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Skippy the ‘Green’ Kangaroo: Identifying Resistances to Eating Kangaroo in the Home in a Context of Climate Change

Bryce Appleby

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Abstract
This thesis examines eating kangaroo in the home. Many environmentalists are advocating eating kangaroo as mitigation and adaptation response to climate change. While the kangaroo industry has conducted research on eating kangaroo, no research has thought about the body-spatial relationships of eating kangaroo in the home. Adopting Elspeth Probyn's concept of ‘the spatial imperative of subjectivity’ the discursive and visceral responses to eating kangaroo in the home are conceptualised in terms of the socially accepted body. Drawing on a range of qualitative methods, this thesis explores the food cultures of 28 adults drawn from across metropolitan Wollongong. Interpretation of responses to semi-structured interview questions employed descriptive statistics, content and discourse analysis. Valuable insights are provided into how domestic food cultures and food pathways intersect with understandings of climate change and discursive as well as visceral knowledge of eating kangaroo. The conclusion returns to the aims of thesis, outlines the policy implications of the results and sets a future research agenda.

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Skippy the ‘Green’ Kangaroo: Identifying Resistances to Eating Kangaroo in the Home in a Context of Climate Change

Bryce Appleby

A thesis submitted in part fulfilment of the requirements of the Honours degree of Bachelor of Science in the School of Earth and Environmental Sciences, University of Wollongong 2010
The information in this thesis is entirely
the result of investigations conducted by the author,
unless otherwise acknowledged, and has not been submitted in part,
or otherwise, for any other degree or qualification.

Signed………………………………………………..       Dated………………………………..
Executive Summary

Skippy the ‘Green’ Kangaroo: Identifying Resistances to Eating Kangaroo in the Home in a Context of Climate Change

This thesis examines eating kangaroo in the home. Many environmentalists are advocating eating kangaroo as mitigation and adaptation response to climate change. While the kangaroo industry has conducted research on eating kangaroo, no research has thought about the body-spatial relationships of eating kangaroo in the home. Adopting Elspeth Probyn’s concept of ‘the spatial imperative of subjectivity’ the discursive and visceral responses to eating kangaroo in the home are conceptualised in terms of the socially accepted body. Drawing on a range of qualitative methods, this thesis explores the food cultures of 28 adults drawn from across metropolitan Wollongong. Interpretation of responses to semi-structured interview questions employed descriptive statistics, content and discourse analysis. Valuable insights are provided into how domestic food cultures and food pathways intersect with understandings of climate change and discursive as well as visceral knowledge of eating kangaroo. The conclusion returns to the aims of thesis, outlines the policy implications of the results and sets a future research agenda.
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Acronyms

KIAA Kangaroo Industry Association of Australia
RIRDC Rural Industries Research and Development Corporation
IPCC Intergovernmental Panel on Climate Change
ACF Australian Conservation Foundation
UOW University of Wollongon
Chapter 1

Introduction: Research Background, Aims and Objectives

In 2008, the economist Ross Garnaut in his *Final Climate Change Review* for the Rudd Government, recommended ‘alternative’ breeds of livestock such as kangaroo as a feasible option to urgently reduce the nations burgeoning greenhouse gas output. Further, Garnaut championed the value of the kangaroo to farmers, *should* agriculture be included in any proposed carbon emissions trading type scheme, given the potential market value of methane savings. However, as Garnaut (2008: 547) acknowledges, this would require Australians to embrace kangaroo as a main meat in their diet, and that major barriers would need to be overcome including; ‘livestock and farm management issues, consumer resistance and the gradual nature of change in food tastes’. A partial shift from eating lamb and beef to kangaroo became framed with climate change discourses as an environmentally friendly consumption practice. The overall objective of this thesis is to employ a cultural geography approach to help discern the reasons why metropolitan households may accept, or resist, eating kangaroo regularly in their home to reduce greenhouse gas emissions. Before outlining the specific aims of the thesis, the next section first outlines how debates about eating kangaroo in Australia are not new and often framed by European ideas about farming practices and species, or questions about Australian nationhood. The chapter then turns to framing of kangaroo consumption with climate change policy discussions.

1.1 Eating Kangaroo?

First of all, I would say that the kangaroo has never been a pest in any part of the colony. Whenever they have gone into fields of corn, and done a little damage, in most cases, it was the owner of the field’s fault, by not having it properly fenced in...the kangaroo has proved itself, in times past, to be most useful, especially upon
needful occasions, not only to the poor man, but to the squatter also, at times when a beast for killing could not be hunted up.

Correspondence to the Editor, *The West Australian*, 5 April 1888.

The kangaroo has been the focus of debates amongst British and European Australians for over two hundred years. As this letter to editor of the West Australian, 1888 entitled ‘The Destruction of Kangaroos’ illustrates, early voices were opposed to sets of European agricultural production ideas that frame the kangaroos as a ‘pest’ to farmers. While the first British and European colonisers often relied upon eating kangaroo meat for their survival, the colonists’ brought alongside land tenure systems their ideas of food – including sheep, pigs and cows. By the late 1800s with agricultural productivity as the benchmark of ‘successful’ farming practice, the kangaroo was increasingly becoming portrayed by most landholders as a pest. Eating kangaroo was positioned as an option of last resort for those who have fallen on tough economic times.

It would appear the kangaroo has always occupied a fluid, multiple and contested positioning both within and between different social groups. In Australia, amongst different people, the kangaroo occupies the status of an ancestral being, native species, foodstuff, national symbol, pest, commercial resource and ‘environmentally sustainable future’. The contested and multiple understandings of the kangaroo points to how the meaning of all animals is always relational, rather than fixed, and brought into existence through particular knowledge systems. For example, for many Indigenous Australians, kangaroos are integral to making their sense of self in the world, as evidenced in drawings and rock art of the Arnhem Land Plateau (Chaloupka, 1984). For tens of thousands of years the kangaroo was important not only as an ancestral being for many Indigenous Australians, but also as a foodstuff and material for clothing and rugs.

In 2010, the kangaroo is framed by a number of intersecting discourses in Australia including nativeness, nature, attractiveness, nationalism, export product, endangered species and environmental sustainability. Eating kangaroo is therefore a highly contested issue. What follows unravels some of the sources and entanglements of these intersecting discourses.
In the years after Federation, nationalistic movements began to emphasise Australian nature as unique, symbolic icons of the young and prosperous Australia (Morton and Smith, 1999:70; Craw, 2008:89). The national framing of the kangaroo began with its appearance alongside the emu on the national coat of arms, because of the European fascination with the distinctive attributes of the continent’s ‘native species’. Since then the kangaroo has been utilised notably by Tourism Australia as a major brand to differentiate its tourism products worldwide. Today, the kangaroo is the emblem of the national air carrier QANTAS and incorporated into the name of numerous national sporting teams (Socceroos, Hockeyroos, (Rugby League) Kangaroos, and, of course, the ‘boxing kangaroo’ flag). Understandings of kangaroos as an attractive childhood friend have been circulated through the 1960s television program Skippy: The Bush Kangaroo. The program broadcast anthropocentric understandings of the kangaroo to Australia and the world. How these sets of ideas intersect has resulted in dominant societal placing of the kangaroo in wildlife parks, sporting games, souvenir shops and ‘the outback’; but perhaps not as available fresh in the supermarket meat section.

Yet, for over fifty years, kangaroo skins and meat products have been exported internationally through a commercial kangaroo industry. As Grigg and Pople (1999) discuss, the annual quota of kangaroos ‘harvested’ under jurisdiction of the Commonwealth Government has enabled increased sales. This quota has substantially increased with the ‘explosion’ of eastern grey and red kangaroo populations. Since the 1959, kangaroo meat has been exported to Europe, following interests from the European game industry, as a ‘significant industry product’ (Grigg and Pople, 1999). In contrast, in Australia during the 1960s the sale of kangaroo meat for human consumption was illegal in all states – and commonly described as contaminated and wormed. In Australia, up to the 1990s, kangaroo meat was primarily destined for the pet bowl. Human consumption of kangaroo was first legalised in South Australia in 1980, where a small domestic market emerged amongst gourmet restaurants in the Barossa Valley (Hercok, 2004: 77). In New South Wales the ban on selling kangaroo meat for human consumption was not lifted until 1993 (Victoria still holds a ban of harvesting kangaroos for food, however consumption is legalised with kangaroo meat in Victoria imported from interstate) (Kelly, 2009).
Today, the culling or ‘commercial harvesting’ of kangaroos is governed by the States National Parks Authority Management Plans. Drawing on principles and methods of the biological sciences, each state produces its own plan which must be approved by the federal Department of the Environment, Water, Heritage and the Arts. These plans detail the monitoring and quota setting controls and are renewed every five years (KIAA, 2008). Each ‘harvest quota’ is based on population size of eastern, red and grey kangaroos, taking into account long-term climate trends and is usually based between 10 and 15% of the total population (maximum) (KIAA, 2008). The Department of Foreign Affairs and Trade (2009) states that: “This approach ensures that the harvesting of kangaroos is managed in an ecologically sustainable way”. Currently, the Department of the Environment, Water, Heritage and the Arts (2010) estimates the combined population of kangaroos in ‘commercial harvest areas’ at just over 27 million; making the species one of, if not the most abundant large wild land mammals on earth (KIAA, 2008). Since the 1990s, the kangaroo meat trade has portrayed itself as a ‘robust’ $270 million industry, employing over 4000 people annually (KIAA, 2008).

During the late 1980s and early 1990s, kangaroo management plans became repositioned within discourses about ‘sustainable futures’. Leading this set of ideas was Gordon Grigg (1989) a biologist who portrayed ‘kangaroo harvesting’ as an ecologically sustainable solution to degradation in the semi-arid rangelands of New South Wales and Queensland. Grigg’s concept of “sheep replacement therapy” involved harvesting kangaroos in a more sustainable approach and reducing sheep numbers to achieve greater protection of the rangelands (1995:162). Grigg campaigned for turning the kangaroo, considered as a ‘pest’ by many, into a renewable resource, and in the process control a population explosion of red, western grey and eastern grey kangaroos. Griggs’ extensive research on kangaroos (Grigg, 1984; 1985; 1987 a, b, c; 1988; 1989; 1991; 1993; 1995), tells us that it is these three species of kangaroo (red, eastern & western grey) that have thrived since European colonization, taking advantage of increased water supplies and grasslands generated by the sheep and cattle industries. According to Grigg (1995), the sheer numbers of these kangaroos (up to 50 million in favourable conditions (KIAA, 2008)), combined with the huge numbers of grazing livestock and an extremely fragile rangeland environment; made a carefully controlled harvest quota system imperative (Department of Foreign Affairs and Trade, 2008).
Australian scientists such as Tim Flannery (1994) and Michael Archer & Bob Beale (2004) have put their support behind the sustainable use of ‘native species’, arguing for more meat to be consumed from kangaroo harvests, rather than solely skins or pet food trade. Conversely, opposition to increased commercial harvesting of kangaroos has come from the Australian Conservation Foundation, Wildlife Protection Association of Australia and other animal rights groups. They dismiss increased harvesting as an example of the commodification of animals. These groups have typically used the language of ‘native’ and ‘wild’ animals to evoke support, arguing that all animals have intrinsic value, and that ‘harvesting’ non-domesticated animals for profit is nothing more than a form of slaughter (ACF, 2010; WPAA, 2004; Animal Liberation, 2009; Animals Australia, 2010).

1.2 Framing eating kangaroos within climate change policy discussions

How has eating kangaroo been evoked within the context of national climate change adaptation and mitigation policies? The IPCC’s 4th Assessment Report (2007) outlined the current scientific consensus of the human impacts on the climate system by ever increasing concentrations of greenhouse gases in the atmosphere. This report further outlined the likelihood of severe weather impacts, those places most vulnerable as well as adaptation and mitigation strategies (IPCC, 2007).

In Australia, during the 1990s, the Howard Coalition Government argued that the Australian economy should be exempt from any international commitment to reduce greenhouse gas emissions because the economy was underpinned by cheap fossil fuels. Hence, the Howard Coalition Commonwealth Government refused to sign the Kyoto Protocol which was at the time, one of the first global agreements towards reducing global greenhouse gas emissions. Political momentum switched following the election of the Kevin Rudd Labor Government in 2007. The Rudd Labor Australian Government has repeatedly described climate change as ‘one of the greatest economic, social and environmental challenges of our time’ (Commonwealth of Australia, 2009).

This sense of political urgency in the late 2000s spurred a number of reports examining how different sectors of the economy could reduce greenhouse gas emissions. The livestock industry has long been known as a highly emission intensive industry. For example the Food and Agricultural Organisation of the United Nations’ report titled
Livestock’s Long Shadow, stated that ‘The livestock sector is a major player, responsible for 18% of greenhouse gas emissions measured in CO₂ equivalent worldwide’ (Steinfeld, 2006). This report also points out that this share is greater than all forms of transport combined.

In Australia, the National Greenhouse Gas Inventory estimates that the livestock industry accounts for 11% of the nation’s greenhouse gas emissions, and thus are the single biggest contributor to the agricultural sector’s emissions (Department of Climate Change, 2009). The majority of these emissions are accounted by methane gas (CH₄), which crucially possesses a warming potential for the atmosphere 21 times that of carbon dioxide (CO₂) (Wilson & Edwards, 2008). Methane is emitted as part of ruminants’ (cattle, sheep, goats etc.) normal digestive process; whereby microorganisms consume carbon dioxide and hydrogen from digested plant matter, producing methane as a result (Steinfeld et. al. 2006). In terms of carbon dioxide equivalent, one beef cow can produce a massive 1.6 tonnes of CO₂ per year, compared to the 2.6kg for that of a kangaroo (Trivedi, New Scientist, 2008). In light of these numbers, in 2007 Dr Mark Diesendorf, a professor in Environmental Studies at the University of New South Wales, called for a 20% reduction in beef consumption and a move to kangaroo or lower meat diets in his report ‘Paths to a Low-Carbon Future ‘. Following the early lead of Michel Archer, Tim Flannery and Gordon Grigg: large scale kangaroo harvesting is positioned as an ‘alternative’ to ‘traditional’ livestock farming. In addition it is framed as a healthier option than other red meat, ecologically sustainable for both the land and kangaroos, and advocated as ‘environmentally friendly’ because kangaroos produce next to no methane (Wilson & Edwards, 2008).

Similarly, George Wilson and Melanie Edwards (2008) from Australian Wildlife Services in Canberra published a landmark paper which modelled that reducing cattle and sheep numbers by a third, and increasing kangaroo to 175 million, could curb cattle emissions and cut the nation’s entire greenhouse gas output by 3 percent by 2020. Wilson and Edwards state that to achieve this, 7 million cattle and 36 million sheep would need to be removed from the rangelands. Crucially for this thesis they concede such a change would ‘require large cultural and social adjustments and reinvestment’ (2008: 119). These statistics and arguments were integral to the recommendations made by Ross Garnaut in
his Final Climate Change Review about eating kangaroo. Yet, would many Australians consider eating kangaroo regularly in their home as mechanism to minimise greenhouse gas emissions?

### 1.3 Thesis Objectives and Aims

The overall aim of this thesis is to adopt a cultural geography approach to examine the cultural resistances, and acceptance, of preparing and eating kangaroo in metropolitan homes. Wollongong, a coastal regional centre some 80 km south of Sydney, was the empirical focus of the study. Wollongong households make an excellent case study because as a coastal city the population is both vulnerable to predicted rising sea-levels and floods and is a ‘hot spot’ of carbon emission production – because of the location of the BlueScope Steelworks, coal mining and high dependency on private cars. Metropolitan Wollongong is also embedded in a range of responses to carbon emissions including the Wollongong City Council initiative, Sustainable Illawarra; the introduction of ‘Green Buses’, the Wollongong Climate Change Action Network, and the site of the Climate Camp 09 rally at Helensburgh. Three specific aims are examined in this thesis.

