuvalu and um, you know the, already in the South Pacific. [...] But I think about it as a problem we have to solve, not as something we have to... be emotional about. So, (*laughs*) I'm heartless aren't I? (*laughs*) and I can't see any point [...] it's just an issue we have to face and have to solve or deal with, I don't think we'll ever solve it. So yeah, problem-solving.

There are few things from this excerpt that I would like to explore in greater detail. The first is the ongoing use of laughter by both myself and Jennifer to ease some of the tension in talking about climate change so openly. Humour and laughter were important tools that people used to discuss climate change socially without causing offence or upset. Humour allowed people to both approach and distance themselves from sensitive subjects and was used in a number of different ways when people discussed climate change. As Joseph Dodds comments, humour can be a way to trivialise, a way to escape, a way to counter the preachiness associated with environmentalism. Sometimes it is funny precisely because it is so serious (Dodds 2011: 45). Jennifer's joke about prime real estate was one I heard regularly in the Blue Mountains. This joke is a perfect distancing strategy that exaggerates the consequences of climate change (the total inundation of Sydney) for comic effect, positioning it in the realm of the imaginary, or more accurately the unimaginable – not something to be worried about here and now. My own laughter at the critical juncture between linking her list of climate change effects with her emotional world is indicative of my own discomfort at asking so directly about things that were socially awkward topics of discussion in the Blue Mountains – both climate change and emotions. It is also in keeping with the tone Jennifer has already set for our discussion with her own joking about Cronulla.

Following my question Jennifer was quick to reassure my awkward laughter with her prompt deflection, 'I just think problem-solving.' Immediately, Jennifer situated us back in the realm of thinking rather than feeling. The apparent split occurring between Jennifer's knowledge of the effects of climate change and the absent emotional or felt sense of *knowing* these effects certainly suggested a form of disavowal (Cohen 2001; Segal 1997; Weintrobe 2013a;). Segal (1997: 119) describes disavowal as 'turning a blind eye... in this split, we retain intellectual knowledge of the reality, but divest of its emotional meaning.' Jennifer's split was not an uncommon response. In several interviews where I asked people how they felt about climate change, many people avoided addressing the deeper emotional implications of the facts that they impartially stated. Occasionally the divorce between cognition and affect would be openly acknowledged, as it was with Jennifer, who actively affirmed that she did not think of climate change as an 'emotional' issue and even joked about seeming heartless. More often there would be a more subtle separation. Participants would list potentially horrific outcomes for the planet, and then reflect on these 'facts' with an impartiality or glibness that did not completely negate the reality they were discussing, but certainly controlled it, shifting, distorting or pushing it out

of conscious view just enough so that what was known became bearable. Climate change was moved from an overwhelming reality to something that was 'kind of happening', 'surreal' or just 'a little bit real':

Um, yeah, climate change, like... what does it mean to me? Well, I think it's a little bit real. Um... doesn't sort of bother me really. Maybe it should... I'm not too bothered by it, I see it as like a thing that's happening through population growth of the planet, that's the way I see it, if humans are just doing what they naturally do [...] when we overpopulate the planet, something'll happen and the humans will be reduced back a bit [...] I don't have a feel of quick let's stop this, what we're doing. You know I think we can all do things better for sure, but you know, even having kids I don't sort of feel like you know it's going to be a catastrophe let's preserve it for everyone and... I dunno I feel happy to let nature take its course there.

Frank, Faulconbridge resident.

In this response, Frank distanced himself from climate change, 'the humans' are discussed as just another species, the way he might talk about 'the whales' or 'the rabbits' divorced from the reality of his own children playing around us in the back garden as we spoke. The exact way that humans will be 'reduced back a bit' was left unsaid. You don't get the sense that Frank spends a lot of his time consciously imagining the reality of how this might happen, or what might be at stake for himself, his children or his grandchildren. He briefly touched into his potential (perhaps buried) concern about the morality of the situation, and his own guilt when he said, 'It doesn't really bother me, maybe it should'. And later when he said, 'I think we can all do things better for sure,' yet each time he circled back to the more reassuring place of not being 'too bothered' by it. Indeed, Frank's response aptly reflects his initial statement that for him climate change was something he doesn't have to worry about as long as it was just 'a little bit real'. Here Frank managed a deft attitude of disavowal rather than negation. He was not saying, climate change is *not* real, just that it is only a *little bit* real. The very words 'little bit' are indicative of Frank's attempt to hold at bay the spectre of 'too much reality' (Weintrobe 2013a: 6).

B: And how do you feel when you think about that or those images coming up?

Helena: Yeah it's interesting. You know it's happening; it's happening today with crazy weather. You know you can't say individual events, but obviously you kind of can at the same time! (*Laughs*) You know what I mean? What was the question again?

B: Just how it feels when you think about those images or have those thoughts...

Helena: Yeah because it's kind of happening, but it's also (...) because it's like presented as this apocalyptic type thing it's almost like futuristic, like you'll know it's here when these things are happening (...) so it's kind of this... feeling of... you know it's going to be really bad but it's not here yet, but actually, it kind of is here already in, and starting to happen anyway... so it's still a little bit surreal I guess is what I'm trying to say. (...) It's still kind of in a... end of the world kind of, even though logically you know that's not true. It's a bit surreal. Um... but I do feel frustrated that people don't see it. I do feel frustrated.

Helena expressed her concern about climate change differently to Frank and Jennifer, though she also is engaged in a struggle with how real it is in her lived experience. She had been involved in climate activism in the past and it was evident in our interview that she had strong environmental values. Her descriptions of climate change were on the more apocalyptic end of the spectrum, but when I asked more directly about how she felt, she initially struggled to articulate an emotion. Perhaps in an attempt to get closer to what she feels she tries to locate climate change more concretely in her experience – is it something she knows as a reality in her daily life here and now? Or is it her feelings about the impending imaginary apocalypse? She tussled with the scientific credibility of connecting it with particular weather events, and lost her train of thought, 'What was the question again?' As she attempted to contact her emotional experience she realised that it was 'still a bit surreal' for her. Finally, she expressed a feeling of frustration, not about climate change, but about the fact that other people don't 'see it' which was perhaps a projected frustration, given her own struggles in 'seeing it' in a real way in her own life. We never really get to what emotions Helena feels about climate change, though we do witness her experience of emotional distance from the subject even though it is an issue of importance for her.

In each of these responses we can see Frank, Helena and Jennifer orbiting in and out of approaching the reality of climate change, touching it lightly and then shrinking back, diving in a little deeper and testing the waters again. How much do I care? How near is it? How real is it? They each deftly find ways to distance themselves from climate change. Each posits an abstract position of acceptance, using projection about future periods in time and other places. They avoid the mundane reality of what it means to confront climate change in their own lives. We could also understand their responses in a different way. Such an approach might also be understood as a process that enables them to engage with the 'hyperobject' (Morton 2013) of climate change little by little, in pieces that might be more digestible and comprehensible as they come to terms with what it might mean in their own lives. To understand why I consider this process to be 'more than' distancing, or 'more than' disavowal I want to include their reflections about the October fires and how they connected their experience with climate change through the fires more viscerally and intimately. Frank grew up in the Blue Mountains and has seen a lot of fires come and go. Earlier in our interview he brought up the way that he felt the fires were changing:

F: I reckon they happen more often. In fire times we get this strong wind and that around, I reckon it's a bit of a climate thing I think. Um, but I see things as becoming a bit more volatile. Say in a really hot summer and that you will get times of the strong wind. And that's the thing that everyone fears about up here is the wind.

B: When it combines?

F: Just the heat, the heats no big deal. But when it starts blowing and is hot... but yeah that happens more often I reckon. And –

B: And why do you think that might be?

F: I think it's got to be a climate change type of thing I think. I'm not a climate sceptic or anything, but I've probably, maybe it's a climate thing I think.

Later, when I asked him if he linked the October fires with climate change he replied,

Um, yeah well, yeah I reckon it, I reckon it did, if I'm going to talk, say what I think, that I've seen weather become more extreme, for sure, those few days... um, weather like that

was pretty crazy, I don't remember too many days that were like that. I remember bushfire days in the past, where there was a big bushfire burning down the Grose Valley or whatever, but I don't remember as a kid, having the weather... like that, where the actual weather was scary. And it was a feeling, even though there was, not even a bushfire burning here... the way the weather was, you just knew that one little thing... it would just go crazy. And I'd never felt that as a kid.

It is tempting to label Frank's response as disavowal. His answers suggest that he is seeing and not seeing the reality of climate change at the same time. Yet his lived experience, the embodied 'feeling' in the air on the day of the October fires when 'the actual weather was scary' palpably speaks of his more conscious anxiety about what climate change means for bushfires and his own life. Because of his tangible experience with the October fires, Frank's engagement with climate change was tangled in ways that complicate a straight forward conception of disavowal. Leviston and Walker's (2012: 284) national survey of 5036 people in Australia on their beliefs about climate change, showed that cognitions and emotions related to climate change were relatively independent. As discussed, much of the behavioural, social sciences literature is focused on this so-called gap between people's knowledge of climate change and their felt sense of concern that might lead to action. Though as Cohen (2013: 78) aptly points out,

there are no phrenological compartments in the brain, neither spatial nor strictly sequential – that is there are not separate boxes marked 'What I know' 'what I feel' and 'what I am going to do about it.' In cognitive terms, a single perception will contain all three.

Thus, the 'gap' becomes more like a 'tangle' of anxieties, fears, losses, anticipations, and desires that produce what is often characterised as apathy but might be more accurately described as ambivalence (Lertzman 2015a). Psychoanalytically, ambivalence has been conceptualised as holding opposing 'affective investments such as the classic example of "love and hate" experienced towards one's parents or the breast' (Lertzman 2015a: 107). In our interview, Frank gives an account of climate change that is both distant and non-threatening as well as profoundly close and scary.

When I asked Jennifer about her own experiences of climate change she said:

I think, I think the winds feel stronger. When they come. [...] I mean a beautiful time of year here was always September. Gorgeous, beautiful Spring weather and now it feels like there's dangers in that time of year, um cause of the heat and the dryness and no Spring rains. So they're the sorts of things... Now it's hard to know though whether you're only remembering the most recent years and what the patterns are. So that's why I don't actually trust my own... experience, or my own memories and recollections of it. You know, I trust the data that tells me what actually happened, rather than what I think. [...] Oh and I do think the ferocity of bushfires, I think the, a change in the pattern of bushfires is something that we're seeing, I don't know if the 2013 one, if the way it started, see that was the winds. It feels like we're going to be much more subject to wind-related consequences.

There was still some detachment in the way that Jennifer discussed climate change here, even in its local effects. She was happy to discuss the 'ferocity of bushfires' or 'the pattern of bushfires' in a more abstract way, but as she began to connect these facts with something more directly linked to her experience, like the October fires, her resolute tone waivered. There was a sense of loss for Jennifer in the comparison of 'gorgeous, beautiful spring weather' with what now feels like a dangerous time of year for her. Still, she was hesitant to speak from her own experience, which was not surprising given the tenor of the public debate discussed in Chapter 5, and the situating of climate change in the Western scientific domain of relevance explored in Chapter 3. Below, when I asked her more directly about her thoughts on the link between the October fires and climate change she articulated more clearly her felt sense of what Spring meant now. Her new sense of vulnerability and fear about fires earlier in the year that will affect her choices and behaviour in ways that are different from five or ten years ago. Jennifer mourned the loss of 'beautiful spring weather' as she anticipated future fire events coming earlier and earlier in the year, her imaginative horizon, her expectations, were changing as she integrated and anticipated the effects of climate change based on her lived experience so far.

Well for me I think it was the extremeness of the weather that day, the unusual windy characteristic, it was unusual. I would never have worried about going to work on a windy October day, five years ago, ten years ago and go ooooh, could be bushfires. I

mean now obviously as early as that I'm going to be going, oooh bushfires, if it's a bad wind day maybe I should stay home. Yeah, I link it to the extreme weather, um, as opposed to, I don't know, I don't think there's the climate change meant we had a bushfire. But the change in the climate led to conditions that had been drier and, but we've had dry weather before, but it was then this overlay of the wind patterns. And people who've lived in the Mountains for years tell me you've got no idea what the wind was like. Now our son, lived in the Mountains his whole life, he said, Mum, the winds were just incredible. And we go, well yeah, we've had winds. And he goes, no, no, they were really, it was really incredible. So that makes me go, okay that's different it's got to be connected to a change in something. So, I don't, I'm happy saying in some way yeah I think climate change played a part there.

Here, Jennifer circled around the connection between climate change and the October fires. She started again with a consideration of the 'unusual' conditions that climate change might have contributed to, and ended with her son's experience of the incredible and unprecedented winds on the day of the fires. He was the only one at home and managed to quickly grab a few things from the house before the fire consumed it. In the exchange she recounted with her son, we witness her challenging and then accepting his account. Because of their close relationship, his growing up in the Mountains, and his insistence that 'it was really incredible' she finished by saying, 'okay that's different it's got to be connected to a change in something' and affirmed that she is 'happy' to say that 'climate change played a part there.'

In each of these responses what seems to be at stake is exactly how real climate change should be, might be, and is, for them and other people in their community. All three tried to align their embodied knowing with conceptual scientific categories that have been immensely complexified by polarised ideological debates. But they were not discussing the reality of climate change in the scientific sense, they understood and agreed with the scientific consensus. Rather, they were grappling with, feeling into, and avoiding what climate change meant for themselves in the lived, experiential sense, in the here and now. Jennifer identified it as heartbreaking, though did not link it in any meaningful way with her current personal loss or heartbreak. She even worried that I might think her heartless in her response to other people's suffering. Frank took a bird's-eye

view, what Clive Hamilton (2013: 205) would call a 'paleofatalism' that both implicates humans and positions climate change as just the latest incarnation of a wider, natural self-regulating system that will serve to reduce humans 'back a bit'. Helena tried to connect climate change with her own daily reality. Even discussing the weather on the day of our interview when the Greater Blue Mountains region was in the middle of an East coast low³¹ that was creating massive storms with extreme winds that were eroding beaches in Sydney, causing flooding and downing huge trees all over the area. Yet there was a sense for Helena that such everyday events (even disastrous bushfires) couldn't ever quite match up with the apocalyptic visions of her own imaginings. For her, climate change meant the 'end of the world... even though logically you know that's not true'. The apocalyptic myth of climate change kept it feeling 'surreal' for her even as she connected it with the recent bushfires and wrote it into the long-term plan for the organisation she works for in the Blue Mountains.

In these three interviews (and in many others) there was a sense that things were going to get worse, that the October fires might represent the beginning of something different for the Blue Mountains – a new and threatening horizon regarding bushfire risk. For each of these participants, their experiences were perceived as climate change and not quite climate change. The uncertainty and ambiguous nature of climate-connected events, of things as mercurial as the weather, created an unstable and contested reality. This ambiguity was conducive to the subtle and complex distancing that they each exhibited along with the contradictory statements like 'It's just an issue we have to face and have to solve or deal with, I don't think we'll ever solve it. So yeah, problem-solving.' Reluctance to talk about climate change directly was very apparent in almost all the private interviews I conducted. When I asked Frank if he thought there was a connection between climate change and the October fires and he replied, 'Um, yeah well, yeah I reckon it, I reckon it did. If I'm going to talk, say what I think,' revealing a reticence on his part, even in a confidential interview, to openly state what he thought about climate change and the October fires. This was a common thread in the discussions I had with people who expressed concern about climate change but grappled with how to talk about what it really meant in their own lives. Yet what was at issue was not just individual strategies of avoidance. As explored in

³¹ East Coast Lows (ECL) are intense low-pressure systems which occur on average several times each year off the eastern coast of Australia, in particular southern Queensland, NSW and eastern Victoria (BoM 2007).

Chapter 5, the social pressure and taboo around discussing climate change also denied Jennifer, Frank and Helena any kind of public space in which to really explore their feelings and experiences of climate change with other people beyond political debate about the science or mitigation policies.

Anxiously anticipated, presently avoided

As discussed in Chapter 3, even with unprecedented and destructive weather events, anything that could be analogous to an event in the past can become a port in the storm, somewhere to shelter and avoid the potential feelings of powerlessness, grief and anger. Yet it was also evident in the conversations I had that such refuge was imperilled by this same uncertainty. This was markedly noticeable in the contradictory ways that people located climate change in time. Michael, whose work was concerned with fire management in the Blue Mountains, shared his own confusion about how to locate climate change in time and in his own experience. For the most part, he discussed climate change as something that he was concerned about for the future, mainly his concern about the vastly different world his newborn child would face. He linked the October 2013 fires with climate change, as well as the more recent fires that occurred unusually early in August 2015. However, Michael doubted the efficacy of including climate change in discussion with locals about fire risk in the Blue Mountains because he felt efforts would be better focused on 'the here and now' rather than drawing pictures about 'where we might be going in the future.' I was curious to know when that might change, and asked him, 'at what point does it become the here and now?' He replied,

Well, I guess it's always the here and now really isn't it? Yeah, um... I'm not sure that you could say that there's a line in the sand I think it's a, it's going to be a continuum and whether if we have over the next ten years another two or three events of this nature and, you know it really starts to grab people's attention. You know, whether then that ah, you know introduction of you know the whole concept of climate change stuff to become more relevant I'm not sure.

For Jason, climate change was the here and now, in the loss of his home in the October 2013 fires, yet it was also a bomb ticking in the background. He was more worried about the future, he felt that things were going to get worse, that there would be 'more tragic fires', that something

had been set in motion that we could not undo or reverse. He was anxious about the world his daughter would be living in, in fifty years.

So, you know, like climate change to me is sort of feels a bit like, well, it's kind of ticking away and happening and, at what point you know, does it become really big and impact on my life you know? And I guess you could say the fire is probably the start of that. [...] But there's a sense that there is a kind of a time bomb kind of ticking away there you know. And you know there's, there's I guess there's sort of reports all the time too that are kind of pointing to that change, talking about recent reports about major kind of glacial melts happening in the Antarctic and in the ocean...

Ron, an RFS member, voiced a fear in our interview that was rarely explicitly stated by Blue Mountains residents, about the future viability of people living in the Mountains at all.

I do worry internally worry about... in generations ahead, if this trend does continue places like the Blue Mountains, wee, well... uninhabitable, it's going to be, well that's a bit strong, but the reality of significant fire events will be such that, it... (Sigh) The cost of rebuilding and that side of it will mean that it'll be better... some economist, or someone'll say, don't rebuild. Um... um... because of, you know that inevitable fire event and if there's another, next cycle of drought or whatever it is, um, if a bad fire happens again, surely there'll be questions asked, well you know, the weather's not going to get any better so why would we be rebuilding in a place that's just going to burn again? Mmmmm... that'll be a hard one.

Joanna, who worked on the recovery effort, reflected about how much of a priority climate change was for her and why:

Like if I think in, if I knew in my lifetime that it was going to be you know, there'd be massive, I mean these things are happening though, like the water level and the temperature stuff. But I think if it was going to be, if I knew that in my lifetime it would go to 50 degrees, that would be pushing it, pushing it more up my priority basically.

Each of these people were asking in different ways, at what point does climate change become real enough for people (me) to respond? When is it real enough to openly acknowledge that you feel it is affecting you in the here and now? Each of these reflections oscillated between recognition of its realness in the here and now and a subtle avoidance of the here and now by focusing on the anticipated catastrophic effects they imagine for the future. Ron spoke of the ways that the Mountains might become uninhabitable as fires become more frequent and rebuilding codes and insurance changes, yet he avoided the ways that this was happening already following the October fires. Michael doubted the use of discussing climate change in relation to fire risk at this point, perhaps if there are two or three more fire events like October 2013 that conversation will be more relevant, yet he admitted that he believed 'it's always the here and now really isn't it?'

These future imaginaries operated in two directions. On the one hand anticipating this awful future, when there will be more tragic fires, when the Mountains might be uninhabitable, when their children will be having to negotiate a radically different world than the one they inhabit, produced a very real affect in the here and now. People's worry and fear, their sadness and guilt about this future were tangible during our interviews. On the other hand, this future imaginary operated to distance people from their present day, perhaps more mundane, experiences of climate change. Experiences of fire or losing a home were small compared with what might happen for others in the future. This future was imagined in a variety of ways: some people not being able to rebuild their homes in Winmalee right now is nothing compared to the idea of the Mountains being uninhabitable; maybe if there are more tragic fires people will stand up and take notice; maybe if it gets even hotter in my life time I will start to prioritise it. Their fear and grief for the anticipated future combined with the ambiguity of the present, removing the impetus to explore the effects of climate change in the here and now. None of these participants situated climate change solely in the future, and yet none situated it personally and presently enough in the 'now' to warrant the need for a response or action from themselves or the community.

Fear and grief

Emergency. Yeah, we're in an emergency situation. The projections I see [...] just frighten the hell out of me. And I think we're, it might even be too late. [...] I'm scared for our future.

Kylie, Springwood resident.

Many authors have pointed out that feelings of anxiety, guilt, and fear are a part of facing global warming and other environmental destruction (Dodds 2011; Gillespie 2014, 2016; Head 2016a; Lertzman 2015a; Moser 2013; Norgaard 2011; Randall 2009, 2013; Rustin 2013; Weintrobe 2013a). Fear and other strong 'negative' emotional states like sadness or grief are widely regarded as debilitating and counterproductive in modern Australian culture where the seriousness of climate change is denied, and there is a tendency to pathologise depression and grief (Gillespie 2014; Head 2016a). The interviews I conducted reflected what I had found elsewhere in my fieldwork and considered more extensively in Chapter 5: a culture that treated certain 'negative' emotions such as fear or sadness as unhelpful or impractical. The statements below express two attitudes to fear and climate change that I commonly observed in the community:

It's a massive issue that is so scary and hard to think about and I don't think we should be afraid of it because we can't necessarily stop it from happening.

Jennifer, former Winmalee resident, Fire Affected.

We don't need to have that alarmist stuff, the fear factor which takes people onto this whole anxiety level, I don't think that's the right thing to do [...] people who promote that scare sort of tactic causes me to feel anxious and so, therefore, my response to that is I'm not going to listen anymore. It's, I wouldn't say it's indifference... it's like um... oh, I can't be bothered with extremists.

Eliza, Winmalee resident.

These responses are typical of what Randall calls, 'the retreat of a frightened child' (Randall 2005: 173). In the first instance, there is the realisation that something awful is happening in the big adult world and that they are too small to affect it. In the second response, the child is trying

to convince themselves that the danger they face is not real but a mean trick or a nasty dream. This child is 'whistling in the dark' (Randall 2005: 173). As Randall points out, each of these phrases expresses the 'childlike assumption that there are adults in charge' (2005:173). It was rare that people would directly state their grief or sadness, though they often expressed thoughts about the future and the implications for future generations that had a poignant a sense of anticipatory loss:

As a child of someone who went to World War II, I feel, quite despondent because that's not... when Dad risked his life... Dad goes off to war, comes back, meets my mum, they want to make a better life and have a better world for us, and somewhere along the line that sort of intergenerational advancement seems to have lost wind.

Ted, Faulconbridge resident.

I've seen the best of what the planet has to offer sort of thing, but I realise that for your generation a lot of those opportunities are disappearing, those doors are closing.

Tim, Springwood resident, RFS member.

It actually makes me feel really sad. Because I feel like that's the legacy that we've created and we're leaving for people. For my kids and their kids. So yeah it makes me a bit sad. Makes me a bit sad about you know, the lack of... the lack of foresight.

Nicky, Winmalee resident.

Paula, the mother of two young children, was passionate about solar energy and taking real action on climate change. She experienced frustration with friends who didn't have enough time or interest in making the lifestyle changes that she saw as straightforward and achievable, lamenting that she would be met with eye rolling and excuses when she raised it socially. When I asked her how she felt about climate change she said, 'Well it's a bit sad isn't it?' and repeated this question again when I asked about her friend's responses to the issue. She couldn't seem to bring herself to state that it was sad for her, that she felt sad about it. The phrasing of her own sadness as a question to me, struck me as a request for acknowledgment in a culture where such feelings are usually denied rather than validated. She had quite a strong sense of culpability for those living in the affluent West, and felt the strain of trying to change her own behaviour and

the behaviour of those around her in ways that would not be perceived as nagging or being high and mighty about it. Toward the end of the interview when I asked if she wanted to add anything she said, 'I've got to apologise for sounding like a bitter twisted old...' After the interview, she seemed embarrassed by how negative she had been and kept apologising for all her 'whingeing'. Later when I discovered that there were some issues with the recording, I was in contact with her about the possibility of a second replacement interview, and she again apologised for being so negative in the original interview. Even expressing relief that we might get to do another one so that I wouldn't have to listen to her complaining in the recording. She was sharply aware of the cultural imperative to be happy and positive to such a degree that sharing sadness, fear or anger about the state of the world felt uncomfortable and socially inappropriate, even in an interview where she was being asked to share her feelings and experiences.

On the 17th October of 2015, exactly two years after the October fires, I attended the H.V. Evatt Memorial Dinner hosted by the Katoomba branch of the ALP³² and the Blue Mountains World Heritage Institute at the Carrington Hotel. The featured speaker at this event was Professor Lesley Hughes who gave a talk titled, *Not just polar bears: Climate change as a social justice issue.* The event was opened by the local member of parliament, Trish Doyle, who acknowledged the anniversary of the fires in her opening remarks but emphasised that the community was 'moving on.' Professor Hughes also began her talk by making the connection between the climate change and bushfire seasons coming earlier in the year, stating that the anniversary of the October fires was a 'sombre reminder of that.' She went on to list, at some length and in detail, the current science of climate change and its current effects on the environment – from the bleaching of coral reefs to changing cyclone patterns, rising sea levels and extinction of different species. Her talk was met with a lot of head shaking in the room, and a great deal of sighing. The feeling of sadness and despair was palpable.

This event was thought-provoking to me in two ways. Firstly, it was unusual for the October fires to be linked so matter-of-factly with climate change in a local public space in the Blue Mountains, particularly on the anniversary of the fire event. I inferred that because the event was hosted by the Labor party and a local environmental organisation there was more of a sense of

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³² Australian Labor Party.

social permission to discuss climate change and the fires without concern about whipping up controversy or causing offence. There was also the additional factor of the evening's talk being devoted to climate change, unusually foregrounding the subject, which perhaps made it easier for speakers to make the link locally. The second aspect of the evening that struck me was the unacknowledged grief and despair that was present in the room as Professor Hughes spoke, and afterwards as people mingled and talked with each other. The room had been stirred into an emotional space but there was no process or container for the grief and frustration that was arising for people. It had a despairing and helpless quality that manifested in conversations about Australian politicians and doubts about the upcoming global conference in Paris. For the most part, people seemed to talk past each other. I was reminded of the point made by Macy and Johnson (2012) in their book Active Hope, that 'Shocking facts delivered without attention to the emotional responses of the audience can be traumatising, and defensively increase responses of denial' (Macy and Johnstone 2012: 70). When someone from the audience asked Professor Hughes how they could talk to people who were sceptical about anthropogenic climate change, she was quick to point out that scepticism per se wasn't the issue in Australia. The issue faced here was how to move people from their apathy, their inability to translate their concern into action. But amid the audience's despair, the question of exactly how to encourage meaningful engagement with this difficult issue remained unanswered.

As discussed in Chapter 5, Collins (2016) found that many councils were employing a 'positive focus' when undertaking community consultation to combat the 'negative politics' of climate change (Collins 2016: 187-88). Lertzman (2015b: para 8) likewise observes that those working on engagement, advocacy, and education about climate change 'tend to skip acknowledgement of people's fears, and focus instead on "solutions." More nuanced psychological research on the role of fear in the public's engagement with climate change is still emerging and there is a lag time between what this research reveals and the strategies employed by mainstream environmental organisations and governments to communicate about climate change. Nevertheless, there is an important distinction to be made between the problematic effort to frighten or shock individuals into action (Milton 2008b; O'Neill and Nicholson-Cole 2009) and the reality that fear arises for people in response to thinking about climate change regardless of how it is communicated. Too much focus on the terror of what could happen is counter-

productive (Gillespie 2014), yet avoiding the subject of people's fears and anxieties can drive them underground where they are not worked through and can escalate (Weintrobe 2013a). Denying fear and grief as a part of the public conversation also negates a form of anticipation. It flattens the imaginary horizon to one of positive or non-threatening scenarios, where individual 'lifestyle choices' and 'low regrets' approaches to climate change adaptation and mitigation (Collins 2016) can be proffered as effective responses to the problem. If anticipation is connected to social action and responsibility (Nuttall 2010; Hastrup 2016), the community's approach to fear and grief – how it was expressed, held and processed and its role in the adaptation process – represents an important avenue for further research (Moser 2013).

The mundane now

Joanna Macy (2014: 5) discusses two frames through which we can understand and see what is happening in the world. The first is characterised as 'business as usual' where the defining assumption is that there is no need to change the way that we live – disasters like the October fires are considered temporary difficulties that will pass. In the 'business as usual' mentality the urgency or importance of the crisis and the need to address it is repressed and ignored as people are caught up in the demands of their daily lives. As Paula from Springwood put it, people are 'away with the fairies... you know, just, probably a normal life where you're just focused on today and tomorrow and getting nice dinner on the table and earning money and rolling along as we are.' The second narrative is what Macy (2014) describes as 'the great unravelling' but it has also been called the 'disaster narrative' (Bragg 2015). This narrative draws attention to the reality of ecological collapse – but it tends to invoke the end of the world as something that is unstoppable; the apocalypse looms large. This narrative can lead to grave concern, but can also provoke profound feelings of powerlessness, or as was explored earlier, distancing people from the more ordinary experience of losses that are occurring now.

My interview data showed people oscillating between these connected narratives and myths in their own lives (Bragg 2015) as they contemplated fire risk, climate change and the future. People were troubled by the ways that their experiences of ecological destruction (both connected and not connected with climate change) threw a dark shadow across the 'myth of progress' that underpinned their understanding of a meaningful and moral trajectory for Western

civilisation (Head 2016a). What was also apparent during the interviews was the sterility of each of these myths and their inadequacy when it came to explaining an event like the October fires. It might seem odd to discuss a catastrophic bushfire event as 'mundane' or 'ordinary', but as Chapter 3 illustrated, bushfire was very much positioned as a part of 'normal' or 'expected' life in the Blue Mountains. Some of the literature is beginning to explore these events – ordinary, disastrous, big and small that are perceived as encounters with climate change (Akerlof et al. 2013; Reser et al. 2014; Weber 2010; Moser 2014; McDonald et al. 2015). Much of this literature shows that these experiences do affect people's engagement with the issue (Reser et al. 2014; Lujala et al. 2014; Myers et al. 2012; Demski et al. 2016). In the Blue Mountains, cultural context was important in making sense of these events. A climate-connected event like the October 2013 fires happened in a mythological vacuum between 'business as usual' and the 'impending apocalypse', and as such, people's experiences were not being translated into meaningful anticipations of what climate change meant for them either locally or globally. There was a lack of shared story through which to process their own lived encounter with climate change. People were left individually to negotiate their own uncertain reality – pushing it away and approaching it tentatively as can be observed in the previous sections of this chapter. Climate change remained only 'a little bit real' because there was no collective narrative that enabled the community to grasp that their 'mundane now' - the excessive rebuilding costs, the changing insurance premiums, the increased hazard reduction fires in autumn, the nightly news over dinner reporting the hottest April on record - could be considered legitimate experiences of climate change.

Much of the psychological literature points to the immense emotional maturity required to be aware of the multitude of conflicting thoughts and emotions that arise in response to climate change (Dodds 2011; Gillespie 2014; Randall 2013; Weintrobe 2013a). It is an enormous effort to sustain a lively engagement with the tension of seemingly opposing perspectives in productive and constructive ways, rather than as a dead end toward apathy, disengagement or irrationality (Weintrobe 2013a). Randall (2013) points out that in the face of this irrationality, climate change scientists and communicators have moved further into the world of 'reason'. There are more graphs, more information, and more precise arguments being transmitted in public communication, as was apparent in the presentation given by Professor Hughes at the Evatt

Memorial dinner. Governance and adaptation researchers call for further dialogue that directly addresses climate change at the community level (Collins 2016; Schlosberg et al. 2017), though there is ongoing debate about how or when climate change should be explicitly named (Moser 2014). Gillespie (2014: 295) finds that,

the context for such dialogues can be neither exclusively personal/individual nor sociopolitical/collective but must embrace both. Space needs to be created and held for psychological realities to be acknowledged and explored, within an awareness that prepares people for creative and sustained action on collective problems.