**Theoretical Aim**

The theoretical aim of this thesis is to apply Elspeth Probyn’s (2003) concept of the spatial imperative of subjectivity to eating kangaroo in the home. This conceptual approach helps to interpret the relationship between eating and the self; not only a highly social process, but also a highly discursive and visceral one that is spatially situated. Attention is drawn to the importance of bodily-spatial relationships for the practice of eating. In particular, this approach highlights how not only ideas, but also tastes, smells and textures operate to constitute boundaries that categorise what is edible and inedible.

**Methodological Aim**

The second aim is to develop a rigorous food cultures methodology that acknowledges the importance of the economic, political, social, cultural and visceral dimensions of eating kangaroo. To do so, conventional and non-conventional qualitative approaches are
employed. Hence, one aim of this thesis is to offer innovative methodologies to explore the embodied geographies of food.

**Analytical Aim**

Finally, the analytical aim of the thesis is to employ descriptive statistics, content and discourse analysis to identify and understand the reasons why people choose whether or not to eat kangaroo as a normal weekly meal at home, in a context of climate change.

### 1.4 Thesis Outline

This thesis is structured into seven chapters. Chapter 2 begins with a literature review. The review draws on a broad range of literature from sociology, anthropology, cultural studies and animal and food geographies. Key words and concepts are introduced including: food cultures, food networks, taboos, domestication, anthropomorphism, taste and disgust. Attention then turns to the conceptual framework. The theoretical aim is addressed here, explaining the value and application of Elspeth Probyn’s spatial imperative of subjectivity to this work.

Chapter 3 addresses the methodological aim of the thesis. The chapter outlines how rigor is maintained throughout the research. The chapter outlines a mixed methods approach, including the innovative use of the participants’ bodies as a research tool. Participant profiles and backgrounds are also introduced.

Chapters 4, 5 and 6 address the analytical aim. Chapter 4 draws on content and discourse analysis to first explore how climate change is constituted amongst participants. Results reveal varying attitudes – with the presence of both sceptics and those committed to changing their household and individual behaviour. Focus then turns to participants’ level of connection and disconnection of the meat industry to climate change and greenhouse gases. Results suggest most committed households are mainly concerned with water and energy reductions over changes to diet.

Chapter 5 examines how participants understand eating kangaroo. Discourse analysis is used to identify how kangaroo is framed within the intersecting discourses of nationalism, domestication, attractiveness, nature and environmentalism. The discussion focuses on
how these intersecting discourses work to construct kangaroo meat as appetizing to some, yet taboo to others. Chapter 6 examines the visceral responses to eating kangaroo. The chapter demonstrates how using the body as an instrument of research presents helpful and exciting approaches to thinking about human-environment relationships. Particular attention is given to how the visceral response triggered the emotion of disgust. Chapter 7 concludes the thesis by revisiting the aims and offering some tentative policy implications and future research directions.
Chapter 2

Literature Review and Conceptual Framework

Introduction

We are sure there is more than one way to accomplish this search, and we are convinced that such searching will not lead to one way of ‘doing’ visceral politics. Visceral political praxis seems to necessitate an interdisciplinary approach. In the face of widespread ‘disordered eating’ and other struggles with food–self relationships, calls are already being made for bringing together, for example, nutritional experts and psychologists with feminist scholars and social scientists (Guilfoyle 2002).

- Hayes-Conroy and Hayes-Conroy (2008: 469)

The aim of this chapter is to present the arguments within several strands of research that help explain the acceptances and resistances towards eating kangaroo in the home, in a context of climate change. To do so, as Hayes-Conroy and Hayes-Conroy (2008) argue requires a interdisciplinary approach, calling for consultation of diverse literature from food culture and food studies, geography, sociology, cultural studies and anthropology. Given the immensity of the interdisciplinary literature on food, only the most relevant authors, papers and arguments are discussed. The literature review is structured under three headings to tease out different strands of thought. The first section focuses on the social and anthropological writings of food and eating, with an emphasis on eating and identity. This section introduces four ideas: ‘food habits’ (including taboos), ‘food gateways’, ‘food networks’ and ‘food cultures’. The second strand turns to animal geographies – and in particular the process of domestication of non-human animals. Here attention is given to how Western binary thinking of culture/nature is integral to understanding how certain non-human animals become edible, or inedible. The third
literature strand is food geographies. Particular attention is given to cultural geography approaches to food. Elspeth Probyn’s concept of the ‘spatial imperative of subjectivity’ is introduced as way of thinking about eating kangaroo in the home.

2.1 Sociological and anthropological perspectives on food and eating

Perspectives from sociologists and anthropologists are important in this study for understanding what items become designated as edible, or inedible, and eating as a social act through which social relationships are established and maintained. Messer (1984) argues that anthropologists have long been interested in the socio-cultural classifications of food as edible or inedible, preferred or less preferred (Rozin & Vollmecke, 1986) and the ‘rules’ for these distributions. Mintz and Du Bois (2002) have produced an exhaustive summary of the analysis of food and eating in culture focusing of works published after 1984. Mintz and DuBois’ (2002) ‘Anthropology of Food and Eating’ underscores the importance of studying food, and eating, and its pervasive role in human life: "Next to breathing, eating is perhaps the most essential of all human activities, and one with which much of social life is entwined" (2002: 102). The review argues that food studies have ‘illuminated broad societal processes such as political-economic value creation, symbolic value creation and the social construction of memory’ (2002: 99). Such ideas have important resonance when examining eating kangaroo in the home.

Yoder (1972) introduced the term “foodways” to refer to the extended network of activities surrounding the procurement, preservation, preparation, presentation, performance and consumption of food. Johnston et. al. (2000) conceptualised these activities as ‘cultural traits’ that can be characteristic of a particular society, cultural group or geographical area. Such definitions have been critiqued for relying on static notions of culture. The substantive writings of Axelson (1986) redefined the concept of ‘foodways’ in more dynamic ways. He argued food related behaviour (what Axelson termed ‘food habits’) of individuals reflected commonsense norms, which are in turn regulated by industry standards and profit-margins in a capitalist market. In other words, food habits within a capitalist society require thinking about the intersection of particular economic relationships of markets, health regulations and sets of ideas about what constitutes items as food. Axelson understood food to move through societies by way of ‘gateways’. For example, for kangaroo to become a household fold it requires to pass
through the gateway controlled by the consumer from the supermarket shelf to the shopping trolley. However, to arrive on the supermarket shelf required kangaroo meat to pass through a series of gateways from the ‘harvest’, at the abattoir and road transport. Only items that fall within commonsense understandings of food will pass through each gateway. Each gateway is controlled by a range of ‘gatekeepers’. These might be health inspectors, roo-shooters, supermarket managers. The final gatekeeper is the consumer. In a more modern take of Axelson’s gateway thesis, Lang and Heasman (2004: 185) use the concept ‘food culture’ as helpful for expressing how food beliefs and behaviours are ‘socially framed’. They defined food culture as a ‘constellation of socially produced values, attitudes, relationships, tastes, cuisines and practices exhibited through food’ (2004:185). Fieldhouse’s (1995) ‘biocultural perspective’ of food resonates with and extends Axelson’s gateway thesis. According to Fieldhouse, food choice, taste and preferences are culturally learned and shaped by social, political and economic factors. For Fieldhouse, taste (flavour) is more than a biological or chemical reaction. According to Fieldhouse, taste is inextricably linked and shaped in situ by the normative understandings of food.

Another strand of anthropological research is concerned with the food cultures of single items. This extensive literature list includes the cultural history of the potato (Salaman, 1949), tomato, (Smith, 1994) and bananas (Jenkins, 2000). Of particular relevance to this project is the cultural complexity of consuming guinea pig and their symbolic and economic importance in the Andes. Morales (1995) and Archetti (1997) document the food cultures of guinea pigs in the Andes, where insights are given to the in-between positioning of the guinea pig as simultaneously a household pet and foodstuff. Both authors treat the guinea pig as a tool through which to discuss social and cultural change. Morales (1995) explores how the guinea pig undergoes a transformation from meat to food, and wild animal to market commodity. Simoons’ (1998) work on the fava bean and ‘favism’ represents a case of a food eaten sparingly, with discomfort, or not at all.

In this strand of literature of single food items many scholars have investigated the connections food takes to belief systems, rituals and symbols. For example, Simoons (1994, 1998) has argued that human belief systems and rituals may act to control what is considered food. Simoons draws on the example of the ban on fava bean consumption by
followers of Pythagoras to argue against biocultural or evolutionary taboo approaches in favour of belief systems and their associated rituals (Mintz & Du Bois (2002). In this example fava beans were considered a ‘taboo’ food item due to the (unknown) effects of ‘favism’, referring to a hereditary anaemic reaction to exposure of broad beans.

The practice of taboo making is important for this thesis because of how maintains the edible/inedible divide. Further, as Kekes (1992) argues there is a strong emotional and embodied dimension to the taboo – that of disgust. Visceral or “deep” disgust is most commonly associated with the violation of social and moral taboos. Human-animal relationships are configured by moral codes. This concept of a moral taboo is particularly relevant for what animals can never become food, which raises a range of questions around human-centred ‘rights’ (see Leslie & Sunstein 2007; Douglas, 2002).

2.2 Animal geographies


One strand of enquiry into the geography of animals has centred on the discourses that shape human-animal relationships and inform practices. For example, a benchmark paper was written by Kate Anderson (1995) on the Adelaide Zoo as an institution that illustrated
various discursive strategies for framing non-human animals as a zoo attraction. She argued that caging is a mutable discursive frame that fashion non-human animals for various ‘human experience of nature’ (1995:275). Since then, numerous geographers have examined the ways in which animals are socially constructed, (re)presented and staged (see Brownlow, 2000; Emel, 1998; Howell, 2000; Philo, 1998 and Marvin, 2005).

A second and related strand of animal geographies literature is built around the concept of domestication. Anderson (1995) conceptualised domestication of non-human animals as a form of human ‘power and possession’. Geographers interested in domestication have also draw on the ideas of the anthropologist Tim Ingold, who offers cross-disciplinary and methodological approaches to re-invigorate and advance understanding of human animals and non-human animals (Johnston, 2008). This work sheds light on how certain non-human animals become reconfigured as food because they are often bred with the specific purpose of feeding human animals.

Serpell (2009) highlights how moral codes underpin this highly social process of domestication. ‘Good’ codes of moral practices for non-human animals domesticated for human consumption are often strongly tied to certain environmental discourses that imply improved non-human animal welfare such as ‘free range’ rather than ‘caged’. Furthermore, moral codes of ‘good’ and ‘bad’ practices no only underpin the welfare of domesticated non-human animals for human consumption, but also which domesticated and non-domesticated animals may become edible, For instance, Podberscek (2009) explores how in South Korea dog eating is normalised as an everyday practice, while favouring a consumption ban on cats. Serpell (2009) comments that such ‘species-specific cultural mores’ are further evidence of how moral norms regarding the treatment of non-human animals are socially and culturally determined (2009: 640).

A third and most recent direction in animal geographies are the embodied dimensions. Serpell (2009) discusses how emotions are integral part of how human connect or disconnect with non-human animals. For example, Herzog and Golden (2009) discuss the emotion of disgust in shaping human attitudes to the treatment of animals. Herzog and Golden’s argue that people who expressed greater concern for animal welfare often expressed their disgust at the way non-human animals were treated by corporations, pet-owners (2009:493). As an emotion, disgust operates to establish borders, and stabilise a
sense of order. Hence, disgust helps to differentiate those people who support animal rights, from those who are less concerned with non-human animal welfare.

### 2.3 Geographies of Food

Food is central to geographical scholarship. The geographies of food have conventionally addressed questions about the spatial patterns of food production (reference), international trade in foodstuffs (reference) and uneven access to food resources (for example see Pottier’s (1999) discussion of the effects of the green revolution on food security, capitalistic relations of agriculture and the questioning of conventional wisdom and the need for detailed research in specific locales). Only more recently have geographers began to explore the relationships between place, identity and food. A groundbreaking text in the cultural geographies of food was the arguments presented in Bell and Valentine’s (1997) *Consuming Geographies: We are where we eat*. This work introduced a thoroughly spatial dimension to the cultural aspects of food consumption. They emphasised that ‘where’ we eat is just as important as ‘what’ we eat. Through eating, the authors demonstrate how personal and collected identities are constructed in and through where, and what individuals are eating. Exploring this line of argument Cook et al. (2006) examined how certain ethnic and socio-economic identities are attached to the consumption of food such as Mexican takeaway in Western societies. Instone (2005) in ‘Eating the Country’ explores ideas of place, food and identity in relation to white-Australian’s and their hunt for an ‘elusive authentic Australian cuisine’; a search that is inspired by romantic and intriguing perceptions of ‘the outback’ and ‘bush tucker’(2005: 135). Instone goes on to argue that “processes of incorporation are inextricably linked to subjectivity - food becomes self in both organic and symbolic ways” (2005: 137). In this sense, individuals can attempt to embody certain identities, such as that of the ‘bush tucker man’.

Building upon Bell and Valentine’s (1997) cultural geography approach to eating is the work of Matthee (2004), Hayes-Conroy and Hayes Conroy (2008) and Longhurst et al (2008; 2009). These authors have extended the work of Bell and Valentine by paying closer attention to the visceral qualities of eating food – the smells, texture and taste. To do so, these authors upon post-structuralist feminist scholars discussion of body-space relationships; and the argument that at the same time as bodies shape spaces through their
actions, spaces also shape bodies by facilitating particular connections or disconnections. As Matthee (2004) notes for her study of the everyday food rituals of female farm workers of colour in the Western Cape province of South Africa, ‘Eating and its associated activities are embodied, social practices that are meaningful and meaning-making’ (2004: 437). Matthee presents food-making as an embodied way of knowing, enhancing women’s sense of agency. Likewise, Longhurst et. al. (2009) studies the importance of preparation and eating food for a group of migrant women in Hamilton, New Zealand. Longhurst et. al. (2008) argues that people’s visceral experiences of food (such as taste, smells and textures) can reveal insights to not only the discursive attributes of place, but also the emotional and affective relations with place. Longhurst et. Al. were interested the role of food preparation and eating particular dishes for migrant women in terms of making Hamilton ‘home’, but also as mean for remaining connected to migrant ‘homelands’.