Climate change is not popularly imagined in the realm of the mundane. Yet when a climate change connected bushfire hits on the ground people negotiate it at the individual level from moment to moment as they defend their homes or evacuate. They have to negotiate it collectively in the local community from day to day as they rebuild and recover. These are often processes that are slow, boring and bureaucratic. In the Blue Mountains, the way that rebuilding and recovery took place was intimately bound to an anticipation of an imagined future (Hastrup 2016). But for residents, the popular imagining of a distant and disastrous future called 'climate change' intersected with present experiences of mundanity, uncertainty, and trauma that did not align with this distant catastrophic conception. This made it challenging for people to engage with climate change in a meaningful or direct way in their own daily lives.

Local councils in Australia do attempt to locate climate change in the everyday by talking about lifestyle choices using positive framing that avoids open discussion of local vulnerabilities (Collins 2016). Yet such approaches also risk increasing community disengagement, apathy and cynicism as the solutions proffered seem incommensurate to the size of the problem, and do not make space for the negative emotional responses arising in the community when confronting their potential and current vulnerability to climate change. This research finds that the attempt to separate climate change from bushfire in local dialogues, in order to protect residents from additionally painful emotions, further contributes to a sense of distant unreality for residents facing the effects of a fire regime increasingly affected by climate change. As Moser (2013) argues, successful adaptation is a way of coming to terms with and accepting what is being lost, deepening community bonds in the process. I suggest that there was a need for the community to

find ways to ground climate change in the mundane now. Discussion of processes at the local level that might facilitate people coming to terms with their fear of climate change and environmental destruction is beyond the scope of this project, but it represents an important direction for future research on the cultural and emotional practices that need to be attended to in local adaptation to climate change (Collins 2016; Moser 2013). The lack of detailed, open, public and local discussion of climate change impacts in the community limited the space for a process of collective anticipation that would have situated climate change more squarely in the here and now, as a process unambiguously requiring both the integration of local and wider societal action.

Conclusion

Stories about the origin of fire encompass basic questions about human responsibility, agency and control in the world. The heat of fire metabolises, transforms, destroys and renews. Far from being a part of nature, the making and possession of fire is a cultural achievement of the first order, and it is thus no coincidence that fire myths typically tell of theft, trickery and deception. Thus, in the Greek legend, fire is stolen from Zeus and delivered to humanity by Prometheus in a stalk of fennel. In Native American cultures of the Pacific Northwest, fire was stolen by coyote, beaver or dog and given to humans. In Norse mythology, the giant Loki gains the secret of fire from an eagle. The northern Australian Dalabon tell a Dreaming narrative of how Rainbow Bird steals a firestick from Crocodile and then flies around the country putting fire into the heart of every tree so that people can make fire from dry wood (Isaacs 1980), and the Kukatja people in Western Australia tell the story of Crow hiding the secret of fire from Eagle (Greene, Tramachi and Gill 1992).

Adapting Levi-Strauss' view of the central significance of fire for humanity to a contemporary Western context, Linda Connor poignantly writes that 'culture and combustion go together' (Connor 2016: 1). In the modern era, as deposits of fossilised plants and animals are methodically lifted from the earth's crust at an industrial scale, a new allegory about the theft of fire is emerging. As Thomas Reuter has argued, the artificial enhancement of 'life force' taken from these fossils has fuelled grander stories of mastery over 'nature', allowing people 'to entertain cosmologies that... portray man as a subject separate from and largely independent of the life processes of planet Earth' (Reuter 2010: 21). And yet, as these fuels combust and the earth heats up, as glaciers melt and waters rise, as homes burn down and seasons become unpredictable, people are brought irrevocably back into contact with their embodied interdependence with the web of geology and ecology on this planet. Arguably, the narratives that are emerging to explain the transformation of worlds, local and global, and the human part in it, are of critical importance. These stories shape identity. They shape action.

This thesis too offers a tale of fire, one that is attentive to the connection between culture, dialogue and responsibility in an era of anthropogenic climate change. I have been especially

concerned with the self-world relationship characteristic of a contemporary Western cosmology, and with the unstable vision of human agency and responsibility at the heart of people's responses to global warming and its related ecological transformations. Out of an Australian modern suburban sensibility have indeed emerged distinctive responses – particular relationships with the bush, local fire mythologies, the stoic character of the recovery process, and the ambiguous figurations of climate change in the Blue Mountains. This is a cosmology that has grown from the roots of settler colonialism, industrialisation and capitalism, three critical forces in the modern-day 'theft' of fire.

In concluding I address two questions that have emerged over the course of this inquiry and that represent fertile avenues for future research on the role of culture in responding to climate change. First, does it matter how or if people talk about climate change with each other at the local level? And second, how will people sustain or acquire a sense of response-ability³³ amid their own suffering and trauma? These questions are evidently in a dynamic relationship with each other; how people talk about climate change is necessarily a matter of how it is conceived of through their culture, while the register and style of this talk – the stories that are told – inform what kinds of responses are imaginable and enacted.

Closing the discursive gap

Early on in my research, I found myself facing the strange paradox of wanting to account for the profound uncertainty and ambivalence that characterised the local (in)articulations of climate change by placing it with conviction at the centre of my own inquiry. Recovery workers and the RFS, in particular were hesitant to directly raise the topic with residents following the October 2013 fires. I have endeavoured to respect their knowledge, experience and perceptions of their local situation, yet in order contribute to a better understanding of climate change in the Blue Mountains, I needed to question the cultural assumptions and contextual stresses that lay behind such a response.

The language people use and the stories people tell each other have consequences for how they anticipate and respond to the situation they find themselves in. During one interview, Matthew, a

³³ I use the term response-ability here to capture the meaning of responsibility as 'the ability to respond' rather than blameworthiness (Minow 1993: 1442–1445 cited in Hirsch 2016: 84).

Winmalee RFS member, recounted a public meeting that was held in the Yellow Rock Guide Hall after the first unseasonably early fire in September of 2013 that damaged property in Yellow Rock and Hawkesbury Heights. At this meeting, the RFS District Manager for the Blue Mountains gave what Matthew called 'the usual talk' about all the different measures the RFS was planning to prevent further severe fires for that season:

David Jones said, 'Oh we're going to do this, we're going to do that', blah blah. But one of the deputy captains got up and turned the truth on. He said, 'Look it's going to happen, and it's going to be pretty severe, and so you just need to be prepared. You've been handed a bushfire survival plan, go home, fill it out and do it. This is serious stuff.' And then bugger me dead a week and a half later that's it. But the problem is that they never had a chance to pull out that bushfire survival plan.

This brief anecdote poignantly illustrates the struggle for people, and especially community leaders, to move beyond 'the usual talk', to make the new and threatening realities of climate change imaginable for the community in time for them to adequately prepare. Kim Fortun proposes that 'discursive gaps emerge when there are conditions to deal with for which there is no available idiom, no way of thinking that can grasp what is at hand' (Fortun 2012: 452). The changing environmental conditions unfolding in relationship with climate change were happening in one such discursive gap. The causes and conditions for these changes bisected the naturalist ontology with its scientific epistemology and faith in technology, as well as the neoliberal teleology of unending materialist progress available under capitalism and democracy. This thesis has explored how these paradigms shaped and limited how residents of the Lower Mountains grasped what was at hand, investigating why and how changes to the bushfire regime were either treated as addressable through existing preparedness and recovery discourse, or excluded altogether as impossible to adequately respond to. As one recovery worker put it to me, 'Nobody's ever prepared for that fire, there's no amount of preparation that would have got us through that one.'

Between the stark physical impact of the fires and the discursive process of meaning-making occurring in conversation about the fires, there was little social and cultural practice that related

directly to dealing with climate change. Actions were largely confined to erecting safety barriers between society and the bush. Language thus became the substance of my analysis – the private conversations I was party to, my interview material, the bureaucratic discourse of preparedness and recovery work, the public articulation of the event, as well as what went unsaid. Based on this analysis, I have argued that local (in)articulations of climate change reflected the process of distancing this thesis has explored. Psychologically, people's engagement with climate change was not 'logical' or linear. Rather, engagement occurred in inconsistent and unstable ways. People both approached and retreated from the reality of climate change as they sought to comprehend and incorporate this existentially threatening and apocalyptic imaginary into the routine experience of their day to day lives. The absence of a shared story through which to process their own encounters with climate change meant that the work of developing cultural and social practices that addressed this reality remained fragmentary. The patchy efforts on the part of local leaders to initiate a courageous and frank conversation about the local impacts of climate change echoed the failure of state and federal governments to address the issue directly in recent years (Collins 2016). A new narrative about climate change requires significant shift in culture, and no doubt much of this shift hinges on the tenor and focus of the conversation occurring between politicians and in the media (Brulle et al. 2012). What is spoken and unspoken about climate change matters. It shapes the social imaginary, which in turn effects people's conceptions of what action is required. The potential for transformation in how climate change would be perceived and acted upon in local communities if approached differently in daily conversation and public discourse is an important direction for future research.

Responsibility amid vulnerability

For those living in the high-emissions culture and entangled in the coal dependent export economy of Australia, the nexus of vulnerability and responsibility creates social and moral inconsistences (Head 2016a). Throughout this thesis, I have highlighted the contradictory and ambivalent aspects of one community's response to environmental change in this arid and fire-prone land with low soil fertility and high climatic variability. Psychoanalytic work on climate change underscores the importance of understanding psychological defence mechanisms that produce such inconsistencies in individuals (Dodds 2011; Gillespie 2014; Hoggett 2013; Lertzman 2015a; Weintrobe 2013a). My research conveys the additional relevance of the cultural

foundations of these contradictions. I have elucidated the hidden tension between cultural participation in the ecological crisis and susceptibility to its effects, by way of considering the connection between local climate change discourse, constructions of vulnerability, and the ability to respond to the environmental, social and cultural change that accompanies global warming, that is, people's 'response-ability' (Hirsch 2016).

Subject to the 'laws of nature', human materiality is brutally underlined by catastrophic bushfire, where the solid, protective and symbolic cultural structure of home is obliterated by 'natural' forces. After the October fires, Lower Mountains residents sought to restore their ontological security by reclaiming and reimposing their human exceptionality and separation from their embodied and material embeddedness in the bush. The marked individualism of Australian culture (Kapferer and Morris 2003) reinforced a focus on those aspects of people's personal lives that allowed them to exert agency and feel empowered in their recovery. Consumerism in the form of building bigger homes offered a heroic cultural project with which to deny the mortality message of the fires and climate change (Connor 2010b: 250).

Sally Weintrobe (2013a: 43) argues that what people in the West dread giving up is not so much particular material possessions or particular ways of life, but a way of seeing themselves as special, and as entitled, not only to possessions, but also to quick fixes. Paraphrasing Freud, psychologist Mary-Jayne Rust writes that in the West 'in an effort to escape our vulnerability we gradually learned how to manipulate the world around us' (Rust 2008: 159). Notions of protection and safety expressed and enacted in the Blue Mountains – hazard reduction burning, tree removal, stricter building regulations, larger houses, avoidance of climate change talk – were closely connected with colonial and naturalist myths of mastery over, and separation from, the natural world. The separate invulnerable self became the means of responding to the threat posed by climate change. Yet the imagined cloak of invulnerability obtained through 'buffering' actions was also eroding under these new conditions. Shifting seasons cast doubt on the efficacy of planned HR burns during autumn and spring. Residents questioned whether their houses could withstand the new kinds of bushfires currently occurring and predicted. The RFS was attempting to re-educate the community about the scarcity of assistance that would be available to them during such fires. Residents wondered whether they could afford to sufficiently insure their

homes to rebuild and recover in the future. Nonetheless, vulnerability, that community members conceptualised in negative terms and in opposition to agency, continued to be projected elsewhere – onto other people, other places, other times. Indeed, the psychological and cultural distancing of climate change that I witnessed in the Blue Mountains could be more accurately characterised as a disavowal of their own vulnerability. This disavowal is central to understanding how those living in suburban Australia conceive of, and respond to, climate change in their own lives.

Contradictory subjectivities remain important here. Those who were fire affected and suffering the trauma, financial stress and dislocation of this destruction were also thought of as 'too vulnerable' to engage with the additional complexity and worry of the fires' potential link with climate change. Thus, climate change was distanced two-fold, and for contradictory reasons. On the one hand, it was unthinkable that it could be happening in the Blue Mountains because residents refused the self-conception of vulnerability and projected it elsewhere. On the other hand, residents were positioned by those working on the recovery process as being in the midst of so much trauma that it was not appropriate to introduce additionally distressing and disempowering information into local conversation about the October bushfires. Many have argued that the psychological distancing of climate change in the West performs a protective function (Connor 2010b; Lertzman 2015a; Moser 2014; Norgaard 2006; Weintrobe 2013a). In the Blue Mountains, silence around the topic of climate change in relation to people's experience of the October fires was thought to protect those in trauma, distancing the threat of climate change from the daily reality of life in recovery.

In *No Reason to Talk about It: Families Confront the Nuclear Taboo*, psychologists David Greenwald and Steven Zeitlan (1987) found that parents and children in focus groups tried to hide their fears about nuclear weapons in order protect each other. Yet this research found that family members felt more secure and empowered when they talked with each other about their fears. Ruth Wajnryb's (2001) research on survivors of the Holocaust and their children similarly provides a nuanced exploration of the challenge of speaking and communicating trauma. She sees that, although many survivors opt for silence,

[o]ne difficulty of silence is that it is not a conducive environment for processing trauma or accomplishing healing. A survivor of trauma needs to process the event, make sense of it, and the way to do this is through the representative function of language (Wajnryb 2001: 104).

For those living in the Australian middle-class, life is characterised by affluence, security and an obsession with comfort. For Connor, this begs the question of who, 'in the 21st century, in a way of life that celebrates living in the moment, ignoring and forgetting... is allowed to feel unhappy or worried, to acknowledge the sadness "at the heart"?' (Connor 2010a: 13). This research and other Australian-based social research (Gillespie 2014; Head 2016a) has established the difficulty people encounter in expressing their fear and grief about climate change. I have suggested that one reason for this difficulty is the disavowal of vulnerability. This prevented the open expression of painful emotions, and especially to share such feelings in a public space. In this cultural context, vulnerability is synonymous with weakness and helplessness, which further drives such acts of vulnerable expression underground where they cannot be shared or heard. As Lesley Head points out, in the stoic vernacular of Australian settler culture, 'even those who know the science most intimately face strong social pressures to be optimistic about the future. There is deep cultural pressure in the West not to be 'a doom and gloom merchant' (Head 2016a: 2). A counterpoint to this culture of stubborn optimism can be found in Connor's (2016) work with spirituality adherents (Christian, Buddhist and Aboriginal) in the Hunter Valley in Australia. She discovered that these participants were more able to express and manage the feelings of loss, sadness and despair that accompanied the contemplation of climate change. She also found that the doctrines of interdependence, compassion, impermanence and responsibility tied to their spiritual beliefs supported these participants in coming to terms with the vulnerability and prospective suffering heralded by climate change (2016: 182).

My study offers a window into a situation that will doubtless become more commonplace as global warming progresses in the 21st century, begging the question of how people will sustain or acquire a sense of responsibility amid their own suffering and trauma. I suggest that this can occur through a recognition of their own vulnerability, and a redefinition of what vulnerability can mean. In his book *Radical Hope*, philosopher Jonathan Lear has put forward a similar proposition: 'Perhaps if we could give a name to our shared sense of vulnerability, we could find

better ways to live with it' (Lear 2006: 7). I want to suggest that recognition of the human material interconnection with the wider environment can facilitate a moderation of the individualist paradigm and allow Western subjects to reimagine what vulnerability, responsibility and agency might mean in the face of anthropogenic global warming. I agree with Stacey Alaimo's (2009: 23) view that 'vulnerability – a sense of precarious, corporeal openness to the material world – can foster an environmental ethics.' In the Blue Mountains, one such acknowledgment of vulnerability might emerge through more open, public and direct discussion of climate change and its local connections with bushfire and other kinds of environmental change.

Ethnographers, social scientists and psychologists have argued that openly engaging with concerns about climate change can be a transformative experience that invites new stories about self, society and the world (Bragg 2015; Gillespie 2013; Gillespie 2014; Pearse et al. 2010; Randall 2009; Randall 2013). Yet the road to this cosmological transformation is difficult to travel. As this thesis has detailed, the conversation about climate change is by no means an easy or straightforward one, spanning questions of existence, knowing, politics and culture. Indeed, a main finding of my study is that the uncertainty and ambivalence about the local reality of climate change following the October fires is a direct expression of climate change experiences. The challenge remains for communities like those of the Lower Blue Mountains to encompass this contingent reality, where they are both vulnerable and share responsibility for this changing environment, where climate change is both real and not real in their quotidian worlds.