Like the work of Longhurst et al (2009) this thesis draws heavily upon the ideas of Elspeth Probyn (2003) and particularly her concept of ‘the spatial imperative of subjectivity’ (2003: 298). Probyn understands subjectivity as sets of practices that are always performed in relationship to space and time. Like Butler’s (1990), Probyn understand subjectivity as something that draws sets of ideas, and that must be performed, repeatedly. She extends Butler’s thinking at one level by demanding that this concept of performativity is always acted out spatially. At another level, she demands attention to the embodied knowledge – to the role of emotions. Probyn argues that there is an emotional economy to subjectivities. In other words we are made to feel our subjectivities as mothers, fathers, cooks, cleaners, surfers and so on. Hence, for this project the performative framework – Probyn’s ‘spatiality of subjectivity’ – the situated ‘I’ of the person who cooks meals for a household does not exist as a homogenous bounded entity, but is constituted through ideas, practices and emotions associated with preparing and eating food in the home. Probyn’s spatial imperative of subjectivity can be applied to preparing and eating kangaroo in the home. Eating kangaroo in the home is understood to be fashioned by how the subjectivity of the household cook is configured in the home by discursive and embodied points of connections and disconnections to kangaroo. Thus, Probyn’s spatial imperative of subjectivity facilitates an interpretation of the discursive and embodied resistances, and acceptances, towards the preparation and consumption of kangaroo in the home.
2.4 Conclusion

To conclude, food cultures demands interdisciplinary approaches. Eating is at the same time biological, cultural, political, economic and social. Conventionally geographers have addressed the uneven access to food, and the spatial patterns of food production. Geographers have only recently turned to thinking about the performative and embodied dimensions of eating. Following the lead taken by feminist geographers, eating kangaroo in the home is conceptualised in this project through Elspeth Probyn’s concept of ‘the spatial imperative of subjectivity’. This lens facilitates an understanding of individual resistances and acceptances to eating kangaroo in the home as intimately linked to understandings of the proper social body that is simultaneously emotional, visceral, cultural, social and discursive. In this performative framework, eating is viewed as a social and embodied process that is shaped by discourses that inform meanings and actions; and most importantly understanding of self. However, such thinking has important methodological implications in terms of accessing the emotional and visceral dimensions. The following chapter details the food culture methodologies developed to identify the discursive and visceral knowledge that inform meaning and actions towards consuming kangaroo in the home.
Chapter 3

Food Culture Methodologies

3.1 Introduction

This chapter addresses one of the original aims of developing a rigorous food cultures methodology. This chapter explains how rigour is achieved for this study, drawing on Baxter and Eyles’ (1997) framework including design, data collection, analysis and interpretation. Baxter and Eyle (1997) identify rigorous research as satisfying the ‘conventional criteria of validity, reliability and objectivity’, but also incorporating the ‘principles of academic integrity’ – honesty and self-reflection on the researchers behalf (1997: 506). The methods developed draw on the concepts of food pathways and food cultures. Food pathways necessitated asking questions that explored households’ freedoms and constraints in decisions taken with food. In contrast food cultures, necessitated asking questions not only about what people think is edible and inedible, but also how these decisions can be based on visceral qualities – taste, aroma and texture. The specific research strategies employed to gain trustworthy insights into the kangaroo climate change and food cultures are outlined in Table 3.1.

To address the aim of developing a rigorous food cultures methodology the chapter is structured into four sections. The first examines the role of the researcher in the project and how the project originated, including positionality statements (how the researcher is embedded in the project). Attention in this section is also given to the ethical considerations of the project. The second section details how the project was implemented including; interview and focus group design and recruitment. The third section presents a rational for embracing participants’ bodies as research tools. The fourth and final section discusses the methods of data analysis including discourse and content analysis. Limitations and complexities of the research design are addressed in each section.
Table 3.1: Criteria and strategies to achieve rigour in qualitative research

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
<th>Methodology Strategies</th>
</tr>
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<tbody>
<tr>
<td><strong>Credibility</strong></td>
<td>Accurate and authentic insights into experiences of food, kangaroo and climate change.</td>
<td>1. Purposeful sampling: targeting likely richer responses. 2. Triangulation: multiple data methods of discussion (individual and group settings), handouts and participant observations. 3. Deep &amp; prolonged familiarisation with research 4. Peer debriefing: research undertaken with supervisor – seminars presented to school – completion of a literature review</td>
</tr>
<tr>
<td><strong>Transferability</strong></td>
<td>Extending generated data and results to fit within contexts outside of study</td>
<td>1. Similar to credibility – purposeful sampling for ‘rich’ and detailed responses. 2. Literature review sets context 3. Thorough content and discourse analysis</td>
</tr>
<tr>
<td><strong>Dependability</strong></td>
<td>Minimisation of the idiosyncrasies in interpretation and identifying source of variability</td>
<td>1. Recording and transcription of interviews 2. Documenting research via multiple data sources: diary, noting expression and tone during interviews – all to minimise variability. 3. Work examined by supervisor 4. Positionality statement</td>
</tr>
<tr>
<td><strong>Confirmability</strong></td>
<td>Extent to which biases, motivations, interests or perspectives of researcher can influence interpretations</td>
<td>1. Reflective research diary during whole project 2. Positionality statement – noting any changes 3. Exercising critical reflexivity</td>
</tr>
</tbody>
</table>

Source: Table adapted from Lincoln and Guba (1985), as cited in Baxter and Eyles (1997)
3.2 Critical Reflexivity and Positionality Statements

Situating one’s self in a research project is imperative to become reflexive and acknowledge how personal biographies impact on the research topic selection and research design (Dowling, 2005). Baxter and Eyles (1997, p. 505) argue that acknowledging the researcher’s partiality is vital in enhancing trustworthiness of qualitative research. Feminists geographers in particular have acknowledged that the researcher’s interpretation of qualitative data will be subjective to ongoing and changing relationships between the researcher and the subject matter, as well as the researchers lived experience (see Pamela Moss 1999). Thus, a positionality statement is crucial in identifying how the research shapes, and is shaped by the researcher.

Pamela Moss (1999:158) suggests researchers put in writing a descriptive summary to highlight their position in a research project – their positionality. My basic positionality statement would read as follows:

A 22 year old, Anglo-Saxon, male, heterosexual student on a relatively low income, living with my parents (who are relatively high income earners) in a Wollongong suburb classified as a high socio-economic area. I am highly educated, completing a Bachelor of Science in Human Geography and am very passionate about environmental issues of those relating to climate change.

However, a richer explanation is required about myself because it conceals both my motivation for this particular project and how the project has changed my understanding of research, kangaroos, environmental issues and myself. Crang (2003) reminds us that ideas we hold during a research project are unstable and constantly changing during the research process and thus documentation must be ongoing. To address these two points, Box 3.1 details the motivations and origin of the research, while Box 3.2 and 3.3 articulate my position at the beginning and the end of the research. These Boxes are drawn from my research diary – composed of reflexive entries I kept over the duration of the project. They illustrate how I became more critically self-aware of the commonsense ideas that informed my understanding of the project. In addition, the research diary was also used to: (1) record ideas and reflective questions that became useful during the analysis; (2) document embodied responses of participants during interviews. Due to
space constraints, but also the highly personal reflexive quality of the research diary, the whole document is not included in this thesis; however, excerpts from the research diary are used to support arguments and are cited when appropriate.

**Box 3.1: My Background and Motivation for the Project**

I was born in Wollongong and have lived in this city my whole life. In 2002 my family moved from our previous home in Fairy Meadow to our current residence in Balgownie, a large suburb not far from the University of Wollongong Campus. Our house backs on the Illawarra Escarpment which was a big location change for me that in effect would begin to mould and shape my understanding and appreciation of ‘nature’, animals and the environment. Sightings of echidnas, snakes, possums, lyrebirds, bush turkeys, and bluetongue lizards hence became common experiences which expanded my appreciation and interest in biology, science and geography. Fast forward to 2006, and an unfulfilling first year in an Arts degree saw me dabble in marketing, history, sociology and media, that left me most unsatisfied of where I was heading. A trial of more scientific courses of human geography and environmental crises excited and convinced me to change to a Bachelor of Science in Human Geography. This event coincided with what I can describe as my own ‘environmental awakening’ of the destructive human impact on the natural environment. My love of films introduced me to *An Inconvenient Truth* which informed my first understandings of climate change and instilled in me a desire for me to know more and importantly; galvanized my interest in human-environment relations. My familiar surroundings of bush, animals and space of my home in Balgownie was then dramatically juxtaposed with the concrete, high rise and city lifestyle of a study abroad experience in Canada in 2008. As I increasingly became involved in discussions and arguments concerning climate change with friends and family, my interest shifted to how and why these different viewpoints are constructed. Increasingly I became aware of a moral ‘framing’ of climate change: that we all must do our small part. The decision to complete an honours project focusing on climate change was thus instinctive for me. Subsequent discussions with my supervisor Gordon Waitt reminded me of research into the contested consumption of kangaroo which was introduced to me in first year human geography, which at the time had caught my interest. A desire to try kangaroo meat for myself and coincidental discussions with friends about the topic had cemented the research path that I was about to embark on. Would people be prepared to change their eating habits to ‘save the planet’? Could eating ‘Skippy’ become a way to reduce our carbon footprints?
Box 3.2: Positionality statement at beginning of research project, July 2009

I had previously studied eating kangaroo. But, like many participants I had never consumed kangaroo. Kangaroo may have been a one off family dinner, but it certainly was never part of my family household’s regular meal plan. Instead, my whole family has been brought up eating fish, pig, cows and sheep. Of the years, vegetarian meals have become a more common fixture in my household’s weekly meals, but not kangaroo. In this sense I was in a similar position as many of my participants. I had some prior knowledge of sets of ideas that farmed eating kangaroo it terms of environmental and health benefits yet had not chosen to actively seek purchase and cook kangaroo at home. This was an opportunity for me to explore my own ideas, feelings and experiences about eating kangaroo. The work of the environmental scientists Gordon Grigg and Tim Flannery were very influential in how I understood the justifications for eating kangaroo. Although I come into contact with many other native animals at my home in Balgownie, I have never encountered a kangaroo or even its close cousin, a wallaby, despite stories from neighbours of sighting wallabies at dusk. My only encounters with kangaroos have been spotting some grazing during summer holidays in the Snowy Mountains, as road kill on the side of highways and overseas experiences. In Canada I saw them in the ‘Oceania’ section of a zoo and I remember being constantly being asked by Canadians if I have a pet kangaroo.

Box 3.3: Positionality and reflexivity statement at end of project, March 2010

Completing this honours project has been incredibly daunting and challenging, but also exciting and rewarding. My ideas towards kangaroo as a meat have dramatically changed. Before I began this project I did not consume kangaroo, and I didn’t really know why I didn’t either. During the research project I cooked kangaroo for myself and family at home and became familiar with the taste smell and texture of the meat. Listening to people’s stories of food and eating has deeply influenced my appreciation of the food. This research made me realise that food is truly sacred and is something to be respected. Researching the environmental impacts of meat has also changed me permanently I believe, where recognising where a foodstuff has come and how it has been produced has become an important part of my eating habits. This has been
3.3 Recruitment and sample size

This project is nestled within a larger ARC Discovery funded project titled ‘Making Less Space for Carbon: A cultural geography approach to climate change mitigation and adaptation”. As part of this project 12,000 surveys titled - *Tough Times? Green Times? A survey of the issues important to households in the Illawarra* - were distributed to Wollongong households in July 2009. Over 1,500 completed surveys were returned. The survey instrument was imperative in this project as a recruitment tool and providing descriptive statistics of meat consumption in Wollongong households.

Two recruitment strategies were employed in this project: (1) inviting people to participate in the project who had expressed an interest to be further involved in the survey research and; (2) contacting community groups in the suburbs of Oak Flats, Berkeley, Thirroul, Austinmer and Port Kembla. The recruitment process following the first strategy involved drawing a contact list from across different socio-economic suburbs. 40 were drawn from across a range of suburbs including Balgownie, Bellambi, Port Kembla Potential participants had provided their email or telephone details. 38 people were contacted from this list (two people just happening to be well acquainted with the researcher), with 20 accepting the invitation for an interview. Common reasons people gave to decline participating in an interview were ‘no time’, ‘not interested’ or ‘not for me’. Due to scheduling difficulties, and commitments of contacts, 15 people participated in individual interviews. When contacting potential participants, the

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**Box 3.3: Positionality and reflexivity statement at end of project (continued)**

enhanced by concurrently working part-time in restaurant settings where I have encountered convenient yet wasteful lifestyles on a grand scale.

As I still live with my parents I occasionally do a fortnightly shop.

Now when I walk down the meat aisle I find myself always having a look at the kangaroo section even if I do not intend to purchase it. Here I am reminded of the ideas and attitudes towards the meat I have encountered. Upon reflection, I have also found I tend to consume less meat in an average week, not only for environmental concerns outlined in this thesis but general taste preferences that have shaped my desires of what I choose eat.
researcher gave the option of the interview to be conducted in the most convenient place for them, which most of the time was their home. This was important because the project was interested in exploring the food pathways that facilitated or restricted the consumption and preparation of kangaroo at home. The home was also revealed as a comfortable place where participants could point or look to foods and objects they were describing during the discussion. However, other participants preferred to meet at the University of Wollongong Campus, or at their favourite cafe. The majority of these interviews were conducted from the beginning of November through to early December 2009. Participants from the survey were generally very eager to share their ideas.

One concern held with utilising the contacts from the carbon survey was that the researcher would end up with a biased sample of ‘green’ or especially environmentally conscious people. To a certain extent this did result. A second recruitment strategy was therefore justified. However, even the most environmentally conscious people still had uncertainties and misconceptions concerning the meat industry (to be discussed in the following results chapter 4).

The second recruitment strategy required contacting organisations that provided meeting places for various community groups in Port Kembla, Oak Flats, Berkley and Thirroul. Community centres were approached first by contacting heads of community. Organisations contacted included the Port Kembla, Unanderra and Cringilla Community Centres, Thirroul District Public Library and Community Centre, and other organisations such as Healthy Cities Illawarra. Each of these organisations was requested to provide the contact details of various community groups and clubs that might be interested in participating. From this list contact was made with Presidents and Secretaries. Formal invites to participate in focus groups and/or individual interviews were sent via mail and email to community group leaders. Follow-up phone calls were then made a few days later. Endless amounts of emails and phone calls were made with little progress. Concurrently, flyers were created (See Appendix G) in an attempt to attract volunteers and were posted on community boards and in community centres, coffee shops, sporting clubs and other public places.

To attract as many people as possible, and not to pre-empt discussion or recruitment, the focus groups were assigned a broad title of ‘Food Cultures’ rather than a title ‘Kangaroos
and Climate Change’. Both these methods of cold calling and posters ultimately failed to result in focus groups, with only two interview resulting. The formal invite approach was replaced with actively visiting and talking to community centres and their group leaders. This approach proved more successful and the four focus groups the researcher ran were sourced from this method, where community groups that might not have been listed on group contact sheets were unexpectedly stumbled upon. Research was then conducted in these various community centres because as Cameron (2005) argues groups that meet regularly are more comfortable speaking together about their ideas. This strategy proved very successful as the two large focus groups returned very rich narratives.

3.4 Conventional and non-conventional qualitative data collection techniques

This project combined both conventional and non-conventional qualitative data collection techniques. Conventional tools deployed in this project to explore what people think about climate change and eating kangaroo included semi-structured focus groups and interactive one-on-one semi-structured interviews. The combination of these methods (triangulation) minimised variability and helped strengthen credibility.

Semi-structured interviews are a flexible research tool, which enabled the researcher to make ongoing adjustments as the conversation unfolded, while the structure guided the themes to be discussed (Dunn, 2005). The interview schedule was split into three themed sections and was designed to start with a general discussion on ideas concerning food, moving on to more the controversial and personal subjects of kangaroos and climate change. The first section of questions focused on household shopping, meal planning and cooking practices; as well as questions on price, disgust, ethics and tastes. The middle section focused on kangaroo consumption, while the third centred on climate change. These three sections were introduced to participants before the interview began to give the respondents an idea of what was to come. Following Denzin and Lincoln (1994) and Dunn (2005); questions were designed to be open-ended allowing for individual interpretation (See Appendix D).
Pilot interviews were conducted first with a friend and then a university acquaintance; trialling the structure and ensuring questions were easily understood. Subsequent revisions were then made to the set of questions (See Appendix B, C, D). Pilotling the questionnaire also clarified the need for tables on three separate hand outs to capture the detail or focus attention on specific topics: (1) household shopping practices, (2) meal planning, and (3) understandings of climate change (see Appendix D). Tables were designed as means to record this information. Completing the first Table acted as an important ‘ice-breaker’ and then provided a focal point for the discussion in section one. Completing the table therefore enhanced the credibility and dependability of the results. The sheets were given to participants at the beginning of each section to avoid participants skimming over all three sheets at the beginning, and possibly losing focus.

Focus groups facilitated rigour and the benefits outlined by Cameron (2005) were apparent in this project. One potential advantage of the focus group is uncovering contrasting experiences that may be unavailable during one-on-one interviews. Differing ideas were thus encouraged to be openly debated in the groups. One comment often triggered a chain of responses. The researcher had the opportunity to promote group interaction and encourage expression of differences of opinion. Cameron (2005) also describes disadvantages of running focus groups. These include the researcher having trouble attracting multiple focus groups that represent different social groups and time and availability of participants may be a limiting factor in the number of focus groups that can be held. Both these factors did pose some limitations on this project and were overcome through adopting two recruitment strategies.

All interviews and focus groups were recorded on digital audio recording devices and transcribed following the format outlined by Hay (2005) (transcripts and sound files are included in the electronic copy of this thesis). Recording in this fashion allowed the researcher and the responder to engage in a more relaxed conversation, where the need for note-taking was eliminated (However reflexive research notes were written down immediately after interviews and during transcription allowing for documentation of embodied responses – see Chapter 6). Other general notes like the time and place of the interview as well as general reflections on the interview were also recorded and later attached to transcripts. Interviews generally ran anywhere from half an hour to one hour in length, while focus groups ran longer – generally over one hour.
One non-conventional method deployed in this project was inviting people to eat kangaroo meat. Before each interview or focus group samples of marinated kangaroo were roasted to facilitate a ‘tasting’ during the interview. The idea of the tasting was to use the participant’s bodies as a research tool. Eating is useful practice through which to examine the impact of cultural differences in forging human-environment relationships. As pointed out by Bell and Valentine (1997), what and where we eat helps make who we are. Eating particular foods in different places can help constitute national, classed, environmental, tourist, gendered, and local identities. One aim of this project was to explore what sorts of identities are constituted through the practice of eating kangaroo in the homes of Wollongong. It is through embodied responses to eating kangaroo meat that sheds light on these identities.

**BOX 3.4: Being Flexible**

Being flexible and able to adapt to different situations also became important during the research process. Certain situation occurred where participants were very keen to participate in the project, but then had to change plans and thereafter became uncontactable. Some interviews were rescheduled at the last minute due to participant’s own busy lives and circumstances. Unexpected events on my part also affected the research project. One example was my first planned pilot interview. Plans were made to meet with the participant in Shellharbour one afternoon. However that morning I was involved in a minor car accident travelling from work to home to prepare for the interview, which threw my day into chaos. As I was unable to get to the interview on time the participant was very understandable and rescheduled for a few days later. When we finally did meet, the accident became an ice breaker as the participant shared a similar story that she had recently experienced. Being able to react to changing circumstances also worked in my favour where unexpected opportunities arose for focus groups and interviews. In some cases these were then conducted the same day or the next. I therefore set myself up to always be prepared and ‘pounce’ on any interview opportunities I came across.
This study builds on the lead developed by Longhurst et. al. (2008) who argued that the researcher’s and participant’s bodies have until recently been left out as an ‘instrument of research’. They argue that bodies have not fully been embraced in geographical methodologies, where smells, tastes, gestures and glances may go unnoticed research. Instead, researchers tend to focus mainly on race, age and gender to position themselves in qualitative research. Longhurst et al. (2008) demonstrate that turning attention to the bodies of the researcher and the participant that can provide important insights to the role of emotions in the creation and dismantling of boundaries and processes of re-evaluation of the self in relationship to others in the world.

The focus for this research was the cultural meanings of food prepared and consumed at home. During the semi-structured interviews, participants were invited to taste kangaroo meat cooked previously by the interviewer. Particular attention was given to hygiene to minimise risks of food poisoning. The kangaroo meat was marinated, roasted, sliced, secured and presented in small bit size pieces on a plate garnished with lettuce. This ‘tasting’ was designed as an opportunity for participants who had not previously tasted kangaroo meat to try it in their home, but also a great opportunity to observe first-hand embodied responses to even the thought of eating kangaroo meat as home as part of a regular weekly diet. In effect, participants could consume the kangaroo meat, or not, and their verbal response and body gestures could be recorded concurrently. The tasting was not intended as a panacea for insights into kangaroo meat acceptances or aversion, but rather to complement the other methods and gain unique in-the-moment embodied responses that add to understandings of kangaroo meat, identity and climate change.

Observing the embodied responses during offering/tasting of kangaroo in the homes of respondents (and various venues in Wollongong) provided access to understandings of kangaroos that many participants could not articulate in words. While many often could not find the words to express their strong emotional response to eating kangaroo, it was communicated by their body language. Respondents comfort and discomfort at eating, or the thought of eating kangaroo meat in their home was expressed through their facial expressions, including wrinkled noses and screwed-up faces.
3.5 Participant Profiles

Tables x and y provide a profile of participants in the focus groups and one-on-one interviews respectively. 38 people participated overall in the project, with 17 individual interviews and 4 focus groups (two small and two rather large in numbers). 28 participants were female and 8 were male. Participants came from a diversity of socio-economic households. In the tables these socio-economic backgrounds are identified in the categories: low, medium or high. Placement in these categories was based on an assessment of attributes such as location, employment and household circumstances. However some households that were sampled from an area considered to be more affluent were found to be better represented in a lower socio-economic group, and vice versa.

Table 3.2: Focus Group Participant Profile

<table>
<thead>
<tr>
<th>Focus Group ID</th>
<th>Age</th>
<th>Sex</th>
<th>Employment</th>
<th>Household circumstances</th>
<th>Location</th>
<th>Education</th>
<th>Socio-economic category</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 (2)</td>
<td>27 &amp; 29</td>
<td>Female</td>
<td>Unemployed</td>
<td>Single parent households, with children</td>
<td>Berkeley</td>
<td>High School</td>
<td>Low</td>
</tr>
<tr>
<td>19 (2)</td>
<td>65 &amp; 66</td>
<td>Male + female</td>
<td>Retired/Pensioner</td>
<td>Divorced (from each other), single person households.</td>
<td>Oak Flats</td>
<td>High School</td>
<td>Low</td>
</tr>
<tr>
<td>20 (7)</td>
<td>30 - 70</td>
<td>Female</td>
<td>Volunteer/Casual</td>
<td>Married with children, married</td>
<td>Warilla</td>
<td>Various</td>
<td>Low</td>
</tr>
<tr>
<td>21 (8)</td>
<td>48 - 70</td>
<td>Female</td>
<td>Retired/Pensioner Part-time</td>
<td>Married, 1 single parent household</td>
<td>Thirroul, Bulli, Austinmer</td>
<td>Various</td>
<td>Med.– high.</td>
</tr>
</tbody>
</table>
Table 3.3: Interview Participant Profile

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>Age</th>
<th>Sex</th>
<th>Employment</th>
<th>Household circumstance</th>
<th>Location</th>
<th>Education</th>
<th>Socio-Economic Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>52</td>
<td>Female</td>
<td>Fulltime Real estate</td>
<td>Living with partner</td>
<td>Balgownie</td>
<td>TAFE</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>36</td>
<td>Female</td>
<td>Full-time marketing</td>
<td>Lives with mother</td>
<td>Balgownie</td>
<td>Tertiary</td>
<td>Med</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>Female</td>
<td>Home duties</td>
<td>Married with kids</td>
<td>Port Kembla</td>
<td>High school</td>
<td>Low</td>
</tr>
<tr>
<td>4</td>
<td>29</td>
<td>Female</td>
<td>Full-time UOW</td>
<td>Married</td>
<td>Port Kembla</td>
<td>Tertiary</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>56</td>
<td>Female</td>
<td>Full-time Unicentre</td>
<td>Married, children (left home)</td>
<td>Port Kembla</td>
<td>High school, TAFE</td>
<td>Med</td>
</tr>
<tr>
<td>6</td>
<td>36</td>
<td>Male</td>
<td>Full time, carpenter</td>
<td>Single parent household, 2 kids.</td>
<td>Bellambi</td>
<td>Tertiary</td>
<td>Low</td>
</tr>
<tr>
<td>7</td>
<td>62</td>
<td>Male</td>
<td>Retired</td>
<td>Married, kids (left home)</td>
<td>Balgownie</td>
<td>High school</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>36</td>
<td>Male</td>
<td>Full time, accounting</td>
<td>Married with 1 child</td>
<td>Balgownie</td>
<td>Tertiary</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>40</td>
<td>Female</td>
<td>Full-time Self-employed nutritionist</td>
<td>Single parent. 2 children</td>
<td>Shell-harbour</td>
<td>Tertiary</td>
<td>Med</td>
</tr>
<tr>
<td>10</td>
<td>47</td>
<td>Female</td>
<td>Self-employed own business.</td>
<td>Married, one child</td>
<td>Bellambi</td>
<td>High school</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>45</td>
<td>Male</td>
<td>Full time student</td>
<td>Single person household</td>
<td>Bellambi</td>
<td>Tertiary</td>
<td>Low</td>
</tr>
<tr>
<td>12</td>
<td>55</td>
<td>Female</td>
<td>Part-time receptionist</td>
<td>Single person household</td>
<td>Port Kembla</td>
<td>High school, TAFE</td>
<td>Low</td>
</tr>
<tr>
<td>13</td>
<td>58</td>
<td>Female</td>
<td>Full-time physiotherapist</td>
<td>Married, kids left home</td>
<td>Port Kembla</td>
<td>TAFE</td>
<td>High</td>
</tr>
<tr>
<td>14</td>
<td>46</td>
<td>Male</td>
<td>Full-time</td>
<td>Single parent. 1 child</td>
<td>Balgownie</td>
<td>Tertiary</td>
<td>Med</td>
</tr>
<tr>
<td>15</td>
<td>50</td>
<td>Female</td>
<td>Full time Wollongong City Council</td>
<td>Married, 3 kids (left home)</td>
<td>Balgownie</td>
<td>Tertiary</td>
<td>High</td>
</tr>
<tr>
<td>16</td>
<td>50</td>
<td>Female</td>
<td>Full-time, Admin/CEO</td>
<td>Married, children left home.</td>
<td>Primbee</td>
<td>Tertiary</td>
<td>Med</td>
</tr>
<tr>
<td>17</td>
<td>21</td>
<td>Male</td>
<td>Full-time student</td>
<td>Lives with parents</td>
<td>Austinmer</td>
<td>Tertiary</td>
<td>Undergrad</td>
</tr>
</tbody>
</table>

3.6 Ethics

Careful consideration was given to the ethical implications of conducting this study. Approval was given by The University of Wollongong’s Human Research Ethics Committee (HREC) on 30th September 2009 (see Appendix A). Ethics were addressed following the National Code of Ethics Guidelines, ensuring confidentiality and
minimising harm during all stages of the project design, implementation, analysis, writing and publication. Informed consent was achieved through the use of a Participant Information Sheet (Appendix E), outlining what the project was about and what their participation would involve. Researcher contact details were printed on the sheet, as well as those of the Ethics Officer for the HREC if any concerns arose to how the research was conducted. Before the interview or focus group took place, the researcher explained to participants that they could withdraw from the project within the timeline of the study, and withhold any information. Confidentiality was enforced with the use of pseudonyms for all participants in the transcribing of interviews and quotations in this thesis. Additionally, participants were made aware of who would have access to material collected during the project, where and for how long the data would be stored. Once participants were fully informed, they were asked to sign the consent form (Appendix F), which gave the researcher permission to use materials under conditions outlined within the form. Following the advice of Dowling (2005) ethics were negotiated beyond the formal guidelines by constant critical reflexivity, documented within the research diary.

3.7 Data Analysis

This project relies on three types of data analysis techniques: descriptive statistics, content analysis and discourse analysis. Descriptive statistics and content analysis were used to categorise different sections of the completed handouts; including participants understanding of links between greenhouse gases and the meat industry and whether respondents would consider eating kangaroo regularly to reduce their carbon footprint. These were represented in percentage forms in various graphs and tables, created using Excel spreadsheets. Descriptive statistics were also employed when analysing data from the Tough Times? Green Times? Survey of issues most important to households in the Illawarra, which included basic statistics of weekly meat consumption and reasons for consumption increases and decreases. It is important to note the work of Forrest and Dunn (2007) who argue that descriptive statistics collected from surveys (in this case a mini handout) work as an indicator of prevailing attitudes conveyed by the sample group and should not be viewed as a definitive result. For example some respondents said they would consider eating kangaroo regularly to reduce their carbon footprint, but then explained verbally certain conditions and circumstances that went along with their decision.
Content analysis was used as a method to interpret responses from handouts including the weekly meal planners and examples that participants listed of how their households are reacting to climate change debates. These were open-ended questions in the interviews and focus groups where participants could write (or say) anything that came to their mind. This particular technique, known as Manifest Content Analysis rests upon quantifying word patterns. Wordle figures are the most notable example of content analysis in this thesis. Wordle is an online resource that generates ‘word clouds’ from text input. Responses to questions (e.g. household action on climate change) were entered ‘verbatim’ into Excel spreadsheets and then transferred into the Wordle program. The words in the resulting ‘wordle cloud’ give greater prominence to words that appear more frequently in the source text. Essentially, the ‘wordle clouds’ are the equivalent of frequency distributions, making the most common words appear larger in proportion to other words. However, Crang (2001) argues the important point that the number of times a word or idea is mentioned does not show a relationship to the significance or meaning attached to it. Thus, the final method of discourse analysis was employed to analyse, sort and code the empirical data.

Discourse analysis is now well established in geographical research as an interpretive approach to identify the sets of ideas, or discourses in ontological thinking within particular social and temporal contexts (Waitt, 2005). In order to identify these sets of ideas, the raw data must be ‘unpacked’ to determine the complex web of relationships, understanding and principles between them. This project takes a Foucauldian approach to performing discourse analysis. Based on the works of French Philosopher Michel Foucault, this approach offers insights to how particular knowledge sets of the world become dominant, while others are simultaneously silenced (Rose, 2001). Foucauldian discourse analysis is appropriate for this research project, given the aims of exploring the relationships between food and identity, animals and ‘nature talk’.

Before outlining how the discourse analysis was undertaken, it is important to understand and consider Foucault’s concepts of ‘discourse’, ‘discursive structures’ and ‘effects of truth’. Foucault’s (1972) meaning of ‘discourse’ is multi-faceted and difficult to define. However the main components can be identified as language or meaning texts that constitute social worlds, which can be grouped to form different themes. These themes are underpinned by ‘discursive structures’ or rules which govern the production and
circulation of knowledge. In the ‘effects of truth’, Foucault (1972) refers to the form of social control that operates subtly to unify, constrain or naturalise what people say (attitudes), do (practices) and think (meanings). Crucially, these discourses are fluid and evolve and change over time (Massey, 2001; Mills, 1997 & Waitt, 2005). Box 3.5 summarises how discourse analysis in this project followed the seven strategies outlined by Rose (2001) and adapted and contributed to by Waitt (2005).