References

- AAP (Australian Associated Press) 2014. 'Climate change means more fires: academic'.

 Australian Associated Press. January 23. Available at http://www.theaustralian.com.au/higher-education/climate-change-means-more-fires-academic/story
 e6frgcjx1226807846513 (accessed 31 January 2014).
- ABC Fact Check (Australian Broadcasting Corporation) 2015. '9 million homes with 2.6 occupants'. *ABC News*. 5 May. Available at http://www.abc.net.au/news/2015-05-06/fact-file-housing-in-australia/6442650 (accessed 3 April 2016).
- ABS (Australian Bureau of Statistics) 2011a. Blue Mountains (C) Local Government Area,

 Available at http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/
 quickstat/LGA10900?opendocument Accessed 5 January 2017.
- ABS 2011b. Springwood-Winmalee Statistical Area Level 2, Available at http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/124 01145?opendocument (accessed 5 January 2017).
- ABS 2011c. Katoomba-Leura Statistical Area Level 2, Available at http://www.censusdata. abs.gov.au/census_services/getproduct/census/2011/quickstat/124011452?opendocument (accessed 5 January 2017).
- Adger, W. N. 2006. 'Vulnerability'. Global Environmental Change 16(3): 268-281.
- Adler, M. 2006. 'Behind the Ever Expanding American Dream House'. *All Things Considered National Public Radio*. July 4. Available at http://www.npr.org/templates/story/story. php?storyId=5525283 (accessed 19 July 2017).

- AEC (Australian Electoral Commission) 2016a. Australian Federal Election Available at http://results.aec.gov.au/20499/Website/HouseDivisionPage-20499-133.htm (accessed 10 January 2017).
- AEC 2016b. First preferences by candidate by polling place NSW. Available at http://results. aec.gov.au/20499/Website/HouseDownloadsMenu-20499-Csv.htm (accessed 10 January 2017).
- Akerlof, K., Maibach, E. W., Fitzgerald, D., Cedeno, A. Y., and Neuman, A. 2013. 'Do people "personally experience" global warming, and if so how, and does it matter?'. *Global Environmental Change* 23(1): 81-91.
- Alaimo, S. 2009. 'Insurgent Vulnerability and the Footprint of Gender'. Women, Gender, and Research (Kvinder, Køn og Forskning, Denmark) 3: 22–35.
- Allan, K., and Burridge, K. 1991. *Euphemism and Dysphemism: Language used as shield and weapon*. New York and Oxford: Oxford University Press.
- Appadurai, A. 1996. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis, MN: University of Minnesota Press.
- Altangerel K., and Kull C. A. 2013. 'The prescribed burning debate in Australia: conflicts and compatibilities'. *Journal of Environmental Planning and Management* 56(1): 103-120.
- Australian Government Productivity Commission 2012. *Barriers to Effective Climate Change Adaptation Report No. 59, Final Inquiry Report*. Canberra. Available at http://www.pc.gov.au/inquiries/completed/climate-change-adaptation/report/climate-change-adaptation.pdf (accessed 17 April 2016).
- AS 3959 n.d. *Bushfire Attack Level*. AS 3959. Available at http://www.as3959.com.au/bushfire-attack-level/ (accessed 25 April 2017).

- Baker, J. 2014. 'Yellow Rock residents who lost their homes in bushfires are on the road to recovery after a tough year'. *The Daily Telegraph*. 4 October. Available at http://www.dailytelegraph.com.au/news/nsw/yellow-rock-residents-who-lost-their-homes-in-bushfires-are-on-the-road-to-recovery-after-a-tough-year/story-fni0cx12-1227079082098 (Accessed 6 October 2014).
- Bauman, Z. 2005. *Work, consumerism and the new poor*. Berkshire, England: Open University Press.
- Becker, E. 1973. The Denial of Death. New York: The Free Press.
- Becker, E. 1975. Escape from Evil. New York: The Free Press.
- Bird, D.W., Bliege Bird, R., Nyalangka Taylor, Codding, B.F. 2016. 'A landscape architecture of fire: cultural and ecological emergence in Australia's Western Desert'. *Current Anthropology* 57(S13): S65-S79.
- Black, M. P., and Mooney, S. D. 2006. 'Holocene fire history from the Greater Blue Mountains World Heritage Area, New South Wales, Australia: the climate, humans and fire nexus'. *Regional Environmental Change* 6(1-2): 41-51.
- Black, M. P., and Mooney, S. D. 2007. 'The Response of Aboriginal Burning Practices to Population Levels and El Niño Southern Oscillation Events during the mid to late Holocene a case'. *Australian Geographer* 38(1): 37-52.
- Black, M. P., Mooney, S. D., and Attenbrow, V. 2008. 'Implications of a 14,200 year contiguous fire record for understanding human-climate relationships at Goochs Swamp, New South Wales, Australia'. *The Holocene* 18(3): 437-447.

- Blue Mountains City Council 2009. *Blue Mountains Climate Change Risk Assessment Report*.

 Blue Mountains City Council. Available at http://www.bmcc.nsw.gov.au/yourcouncil/policiesplansandstrategies/climatechange (accessed 25 September 2014).
- Blue Mountains City Council 2010. *Aboriginal Cultural Protocols*. Blue Mountains City Council Available at http://www.bmcc.nsw.gov.au/download.cfm?f=7A869BCB-C29F-26E0-D39FDEA51CDEF545 (accessed 17 January 2017).
- Blue Mountains City Council 2012. *State of the City Report 2008-2012*. Blue Mountains City Council. Available at http://www.bmcc.nsw.gov.au/yourcouncil/integratedplanning andreporting/stateofcityreport (accessed 23 July 2016).
- Blue Mountains City Council 2013. *Sustainable Blue Mountains 2025: our city our future*. Blue Mountains City Council. Available at http://www.bmcc.nsw.gov.au/download. cfm?f=08C71CC1-DF65-4058-926FA7F5C8026E1B (accessed 23 July 2016).
- Blue Mountains Conservation Society 2014. Submission to the Blue Mountains City Council regarding the Development Application for the Staged Subdivision of Lots 2 and 3 in DP133438 at 168 Hawkesbury Road Springwood (St Columba's). Available at blue mountains.org.au/.../Submission_to_BMCC-St_Columbas_Development.pdf (accessed 2 February 2017).
- Blue Mountains Gazette 2014. 'Mental health support for residents affected by bushfires'. Blue Mountains Gazette. 2 April 2014: 29.
- Blue Mountains Local Community Recovery Group 2015. *Community Reference Group Community Survey*. Blue Mountains Bushfire Recovery, Blue Mountains City Council. Katoomba. Available at www.bmcc.nsw.gov.au/files/CRG%20Community%20Survey% 202015.pdf (accessed 5 May 2015).

- Blue Mountains World Heritage Institute (BMWHI) 2016. *About Us.* http://www.bmwhi.org.au/wp/about-us/world-heritage/ (accessed 24 July 2016).
- Boer, M. 2013. 'Are the NSW bushfires linked to climate change?'. *The Conversation*. 25 October. Available at https://theconversation.com/are-the-nsw-bushfires-linked-to-climate-change-19480 (accessed 30 June 2014).
- Bolin, I. 2009. 'The Glaciers of the Andes are Melting: Indigenous and Anthropological Knowledge Merge in Restoring Water Resources'. In: *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Boon, H. J. 2014. 'Perceptions of climate change risk in four disaster-impacted rural Australian towns'. *Regional Environmental Change* 16(1): 137-149.
- BoM (Australian Government Bureau of Meteorology) 2007. About East Coast Lows. Bureau of Meteorology. Available at http://www.bom.gov.au/nsw/sevwx/facts/ecl.shtml (accessed 5 August 2017).
- BoM 2012. Australian Climate Observations Reference Network Surface Air Temperature (ACORN-SAT) Station catalogue. Bureau of Meteorology. Available at http://www.bom.gov.au/climate/change/acorn-sat/documents/ACORN-SAT-Station-Catalogue-2012-WEB.pdf (accessed 12 July 2017).
- Bradstock, R. A., Cary, G. J., Davies, I., Lindenmayer, D. B., Price, O. F., and Williams, R. J. 2012. 'Wildfires, fuel treatment and risk mitigation in Australian eucalypt forests: insights from landscape-scale simulation'. *Journal of Environmental Management*. 105: 66-75.
- Bragg, E. 2015. "What If...?": Climate Change as Ally'. Ecopsychology 7(4): 231-237.

- Brulle, R. J., Carmichael, J. and Jenkins, J. C. 2012. 'Shifting public opinion on climate change: an empirical assessment of factors influencing concern over climate change in the U.S., 2002–2010'. *Climatic Change* 114(2): 169-188.
- Burke, A. 1988. 'Awesome Cliffs, Fairy Dells and Lovers Silhouetted in the Sunset a Recreation History of the Blue Mountains'. In: *The Blue Mountains: Grand Adventure for All*. P. Stanbury (ed). Sydney: Second Back Row Press.
- Burton, D. and E. Laurie 2009. *Blue Mountains City Council Climate Change Risk Assessment Report*. Climate Risk Pty Ltd. Available at http://www.bmcc.nsw.gov.au/yourcouncil/policiesplansandstrategies/climatechange/ (accessed 18 February 2014).
- Butler, J. 2004. Precarious life: the powers of mourning and violence. New York: Verso
- Butler, J. 2016. 'Rethinking Vulnerability and Resistance'. In: *Vulnerability in Resistance*. J. Butler, Z. Gambetti, and L. Sabsay (eds). Durham, United States: Duke University Press.
- Bryant, L., and Garnham, B. 2014. 'The fallen hero: masculinity, shame and farmer suicide in Australia'. *Gender, Place & Culture* 22(1): 67-82.
- Cameron, B. 1992. *A History of the Blue Labyrinth: Blue Mountains National Park.* Valley Heights: B. Cameron.
- Carter, P. 2010 [1987]. *The Road to Botany Bay: an essay in spatial history*. 3rd Edition. Minneapolis: University of Minnesota Press.
- Clayton, S., Manning, C., and Hodge, C. 2014. *Beyond Storms and Droughts: The Psychological Impacts of Climate Change*. Washington D.C.: American Psychological Association. Available at https://ecoamerica.org/wpcontent/uploads/2014/06/eA_Beyond_Storms_and_Droughts_Psych_Impacts_of_Climate_Change.pdf (accessed 19 June 2014).

- Climate Justice Now 2009. *Climate Justice Assembly Declaration*. Available at http://www.climatejusticenow.org/category/reports_and_pub-lications/climate-justice-at-the-world-social-forum/ (accessed 22 April 2017).
- Cohen, S. 2001. States of denial: knowing about atrocities and suffering. Malden, MA: Polity.
- Cohen, S. 2013. 'Discussion'. In: *Engaging with Climate Change: Psychoanalytic and Interdisciplinary Perspectives*. S. Weintrobe (ed). Hove, England: Routledge.
- Collins, L. 2016. 'Confronting the Inconvenient Truth: the politics and policies of Australian climate change adaptation planning'. PhD thesis. University of Sydney.
- Connor, L. H. 2010a. 'Climate Change and the challenge of immortality: faith, denial and intimations of eternity'. S. Job and L. Connor (eds). *Online proceedings of the symposium 'Anthropology and the Ends of Worlds' 25-26 March 2010*. University of Sydney, Sydney: 1-22.
- Connor, L. H. 2010b. 'Anthropogenic Climate Change and Cultural Crisis: An Anthropological Perspective'. *Journal of Australian Political Economy* 66: 247-267.
- Connor, L. H. 2016. *Climate Change and Anthropos: planet, people and places*. New York: Routledge.
- Connor, L. H. and N. Higginbotham 2013. "Natural cycles" in lay understandings of climate change. *Global Environmental Change*. 23(6): 1852-1861.
- Connor, L. H. and Marshall, J. P. 2016, 'Ecologies, ontologies, mythologies of possible futures'.

 In: *Environmental Change and the World's Futures: ecologies, ontologies, mythologies.*J. P. Marshall and L. H. Connor (eds). Oxon: Routledge.

- Crate, S. A. 2008. 'Gone the Bull of Winter? Grappling with the Cultural Implications of and Anthropology's Role(s) in Global Climate Change.' *Current Anthropology* 49(4): 569-595.
- Crate, S. A. 2011. 'Climate and Culture: Anthropology in the Era of Contemporary Climate Change.' *Annual Review of Anthropology* 40(1): 175-194.
- Crate, S.A. 2016. 'Gone with cows and kin? Climate, Globalisation, Youth and Alienation in Siberia'. In: *Anthropology and Climate Change: from actions to transformations*. S.A. Crate and M. Nuttall (eds). New York: Routledge.
- Crate, S. A. and Nuttall, M. (eds) 2009a. *Anthropology and Climate Change: from encounters to actions*. Walnut Creek: Left Coast Press.
- Crate, S. A. and Nuttall, M. 2009b. 'Introduction: Anthropology and Climate Change'. In: *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Crate, S. A. and Nuttall, M. (eds) 2016. *Anthropology and Climate Change: from actions to transformations*. New York: Routledge.
- Crane, T. A., Roncoli, C., Paz, J., Breuer, N., Broad, K., Ingram, K. T., and Hoogenboom, G. 2010. 'Forecast Skill and Farmers' Skills: Seasonal Climate Forecasts and Agricultural Risk Management in the Southeastern United States.' *Weather, Climate, and Society* 2(1): 44-59.
- Cruikshank, J. 2001. 'Glaciers and climate change: perspectives from oral tradition [of Athapaskan and Tlingit elders].' *Arctic* 54(4): 377-393.
- Cruikshank, J. 2005. Do glaciers listen? Local knowledge, colonial encounters, and social imagination. Vancouver: UBC Press.

- Crutzen, P. J., and Stoermer, E. F. 2000. 'The Anthropocene'. *Global Change Newsletter* 41:17-18.
- Cunningham, I. 2013. 'Oliver's miraculous survival'. *The Blue Mountains Gazette*. 23 October: 6.
- Curtin, J. 2015. 'Mountains very lucky no lives lost'. The Blue Mountains Gazette. 10 June: 6.
- Dados, N. and Connell, R. 2012. 'The Global South'. Contexts 11(1): 12-13.
- Davidson, H. 2014. 'Blue Mountains residents slowly rebuilding lives one year on from fires'. *The Guardian.* 14 October. Available at http://www.theguardian.com/australia-news/2014/oct/14/-sp-blue-mountains-one-year-on-from-fires#comment-42246897 (accessed 19 October 2014).
- Davies, C. 2013. 'Don't mention the war!' *Blue Mountains Conservation Society Hut News*.

 November (309): 3. Available at http://bluemountains.org.au/documents/hutnews/richer/
 1311news_rich.pdf (accessed 9 September 2014).
- Davison, A. 2005. 'Australian Suburban Imaginaries of Nature: Towards a prospective history'. *Australian Humanities Review* 37. Available at http://www.australianhumanitiesreview. org/archive/Issue-December-2005/davison.html (accessed June 29 2017).
- Davison, A., and Williams, S. 2017. 'The outside within: the shifting ontological practice of the environment in Australia'. In: *Nature, Temporality and Environmental Management*. L. Head, K. Saltzman, S. Gunhild, and M. Stenseke (eds). Oxon, England: Routledge.
- Demski, C., Capstick, S., Pidgeon, N., Sposato, R. G., and Spence, A. 2016. 'Experience of extreme weather affects climate change mitigation and adaptation responses'. *Climatic Change* 140(2): 149-164.