<table>
<thead>
<tr>
<th>Box 3.5: Strategies for Discourse Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. First, source materials or texts were chosen. For this project, interviews, focus groups, and visceral responses were used as a rich source for understanding how emerging themes were socially constituted. At times these were contradictory and captured the complexities and ambiguities of human behaviour.</td>
</tr>
<tr>
<td>2. Second, Rose (2001) suggests suspending pre-existing categories when approaching texts to avoid the influence of preconceived assumptions. This involves becoming reflexive of one’s own beliefs and writing this into the project in the form of positionality statements. Rose (2001) and Waitt (2005) remind us to approach the subject matter with “fresh” eyes and ears.</td>
</tr>
<tr>
<td>3. The next step centers on familiarisation with the texts. This involves prolonged thinking, reviewing and engaging with the text and thinking critically about the social contexts.</td>
</tr>
<tr>
<td>4. The fourth step, coding or indexing, first involves demarking transcripts into four allows capture of emergent themes, which are then demonstrated the highlighting of verbatim quotations (Ritchie and Spencer 1994). The formulated code listing for this thesis is displayed in Appendix I.</td>
</tr>
<tr>
<td>5. The fifth strategy involves questions of ‘persuasion’ – how do participants identify their positions and contributions as the ‘truth’? (Waitt, 2005:102) Here practices and ideas can be identified as unacceptable or ‘taboo’, and contrasted with those that are ‘commonsense’.</td>
</tr>
<tr>
<td>6. Inconsistencies and contradictions constitute the sixth strategy. Complexities are recognised within the texts (which enhance rigour) to outline competing discourses such as domesticated vs. wild of the kangaroo.</td>
</tr>
<tr>
<td>7. The final strategy of discourse analysis relates to silences and how they too can work to establish what discourses are thought of as ‘commonplace’. Considering what voices may be omitted in narratives aids in reflection of the rules and boundaries existing for certain discursive structures.</td>
</tr>
</tbody>
</table>
3.8 Conclusion: Food Cultures Methodology

This chapter addresses the third aim of this thesis to develop a food cultures methodology. This methodology was a combination of conventional and non-conventional methods including semi-structured focus groups and individual interviews, participant observation, a reflexive diary, positionality statements and the participants bodies as ‘instruments of research’. The chapter began by introducing and positioning the researcher within the research subject matter. The chapter outlines how maintaining rigour in qualitative research is fundamental in the entire research process: including design, data collection, ethical considerations, critical reflexivity content and discourse analysis. The next three chapters move on to discuss the results. The first examines the household’s food cultures, particularly their patterns of meals and understanding of changes to meat consumption as climate change mitigation and adaptation policy responses. The second results chapter explores in more detail what people think about kangaroos and kangaroo meat. The third results chapter explores the visceral responses associated with eating kangaroo in the home.
Chapter 4
Understandings of Climate Change and the Role of the Meat Industry.

4.1 Introduction

This chapter draws on content and discourse analysis to explore how participants constitute climate change. Content analysis of participants’ lay knowledge of climate change revealed three groups; those confused about climate change, those committed to climate change and those sceptical of climate change. Discourse analysis reveals how each group draws upon the intersection of a range of religious, scientific, economic and political ideas circulating around climate change. Next the chapter explores through the use of content analysis how participants position food within household strategies of climate change adaptation and mitigation. Attention then turns to explore if participants had specifically considered eating kangaroo as means to reduce greenhouse gas emissions.

4.2 ‘Confused’, ‘committed’ and ‘sceptics’: results from content and discourse analyses

A discourse analysis suggests participants frame climate change through the intersecting discourses of the catastrophic, religion, as well as the science, economics, and politics of climate change itself. The intersection of these discourse often left some people feeling confused about the process; others agreeing with climate scientists and a third group that rejected climate change science.
Table 4.1: Content analysis to identify those participants ‘confused’ by climate change

<table>
<thead>
<tr>
<th>Words Used</th>
<th>Respondent ID</th>
<th>Total Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t understand</td>
<td>18 (2), 8</td>
<td>3</td>
</tr>
<tr>
<td>Confused about debate between scientists, politicians</td>
<td>18, 21, 1, 19</td>
<td>4</td>
</tr>
<tr>
<td>Try to ignore</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>

Confusion

As seen in Table 4.1, for some, confusion arose from the scientific discourses used to frame climate change. For example Therese and Krystal (homemakers, aged 27 and 29, respectively, from Berkeley) expressed a lack of interest in climate change that arose from not understanding how the topic was framed:

Interviewer – There’s a lot of debates at the moment about climate change and I was just wondering if these debates are relevant or interesting to you at all?
Therese - Nah, I don’t understand all that.
Krystal - I’ve never really thought about it... All I know is that you've gotta stop using so much of the stuff...what's the word? The greenhouse gas...but I don't actually understand most of it but see my dad explains a lot of that for me. So when I go up to their place they'll explain it a lot for me.

Focus Group (18/11/2009)

In comparison, Ron, a 36 year old accountant from Balgownie expressed his lack of understanding for climate change from how the discourse of catastrophe intersected with climate change science:

Ron - I find them interesting in the sense that I think "Yeah, long-term, how's it [climate change] going to affect my grandchildren?" and so forth. But my attitude tends to be "It's not affecting me today," and therefore I don't seem to pay too much attention to it. Apart from the fact that the media might dramatise what's happened in parliament on a certain day and you might watch it for that reason
because it's more - being dramatised, but not because of the issue of what's going on. So I don't tend to understand fully what's going on.

Interview (27/11/2009)

Although Ron expresses interest for how climate change may affect his grandchildren, his everyday interactions do not resonate with discourse of climate change science and he plays down the media discourses as ‘dramatised’. Consequently he regards climate change as having low personal risk. Hulme (2009) argues that one of the many reasons why individuals disagree about climate change science is that people employ different discourses to understand and distinguish in vastly different ways the economic, social and political risks of climate change. Yet, it is more than simply a lack of understanding. There is an emotional dimension to this perceived lack:

Interviewer - So is it a turn-off if you might see it on the news or something because you might not understand it?

Ron - Yes, definitely, yeah. You look at it and just go - you can see there's a major world concern about it (climate change) and you're just embarrassed about the fact that you're not up-to-date with it; sort of thing, and so therefore you have that, yeah.

Interview (27/11/2009)

Embarrassment suggests a heightened awareness that he is not living-up to the growing normative expectation of an environmentally responsible citizen. Shame operates to heighten an awareness of self, and offer possibilities for change that politics of guilt can never acheive because it operates to separate the person from the object of their guilt. For example Michael (36, carpenter, Bellambi) articulates how he thinks shame has influenced his household practices:

Michael - Probably, like everybody else, I would say we’ve found ourselves shamed into using reusable shopping bags which I think is about the tiniest, most irrelevant thing you could do to stop climate change, but it’s just something that people think…it’s one of those things that everybody just starts to do it, and then you become…everybody’s compelled to do it.

Interview (23/11/2009)

In Michael’s case, shame operated for the household to rethink their use of plastic shopping bags. Yet Michael remains unconvinced of the implications of using recyclable bags for addressing climate change.
In contrast, those who have embraced the discourse of climate change science often spoke about the process in terms of having higher personal risk; particular towards their grandchildren. Those who expressed climate change as through scientific discourses commonly used terms like ‘greenhouse gasses’, ‘methane’ and ‘fossil fuels’. As shown in Table 4.2, for those who deployed the discourse of climate change science, the process was framed by five respondents as a ‘global’ problem and by ten respondents as having implications for ‘future generations’. For example, Lana, a 50 year old health worker from Primbee spoke about her concerns for her children and her grandchildren:

Interviewer: *Do these debates about climate change interest you at all?*

Lana: *They do because I wonder where we’re going to end up, not so much me, but my daughters and my grandchildren where it’s going to end up, and people did things years ago and they just weren’t aware of the damage.*

Interview (8/12/2009)

Likewise, Simon a 65 year old retiree held concern for the future world of his grandchildren:

Simon - *We’re soon gonna have nine grandchildren and what are we gonna leave them? You know, we’re just ruining everything. We are.*

Focus Group (16/11/2009)

Like Simon and Lana, Martina, a 51 year old office worker from Balgownie constitutes climate change as having high risk for future generations. Further, she reveals how the ongoing debates surrounding climate change science are embedded in religious discourses:

Martina - *I do listen in to the debate very closely... you’re talking to the converted!*

Interview (2/12/2009)

Martina used to word ‘converted’ to describe her interest in climate change and carbon trading debates. Martina’s response resonates with Hulme’s (2009) suggestion that climate change is ‘increasingly discussed using language borrowed from religion, theology and morality’ (2009: 173). In this sense climate change science is portrayed as a religion, and for those who break their faith in climate science may speak of ‘carbon sins’ and express feelings of guilt for over-consumption. Indeed, Pamela, a 50 year old
therapist from Port Kembla, introduced the idea of the climate change sceptic – a non-believer of climate change science:

Pamela - *I'm not a climate change sceptic I believe in climate change and so I think we need to do something so any of those changes, any changes they talk about I'm interested in.*

Interview (24/11/2009)

**Table 4.2:** Content Analysis to identify those participants ‘committed’ to climate change

<table>
<thead>
<tr>
<th>Words Used</th>
<th>Respondent ID</th>
<th>Total Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global issue</td>
<td>14, 21 (2), 20</td>
<td>4</td>
</tr>
<tr>
<td>Interesting, current issue</td>
<td>15,14, 21 (4), 2</td>
<td>7</td>
</tr>
<tr>
<td>Concern over future of planet</td>
<td>21, 10, 19, 4</td>
<td>5</td>
</tr>
<tr>
<td>Impact on future generations, way of life</td>
<td>16, 21 (3), 10, 3, 20, 2, 19, 8</td>
<td>10</td>
</tr>
<tr>
<td>weather Hotter when I was growing up than it is now</td>
<td>20, 7, 6 21(4)</td>
<td>3</td>
</tr>
<tr>
<td>Greenhouse gases</td>
<td>18, 4, 20</td>
<td>3</td>
</tr>
<tr>
<td>Climate change is happening now</td>
<td>4, 13, 7, 6 21(2), 10, 19, 13, 7 16, 21(2)</td>
<td>4</td>
</tr>
<tr>
<td>Rising sea levels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotter weather, heatwaves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community effort, shared responsibility</td>
<td>16,21(3), 10, 19(2), 4, 13</td>
<td>9</td>
</tr>
</tbody>
</table>

**Commitment**

How different discourses of climate change intersect with lived experiences is crucial to understand how individuals respond. When climate change discourses resonate with personal experiences, participants expressed a stronger willingness to modify household practices. For example, Pamela (50, therapist, Port Kembla) articulates how she is willing to modify her household’s water use because of living in Papua New Guinea.

Pamela - ... *we have the bucket in the shower to collect a bit of water before the water runs hot, all those daggy things we do all those because I think everyone*
needs to do their little bit ... plus when we were in Wewak it’s an area that’s been affected by rising sea levels and we saw people’s homes get inundated by the ocean ... So I feel I’ve seen it happening and so yeah we’re trying to do as much as we can.

Interview (24/11/2009)

For Pamela, water saving practices are viewed as a small, but important action related to climate change because ‘everyone needs to do their little bit’. Pamela also mentions rising sea levels which was a frequently mentioned idea throughout interviews and discussed by six individuals in particular (Table 4.2); as well as the idea that climate change is happening now. Pamela shares a story of living in Wewak, Papua New Guinea where her husband and herself witnessed rising sea level impacts. For Pamela, this local story has given meaning to the idea of climate change and thus it exists as a real and physical presence in her life and she understands everyone has a shared responsibility to respond.

Making sense of climate change science through living in close proximity to the sea was also expressed by the women’s quilting group in Thirroul:

Interviewer - I was just interested if you think these kinds of debates [concerning climate change] are interesting or relevant to yourselves personally?
Barbara - We should! We're near the beach!
Harriet - Oh definitely
Marina - We can do something about it just as long as everybody else does you know.
Barbara - That's what I mean...America's not.
Sandra - As a community we should care about it
Marina- We're a small fish in the...Oh the community, yes and I do.

Focus Group (2/12/2009)

Barbara first implies that her community will be threatened by climate change and rising sea levels due to her proximity to the beach. Marina expresses that something must be done about climate change, but everyone must contribute. Barbara introduces the international politics of carbon trading schemes when she refers to the inaction of the United States of America. Sandra and Marina both agree that social collectives are important in addressing climate change. Together, these responses illustrate Hulme’s (2009) argument that individuals constitute very different ‘risk cultures’ through drawing
on the intersections of discourses framing climate change and lived experiences in different ways (2009: 208).

**Table 4.3:** Content Analysis to identify those participants ‘sceptical’ of climate change

<table>
<thead>
<tr>
<th>Words Used</th>
<th>Respondent ID</th>
<th>Total Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>All part of a cycle</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Distrust, conspiracy, opportunity for some to make money</td>
<td>1, 9</td>
<td>2, 1</td>
</tr>
<tr>
<td>Debate needed</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Scepticism**

As seen in Table 4.3, a few participants were openly opposed to the science of climate change. Harriet (65, pensioner from Thirroul) turns to the discourse of natural cycles to explain away the anthropogenic contribution to climate change:

Harriet - *I don't think it's any problem [climate change]. It always has been and always will be. While you live...I don't think it's got anything to do with that [emissions] at all...I mean a lot of the things that are happening now have happened hundreds of years ago and to me it's just the world revolving round again...Yeah and I mean it all goes in a cycle.*

Focus Group (2/12/2009)

Harriet interprets climate change as a natural process that ‘all goes in a cycle’, inferring that humans are not the main contributors to climate change observed in the atmosphere. During the focus group Marina, 62 and also a retiree from Thirroul, attempts to convince Harriet by referring to a report she had seen on the television:

Marina - *Last night they [media] were talking about this and they said...USA had a report and so did England and they both come out that we have had the hottest ten years in history...but that just showed that everything had been heated up and it's been put by two countries that have come to the same conclusion.*

Harriet - *But we came here forty years ago the heat, it was a lot hotter than ever it is now.*

Focus Group (2/12/2009)
Harriet then retorts her belief that it was much hotter 40 years ago when she immigrated to Australia from Britain than it is now. Harriet understands the main argument of climate scientists to be that the atmosphere is gradually warming and for that to be true it must be warmer now that it was 40 years ago. Her experiences tell her this is not the case and firms her opposition to the idea of anthropogenic-induced climate change.

Like Harriet, Rebecca, a 52 year old real-estate agent from Balgownie, is also sceptical of anthropogenic climate change arguments. Rebecca is seeking the ‘real truth’:

Rebecca - I don't trust em [scientists]. I'd really like to know the real truth but how do you ever find out? I'll have to wait for Mike Moore to put out a movie on it! [laughter] That sort of thing, you know one side says something which is very convincing and then the other side says something which is very convincing and you think ... some people say it's like a furphy, and other people are saying it's real and scientists are saying it's real, so...

Interview (17/11/2009)

Part of Rebecca’s scepticism lies in not wishing to be duped by science and lack of appreciation that scientific knowledge is based on levels of acceptable uncertainty rather than certainty. In seeking ‘the truth’ she mistrusts climate change scientists and distances herself from the debate.

In summary, of the 29 participants, four remained sceptical about climate change, eight expressed a lack of understanding, leaving 17 who were ‘committed’ to changing their everyday practices because of the risks they associated with climate change. The next section explores how many respondents had considered the importance of food in adapting to climate change.

4.3 The Meat Industry, Greenhouse Gas Emissions and Climate Change

Participants were asked to reflect on how their household was responding to the challenges of climate change. Almost all respondents indicated at least some influence on household practices, with many pointing to greatly modified household practices. Participants listed examples, which are summarised in a pictorial content analysis in Figure 4.1.
Clearly, household responses to climate change are understood primarily in terms of reducing electricity consumption, reducing water consumption, and recycling. The most popular changes to household practices were increased recycling, insulation and water tank installation, saving water and electricity. Interestingly, sustainable food practices were only mentioned by four respondents – ‘meatless diet’, ‘permaculture’, ‘chickens’ and ‘garden’. This illustrates that the majority of participants do not think of the foods they purchase and consume as impacting on their carbon footprint or contributing to climate change. Food cultures are thus not positioned as central to mitigation and adaptation practices. Furthermore, there was little prior familiarity with the environmental discourse that positions kangaroo meat as an integral component of reducing the nation’s overall carbon emissions within the agricultural sector.

**Figure 4.1:** Wordle (content analysis) of changes in household practices because of climate change

![Wordle Image](http://www.wordle.net/)

Further to this, participants were asked to elaborate on their views of the meat industry in relation to climate change. They were asked the question whether the meat industry is responsible for producing large amounts of greenhouse gases. Figure x illustrates participants’ response to this question. Responses to this question are crucial because it registers if meat production is considered part of ‘the problem’ of climate change. In other words, if people do not think of meat consumption and food in general as a contributor to greenhouse gases then they are less likely to regularly reduce their weekly meat consumption or switch to lower-meat diets or kangaroo.
As seen in figure 4.2, 46% of participants indicated they did think the meat industry was responsible for producing large amounts of greenhouse gases, while 54% thought ‘no’ or had never thought about it. However this result may be misleading due to the fact that some participants completed the sheet after discussions of the meat industry’s impact on national greenhouse gas emissions. As indicated in Figure 4.2, most participants’ individual responses reveal the majority of the sample did not connect greenhouse gas emissions to livestock or the meat industry. Indeed, most participants who were unfamiliar with role played by livestock in the production of methane gas expressed their surprise. For example when Rebecca (52, real estate agent from Balgownie) articulated:

Rebecca - *No I think it's like fuel and things like that, yeah. I never think of meat when I think of that [large greenhouse gas emissions.*

Interview (17/11/2009)

Rebecca never thinks of meat or any animals producing large amounts of greenhouse gases, instead she links the gases to fuel and other human-framed industrial processes. Michael (36, carpenter, Bellambi) paints a similar understanding of the meat industry and greenhouse gas emissions:
Michael - ... it’s [greenhouse gases] not something I’d really associate with the meat industry. It’s not what comes to mind when I think about who’s responsible for greenhouse gases, no.

Interview (23/11/2009)

For Martina (51, office worker Balgownie) the meat industry is connected with ideas concerning animal welfare rights, marketed in terms of ‘free range’, but not greenhouse gases:

Martina - I don’t hear much about the meat industry... I don’t really think about it very much, apart from chickens, and if I know there’s a sign and it says free range pork or free range chicken, that’ll take, that I get, and the butcher down here I think sells free range goat or something. But apart from that sort of stuff I don’t actually think about the industry as a whole.

Interview (3/12/2009)

Despite coming from a higher education background and identifying herself as one of the more ‘environmentally conscious’ participants and being very interested in climate change, Martina does not connect the meat industry to climate change emissions. This trend was repeated across most other participants. Most respondents who connected greenhouse gas emissions with the livestock industry came from a higher socio-economic background; including higher education and employment levels, or had undertaken specific research on the topic.

Only one respondent commented that he had recently decreased meat consumption and attempted to persuade his family members to do so too:

Raymond - I suppose I dislike the amount of meat that my family eats but I’ve been bringing that up a bit more just the whole climate change thing. I suppose I dislike that but then mum has been trying to make an effort to cook more vegetarian things as well which is good

Interview (2/12/2009)

Raymond, a 21 year old student from Austinmer is undertaking a Bachelor of Science Degree and has taken numerous environmental science subjects to which he attributes his
knowledge of climate change and its connection to the meat industry. Raymond’s background is significant since he was the only participant who had reduced their meat consumption for the reason of climate change. These results mirror the unpublished findings from the UOW’s School of Earth and Environmental Sciences' *Tough Times? Green Times? A Survey of the issues important to households in the Illawarra*, where climate change and vegetarianism were not significant reasons for changes in meat consumption (both < 1%).

Conversely, there were some participants who acknowledged livestock being responsible for producing large volumes of greenhouse gases, but expressed that nothing could be done to reduce these. For example Alan commented:

Interviewer - *What do you think about the role of the meat industries in contributing to greenhouse gas emissions and climate change?*
Alan - *You mean livestock gases and CH₄ and stuff like……methane?*
Interviewer - *Yeah.*
Alan - *Now what can you do about that? I mean, you know. There’s nothing you can do, can you really?*

Interview (23/11/2009)

For Alan, traditional livestock such as cows and sheep constitute what is known to him as food. Alan believes nothing can be done to reduce emissions from the meat industry because he views the industry as an accepted and important part of his food culture. As Brien (2009) argues, foodways, and how individuals think about them, only change when there is a perceived problem. For Allan, livestock remain unproblematic. Conversely, at one focus group the debate of the meat industry identified levels of human meat consumption practices as the problem, not the flatulence of cows, and the realisation a solution was to eat less meat:

Interviewer - *So you don't think they [the meat industry] should have a role or a responsibility in reducing emissions?*
Harriet - *No, no not at all.*
Melanie - *No, no let them be cows or whatever or sheep or whoever does it.*
Harriet - *It's trying to change humans...we can't change animals, it's terrible.*
Barbara - *And that's part of nature, that's nature...so.*
Rosemary - *Yeah but we don't have to eat so much meat that's the thing.*
Sandra - *Yeah it's about us isn't it? It's about what we do, about our practices*
Barbara - Well that's up to us to worry about isn't it, but that's not to do with the cows
Rosemary- But what about the fish that wee in the water?
Harriet - Exactly
Barbara - It's the same difference isn't it?

Focus Group (2/12/2009)

In this group discussion from a quilters group in Thirroul, humans are positioned as the problem that need ‘changing’. Sandra, a vegetarian, supports this view when she states “Yeah it’s about us...about our practices”. During these discussions, only one respondent, Raymond identified and connected eating kangaroo as an ‘alternative’ meat to reduce greenhouse gas emissions. The next section explores participant’s responses to environmental discourses that frame the kangaroo as a solution to climate change.

4.4 Kangaroo as a solution to climate change

Having considered the importance of livestock’s contribution to greenhouse gas emissions, participants were then asked if they would consider eating kangaroo regularly, as one way to reduce greenhouse gas emissions. Results of this question are summarised in Figure 4.3. While nearly 40 per cent of respondents were in the affirmative, 54 per cent responded with a definitive ‘no’, while around 10 per cent suggest they might consider eating kangaroo on a regular basis.

Figure 4.3: Graph to show if respondents would consider eating kangaroo regularly to reduce household carbon emissions
The results noticeably reflect a unique combination of enthusiasm, unease and confusion towards kangaroo consumption. The discussion below from the quilters group in Thirroul illustrates the more negative responses:

Interviewer - With that last question and the report, it just got me thinking would people actually be prepared to make such a change towards our eating habits if they were concerned?
Harriet - No, definitely not.
[Several no’s]
Marina - My conscience tells me I should, but I won’t.
Rosemary - It would take more than conscience to make me give up meat and eat kangaroo
Marina - You’d have to force me to eat it actually, no way.

Focus Group (2/12/2009)

For Marina (63, pensioner, Thirroul), the answer was a conflicting one. Her conscience – with links to environmental and ethical discourses - would convince her to eat kangaroo; while her body – comprising of her tastes, smells and past experiences – prevented her from consuming it. The visceral responses to eating kangaroo prohibited the meat from entering Marina’s body to the point where she would have to be forced to eat it to support an environmental ideology. Barbara too thinks about eating more kangaroo, but cannot bring herself to do it:

Barbara - No, no I think we should think about eating more kangaroo...it’s just a thing with me I couldn’t

Focus Group (2/12/2009)

Common were responses like Lana’s below, were that it would take more than environmental discourses of climate change for her to consider eating kangaroo:

Lana - I don’t know I’d do it though just to help the environment, yeah. I think you know if they came down and because definitely our red meat consumption has gone down, but a lot of that has been cost, because of the cost. Yeah it has, ours has gone down a lot, we do eat more chicken now...I never thought...oh no...and that’s it, yep.

Interview (8/12/2009)
Lana comments that she had never thought of the emissions of livestock, and a big motivating factor to her reduction in red meat consumption has been cost. Cost was also of significant concern to Elise, 47 from Bellambi:

Elise - If it's um...not the ethical side of it so much, but the costing - the price of it. So I mean yes I would [consider eating kangaroo], under consideration... yeah it might be a great idea to do the kangaroo thing, but I think it's going to cost a hell of a lot of money to do that and you're going to have to keep them contained, um you've gotta buy food for them. I dunno it's...there's a lot of implications I think.

Interview (19/11/2009)

Elise explains that the ethical side of eating ‘Skippy’ is not as concerning as the costing of increased kangaroo harvesting that she feels she, as a consumer may have to bear. For those in favour of eating kangaroo to reduce their carbon footprint, participants were encouraged by environmental discourses about eating kangaroos:

Chloe - Oh right, yeah. Yeah I would because I thought all them cows, they're probably not as good as a few kangaroos. And they seem to be shooting the kangaroos anyway [laughter]

Interview (24/11/2009)

Yelena - Yeah well I think so, yeah. You can't just become a vegetarian and a lot of people wouldn't do it because of that, but to reduce the number of cows and sheep and...yeah eating kangaroo, I will be happy to switch to that!

Interview (27/11/2009)

James - It was not something that I was aware of or had thought about. Um, but it would certainly be an extra reason for changing eating habits.

Interview (21/11/2009)

Others might consider eating kangaroo after more persuasion and ideas on how to cook the meat:

Simon - I suppose I would if there was a big marketing thing and um they come up with ideas about how you would cook kangaroo because I believe it's very tough.

Interview (16/11/2009)
4.5 The absence of the so-called ‘kangatarians’?

In the *Sydney Morning Herald* on the 9th February 2010, Tayissa Barone wrote an article discussing the rise of a new semi-vegetarian movement in Australia of people who refer to themselves as ‘kangatarians’ and “exclude all meat except kangaroo on environmental, ecological and humanitarian grounds” (Barone, 2010). According to Barone many ‘kangatarians’ were strict vegetarians for years but find that kangaroo meat satisfies their ethical and environmental concerns.

However, there were no kangatarians in this sample. The two participants who identified themselves as vegetarian would not consider eating kangaroo. While both participants understood the kangaroo as a better meat choice for the environment than other livestock, their personal selection is not to eat animals. Sandra (52, retired, Thirroul) does not eat meat because of ethical considerations. For these same reasons she would not consume kangaroo as explained below:

*Sandra - Yes that’s right, I could understand why people who ate meat might but I wouldn’t personally [eat kangaroo meat].*

*Focus Group (2/12/2009)*

Similarly, Pam (40, Nutritionist, Shellharbour) explains her vegetarian perspective towards eating kangaroo meat:

*Pam - I would support it [increased consumption of kangaroo] if it meant changing the environment...I would not necessarily eat it myself, but if it meant making our environment better yeah I would support that...if there was...if it was proven that that would happen [reduced emission reductions], yeah I'd vote...kangaroo! [laughter]*

*Interview (6/11/2009)*

Equally, Rebecca who would rather become vegetarian than dine on kangaroo:

*Rebecca - If we had to eat a kangaroo I think I'd rather be a vegetarian! [laughter]*

*Interview (17/11/2009)*
4.6 Conclusion

Content analysis of participants’ lay knowledge of climate change revealed three groups; those confused about climate change, those committed to climate change and those sceptical of climate change. Discourse analysis revealed these groups draws upon intersection of a range of religious, scientific, economic and political ideas circulating around climate change. Despite enthusiasm for the environmental benefits of eating kangaroo by some, clearly amongst this group of consumers, the kangaroo industry cannot rely on discourses of climate change alone to increase sales of kangaroo. Reducing electricity and water consumption seems to be on the minds of most households, whereas altering the food and meat they consume is not. Pitching kangaroo meat as the environmentally preferred meat may not increase sales. The next two chapters provide a better understanding of the resistances to eating kangaroo meat through identifying how the kangaroo is constituted through the intersection of several competing discourses and the visceral responses to eating kangaroo.
Chapter 5

What people think about kangaroos and kangaroo meat?

5.1 Introduction

How is kangaroo constituted within the food cultures of Wollongong? This results chapter draws on content and discourse analysis to explore the ideas evoked by participants when discussing kangaroos and kangaroo meat. These responses are drawn from specific questions on kangaroos in the interview schedule and sections where participants volunteered information about kangaroos and kangaroo meat. The discussion of kangaroo and kangaroo meat focuses on discourses of nationalism, domestication, and environment. Tables are used to show the number of times a particular theme was identified around dominant sets of ideas, or discourses. Quotations form participants are then used to illustrate each analytical theme. The results suggest that rather than fitting nicely into binary constructs of food/non-food; the kangaroo is constituted by different participants in a variety of often contradictory ways. When the kangaroo is not understood as a food, it is variously constituted as not domesticated, pest and national icon. In contrast, when kangaroo is categorised as a foodstuff it is draws on sets of ideas that enable people to speak about it as a native and wild animal, resource and to some; a sustainable and edible meat choice. In this chapter examples of these discourses will be explored critically.
## Kangaroo meat as inedible for humans

### Table 5.1: Results of content and discourse analysis illustrating sets of ideas working against the kangaroo as a food resource

<table>
<thead>
<tr>
<th>Ideas about kangaroos that facilitate the meat becoming understood as inedible for humans</th>
<th>Interviewees mentioning particular idea (Listed by respondent ID)</th>
<th>Total Number of Interviewees mentioning particular idea</th>
<th>Analytical theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Kangaroo as pest</td>
<td>4, 20(4) 1, 20, 21(3)</td>
<td>5</td>
<td>Pest</td>
</tr>
<tr>
<td>1.2 Pest/menace to farmers</td>
<td>1, 2, 3, 4, 7, 10, 11, 12, 16, 19, 20, 21(3) 4, 6, 11, 12</td>
<td>14</td>
<td>Pest /Abundance</td>
</tr>
<tr>
<td>1.3 Being shot/ culled</td>
<td>1, 2, 3, 4, 7, 10, 11, 12, 16, 19, 20, 21(3) 4, 6, 11, 12</td>
<td>5</td>
<td>Destructive</td>
</tr>
<tr>
<td>1.4 Being hunted</td>
<td>10, 12</td>
<td>2</td>
<td>Pest</td>
</tr>
<tr>
<td>1.5 More destructive on land than cows</td>
<td>10, 21(2)</td>
<td>3</td>
<td>Destructive</td>
</tr>
<tr>
<td>1.6 Destroy/damage everything</td>
<td>21</td>
<td>1</td>
<td>Dangerous/Destroyer</td>
</tr>
<tr>
<td>1.7 Cause road accidents</td>
<td>10, 12</td>
<td>2</td>
<td>Wildness/undomesticated</td>
</tr>
<tr>
<td>1.8 Wild, crazy, nuts</td>
<td>3, 9, 10, 11</td>
<td>4</td>
<td>Pest</td>
</tr>
<tr>
<td>1.9 Feral animal</td>
<td>10</td>
<td>1</td>
<td>Wild/unsafe</td>
</tr>
<tr>
<td>1.10 Has worms/disease</td>
<td>20</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2.1 National treasure</td>
<td>1</td>
<td>6</td>
<td>Nationalism/symbolic value</td>
</tr>
<tr>
<td>2.2 National emblem</td>
<td>2, 7, 10, 11, 18, 20 11, 18 7, 12 12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2.3 National symbol</td>
<td>10, 11, 20(4) 12</td>
<td>6</td>
<td>Nurturing/companion</td>
</tr>
<tr>
<td>2.4 National icon</td>
<td>10, 11</td>
<td>2</td>
<td>Intelligence</td>
</tr>
<tr>
<td>2.5 Needs special status</td>
<td>7, 10, 11</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3.1 Skippy</td>
<td>2</td>
<td>3</td>
<td>Attractiveness</td>
</tr>
<tr>
<td>3.2 Smart animal (smarter than cow)</td>
<td>11, 20(4) 12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3.3 Beautiful nature of kangaroo, beautiful animal</td>
<td>2, 11</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3.4 Cute animal</td>
<td>7, 10, 11</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Eating kangaroo and the discourse of nationalism

As Benedict Anderson (1983) and others have argued, the concept of the ‘nation’ is too abstract an idea to imagine or too distant from everyday life for people to identify with. Hence, governments and political leaders have turned to more concrete symbols to personify and objectivity the nation. Hence, the nation is made sense of through material objects like flags, food, landscapes, animals and plants. Michael Billig (1995) proposes the notion of ‘banal nationalism’ to name the trivial but pervasive practices through which national formations are reproduced everyday – like flying a flag or drinking beer.