- Descola, P. 2013. Beyond Nature and Culture. Chicago: University of Chicago Press.
- Desiatnik, S. 2014. 'From disaster to dream home'. *The Blue Mountains Gazette*. October 15. Springwood: Fairfax: 1.
- Desjarlais, R., and Throop, J. 2011. 'Phenomenological Approaches in Anthropology'. *Annual Review of Anthropology* 40: 87-102.
- Dickinson, J. 2009. 'The People Paradox: Self-Esteem Striving, Immortality Ideologies, and the Human Response to Climate Change'. *Ecology and Society* 14(1): 34-53.
- Dodds, J. 2011. *Psychoanalysis and Ecology at the Edge of Chaos: complexity theory, Deleuze*| *Guattari and psychoanalysis for a climate in crisis*. New York: Routledge.
- Donner, S. 2011. 'Making the climate a part of the human world'. *Bulletin of the American Meteorological Society* 92(10): 1297-1302.
- Douglas, M. 1994. Risk and Blame: Essays in Cultural Theory. London: Routledge.
- Drury, J., Cocking, C., & Reicher, S. 2009. 'The nature of collective resilience: Survivor reactions to the 2005 London bombings'. *International Journal of Mass Emergencies and Disasters* 27: 66–95.
- Durkheim, E. 2000 [1897]. On Suicide. London: Penguin.
- Eliasoph, N. 1998. *Avoiding politics: how Americans produce apathy in everyday life*. Cambridge: Cambridge University Press.
- Eriksen, C., and Gill, N. 2010. 'Bushfire and everyday life: Examining the awareness-action "gap" in changing rural landscapes'. *Geoforum* 41(5): 814-825.

- Eriksen, C., and Head, L. 2014. 'Geographical Fire Research in Australia Review and Prospects'. *Geographical Research* 52(1): 1-5.
- Eriksen, C., and Prior, T. 2011. 'The art of learning: wildfire, amenity migration and local environmental knowledge'. *International Journal of Wildland Fires* 20: 612-624.
- Fallding, M. 2015. 'Sydney and the bush: the nature-culture interaction'. In: *Values for a New Generation: Greater Blue Mountains World Heritage Area*. D. Benson (ed). Katoomba, Greater Blue Mountains World Heritage Area Advisory Committee.
- Feldman, I. 2016. 'Reaction, Experimentation, and Refusal: Palestinian Refugees Confront the Future'. *History and Anthropology* 27(4): 411-429.
- Feneley, R. 2013a. 'Back on parade: Firestorm families ready to rebuild their homes and lives'. *The Sydney Morning Herald.* October 23. Available at http://www.smh.com.au/environment/weather/back-on-parade-firestorm-families-ready-to-rebuild-their-homes-and-lives-20131022-2vza6.html (accessed 22 October 2014).
- Feneley, R. 2013b. 'A tale of two houses: lessons in how to rebuild a life from the ashes'. *The Sydney Morning Herald.* November 10. Available at http://www.smh.com.au/environment/a-tale-of-two-houses-lessons-in-how-to-rebuild-a-life-from-the-ashes-20131109-2x8gx.html (accessed 22 October 2014).
- Fineman, M. A. 2008. 'The Vulnerable Subject: Anchoring Equality in the Human Condition'. *Yale Journal of Law & Feminism* 20(1): 1-23.
- Fire and Rescue NSW n.d. 'Traditional Fire Stories'. *NSW Government*. Available at http://www.fire.nsw.gov.au/gallery/files/pdf/publications/Traditional%20fire%20stories.p df (accessed 16 May 2017).

- Flato, G., Marotzke, J., Abiodun, B., Braconnot, P., Chou, S. C., Collins, W., Cox, P., Driouech, F., Emori, S., Eyring, V., Forest, C., Gleckler, P., Guilyardi, E., Jakob, C., Kattsov, V., Reason, and C., Rummukainen, M. 2013. 'Evaluation of Climate Models'. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.* T. F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P. M. Midgley (eds). Cambridge, UK and New York, USA: Cambridge University Press.
- Fortun, K. 2012. 'Ethnography in Late Industrialism'. Cultural Anthropology 27(3): 446-464.
- Fortun, K. 2014. 'From Latour to late industrialism'. *HAU: Journal of Ethnographic Theory* 4(1): 309-329.
- Frantz, C. M., and Mayer, F. S. 2009. 'The Emergency of Climate Change: Why Are We Failing to Take Action?'. *Analyses of Social Issues and Public Policy* 9(1): 205-222.
- Freud, S. 1953. *The Standard Edition of the Complete Psychological Works of Sigmund Freud:* (1913-1914) *Totem and taboo and other works*. London: Hogarth Press.
- Frost, N. 2016. 'Sydneysiders Lured to Blue Mountains as city's west develops'. *Domain*. 22 September. Available at http://www.domain.com.au/news/sydneysiders-lured-to-blue-mountains-as-citys-west-develops-20160922-grlw16/ (accessed 26 September 2016).
- Fuller, S. 2016. 'When climate change is not the concern: realities and futures of environmental change in village Nepal'. In: *Environmental Change and the World's Futures*. J.P. Marshall and L.H. Connor (eds). Oxon, England: Routledge.
- Gammage, B. 2012. *The biggest estate on earth: how Aborigines made Australia*. Crows Nest: Allen & Unwin.

- Giddens, A. 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Stanford: Stanford University Press.
- Gilding, P. 2013. 'Now is the time to talk about climate change'. *The Drum.* 22 October. Available at http://www.abc.net.au/news/2013-10-22/gilding-now-is-the-time-to-talk-about-climate-change/5038006 (accessed 23 October 2013).
- Gillespie, S. (2013). 'Climate change and psyche: Conversations with and through dreams'. *International Journal of Multiple Research Approaches* 7(3): 343-354.
- Gillespie, S. 2014. 'Climate Change and Psyche: Mapping Myths, Dreams and Conversations in the Era of Global Warming'. PhD Thesis. University of Western Sydney.
- Gillespie, S. 2016. 'Climate change imaginings and depth psychology: reconciling present and future worlds'. In: *Environmental Change and the World's Futures: Ecologies, ontologies, mythologies.* J. P. Marshall and L. Connor (eds). Oxon: Routledge.
- Goodall, H. 1995. 'New South Wales'. In: *Contested Ground: Australian Aborigines under the British Crown*. A. McGrath (ed). St Leonards: Allen & Unwin.
- Goodlet, K. 2014. 'People in the Central Blue Mountains'. In: *This Tortuous Ridge: Linden to Lawson*. E. Stockton (ed). Lawson, Blue Mountain Education and Research Trust.
- Gordon, R. 2004. 'The social system as site of disaster impact and resource for recovery'. *The Australian Journal of Emergency Management*, 19(4): 16-22.
- Gorman-Murray, A. 2010. 'An Australian Feeling for Snow, Towards Understanding Cultural and Emotional Dimensions of Climate Change'. *Cultural Studies Review* 16(1): 60-81.

- Grant, W. 2013. 'There's no place for politeness when you're fighting a fire'. *The Conversation*. 22 October. Available at https://theconversation.com/theres-no-place-for-politeness-when-youre-fighting-a-fire-19370 (accessed 1 July 2014).
- Green, D Alexander, L., McLnnes, K., Church, J., Nicholls, N., and White, N. 2009. 'An assessment of climate change impacts and adaptation for the Torres Strait Islands, Australia.' *Climatic Change* 102 (3-4): 405-433.
- Greene, G., Tramacchi, J. and Gill, L. 1992. *Tjarany Roughtail (Stories told by the Kukatja)*. Broome: Magabala Books.
- Greenwald, D., and Zeitlin, S. 1987. *No Reason to Talk About It*. New York and London: W. W. Norton Company.
- Hallam, S. J. 1975. Fire and hearth: a study of Aboriginal usage and European usurpation in south-western Australia. Canberra: Australian Institute of Aboriginal Studies.
- Hammill, K. and Tasker, L. 2010. *Vegetation, Fire and Climate Change in the Greater Blue Mountains World Heritage Area*. Department of Environment, Climate Change & Water NSW. Available at www.environment.nsw.gov.au/resources/protectedareas /DECCW20100941.pdf (accessed 23 March 2015).
- Hamilton, C. 2010. Requiem for a species: why we resist the truth about climate change. Crows Nest, NSW: Allen & Unwin.
- Hamilton, C. 2013. *Earthmasters: The dawn if the age of climate engineering*. London: Yale University Press.
- Hamilton, L. C., Hartter, J., Keim, B. D., Boag, A. E., Palace, M. W., Stevens, F. R., and Ducey,M. J. 2016. 'Wildfire, climate, and perceptions in Northeast Oregon'. *Regional Environmental Change* 16(6): 1819-1832.

- Handmer, J., Honda, Y., Kundzewicz, Z. W., Arnell, N., Benito, G., Harfield, J., Mohamed, I. F., Peduzzi, P., Wu, S., Sherstyukov, B., Takahashi, K. and Yan, Z. 2012. 'Changes in impacts of climate extremes: human systems and ecosystems'. In: *Managing the risks of extreme events and disasters to advance climate change adaptation*. C.B. Field, V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds). A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC). Cambridge, UK and New York: Cambridge University Press.
- Handmer, J. and Tibbits, A. 2005. 'Is staying at home the safest option during bushfires? Historical evidence for an Australian approach'. Environmetal Hazards 6(2):81-91.
- Hannam, P. 2016. 'Australia experiencing more extreme fire weather, hotter days as climate changes'. *Sydney Morning Herald*. October 27. Available at http://www.smh.com.au/environment/climate-change/australia-experience-fire-weather-hotter-days-as-climate-changes-20161025-gsao24.html (accessed 1 November 2016).
- Hastrup, K. 2013. 'Anticipating Nature: The Productive Uncertainty of Climate Models'. In: *The Social Life of Climate Models: Anticipating Nature* K. Hastrup (ed). New York: Routledge.
- Hastrup, K., and Rubow, C. (eds) 2014. *Living with Environmental Change: Waterworlds*. Florence: Taylor and Francis.
- Hastrup, K. 2016. 'Climate Knowledge: Assemblage, Anticipation Action'. In: *Anthropology* and *Climate Change: from actions to transformations*. S. Crate & M. Nuttall (eds). New York: Routledge.
- Head, L., 1989. 'Prehistoric aboriginal impacts on Australian vegetation: an assessment of the evidence'. *Australian Geographer* 20: 37–46.

- Head, L., Atchison, J., Gates, A., and Muir, P. 2011. 'A Fine-Grained Study of the Experience of Drought, Risk and Climate Change Among Australian Wheat Farming Households'. *Annals of the Association of American Geographers* 101(5): 1089-1108.
- Head, L., and Muir, P. 2006. 'Suburban Life and the Boundaries of Nature: Resilience and Rupture in Australian Backyard Gardens'. *Transactions of the Institute of British Geographers* 31(4): 505-524.
- Head, L. 2016a. *Hope and Grief in the Anthropocene: re-conceptualising human-nature relations*. Oxon: Routledge.
- Head, L. 2016b. 'Grief, Loss and the Cultural Politics of Climate Change'. In: *Towards a Cultural Politics of Climate Change*. H. Bulkeley and J. Stripple (eds). Cambridge: Cambridge University Press.
- Henshaw, A. 2009. 'Sea Ice: The Sociocultural Dimensions of a Melting Environment in the Arctic'. In: *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Hill, E. 2013. 'Retracing Explorer's Path'. 28 February. *Blue Mountains Bicentenary Crossing 2013-2015, Blue Mountains Lithgow and Oberon Tourism*. Available at https://visitbluemountains.wordpress.com/tag/blue-mountains-crossings-bicentenary-2013-2015/ (accessed 23 January 2017).
- Hirsch, J., Van Deusen Phillips, S., Labenski, E., Dunford, C., and Peters, T. 2011. 'Linking Climate Action to Local Knowledge and Practice: A Case Study of Diverse Chicago Neighbourhoods'. In: *Environmental Anthropology Today*. H. Kopnina and E. Shoreman-Ouimet (eds). New York: Routledge.

- Hirsch, M. 2016. 'Vulnerable Times'. In: *Vulnerability in Resistance*. J. Butler, Z. Gambetti, and L. Sabsay (eds). Durham, United States: Duke University Press.
- Hoffman, S. 1999. 'The worst of times, the best of times: toward a model of cultural response to disaster'. In: *The Angry Earth: disaster in anthropological perspective*. A. Oliver-Smith and S. Hoffman (eds). New York: Routledge.
- Hoffman, S. 2002. 'The Monster and the Mother: the symbolism of disaster'. In: *Catastrophe and culture: the anthropology of disaster*. A. Oliver-Smith and S. Hoffman (eds). Santa Fe: School of American Research Press.
- Hoggett, P. 2011. 'Climate change and the apocalyptic imagination'. *Psychoanalysis, Culture & Society* 16(3): 261-275.
- Hoggett, P. 2013. 'Climate Change in a perverse culture'. In: *Engaging with Climate Change:**Psychoanalytic and Interdisciplinary Perspectives. S. Weintrobe (ed.). Hove, England:

 Routledge.
- Holmes, D. 2013. 'Is the Abbott government fiddling while Australia burns?'. *The Conversation*. 18 October. Available at https://theconversation.com/is-the-abbott-government-fiddling-while-nsw-burns-19339 (accessed 1 February 2014).
- Horton, D. F. 1982. 'The Burning Question: Aborigines, Fire and Australian Ecosystems'. *The Australian Journal of Anthropology* 13(3): 237–252.
- Hughes, L., and Steffen, W. 2013. *Be Prepared: Climate Change and the Australian Bushfire*. Climate Council of Australia Ltd. Available at https://www.climatecouncil.org.au/be-prepared (accessed 28 January 2014).
- Hughes, R. 1988. The Fatal Shore. London: Pan

- Hulme, M. 2008. 'Geographical work at the boundaries of climate change'. *Transactions of the Institute of British Geographers* 33(1): 5-11.
- Hulme, M. 2009. Why we disagree about climate change: understanding controversy, inaction and opportunity. New York: Cambridge University Press.
- Ireland, J. 2013. 'Clear link between climate change and bushfires: UN adviser warns Tony Abbott'. *Sydney Morning Herald*. 22 October. Available at http://www.smh.com.au/federal-politics/political-news/clear-link-between-climate-change-and-bushfires-un-adviser-warns-tony-abbott-20131021-2vxs5.html (accessed 11 March 2017).
- Ingold, T. 1993. 'The Temporality of the Landscape'. World Archaeology 25(2): 152-174.
- Ingold, T. 2007. 'Earth, sky, wind and weather'. *Journal of the Royal Anthropological Institute* 13(s1): 19-38.
- IPCC (Intergovernmental Panel on Climate Change) 2007. *Climate Change* 2007 *Impacts, Adaptation and Vulnerability*. Available at https://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4 wg2 full report.pdf (accessed 15 April 2017).
- Isaacs, J. (ed) 1980. Australian Dreaming 40,000 years of Aboriginal History. Sydney: Landsome Press.
- Jacka, J. K. 2009. 'Global Averages, Local Extremes: The Subtleties and Complexities of Climate Change in Papua New Guinea'. In: *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Jacka, J. K. 2016. 'Correlating Local Knowledge with Climatic Data: Porgeran experiences of climate change in Papua New Guinea'. *Anthropology and Climate Change: from actions to transformations*. S. A. Crate and M. Nuttall (eds). New York: Routledge.

- Jennings, T. 2010. 'Came an East Wind: an anthropology of climate, landscape, and marginality in Cornwell England'. PhD thesis. University of Wisconsin-Madison.
- Johnson, D. 2007. Sacred Waters: the story of the Blue Mountains Gully traditional owners. Sydney: Halstead.
- Jones, R. 1969. 'Fire-stick farming'. *Australian Natural History* 16: 224–228.
- Jones, G. 2014. 'Blue Mountains Backbone: landscape and bedrock'. In: *The Tortuous Ridge: Linden to Lawson*. E. Stockton (ed). Lawson, Blue Mountain Education and Research Trust.
- Kapferer, B., and Morris, B. 2003. 'The Australian Society of the State: Egalitarian Ideologies and New Directions in Exclusionary Practice'. *Social Analysis: The International Journal of Social and Cultural Practice* 47(3): 80-107.
- Keating, M.L., Bigelow, J., and Templeman, S. 2014. *As the Smoke Clears: images of hope and recovery following the Blue Mountains 2013 bushfires*. Springwood: M.L. Keating.
- Krosnick, J. A., Holbrook, A. L., Lowe, L., and Visser, P. S. 2006. 'The Origins and Consequences of democratic citizens' Policy Agendas: A Study of Popular Concern about Global Warming'. *Climatic Change* 77(1-2): 7-43.
- Krupnik, I. and D. Jolly 2002. *The Earth is Faster Now: Indigenous Observations of Arctic Environment Change*. Alaska: Arctic Research Consortium of the United States.
- Lateline 2013. 'Fire expert, Professor David Bowman, discusses the latest bushfire emergency'.