In Australia, the Commonwealth Government has played a central role in deploying the kangaroo as providing a focus of national belongingness with which a collective identity can be forged. Interestingly, the Australian government has never officially adopted any official faunal emblem (like the Canadian Beaver or the American Bald Eagle) however the kangaroo has featured alongside the Emu on the Australian coat of arms since 1908, which most notably embellishes all Australian passports. The Department of Foreign Affairs and Trade (2008) states that only by ‘accepted tradition’ has the kangaroo been established as the national animal.

As Craw (2008) argues, the kangaroo was elected as a national symbol due to a “long-standing fascination with the ‘otherness’ of Australian nature” (2008: 90). The uniqueness of kangaroos, along with the emu and other animals and plants become one way to differentiate Australians from British and European migrants. As noted by Craw (2008) this followed the wake of how since British occupation and settlement, the main attribute
of Australia’s flora and fauna has been its ‘difference’ against a background of traditional European science.

As illustrated in Table 5.1, twelve participants portrayed the kangaroo as a national treasure, symbol, emblem or icon; with one participant stating the kangaroo was worthy of special status. In this case the kangaroo is understood to represent the diversity of people who comprise the nation. For instance, when asked if there were any foods that you would never eat, Alan responded:

Alan - *Oh no, what I wouldn’t eat, for start, a bloody emu or kangaroo. No, I’d pretty well eat anything. You know, a lot of friends I’ve got just wouldn’t eat kangaroo or emu just on principal. The bloody national anthem, national icon... what’s her name, emblem. You know, why would you eat them? I think it’s wrong. Americans wouldn’t saddle up to a bloody a big golden eagle would they?*

*Interview (23/11/2009)*

Alan, who is a 62 year old married retiree from Balgownie, strongly connects the kangaroo with being a white Australian. He concludes that it would be unpatriotic to eat any of the national icons or emblems of Australia. Alan compares dining on kangaroo as equivalent to eating the national icon of any nation, giving the example of the United States of America and the Bald Eagle. Clearly, Alan understands consuming kangaroo as very controversial. Alan’s comments reflect that the kangaroo’s iconic status in representing the collective ‘we’ of the Commonwealth of Australia is the main reason behind his apprehension and branding of the meat as taboo. His response presents a positive perception of the kangaroo, but one that evokes strong emotions against the consumption of kangaroo meat at home.

Similarly, Sam, a 46 year old student from Bellambi noted the strangeness when confronted with the idea of eating a national symbol:

Sam - *I don’t know, there is something sort of strangely weird about eating your national symbol isn’t there?*

*(Interview 19/11/09)*
Again, how national symbolism of the collective body of nation works against some people eating kangaroo meat is raised by Elise, a 47 year old self-employed mother from Bellambi. She reflects on the ways in which national symbolism operates against her having kangaroo as part of her weekly meal plans:

Elise - *I don’t know why there’s something about...I think they’re [kangaroos] so cute and it’s like eating the national emblem, which is absolutely bloody ridiculous, cause if our national emblem is a cow then I wouldn’t eat cow would I? How stupid’s that! Um, I dunno I think it’s something that everybody’s gotta get over, I mean if that [kangaroo] was the only meat that I had to choose from then I would definitely buy it all the time.*

(Interview 19/11/2009)

However, as noted by Craw (2008) the kangaroo is an animal that provides a focus of national belongingness that can work both ways for the kangaroo meat industry. Rather than the flesh of imagined community (and therefore taboo), the marking or commodification by the kangaroo industry or celebrity cooks of kangaroo as a ‘national food’, ‘native food’, ‘indigenous food’ or ‘sustainable food’ can often work to invite people to taste the meat. These positive and negative connotations attached to the kangaroo can work both ways for kangaroo consumption and avoidance and are summarised in Table 5.3 and Table 5.4.

Kangaroo meat as a ‘national dish’ requires working against conventional version of Australian nation foods configured out of myths of bushman: billy tea, damper and roast lamb. For example Elise has purchased and cooked kangaroo for her family but still held reservations about eating it regularly every week. In the context of an ‘international night’, Elise describes introducing her work-friends to kangaroo meat:

Elise - *...we decided to have an international night here... Well I decided to do, I put my hands up and I’ll do the Aussie thing. So I told everyone that they were having lamb for dinner. ...well I thought no, I’m gonna do kangaroo... And then someone said: ‘Oh this is really nice.’ And Alistair and I knew what it was so we kept going [imitates Skippy’s voice] to each other. And they said: ‘What’s the go?’...and one friend sort of must’ve cottoned on, they said: ‘What are we actually*
eating?’ And I said: ‘You’re having kangaroo!’ Now if I hadn’t of done the [imitates Skippy’s voice] Skippy impersonation I would guarantee that not one of them would have picked that.

(Interview 19/11/2009)

In the context of a special occasion, an international night, Elise decided to cook kangaroo under the disguise of what she believes is widely considered a more conventional Australian meat: roast lamb. Despite her enthusiasm for kangaroo meat, she does not tell her guests they are coming to dine on kangaroo. Equally, she doesn’t say anything until she is complimented on the meal. Only then does she reveal the type of meat by drawing on the sounds made famous by a kangaroo in a 1960s television series - Skippy the Bush Kangaroo (for further discussion of the kangaroo as Skippy see Chapter 6). For Elise, the preparation and consumption of kangaroo meat in the home on a special occasion can inculcate a sense of nationality. Kangaroo meat becomes a commodity to be consumed that is widely understood to represent the nation. Yet as suggested by Elise, there are still ongoing anxieties around eating kangaroo meat and national identity. She is unable to tell her work-friends outright what they are eating.

Similarly, kangaroo was constituted as a food item by nationalist narratives when constituted as ‘bush tucker’ at a fete. For example Carol (35, homemaker Warilla) spoke about first trying kangaroo when portrayed as a native food:

Carol – At a bush tucker thing once when we were at a fete, they had all these meats and we tasted it and everything...and I thought hmm and I tried it and yeah it was tough I thought a little bit but/

Steve – No they had um, crocodile, emu, kangaroo

Carol – Yeah that’s what we had.

Focus Group (5/11/2009)

In the context of a fete, kangaroo together with crocodile and emu can be consumed as ‘bush tucker’. Like Carol, Ron, a 36 year old accountant also from Balgownie spoke of his first time trying kangaroo meat during a holiday to the North Territory:
Ron - Yeah, I tried it once, only in the Northern Territory and I found it a little bit tough. I didn't find it overly - incredibly tasty or anything. It was just more the fact that it was kangaroo meat that made it more exotic, but I didn't find it - I enjoyed it less than - you know more the meat that I just get at the local butcher shop.

Interview (27/11/2009)

Ron describes kangaroo meat as being exotic. What made it possible to eat kangaroo was a reason for him to try the meat is through the differentiation of the Australian nation through the kangaroo – he selected kangaroo meat from an Australian-themed menu at a restaurant in the Northern Territory. However, evident in Ron’s response is how he differentiates kangaroo as an exotic meat that he would not normally purchase at his local butcher shop and prepare to eat in his home.

Another aspect of kangaroo meat is its perceived ‘otherness’. As illustrated in Table 5.2, ten participants spoke of kangaroo meat as being ‘special’ and ‘different’. For example Rosina, a single 36 year old from Balgownie working in marketing, explained how she made sense of kangaroo meat as a food choice:

Rosina - But yeah it’s an exquisite sort of market, they’re trying to aim it at...I get the sense from that from marketing perspective that they’re trying to aim it for more exquisite people that are willing to try something completely different.

Interview (22/11/09)

As a speciality food, kangaroo is eaten in restaurants and prepared in the home for guests, rather than part of the weekly repertoire of means. For example James, 36 from Balgownie explains how he constitutes kangaroo a speciality food, prepared in restaurants:

Interviewer - So under what kind of circumstances could you imagine yourself eating kangaroo?

James - Well the times that I have eaten it have been at restaurants...if I ate it at home, then it would probably be with someone else....um, it wouldn’t be something
that I would just cook for myself...so in that sense, it would be something specialist
I guess...on a Saturday or a Sunday night.

James had only eaten kangaroo in restaurants and describes the meat as ‘something specialist’. James reserves eating kangaroo for special occasions, times and people. Similarly Frances, a 55 year old ex-cook had not considered cooking kangaroo in the home:

Interviewer - So if you were to eat it (kangaroo), would you envisage yourself eating it with friends or family or would it be by yourself?

Frances - More so probably at a restaurant, not cooking it at home, no.

Like James and Frances, many participants spoke of eating kangaroo as a form of restaurant dining (see Table 5.3). Eleven participants had either seen or tried kangaroo on the menu of restaurants, and for many this setting was their first experience with kangaroo as a food item. Indeed, as shown in Table 5.4, seven participants indicated they would not know how to cook kangaroo:

Interviewer - ...would you be aware of how to cook it (kangaroo) or different recipes?

Rosina - I wouldn't know how to cook it (kangaroo) yeah, that's it...let someone else, the experts try it. Yeah.

Rosina, for example, preferred kangaroo cooked by professionals. Others were also worried about the meat being too tough when cooked at home. These results resonate strongly with past studies on kangaroo meat consumption by the Rural Industries Research and Development Council. According to this Council, 66% of kangaroo meat is eaten in restaurants, with 50% of kangaroo consumers eating the meat only in restaurants (Purtell, 1997).
5.3 Eating Kangaroo and Discourses of Domestication and Pest

Domestication, and the apparent lack of domestication of the kangaroo, operated against the possibilities of kangaroo ever becoming dinner. Clutton Brock (1989) argues that only an animal that has been bred in captivity for successive generations can be considered to be domesticated. Traditional livestock such as sheep and cattle then constitute what edible farm animals should look like because they have been domesticated for thousands of years by human civilisation, with sheep goats and pigs in fact the first animals to be included with simple plant domestication (Sauer, 1952). Anderson (1997:465) describes domestication as a ‘complex cultural practice.’ She defines domestication as a culturally defined process whereby ‘nature’s wildness’ is tamed, nurtured, and exploited to fit the needs and norms of the society (1997:3). Such understanding of the necessity for domestication for animal meat to become fit for human consumption is present amongst certain participants. For instance, Frances, a 55 year-old part-time receptionist from Port Kembla explores these ideas of domestication when discussing kangaroo meat:

Frances - I just look at the animal and I think it would do less environmental damage to eat kangaroo if cows were taken away, sheep were taken away, except for the wool. I always endorse wool growing, but when it comes to kangaroo, I just think they’re a different genetic makeup to a cow and I know that you know, they domesticated cows a long, long time ago and I wasn’t there when they were trying to domesticate them, so I don’t know the hassle, but to me it’s got four legs and it looks like a farm animal and kangaroos don’t. And that’s my theory, I just put the theory you know there. It’s just a different species altogether and how they can control their pregnancies and all the things that they can do, like you know cows are just dumb cow. They’re not kind of emotional enough to think. Does that answer?

(Interview 19/11/2009)

Frances constitutes the kangaroo as an undomesticated animal, and therefore inedible to humans. She understands domestication as a process of dumbing-down animals. For Frances, the kangaroo does not fit into the grouping of farm animals because it does neither ‘look like a farm animal’ nor thinks like one and is a species of higher intelligence and emotions, with superior control over its body; whereas as cows are ‘just dumb cows’.
Frances allures to kangaroos being in control of their own bodies which is important when discussing ideas of domestication. Ingold (2006) argues that this control that ‘wild’ descendants of sheep and cattle once had, has been relinquished to humans under pastoralism (2006:16). Frances views this human control while as a limiting factor on a cow’s intelligence, where every decision is made for them by their farmers, including their eating habits and pregnancies; is important in differentiating between meats suitable for human consumption and those which are not.

Crucially, human control over the spatial movement of animals is central to understanding of domestication. Domesticated animals require a spatial order and restricted movement to exist, that is domesticated animals require to be either herded or regulated by fences in paddocks (see Ingold (2006). Interestingly, movement is one emergent theme in the interview transcripts that some participants deploy to separate kangaroos from domesticated animals. As shown in Table 3.1, kangaroos were described by six participants as hopping or jumping around. Hence, if kangaroos were ever to become dinner, some participants evoked the idea kangaroos would also have to come under the similar form of spatial regulation of their movement. For instance, Elise (47, Bellambi) states that for kangaroos to be consumed on a scale similar to livestock, the kangaroo industry would need to have:

Elise - huge paddocks with these...huge fences to keep kangaroos in
Interview (19/11/2009)

Like Frances, Krystal agrees that two-legged animals with tails are not what constitute her understanding of livestock or edible meat:

Krystal - Kangaroo no way. If the government said right, it’s illegal to touch any animals with four legs, we have to eat the animal with two legs and long tail I’d say fuck you mate. I’m growing my own food in the backyard [laughter]
Focus Group (18/11/2009)

Similarly Irene assumes that as a non-domesticated and therefore ‘wild’ animal, kangaroos are rendered inedible to humans because they are riddled with worms. Irene’s assumption was revealed in a Warilla focus group discussion over how to cook kangaroo:
Anita – So how did you cook that?
Interviewer – Yeah I just cooked it on the pan
Anita – Oh yeah? slow cook?
Interviewer – Oh no really quick.
Bill – No you’ve gotta cook it fast
Elizabeth – Really fast or really slow
Irene – But I thought with the meat, with the meat like that, with the worms and that, that’s why you’ve gotta cook it slow. With pork, I know with wild pork you gotta cook it really slow to kill the worms.
Elizabeth – There shouldn’t be any worms in it if it’s farmed.

Focus Group (5/11/2009)

This conversation also reflects back to debates concerning wild/farmed dualism. Irene understands wild animals to possibly be diseased and be infested with worms. Elizabeth then reaffirms this idea by stating that ‘farmed’ animals are not wild and therefore pest free.

Table 5.1 indicates that as a non-domesticated farm animal, more than half of the participants described the kangaroo as being a pest to farmers - by damaging fences and eating grasses and feed intended for livestock. This finding resonates with Grigg and Pople’s (1999) argument that the main reason the kangaroo industry was approved is ‘almost certainly because of the extent to which kangaroos are regarded as a pest; and their commercialisation has provided a self-funding pest control agent’ (1997: Ch.7:1). Constituted as a pest to agricultural production, culling could then be easily justified as a form of purification to help restore sustainable agricultural practices. Constituted as a pest to farmers, kangaroos can be legitimately shot, because they have no rights to be on this land. Further, fourteen participants justified the culling of kangaroos because of ideas of over-population. Shooting became justified as a mechanism for bringing kangaroo populations back into balance. For example Donna, a 33 year old mother of two from Warilla gave perhaps the clearest depiction of the kangaroo as a pest to be eradicated to facilitate sustainable agricultural practices:

Donna – But a lot of ‘em (kangaroos)...they are getting rid of ‘em like that (being shot), they are a pest.
Bridget – *Yes because they are a pest.*

Focus Group (5/11/2009)

Bridget, a 50 year old grandmother also from Warilla never questioned the view that kangaroos are shot. For her, killing is necessary because they are considered as pests to be ‘out of place’ on farms.