 Television program transcript. ABC TV. October 21. Available at http://www.abc.net.au/
 news/2013-10-21/fire-expert-professor-david-bowman-discusses-the/5036718 (accessed
 1 February 2016).

- Langton, M. 1996. 'What do we mean by wilderness? Wilderness and Terra Nullius in Australian art' [Address to The Sydney Institute on 12 October 1995.]. *The Sydney Papers* 8(1): 10-31.
- Latour, B. 1993. We have never been modern. Cambridge, Mass: Harvard University Press.
- Lazrus, H. 2009. 'The governance of vulnerability: climate change and agency in Tuvalu, South Pacific'. In *Anthropology and climate change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Lazrus, H. 2016. 'Shifting Tides: climate change, migration and agency in Tuvalu'. In: *Anthropology and Climate Change: from actions to transformations*. S. A. Crate and M. Nuttall (eds). New York: Routledge.
- Lear, J. 2006. *Radical hope: Ethics in the face of cultural devastation*. Cambridge, MA: Harvard University Press.
- Leduc, T. B. 2007. 'Sila dialogues on climate change: Inuit wisdom for a cross-cultural interdisciplinarity'. *Climatic Change* 85(3-4): 237-250.
- Leduc, T. B. 2011. *Climate, Culture, Change: Inuit and Western Dialogues with a Warming North.* Ottawa: University of Ottawa Press.
- Leiserowitz, A. 2005. 'American risk perceptions: is climate change dangerous?' *Risk Analysis* 25(6): 1433-1442.
- Leiserowitz, A. 2006. 'Climate Change Risk Perception and Policy Preferences: The Role of Affect, Imagery, and Values'. *Climatic Change* 77(1-2): 45-72.

- Lele S., Springate-Baginski O., Lakerveld R., Deb D. and Dash P. 2013. 'Ecosystem Services: Origins, Contributions, Pitfalls, and Alternatives'. *Conservation Society* 11: 343-58.
- Lertzman, R. 2008. 'The myth of apathy'. *Ecologist* 38(5): 16-17.
- Lertzman, R. 2010. 'The Myth of Apathy: Psychoanalytic Explorations of Environmental Degradation'. PhD thesis. Cardiff University.
- Lertzman, R. 2015a. *Environmental Melancholia: psychoanalytic dimensions of engagement*. East Sussex: Routledge.
- Lertzman, R. 2015b 'In Climate Change, Psychology Often Gets Lost in Translation'. *Climate Psychology Alliance*. 24 November. Available at http://www.climatepsychologyalliance.org/explorations/papers/95-in-climate-change-psychology-often-gets-lost-in-translation (accessed 2 June 2017).
- Lewis, B.C. 2014a. 'Winmalee home rises from ashes'. *The Blue Mountains Gazette*. March 19: 1.
- Lewis, B. C. 2014b. 'Government clears the way'. *The Blue Mountains Gazette*. 4 June. Springwood: Fairfax: 41.
- Lewis, B. C. 2015. 'Steady population growth for Mountains'. *The Blue Mountains Gazette*. 7 April. Springwood, Fairfax: 4.
- Leviston, Z., and Walker, I. 2012. 'Beliefs and Denials About Climate Change: An Australian Perspective'. *Ecopsychology* 4(4): 277-285.
- Lien, M. E. 2005. "King of fish" or "feral peril": Tasmanian Atlantic salmon and the politics of belonging'. *Environment and Planning D: Society and Space* 23: 659-671.

- Lindenmayer, D. B., and Laurance, W. F. 2012. 'A history of hubris Cautionary lessons in ecologically sustainable forest management'. *Biological Conservation* 151: 11-16.
- Lithgow Mercury 2013. 'The Bicentenary of the Blue Mountains Crossing'. 22 May. Available at http://www.lithgowmercury.com.au/story/1519330/the-bicentenary-of-the-blue-mountains-crossing/ (accessed 14 January 2017).
- Lorenzoni, I., and Pidgeon, N. F. 2006. 'Public Views on Climate Change: European and USA Perspectives'. *Climatic Change* 77(1-2): 73-95.
- Lorenzoni, I., Nicholson-Cole, S., and Whitmarsh, L. 2007. 'Barriers perceived to engaging with climate change among the UK public and their policy implications'. *Global Environmental Change* 17(3-4): 445-459.
- Low, J. n.d. *Origin of Blue Mountains Town Names*. Blue Mountains City Council. Available at http://www.bmcc.nsw.gov.au/download.cfm?f=626D0CA4-AE40-9F6C-B71C7CC9FE366C21 (accessed 25 June 2014).
- Lujala, P., Lein, H., and Rød, J. K. 2014. 'Climate change, natural hazards, and risk perception: the role of proximity and personal experience'. *Local Environment* 20(4): 489-509.
- Mackay, R. 2015. 'The Contemporary Aboriginal Heritage Value of the Greater Blue Mountains'. In: *Values for a New Generation*. D. Benson (ed). Katoomba: The Greater Blue Mountains World Heritage Area Advisory Committee.
- MacRae, G. 2010. 'What Can Anthropologists Say About Climate Change?'. World Anthropologies Network 5: 33-52.
- Macy, J. 2007. World as Lover World as Self. Berkley: Parallax Press.

- Macy, J. and Johnstone, C. 2012. *Active Hope: how to face the mess we're in without going crazy.* Novato, CA: New World Library
- Macy, J. and Brown, M. 2014. *Coming back to life*. Gabriola Island, BC: New Society Publishers.
- Madigan, Damien 2013. 'Mountain crossing marks 200th year'. *Hawkesbury Gazette* 27 February. Windsor: Fairfax:19.
- Mallon, K., Lamb, J., and Wormworth, J. 2014. *Buyer-Beware: Home Insurance, Extreme Weather and Climate Change*. The Climate Institute. Available at http://www.climate institute.org.au/buyer-beware.html (accessed 24 April 2016).
- Manne, R. 2009. 'The History Wars'. *The Monthly*. November. Available at https://www.themonthly.com.au/issue/2009/november/1270703045/robert-manne/comment (accessed 21 June 2017).
- Marino, E. and Schweitzer, P. 2009. 'Talking and Not Talking about Climate Change in Northwestern Alaska'. In: *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Marino, E. and Schweizter, P. 2016. 'Speaking Again of Climate Change: An analysis of climate change discourses in Northern Alaska'. *Anthropology and Climate Change: from actions to transformations*. S. A. Crate and M. Nuttall (eds). New York, Routledge.
- Marshall, J. 2011. 'Climate change movements and psycho-social disorder'. *The Australian Journal of Anthropology* 22(2): 265-269.
- Massey, D. 2005. For Space. London: Sage Publications.

- Mathiesen, K. 2016. 'World heritage forests burn as global tragedy unfolds in Tasmania.' *The Guardian Australia*. 26 January. Available at http://www.theguardian.com/environment/2016/jan/27/world-heritage-forests-burn-as-global-tragedy-unfolds-in-tasmania? (accessed 1 February 2016).
- McCaffrey, S., 2004. 'Thinking of wildfire as a natural hazard'. *Society and Natural Resources* 17(6): 509-516.
- McDonald, R. I., Chai, H. Y., and Newell, B. R. 2015. 'Personal experience and the "psychological distance" of climate change: an integrative review'. *Journal of Environmental Psychology* 44: 109–118.
- McLennan, J., Elliott, G., and Omodei, M. 2012. 'Householder decision-making under imminent wildfire threat: stay and defend or leave?'. *International Journal of Wildland Fire* 21(7): 915-925.
- McGrath, A. 2015. 'Crossing history's mountains: the historic values of the Greater Blue Mountains'. In: *Values for a New Generation*. D. Benson (ed). Katoomba: Greater Blue Mountains World Heritage Area Advisory Committee.
- McKenny, L. and Ziaziaris, S. 2015. 'Blue Mountains spared Sydney's sprawl as new city limits set'. *Sydney Morning Herald.* 11 January. Available at http://www.smh.com.au/nsw/blue-mountains-spared-sydneys-sprawl-as-new-city-limits-set-20150110-12lc7g.html (accessed 12 January 2015).
- Merriman, J. 1993. 'Difficult, rocky, sandy, stoney, flowery: Aboriginal Ecology in the Blue Mountains'. In: *Blue Mountains Dreaming: Aboriginal heritage*. E. Stockton (ed). Winmalee: Three Sisters Productions.
- Milton, K. 2008a. 'Anthropological Perspectives on Climate Change'. *Australian Journal of Anthropology* 19(1): 57-88.

- Milton, K. 2008b. 'Fear for the future'. The Australian Journal of Anthropology 19(1): 73-76.
- Minnegal, M. and P. Dwyer 2008. 'Fire, Flood, Fish and the Uncertainty Paradox'. *The Australian Journal of Anthropology* 24(1): 77-81.
- Mooney, S. D., Webb, M., and Attenbrow, V. 2007. 'A Comparison of Charcoal and Archaeological Information to Address the Influences on Holocene Fire Activity in the Sydney Basin'. *Australian Geographer* 38(2): 177-194.
- Mooney S. D., Harrison S. P., Bartlein P.J., Daniau A. L., Stevenson J., Brownlie K., Buckman S., Cupper M., Luly J., Black M., Colhoun E., D'Costa D., Dodson J., Haberle S., Hope G.S., Kershaw P., Kenyon C., McKenzie M. and Williams N. 2011. 'Late Quaternary fire regimes in Australia'. *Quaternary Science Reviews* 30: 28-46.
- Morgan, J. 2013. 'Smoke from bushfires fill the sky over the city in Sydney'. *Australian Associated Press*. Available at http://www.abc.net.au/news/2013-10-17/smoke-from-bushfires-fill-the-sky-over-the-city-in-sydney/5030026 (accessed 5 February 2016).
- Morton, A. 2016. "Like losing the thylacine": Fire burns Tasmanian Wilderness World Heritage Area'. *Sydney Morning Herald.* 31 January. Available at http://www.smh.com.au/environment/like-losing-the-thylacine-fire-burns-tasmanian-wilderness-world-heritage-area-20160131-gmi2re.html (accessed 1 February 2016).
- Morton, T. 2013. *A Quake in Being an Introduction to Hyperobjects*. Minneapolis: University of Minesota Press.
- Moser, S. C. 2010. 'Communicating climate change: history, challenges, process and future directions'. *Wiley Interdisciplinary Reviews: Climate Change* 1(1): 31-53.

- Moser, S. C. 2013. 'Navigating the Political and Emotional Terrain of Adaptation: Community Engagement When Climate Change Comes Home'. In: *Successful Adaptation to Climate Change: Linking Science and Policy in a rapidly Changing World*. M. T. Boykoff and S.C. Moser (eds). London: Routledge.
- Moser, S. C. 2014. 'Communicating adaptation to climate change: the art and science of public engagement when climate change comes home'. *Wiley Interdisciplinary Reviews:*Climate Change 5(3): 337-358.
- Mowska, E. C., Ahonen, I., Santala, V., Weber, D., Robinson, G. M., and Bardsley, D. K. 2016. 'Perceptions of bushfire risk mitigation and biodiversity conservation: a systematic review of fifteen years research'. *Environmental Review* (24): 219-232.
- Murphy, A. 2015. 'Council to Review Springwood Town Centre Masterplan'. *Fresh Air Daily*. 9 March. Available at https://www.bluemts.com.au/news/council-to-review-springwood-town-centre-masterplan/ (accessed 22 June 2015).
- Murphy, M. W. 2016. 'Mapping Environmental Privilege in Rhode Island'. *Environmental Justice* 9(5): 159-165.
- Myers, T., Maibach, E. W., Roser-Renouf, C., Akerlof, K. and Leiserowitz, A. A. 2013. 'The relationship between personal experience and belief in the reality of global warming'.

 Nature Climate Change 3: 343–347.
- National Native Title Tribunal n.d. *About native title applications*. Available at http://www.nntt. gov.au/nativetitleclaims/Pages/default.aspx (accessed 26 July 2017).
- Neimanis, A., and Walker, R. L. 2014. 'Weathering: Climate Change and the "Thick Time" of Transcorporeality'. *Hypatia* 29(3): 558-575.

- Norgaard, K. M. 2006. "People Want to Protect Themselves a Little Bit": Emotions, Denial, and Social Movement Nonparticipation'. *Sociological Inquiry* 76(3): 372-396.
- Norgaard, K. M. 2011. *Living in denial: Climate change, emotions, and everyday life.*Cambridge MA: The MIT Press.
- Norgaard, K. M. 2012. 'Climate denial and the construction of innocence: reproducing transnational environmental privilege in the face of climate change'. *Race, Gender, Class* 19(1-2): 80-103.
- NPWS (NSW National Parks and Wildlife) 2001. *Blue Mountains National Park Plan of Management*. Available at http://www.environment.nsw.gov.au/resources/parks/pomFinalBluemountains.pdf (accessed 6 February 2016).
- NPWS 2004. Fire Management Strategy Blue Mountains National Park Report. Department of Environment and Conservation NSW. Available at http://www.environment.nsw.gov.au/resources/parks/FMSBlueMountainsNP.pdf (accessed 13 January 2017).
- NSW Rural Fire Service n.d. *10/50 Vegetation Clearing*. NSW Rural Fire Service. Available at http://www.rfs.nsw.gov.au/plan-and-prepare/1050-vegetation-clearing (accessed 19 March 2016).
- Nuttall, M. 2009. 'Living in a World of Movement: Human Resilience to Environmental Instability in Greenland'. In: *Anthropology and Climate Change: from encounters to actions*. S. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Nuttall, M. 2010. 'Anticipation, climate change, and movement in Greenland'. Études/Inuit/Studies 34(1): 21-37.

- Office of Environment and Heritage NSW 2012. *Aboriginal joint management of parks*. http://www.environment.nsw.gov.au/jointmanagement/index.htm (accessed January 21 2017).
- Oliver-Smith, A. 1999a. 'Peru's five-hundred-year earthquake: vulnerability in historical context'. In: *The Angry Earth: disaster in anthropological perspective*. A. Oliver-Smith and S. Hoffman (eds). New York: Routledge.
- Oliver-Smith, A. 1999b. 'The brotherhood of pain: theoretical and applied perspectives on post-disaster solidarity'. In: *The Angry Earth: disaster in anthropological perspective*. A. Oliver-Smith and S. Hoffman (eds). New York: Routledge.
- Oliver-Smith, A. 2013. 'Disaster Risk Reduction and Climate Change Adaptation: the view from applied anthropology'. *Human Organization* 74(4): 275-282.
- Oliver-Smith, A. 2016. 'The Concepts of Adaptation, Vulnerability, and Resilience in the Anthropology of Climate Change: Considering the Case of Displacement and Migration'. In: *Anthropology and Climate Change: from actions to transformations.* S. A. Crate and M. Nuttall (eds). New York: Routledge.
- O'Neill, S., and Nicholson-Cole, S. (2009). "Fear Won't Do It": Promoting Positive Engagement with Climate Change Through Visual and Iconic Representations'. *Science Communication* 30(5): 355-379.
- Orlove, B. S., and Strauss, S. (eds). 2003. Weather, climate, culture. Oxford: Berg.
- Orlove, B., Wiegandt, E., and Luckman, B. H. (eds). 2008. *Darkening Peaks: Glacier Retreat, Science and Society*. Berkeley: University of California Press.
- O'Sullivan, M. 2015. 'Badgerys Creek flight paths over Blue Mountains pose "threat to world-heritage listing".' *Sydney Morning Herald*. 14 December. Available at

- http://www.smh.com.au/nsw/badgerys-creek-flight-paths-over-blue-mountains-pose-threat-to-worldheritage-listing-20151214-glmwwi.html (accessed 25 January 2017).
- Paerregaard, K. 2016. 'Making Sense of Climate Change: global impacts, local responses and anthropogenic dilemmas in the Peruvian Andes'. In: *Anthropology and Climate Change: from actions to transformations.* S. A. Crate, and M. Nuttall (eds). New York: Routledge.
- Paolisso, M. 2003. 'Chesapeake Bay Watermen'. In: *Weather, Climate, Culture*. B. Orlove and S. Strauss (eds). Oxford: Berg.
- Partridge, E. 2014. 'Winmalee rises from the ashes'. *The Sydney Morning Herald*. August 22. Available at http://www.smh.com.au/nsw/winmalee-rises-from-the-ashes-20140822-1075hu.html (accessed 25 August 2014).
- Paterson, A. B. 1987 [1889]. Banjo Paterson's poems of the bush. Melbourne: Dent.
- Paton, N. 1987. Walks in the Blue Mountains National Park. Kenhurst: Kangaroo Press Pty Ltd.
- Pearse, R. J., Goodman, J., and Rosewarne, S. 2010. 'Researching direct action against carbon emissions: A digital ethnography of climate agency'. *Cosmopolitan Civil Societies Journal* 2(3): 76-103.
- Pellow, D. and Nyseth-Brehm, H. 2013. 'An Environmental Sociology for the Twenty-First Century'. *Annual Review of Sociology* 39: 229–250.
- Philips, J., and Malone, U. 2014. 'Climate change forcing rethink on fire risk, RFS chief Shane Fitzsimmons says'. *Australian Broadcasting Corporation*. 17 October. Available at http://www.abc.net.au/news/2014-10-17/climate-change-forcing-rethink-on-fire-risk-bushfire-chief/5821386 (accessed 20 October 2014).

- Pokrant, B. and L. Stocker 2011. 'Anthropology, Climate Change and Coastal Planning'. In: *Environmental Anthropology Today*. H. Kopnina and E. Shoreman-Ouimet (eds). New York: Routledge.
- Pollard, K. 2012. 'Mountains crossing bicentenary launch'. *The Blue Mountains Gazette*. 22 May. Available at http://www.bluemountainsgazette.com.au/story/273408/mountainscrossing-bicentenary-launch/ (accessed 23 January 2017).
- Puntenney, P. 2009. 'Where Managerial and Scientific Knowledge Meet Sociocultural Systems: Local Realities, Global Responsibilities'. In: *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Randall, R. 2005. 'A new climate for psychotherapy?'. *Psychotherapy and Politics International* 3(3): 165-179.
- Randall, R. 2009. 'Loss and Climate Change: The Cost of Parallel Narratives'. *Ecopsychology* 1(3): 118-129.
- Randall, R. 2013. Great expectations: the psychodynamics of ecological debt. In: *Engaging with Climate Change: Psychoanalytic and Interdisciplinary Perspectives*. S. Weintrobe (ed). Hove, England: Routledge.
- Read, P. 2015. 'Dispossesion is a Legitimate Experience'. In: *Long History Deep Time*. M. A. Jebb and A. McGrath (eds). Canberra: ANU Press.
- Reser, J. P., Bradley, G. L., Glendon, A I., Ellul, M. C., and Callaghan, R. 2012. *Public Risk Perceptions, Understandings, and Responses to Climate Change and Natural Disasters in Australia, 2010 and 2011*. Gold Coast: National Climate Change Adaptation Research Facility. Available at https://www.griffith.edu.au/__data/assets/pdf_file/0009/578970/Public-risk-perceptions-and-responses-to-climate-change-Exec-Sum.-Reser-et-al-FINAL-11-9-12.pdf (accessed 13 August 2013).

- Reser, J. P., Bradley, G. L., and Ellul, M. C. 2014. 'Encountering climate change: "seeing" is more than "believing". *Wiley Interdisciplinary Reviews: Climate Change* 5(4): 521-537.
- Reuter, T. 2010. 'Anthropological Theory and the Alleviation of Anthropogenic Climate Change: Understanding the Cultural Causes of Systemic Resistance'. *World Anthropologies Network* 5: 7-33.
- Rigby, C. E. 2004. *Topographies of the sacred: the poetics of place in European Romanticism*. Charlottesville: University of Virginia Press.
- Rodriguez, H., Trainor, J., and Quarantelli, E. L. 2006. 'Rising to the challenges of a catastrophe:

 The emergent and prosocial behavior following Hurricane Katrina'. *Annals of the American Academy of Political and Social Science* 604: 82–101.
- Rojas, D. 2016. "This is not science fiction": Amazonian narratives of climate change'. In: *Anthropology and Climate Change: from actions to transformations.* S. A. Crate and M. Nuttall (eds). New York: Routledge.
- Roncoli, C. 2006. 'Ethnographic and participatory approaches to research on farmers' responses to climate prediction'. *Climate Research* 33: 81-99.
- Roncoli, C., Ingram, K., Jost, C., and Kirshen, P. 2003. 'Meteorological Meanings: Farmers' Interpretations of Seasonal Rainfall Forecasts in Burkina Faso'. In *Weather, Climate, Culture*. B. Orlove and S. Strauss (eds). Oxford: Berg.
- Roncoli, C., Crane, T. A., and Orlove, B. 2009. 'Fielding Climate Change in Cultural Anthropology'. In: *Anthropology and Climate Change: from encounters to actions.* S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.

- Rose, D. 1996. *Nourishing Terrains; Australian Aboriginal views of Landscape and Wilderness*. Canberra: Australian Heritage Commission.
- Rose, D., James, D. and Watson, C. 2003. *Indigenous kinship with the Natural World in New South Wales*. NOWS. Available at www.environment.

 nsw.gov.au/resources/cultureheritage/IndigenousKinship.pdf (accessed 16 January 2017).
- Rudiak-Gould, P. 2011. 'Climate change and anthropology: the importance of reception studies'. *Anthropology Today*. 27(2): 9-12.
- Rudiak-Gould, P. 2016. 'Climate Change Beyond the 'Environmental': the Marshellese case'. *Anthropology and Climate Change: from actions to transformations.* S. A. Crate, and M. Nuttall (eds). New York: Routledge.
- *Rural Fires Act 1997 No. 65*. Available at http://www.legislation.nsw.gov.au/inforce/b5468a00-1287-43f9-f4b8-8e2bcb0f0a3f/1997-65.pdf (accessed 1 March 2017).
- Rural Fires Amendment (Vegetation Clearing) Bill 2014. Available at https://www.legislation. nsw.gov.au/inforce/b5468a00-1287-43f9-f4b8-8e2bcb0f0a3f/1997-65.pdf (accessed 1 August 2017).
- Russell, D. 2011. 'Lost for words: embryonic Australia and a psychic narrative'. In: *Placing psyche: exploring cultural complexes in Australia (Vol. 1)*. San Roque, C., Dowd, A. G., and Tacey, D. J. (eds). New Orleans: Spring Journal Books.
- Rust, M. J. 2008. 'Climate on the couch: unconscious processes in relation to our environmental crisis'. *Psychotherapy and Politics International* 6(3): 157-170.
- Rustin, M. 2013. 'How is climate change an issue for psychoanalysis?' In: *Engaging with Climate Change: Psychoanalytic and Interdisciplinary Perspectives*. S. Weintrobe (ed). Hove, England: Routledge.

- Rutledge, A. 2015. 'The unsaid: when climate change hits home'. Masters thesis. Royal Roads University.
- Schlosberg, D., Collins, L. B., and Niemeyer, S. 2017. 'Adaptation policy and community discourse: risk, vulnerability, and just transformation'. *Environmental Politics* 26(3): 413-437.
- Schutz, A. 1970. On phenomenology and social relations: selected writings. Wagner, H. R. (ed). Chicago: University of Chicago Press.
- Schutz, A. 1975. 'Some structures of the Life-world'. In: *Collected Papers III: Studies in Phenomenological Philosophy*. I. Schutz (ed). The Hague: Martinus Nijhoff.
- Sahlins, M. 2013. 'Forward'. In: *Beyond Nature and Culture*. Descola, P. Chicago: University of Chicago Press.
- Segal, H. 1997. Psychoanalysis, literature, and war papers, 1972-1995. In: *A Psychoanalytic Approach to Aesthetics*. J. Steiner (ed). London: Routledge.
- Sheridan, M. 2016. 'The Politics of Rain: Tanzanian farmers' discourse on climate and political disorder'. *Anthropology and Climate Change: from actions to transformations.* S. A. Crate, and M. Nuttall (eds). New York: Routledge.
- Sherratt, T. Robin, L., and Griffiths, T., 2005. *A change in the weather: climate and culture in Australia*. Canberra: National Museum of Australia Press.
- Skillington, T. 2017. Climate Justice and Human Rights. New York: Palgrave Macmillan.
- Smith P., and Smith J. 1995. Flora and fauna study for Blue Mountains Environmental Management Plan: Areas 1 to 5. Blaxland: P & J Smith Ecological Consultants.

- Sneath, J., Lacey, R., and Kennett-Hensel, P. 2009. 'Coping with a Natural Disaster: Losses, Emotions, and Impulsive and Compulsive Buying'. *Marketing Letters* 20(1): 45-60.
- Solnit, R. 2009. A Paradise Built in Hell: the extraordinary communities that arise in disaster. New York: Viking Penguin.
- Solomons, M., and Willacy, M. 2014. 'Jeff Seeney orders Moreton Bay Regional Council to remove references to climate change-derived sea level rises from regional plan'. *ABC News*. Available at http://www.abc.net.au/news/2014–12–09/seeney-removes-climate-change-references-from-council-plan/5954914 (accessed 25 April 2017).
- Spence, A., Poortinga, W., Butler, C., and Pidgeon, N. F. 2011. 'Perceptions of climate change and willingness to save energy related to flood experience'. *Nature Climate Change* 1(1): 46-49.
- Stewart, D. 1943. *Ned Kelly: a play*. London and Sydney: Angus and Robertson.
- Strauss, S. 2009. 'Global Models, Local Risks: Responding to Climate Change in the Swiss Alps'. *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Stockton, E. (ed) 1993. *Blue Mountains Dreaming: Aboriginal heritage*. Winmalee: Three Sisters Productions.
- Stockton, E. (ed.) 2014. *This Tortuous Ridge: Linden to Lawson*. Lawson: Blue Mountain Education and Research Trust.
- Stockton, E. and K. Knox 2014. 'Sacred Ground'. In: *This Tortuous Ridge*. E. Stockton (ed). Lawson: Blue Mountain Education and Research Trust.

- Stoll-Kleeman, S., O'Riordan, T., and Jaeger, C. 2000. 'The psychology of denial concerning climate mitigation measures: evidence from Swiss focus groups'. *Global Environmental Change* 11: 107-117.
- Streater, M. 2014. 'Building Back Better'. *After Disaster Strikes: learning from adversity conference 2014*. Australasian Fire and Emergency Service Authorities Council and Bushfire and Natural Hazards Cooperative Research Centre. Wellington. Available at http://www.pacificdisaster.net/pdnadmin/data/original/AFAC14_Building_better.pdf (accessed 13 March 2015).
- Takàcs-Sànta, A. 2007. 'Barriers to Environmental Concern'. *Human Ecology Review* 14(1): 26-38.
- Taylor, A. and Butterfield, R. 2011. *Vulnerability Definitions*. weADAPT. https://www.weadapt .org/knowledge-base/vulnerability/vulnerability-definitions (accessed 14 April 2017).
- The Daily Telegraph 2016. 'Supreme Court taken to site of 2013 Blue Mountains bushfire', The Daily Telegraph. 23 February. Available at http://www.dailytelegraph.com.au/newslocal/west/supreme-court-taken-to-site-of-2013-blue-mountains-bushfire/story-fngr8i5s-1227761326634?from=newslocal rss (accessed 1 March 2016).
- The Australian 2013. 'Bushfire response needs calm, clear thinking'. The Australian. 23 October. Available at http://www.theaustralian.com.au/opinion/editorials/bushfire-response-needs-calm-clear-thinking/story-e6frg71x-1226744804264 (accessed 23 October 2013).
- 'The cost of putting power lines underground' 2010. *7.30 Report*. Television program transcript. ABC TV. Melbourne. 3 September. Available at http://www.abc.net.au/news/2010-09-03/the-cost-of-putting-power-lines-underground/2249096 (accessed 1 March 2016).

- Thomas, M. 2004. *The Artificial Horizon: imagining the Blue Mountains*. Carlton: Melbourne University Press.
- Tasmanian Parks and Wildlife 2013. *Case Study Fire Management in the Tasmanian Wilderness Heritage Area*. Tasmanian Parks and Wildlife. Available at http://www.parks.tas.gov.au/file.aspx?id=35224 (accessed 3 February 2016).
- Templeman, S. 2015. 'Rising from the ashes: what governments and insurers can do to stop short-changing victims after bushfires'. *Policy Forum*. Available at http://www.policy forum.net/rising-from-the-ashes/ (accessed 20 January 2016).
- Trigger, D. 2003. 'Disputed territories: land, culture and identity'. In: *Disputed territories. Land, culture and identity in settler societies*. Trigger, D. and Griffiths, G. (eds). Hong Kong: Hong Kong University Press.
- Trigger, D. and Mulcock, J. 2005. 'Native vs exotic: cultural discourses about flora, fauna and belonging in Australia'. In: *Sustainable Planning and Development*. A. Kungolos, C. Brebbia, and E. Beriatos (eds). Southampton, Wessex Institute of Technology Press.
- Tsing, A. 2005. *Friction: an ethnography of global connection*. Princeton: Princeton University Press.
- UNESCO (United Nations Educational, Scientific and Cultural Organisation) n.d. *Greater Blue Mountains Area*. http://whc.unesco.org/en/list/917 (accessed 23 January 2017).
- Van der Linden, S. 2014. 'On the relationship between personal experience, affect and risk perception: The case of climate change'. *European Journal of Social Psychology* 44(5): 430-440.
- Vezzali, L., Drury, J., Versari, A., & Cadamuro, A. 2015. 'Sharing distress increases helping and contact intentions via social identification and inclusion of the other in the self:

- Children's prosocial behaviour after an earthquake'. *Group Processes & Intergroup Relations* 19(3): 314-327.
- Victoria Police 2009. 'Bushfires death toll revised to 173'. Press Conference 30 March.

 Available at http://www.police.vic.gov.au/content.asp?Document_ID=20350 (accessed 14 April 2017).
- Visit NSW 2017. *Aboriginal Culture*. Visit NSW. http://www.visitnsw.com/destinations/blue-mountains/aboriginal-culture (accessed 27 June 2017).
- Wagner, H. R. (ed) 1970. *Alfred Schutz on phenomenology and social relations*. Chicago and London: University of Chicago Press.
- Wajnryb, R. 2001. The silence: how tragedy shapes talk. Crowns Nest, N.S.W: Allen & Unwin.
- Wallace, N., and Hannam, P. 2013. 'Hot and dry conditions align for fiery season'. *The Age*. October 20. Available at http://www.theage.com.au/environment/weather/hot-and-dry-conditions-align-for-fiery-season-20131019-2vto7.html (accessed 22 October 2013).
- Wallerstein, I. 1992. 'The West, Capitalism, and the Modern World-System'. *Review (Fernand Braudel Center)* 15(4): 561-619.
- Weber, E. U. 2010. 'What shapes perceptions of climate change?'. *Wiley Interdisciplinary Reviews: Climate Change* 1(3): 332-342.
- Weintrobe, S. 2013a. 'The difficult problem of anxiety in thinking about climate change'. In *Engaging with Climate Change: Psychoanalytic and Interdisciplinary Perspectives.* S. Weintrobe (ed). Hove, England: Routledge.

- Weintrobe, S. 2013b. 'On the love of nature and on human nature: restoring split internal landscapes'. In: *Engaging with Climate Change: Psychoanalytic and Interdisciplinary Perspectives*. S. Weintrobe (ed). Hove, England: Routledge.
- Weintrobe, S. (ed) 2013c. *Engaging with Climate Change: Psychoanalytic and Interdisciplinary Perspectives*. Hove, England: Routledge.
- West, C. T. and Vàsquez-León, M. 2003. 'Testing Farmers' Perceptions of Climate Variability:A Case Study from the Sulphur Springs Valley, Arizona'. In *Weather, Climate, Culture*.B. Orlove and S. Strauss (eds). Oxford: Berg.
- Whitmarsh, L. 2008. 'Are flood victims more concerned about climate change than other people? The role of direct experience in risk perception and behavioural response'. *Journal of Risk Research* 11(3): 351-374.
- Whitmarsh, L. 2011. 'Scepticism and uncertainty about climate change: Dimensions, determinants and change over time'. *Global Environmental Change* 21(2): 690-700.
- Wilk, R. 2009. 'Consuming Ourselves to Death: The Anthropology of Consumer Culture and Climate Change'. In: *Anthropology and Climate Change: from encounters to actions*. S. A. Crate and M. Nuttall (eds). Walnut Creek: Left Coast Press.
- Wilk, R. 2016. 'Is a sustainable consumer culture possible?'. In: *Anthropology and Climate Change: from actions to transformations*. S. A. Crate and M. Nuttall (eds). New York: Routledge.
- Williams, D., Gill, A. M., and Bradstock, R. A. 2012. *Flammable Australia: Fire Regimes, Biodiversity and Ecosystems in a Changing World*. Melbourne: CSIRO Publishing.

- Williams, A. N., Mooney, S. D., Sisson, S. A., and Marlon, J. 2015. 'Exploring the relationship between Aboriginal population indices and fire in Australia over the last 20,000 years'. *Palaeogeography, Paleoclimatology, Paleoecology* 432: 49-57.
- Wolf, J. and Moser, S. C. 2011. 'Individual understandings, perceptions, and engagement with climate change: insights from in-depth studies across the world'. *Wiley Interdisciplinary Reviews: Climate Change* 2(4): 547-569.
- Wolf, J., Allice, I., and Bell, T. 2013. 'Values, climate change, and implications for adaptation: Evidence from two communities in Labrador, Canada'. *Global Environmental Change* 23(2): 548-562.
- Wolfe, P. 1999. Settler Colonialism and the transformation of Anthropology: the politics and poetics of an ethnographic event. London and New York: Cassell.
- Wolfe, P. 2006. 'Settler colonialism and the elimination of the native'. *Journal of Genocide Research* 8(4): 387-409.
- Wroe, D. 2013. 'Infernos being "politicised". *The Sydney Morning Herald.* 19 October.

 Available at http://www.smh.com.au/national/infernos-being-politicised-20131018-2vskj.html (accessed 18 April 2016).
- Zerubavel, E. 2006. *The elephant in the room: silence and denial in everyday life*. Oxford: Oxford University Press.

Appendices

Appendix A: Information Flyer



INVITATION TO TAKE PART IN A STUDY ON COMMUNITY EXPERIENCES OF ENVIRONMENTAL CHANGE IN THE BLUE MOUNTAINS

WHAT IS THE STUDY ABOUT?

Communities in the Blue Mountains are uniquely situated between city and bush, straddling two different worlds, enjoying both the benefits and difficulties of both. This research explores how people's relationship with the natural world might affect their experiences of environmental change, including suburban expansion, pollution, weather patterns, bushfire, as well as views about climate change impacts in their local area. The study will focus on your understandings, experiences and perceptions of environmental change in your own life.

WHAT IS INVOLVED IN PARTICIPATING?

HOW LONG IS AN INTERVIEW?

HOW DO I PARTICIPATE?

You can participate in this study by arranging to take part in an interview with the researcher Beth Hill. With your consent, this interview will be digitally recorded. During the interview you will be asked questions about your views and experiences of living in the Blue Mountains area. Participation in this study is completely voluntary and you may withdraw without consequence at any time.

An interview will take between 30 minutes and 1 hour.

For more information about this project or to organise an interview time you can contact Beth Hill

EMAIL: bhil6988@uni.sydney.edu.au

PHONE: 0424441543

The study is being conducted by Beth Hill and will form the basis for the degree of Doctor of Philosophy at The University of Sydney under the supervision of Professor Linda Connor, Chair of Anthropology +61 2 93516678, linda.connor@sydney.edu.au. This project has received approval by the University of Sydney Human Research Ethics Committee Project No: 2014/188. Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).



Appendix B: Participant Information Sheet

Community views and experience of environmental change in the Blue Mountains

PARTICIPANT INFORMATION STATEMENT

(1) What is the study about?

Communities in the Blue Mountains are uniquely situated between city and bush, straddling two different worlds enjoying both the benefits and difficulties of both. This project will explore resident's interactions with the natural world, their experiences of environmental change including suburban expansion, pollution, weather patterns, and bushfire, as well as their views about climate change impacts in their local area. The study will focus on emerging understandings, experiences and perceptions of environmental change emphasising local interpretations of these changes in residents' everyday lives.

(2) Who is carrying out the study?

The study is being conducted by *Beth Hill* and will form the basis for the degree of Doctor of Philosophy at The University of Sydney under the supervision of Professor Linda Connor, Chair of the Department of Anthropology.

(3) What does the study involve?

The researcher will live in a Blue Mountains community and observe a range of organisations and activities of residents related to the environment and development. The study will involve interviews with residents in the Blue Mountains.

(4) How much time will the study take?

Interviews will take between 30 minutes and 1 hour.

(5) Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with The University of Sydney.

You may stop the interview at any time if you do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

(6) Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

(7) Will the study benefit me?

This study offers you the opportunity to share your views about issue of considerable community interest in the Blue Mountains. While there may be no immediate benefits to individuals or groups, your participation will help the researcher to analyse and understand community responses to environmental change that may be useful for planning by community organizations, local governments, policy makers, and environmental authorities.

(8) Will there be any difficult aspects of participating in this study?

It is possible that in the course of the interview you may experience some distress, particularly if, for example, you choose to talk about your experiences with bushfires. If this is the case, you will be provided with the opportunity to pause or suspend the interview. You may also wish to contact one of the several services established in the region to support those who have had those experiences:

- Blue Mountains Counselling Centre, Katoomba Ph: (02) 4782 4900
- Marion Street Counselling, Springwood Ph: (02) 4751 5155
- Riverlands Therapy Services, Blaxland Ph: (02) 4731 8111
- Step by Step Blue Mountains Bushfire Support Ph: 0474 229 845

(9) Can I tell other people about the study?

Yes, you are welcome to tell other people about the study and your experience of participating.

(10) What if I require further information?

When you have read this information, Beth will discuss it with you further and answer any questions you may have. If you would like to know more at any feel please free to contact Beth Hill 0424441543, stage, bhil6988@uni.sydney.edu.au, or Professor Connor, Chair of Linda Anthropology +61 2 93516678, linda.connor@sydney.edu.au

(11) What if I have a complaint or concerns?

Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).

This information sheet is for you to keep

Appendix C: Ethics Approval



Research Integrity

Human Research Ethics Committee

Thursday, 8 May 2014

Prof Linda Connor Anthropology; Faculty of Arts and Social Sciences Email: linda.connor@sydney.edu.au

Dear Linda

I am pleased to inform you that the University of Sydney Human Research Ethics Committee (HREC) has approved your project entitled "Community views and experience of environmental change in the Blue Mountains".

Details of the approval are as follows:

Project No.: Approval Date: First Annual Report Due: Authorised Personnel:

Documents Approved:

2014/188 8 May 2014 8 May 2015 Connor Linda; Hill Beth;

| Date Uploaded | Туре | Document Name |
|------------------|----------------------------|-------------------------------|
| 28/02/2014 | Advertisements/Flyer | Facebook Flyer |
| 03/03/2014 | Interview Questions | Interview Schedule |
| 28/02/2014 | Other Type | Facebook Post |
| 15/04/2014 | Participant Consent Form | Consent Form V2 |
| 15/04/2014 | Participant Info Statement | Participant Info Statement V2 |
| 15/04/2014 | Recruitment Letter/Email | Draft Letter of Invitation V2 |

HREC approval is valid for four (4) years from the approval date stated in this letter and is granted pending the following conditions being met:

Condition/s of Approval

☐ Continuing compliance with the National Statement on Ethical Conduct

| in Research Involving Humans. | | | |
|--|----|--|--|
| ☐ Provision of an annual report on this research to the Human Research Ethics Committee from the approval date and at the completion of the study. Failure to submit reports will result in withdrawal of ethics approval for the project. | l | | |
| $\hfill \Box$ All serious and unexpected adverse events should be reported to the HREC within 72 hours. | | | |
| All unforeseen events that might affect continued ethical acceptability of the project should be reported to the HREC as soon as possible. | of | | |
| ☐ Any changes to the project including changes to research personnel must be approved by the HREC before the research project can proceed. | | | |
| □ Note that for student research projects, a copy of this letter must be included in the candidate's thesis. | | | |
| Chief Investigator / Supervisor's responsibilities: | | | |

- 1. You must retain copies of all signed Consent Forms (if applicable) and provide these to the HREC on request.
- 2. It is your responsibility to provide a copy of this letter to any internal/external granting agencies if requested.

Please do not hesitate to contact Research Integrity (Human Ethics) should you require further information or clarification.

Yours sincerely

Professor Glen Davis Chair Human Research Ethics Committee

Glen Davis E

This HREC is constituted and operates in accordance with the National Health and Medical Research Council's (NHMRC) National Statement on Ethical Conduct in Human Research (2007), NHMRC and Universities Australia Australian Code for the Responsible Conduct of Research (2007) and the CPMP/ICH Note for **Guidance on Good Clinical Practice.**

Appendix D: Methodological Information

Participant observation

I was in the field from May 2014 till October 2015. I lived in Springwood from July 2014-July 2015. During this time, I undertook extensive participant observation activities, attending community preparedness events, 2013 October Fires anniversary events, community fairs and other social events in both the Lower and Upper Mountains. I volunteered with both the Winmalee Neighbourhood Centre and the Springwood Neighbourhood Centre Cooperative on a weekly basis. I also participated in a local Bushcare group at Faulconbridge, and undertook a community gardening course with Winmalee Neighbourhood Centre. Throughout this time, I made detailed daily field notes.

Interviews

Interviewees were recruited using an Information Flyer (see Appendix A) which I posted on community bulletin boards and in community online forums. Interview sampling was purposive - I sought a spread of ages and genders and cultural backgrounds that reflected the Census demographic data for the area. I conducted 40 recorded interviews which ranged in time from 45 minutes to two hours. Each of these interviews were transcribed by me in full, and thematically analysed. Ten of these interviews were with those who were 'fire affected', five of whom lost their homes in the October fires. As discussed in the body of the thesis, I used the term 'fire affected' to also refer those who had children at the schools who were stuck in the fire, and those who were at home and had to evacuate at the last moment – these were significant and traumatic experiences for many residents. I interviewed seven people who I have classified as 'recovery workers', these were community workers based with various organisations throughout the Blue Mountains who were directly involved with coordinating the recovery effort following the October fires, and who also resided in the Blue Mountains. Five interviews were conducted with local RFS members, as well as five interviews with people who worked for the Blue Mountains City Council in various roles involving town planning, fire management, and environmental sustainability.

Demographics

Of the 40 interviews, 29 people identified as long-term residents of the Blue Mountains, that is they had lived there twenty years or longer, 10 identified as new residents and had moved to the area in the last five years. One participant based with the council, lived in Sydney. 18 of the interviewees were men, 22 were women. Demographically, all interviewees were of European descent, with two also identifying as of Aboriginal descent. Two participants were under 30, 21 participants aged between 30-49, and 17 aged between 50-69.

Internet and media collation

During my 18 months in the field, I checked the community Facebook pages *Blue Mountains Gazette Facebook page, Firewatch and Recovery Facebook page and Winmalee RFS Facebook page* 3-4 times a week. Each of these pages were extremely active with members of the community posting and responding to discussions throughout the week. When I came across discussions that were relevant to my research I downloaded them and saved them for later analysis. I also read and collated relevant articles from the weekly print newspaper the *Blue Mountains Gazette* during my time in the field.

Appendix E: Interview Schedules

Semi-Structured Interview Guide: Community Members
For researcher use only Version 2: 19/1/15

(Introduction; Thanks for agreeing to participate; ask permission to tape record and explain right to stop recording at any time, erase part or all on request; go over consent statement; any questions? I'm really interested in your experience of living in the Blue Mountains and your personal reflections about these topics as a resident are very important to this research)

1. Residence Information

How long have you lived in this area (specific location) and the Blue Mountains region more generally? What about your extended family?

2. Relationship with local environment

What do you value about living in the Blue Mountains?
What is difficult about living in the Blue Mountains?
Do you like spending time in the bush?
If yes, where do you go?

(If yes) what do you do there, what do you value about that time?
(If no) Are there reasons for this? What prevents you from spending time there?

3. Experiences of environmental change

What kinds of changes in your local environment/area have you noticed in recent years?

Prompt: urban development, national parks management, traffic, climate change, CSG proposals, coal mining, bushfires, more people in the bush?

Do you think there has been a big change in the local environment because of bushfires? ,What sort of changes have the bushfires brought?

Have any of these changes personally affected you?

4. Experience of bushfire

Can you tell me about your experience of bushfire while living in the Blue Mountains?

Do you think the fires are changing?

(If yes) How? Why?

5. Climate Change

What does the term climate change mean to you?

What information about climate change do you trust?

Can you tell me about any changes that you've experienced in your area that you connect with climate change? Or that might be connected with climate change?

6. Bushfire and climate change

What do you think about the link between climate change and bushfire? Do you think climate change had a role in the October Fires? Why? Why not?

What is your most valued source of information about how bushfires are changing? [if they think they are changing]

What information has been useful and meaningful to you and affected decisions that you make about your own preparation for the bushfire season?

7. Future

What do you think is most likely to change in your local environment in the future?

How do you think about your own future living in this area?

What do you consider the most likely future effects of climate change in your area? [if they think climate change is happening, or is a future possibility]

What impact do you think these changes will have on you, your family, and the wider community?

Have your thoughts about the future changed over the last few years? If so, how?

8. Anything Else? Questions?

Is there anything else you would like to add? Do you have any questions? Semi-Structured Interview Guide: Recovery Workers For researcher use only Version 2: 2/4/15

(Introduction; Thanks for agreeing to participate; ask permission to tape record and explain right to stop recording at any time, erase part or all on request; go over consent

statement; any questions? I'm really interested in your experience of living and working

in the Blue Mountains and your personal reflections about these topics are very

important to this research)

1. Basic Information

How long have you lived in this area (specific location) and the Blue Mountains

region more generally? How long have you worked in community-related

services in the Mountains?

2. Relationship with local environment

What do you value about living in the Blue Mountains?

What is difficult about living in the Blue Mountains?

3. Experiences of working in recovery

Can you tell me a bit about your experience of working in the recovery process?

Prompt: what has been most rewarding, difficult, surprising.

What do you think has been unique or different about this recovery process?

What have you learned in your time working on the recovery process?

What has it been like working with fire-affected people? [Prompts - local env,

risk, the future, CC etc, their engagement with local bush/environment.]

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Can you tell me about your own experience of bushfire while living in the Blue Mountains?

4. Climate Change

What does the term climate change mean to you?

[Prompt; Have your thoughts about climate change changed in the last few years?]

What information about climate change do you trust?

What do you think about the link between climate change and bushfire? [Prompt: Do you think climate change had a role in the October Fires?]

Is climate change something you feel comfortable talking about with your coworkers?

How would you feel about talking about it with fire-affected people?

Is climate change something you think about as a part of your role in the recovery process?

5. Future

What do you think is most likely to change in your local environment in the future?

How do you think about your own future living and working in this area?

What do you consider the most likely future effects of climate change in your area?

What impact do you think these changes will have on you, your work, and the wider community?

Have your thoughts about the future changed over the last few years? If so, how?

6. Anything Else? Questions?

Is there anything else you would like to add? Do you have any questions? Semi-Structured Interview Guide: RFS

For researcher use only Version 2: 2/4/15

(Introduction; Thanks for agreeing to participate; ask permission to tape record and

explain right to stop recording at any time, erase part or all on request; go over consent

statement; any questions? I'm really interested in your experience of living and working

in the Blue Mountains and your personal reflections about these topics are very

important to this research)

1. Basic Information

How long have you lived in this area (specific location) and the Blue Mountains

region more generally? How long have you volunteered with the RFS?

2. Relationship with local environment

What do you value about living in the Blue Mountains?

What is difficult about living in the Blue Mountains?

3. Experiences of volunteering with the RFS

Can you tell me a bit about your experience of volunteering with the RFS?

Prompt: what has been most rewarding, difficult, surprising.

Can you tell me about your own experience of bushfire while living in the Blue

Mountains?

What was your experience with working on the October fires?

What have you learned in your time volunteering with the RFS?

How do you talk with the community about preparedness?

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4. Climate Change

What does the term climate change mean to you?

[Prompt; Have your thoughts about climate change changed in the last few years?]

What information about climate change do you trust?

What do you think about the link between climate change and bushfire? [Prompt: Do you think climate change had a role in the October Fires?]

Is climate change something you feel comfortable talking about with the community?

How would you feel about talking about it with fire-affected people?

Is climate change something you think about as a part of your role with the RFS?

5. Future

What do you think is most likely to change in your local environment in the future?

How do you think about your own future living and working in this area?

What do you consider the most likely future effects of climate change in your area?

What impact do you think these changes will have on you, your work, and the wider community?

Have your thoughts about the future changed over the last few years? If so, how?

6. Anything Else? Questions?

Is there anything else you would like to add? Do you have any questions?