Similarly, Carol, a 47 year old mother from Warilla portrays the kangaroo as a pest. She compares them to cane toads to underscore how killing kangaroos is justified to restore the utility of farms in terms of an economically sustainable agriculture:

Carol - *You know my sister lives up in QLD and I said ‘why have you got a big...wood type thing that you go play golf with? She said: ” To whack the cane toads”. I went: ‘That’s cruel’. But no they’re over-ruling. And when you sit down and think about it, they (kangaroos) are wrecking peoples livelihoods, so yeah they’ve gotta...cull, do whatever.’*

Focus Group (5/11/2009)

This theme of kangaroos ‘wrecking’ or destroying property due to exceeding their population limits is repeated by Elise (47, Bellambi) She said:

Elise - *Um, they're [kangaroos] more destructive on the land than the cow is...have you seen what kangaroos are like in the wild? They're nuts, they just destroy everything.*

Interview (19/11/2009)

Countering arguments presented by biologists such Gordon Grigg and Tim Flannery, Elise represents the kangaroo as more detrimental to the land than cows. The understanding of kangaroo populations being ‘out-of-control’ in large numbers is again presented in this excerpt from a group discussion from a retired women’s quilting group in Thirroul:

Barbara - *When you see the damage they (kangaroos) do in the paddocks and the farms and that, we should probably try and cull them.*

Marina - *Yeah they should be culled.*
Barbara - *That's what they do in Canberra, I mean they cause road accidents and everything.*

Focus Group (2/12/09)

Barbara attributes the damage in paddocks and farms to kangaroos, not livestock. As a threat to agricultural production she points to a collective responsibility in restoring an order underpinned by European understandings of crops and farming practices. With the kangaroo considered as ‘the problem’, killing is again justified on the grounds of removing a threat to the productivity of the land and livelihood of the farmer. Again, Barbara lapses into the discourses that kangaroos are a threat to drivers. She constitutes roads as places for cars to move from A to B with least resistance, and therefore not a place for kangaroos. She never considers the role of drivers in accidents involving kangaroos, nor the idea that kangaroos may have some sort of right to exist in Canberra, regardless of streets and traffic flows. Shooting or culling kangaroos is thus justified along instrumental terms. As a pest control, culling operates as a solution to minimise what are understood as adverse risks to people and property.

When the kangaroo is constituted as a pest and culling as a form of pest control, this has important implications for understandings of what and who can eat kangaroo meat. For example, Rebecca, a 52 year old real estate agent from Balgownie draws on her family experiences to discuss ideas about kangaroos and kangaroo meat:

Rebecca - *He (uncle) used to shoot them for pet meat...and so he’d kill them, bring them in off the land. And there's only so many licences they give out and now his son does it, and that's what he does he makes a lot of money out of it. And so, they do it for pet meat only. And to cull them, because they're a menace to farmers... I can remember walking in when we were little to where they brought them all back, and they obviously butcher them then, and the smell of it [look of disgust] I'm sure it's not like that everywhere, but that's just what I remember, but I just couldn't eat them either because they are our national treasure and yeah. ... I just...ah I just couldn't [look of disgust]...the smell in my nostrils (jaunty).*

Interview (17/11/2009)
Rebecca, who grew up in Broken Hill, is aware of the licensing system for the so-called ‘kangaroo harvest’ and understands that her uncle only uses the meat to sell to pet food suppliers. She more generally portrays kangaroos as pests that are culled because they pose a menace to farmers. Most importantly, with culling understood as a form of pest control, Rebecca constitutes kangaroo meat as pet food. Here, kangaroos are a threat, not the European agricultural practices. Moreover, they are a challenge to European farming practices rather than threatened by agricultural practices. Consequently, they are not a food but interfere with agriculture.

**Kangaroo meat as a human foodstuff**

**Table 5.2** Results of content and discourse analysis illustrating ideas facilitating kangaroo meat to become understood as edible.

<table>
<thead>
<tr>
<th>Ideas about kangaroos that facilitate the meat becoming understood as edible</th>
<th>Interviewees mentioning particular idea (Listed by interviewee number)</th>
<th>Total Number of Interviewees mentioning particular idea</th>
<th>Analytical theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Indigenous/aboriginal meat</td>
<td>20(2), 21</td>
<td>3</td>
<td>Survival/ Bush resource</td>
</tr>
<tr>
<td>5.2 Bush food</td>
<td>21</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5.3 Survival food</td>
<td>21</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5.4 Industry product</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6.1 Better suited to land than livestock</td>
<td>3, 6, 11, 14, 15</td>
<td>5</td>
<td>Sustainability / Conservation</td>
</tr>
<tr>
<td>6.2 Can handle floods and droughts better</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6.3 Good for environment</td>
<td>13, 15, 17</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7.1 Kangaroo on its own in natural environment/bush</td>
<td>2, 11</td>
<td>2</td>
<td>Nature/culture binary</td>
</tr>
<tr>
<td>8.1 Produce less gases than cows</td>
<td>3, 21</td>
<td>2</td>
<td>Climate change science</td>
</tr>
<tr>
<td>8.2 Don’t emit methane</td>
<td>11, 21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8.3 Have different digestive process</td>
<td>11, 21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9.1 No shortage of kangaroos</td>
<td>7</td>
<td>1</td>
<td>Abundance Overpopulation</td>
</tr>
<tr>
<td>9.2 Overpopulated</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9.3 Prolific</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9.4 Need to be culled for population control</td>
<td>12, 16</td>
<td>2</td>
<td>Abundance &gt; Conservation</td>
</tr>
</tbody>
</table>
5.4 Eating kangaroo and discourses of environment and health

Figure 5.1: Example of current pack labelling of Macro meats kangaroo products as a healthy and environmentally friendly meat choice.

Source: Author

Kangaroo is understood amongst some participants through its commodity branding as a ‘healthy meat’. Kangaroo meat was dubbed by Gordon Grigg as “the read meat that’s good for you when you have been told to give up eating red meat”. Environmental scientists, nutritionists, celebrity cooks and the kangaroo meat industry have praised kangaroo meat for its lack of chemicals, hormones and diseases (Figure 5.1) Table 5.3 illustrates that nine participants mentioned kangaroo as either a ‘very healthy’ or ‘lean’ meat. Nine participants also described kangaroo meat as having ‘less fat’ or ‘cholesterol’ than other meats. These comments came from people who had tried kangaroo as well as those who had not. For example Chloe expressed the idea circulated by the kangaroo meat industry that kangaroo flesh is low in fat:

Chloe - Well yeah it's drier because it's not as fatty, because they're hopping around, so yeah they're not fatty meat, so it was quite dry, yeah.

Interview (24/11/2009)

Similarly, Yelena, who was born in Russia and immigrated to Australia, tells her experience of trying kangaroo for the second time after learning of the healthy attributes of kangaroo meat from the packaging:

Yelena - ...well the story is that when I came to Australia I thought I would have to try it, the kangaroo steak - especially because they sell it in the supermarket I
thought oh I'll have to try it. And then I cooked it at home and then I over-cooked it which is very easy thing to do and that sort of put me off on it and I sort of thought oh this is not a juicy meat, this is dry I don't like it, and I didn't buy it at all for about five years. And then probably six months ago I went in a supermarket in Coles again and I saw the advertising, on the packet itself it says how healthy it is, that it's got no...like minimal fat and it's got all this protein and nutritional values and everything and I thought oh that's great I'll try that and prior to that I actually saw a cooking show one day and they were making kangaroo steaks and they were talking about how important it is not to overcook it. And I've tried it at home and me and my husband just love it. It was really great. It's a scary dish to eat if you don't like meat and you feel really concerned about the blood and stuff, because when you cook kangaroo the blood is still coming out, that's what gets the flavour out of the meat and the juiciness in it, yeah...But it's great, yeah.

Interview (27/11/2009)

For Yelena, the promise of a healthy meat with high protein and nutritional values was enough for her to try the meat again after a disappointing first experience. Likewise, Michael, 34 from Bellambi, prepares and eats kangaroo meat about once a month in his home with his family, and explains the healthiness as one of the main reasons for purchase:

Michael - ...I don’t think it tastes that great. The reason I buy it sometimes is partly for variety and partly that I’m aware that it’s a healthier meat in that it’s got a low fat content and that it’s environmentally better because it doesn’t damage the ground as much as the introduced species.

Interview (23/11/2009)

For Michael, his consumption of kangaroo is strongly tied to environmentally friendly practices, especially considering he does not particularly enjoy the taste. Here Michael introduces another widely circulating discourse amongst participants: kangaroo as an environmentally sustainable meat. Table 5.2 illustrates how five participants tapped into environmental discourses that position kangaroos as being better suited to the land than introduced European livestock. Michael described kangaroos as ‘environmentally better’, particularly mentioning the damage to the ground caused by hard-hoofed livestock.
Interesting is Michael’s labelling of the livestock as ‘introduced species’, and inference of kangaroos as native.

Likewise, Martina, a 51 year old council worker from Balgownie has prepared and eaten kangaroo in her home a few times, and spoke about kangaroo as a ‘healthy meat’ and being better for the environment:

Interviewer: So when you mentioned how you’ve heard people telling you of how good it (kangaroo) is, what kind of things do you mean in terms of that?
Martina: Well in terms of good I’ve heard people say that it’s just a lean meat…it’s mainly around the health stuff…and the fact that it’s good for the environment, I mean, yeah. Cattle and sheep…they’re not for our Australian environment really. Kangaroo farms would probably be better for this land.

Such comments illustrate the increased awareness of the environmental impact of an agricultural system based on European species and farming practices. Preparing and eating kangaroo meat in suburban homes of Wollongong is embraced by some households as an environmentally friendly and healthy eating practice.

| Ideas about kangaroo meat          | Interviewees mentioning particular idea (Listed by interviewee number) | Total Number of Interviewees mentioning particular idea | Analytical theme (+ represents positive neutral)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy/lean meat</td>
<td>1, 3, 4, 6, 7, 9, 11, 12, 15</td>
<td>9</td>
<td>Healthy (+)</td>
</tr>
<tr>
<td>Less/er fat/cholesterol</td>
<td>2, 3, 4, 6, 7, 9, 10, 11, 13, 20, 21</td>
<td>11</td>
<td>Health benefits (+)</td>
</tr>
<tr>
<td>Healthier than beef</td>
<td>1, 13, 20</td>
<td>3</td>
<td>Healthy (+)</td>
</tr>
<tr>
<td>Lots of protein, nutritional values</td>
<td>4, 9, 10</td>
<td>3</td>
<td>Nutrition (+)</td>
</tr>
<tr>
<td>Dark meat</td>
<td>7, 11, 19, 20, 21</td>
<td>5</td>
<td>Aesthetics (0)</td>
</tr>
<tr>
<td>Pros and cons/positive negatives</td>
<td>2, 14</td>
<td>2</td>
<td>(+-)</td>
</tr>
</tbody>
</table>

Table 5.3: Results of content and discourse analysis illustrating positive/neutral connotations attached to kangaroo meat.
<table>
<thead>
<tr>
<th>Description</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro kangaroo campaign needed</td>
<td>2</td>
<td>1</td>
<td>Advertising (0)</td>
</tr>
<tr>
<td>Variety available (mince, steaks, roasts, kangaroo jerky)</td>
<td>10, 15, 16, 20(2)</td>
<td>11</td>
<td>Access (+)</td>
</tr>
<tr>
<td>Jump steak</td>
<td>5</td>
<td>1</td>
<td>Unique (+)</td>
</tr>
<tr>
<td>Seen/tried on the menu of restaurants</td>
<td>1, 7, 8, 9, 10, 11, 12, 14, 15, 21(2)</td>
<td>11</td>
<td>Specialty/exotic appeal (+)</td>
</tr>
<tr>
<td>In gourmet restaurants</td>
<td>2, 10</td>
<td>2</td>
<td>Indulgence in something different (+)</td>
</tr>
<tr>
<td>More likely to eat in restaurant</td>
<td>2, 3, 7, 8, 11, 12</td>
<td>8</td>
<td>Specialty (+)</td>
</tr>
<tr>
<td>Novelty/specialty item in restaurant</td>
<td>8</td>
<td>1</td>
<td>Specialty (+)</td>
</tr>
<tr>
<td>Growth industry/ new market</td>
<td>2</td>
<td>1</td>
<td>Economics (+)</td>
</tr>
<tr>
<td>Something different</td>
<td>2, 20</td>
<td>2</td>
<td>Specialty/unique (+)</td>
</tr>
<tr>
<td>Exotic meat</td>
<td>8</td>
<td>1</td>
<td>Resource usage (+)</td>
</tr>
<tr>
<td>Alternative meat</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>New food/strange</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Something to branch out into/new sensation</td>
<td>12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Not a traditional meat</td>
<td>13</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Specialist meat</td>
<td>14</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Unusual food item</td>
<td>15</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Exquisite market</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>If it’s not harming anyone why not?/ if they’re being shot anyway</td>
<td>2, 4, 7, 16</td>
<td>4</td>
<td>Cooking variety (+)</td>
</tr>
<tr>
<td>If it’s good for you then why not?</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Aware of recipes</td>
<td>15</td>
<td>1</td>
<td>Cooking/recipes (0)</td>
</tr>
<tr>
<td>Important not to overcook</td>
<td>4, 10, 11, 14, 20(2), 21(2)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Love it, great</td>
<td>4</td>
<td>1</td>
<td>Taste/appeal (+)</td>
</tr>
<tr>
<td>Acceptable price cheap</td>
<td>4, 6</td>
<td>2</td>
<td>Cost (+)</td>
</tr>
<tr>
<td>Same price as any other meat</td>
<td>21</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education needed to increase consumption</td>
<td>4, 20(3), 21(2)</td>
<td>6</td>
<td>Education (0)</td>
</tr>
<tr>
<td>Advertising/marketing campaign to increase consumption</td>
<td>11, 19</td>
<td>2</td>
<td>Advertising (0)</td>
</tr>
<tr>
<td>Available in supermarkets/butchers</td>
<td>3, 4, 5, 6, 11, 14, 19, 20(4), 21(4)</td>
<td>15</td>
<td>Availability, convenience. Awareness (+)</td>
</tr>
<tr>
<td>Wouldn’t know it was kangaroo if someone didn’t tell me</td>
<td>8</td>
<td>1</td>
<td>Taste (0)</td>
</tr>
<tr>
<td>Tastes like any other piece of meat</td>
<td>8</td>
<td>1</td>
<td>Taste (0)</td>
</tr>
<tr>
<td>Ideas about kangaroo meat</td>
<td>Interviewees mentioning particular idea (Listed by participant ID)</td>
<td>Total Number of Participants mentioning particular idea</td>
<td>Analytical theme</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Used to be poor person’s food</td>
<td>10</td>
<td>1</td>
<td>Status (-)</td>
</tr>
<tr>
<td>Don’t like the smell</td>
<td>1, 2, 16, 18, 21</td>
<td>5</td>
<td>smell (-)</td>
</tr>
<tr>
<td>Don’t like the taste</td>
<td>6, 18, 19</td>
<td>3</td>
<td>taste (-)</td>
</tr>
<tr>
<td>Tough texture/dry</td>
<td>8, 19, 20(2), 21</td>
<td>5</td>
<td>Taste (-)</td>
</tr>
<tr>
<td>Tough meat</td>
<td>11</td>
<td>1</td>
<td>Taste (-)</td>
</tr>
<tr>
<td>Rich/ Stronger flavour</td>
<td>10, 13</td>
<td>2</td>
<td>Taste (-)</td>
</tr>
<tr>
<td>Used for pet food</td>
<td>1, 21</td>
<td>2</td>
<td>Lower standard (-)</td>
</tr>
<tr>
<td>Used to be poor person’s food</td>
<td>10</td>
<td>1</td>
<td>Status (-)</td>
</tr>
<tr>
<td>Enough meat choice already without eating kangaroos</td>
<td>2</td>
<td>1</td>
<td>Choice (-)</td>
</tr>
<tr>
<td>Would not know how to cook it</td>
<td>2, 5, 7, 8, 9, 17, 19</td>
<td>7</td>
<td>Cooking (-)</td>
</tr>
<tr>
<td>Some people would be disgusted by it</td>
<td>2, 11</td>
<td>1</td>
<td>Disgust (-)</td>
</tr>
<tr>
<td>Some would say it’s un-Australian</td>
<td></td>
<td>3</td>
<td>Culturally un-acceptable (-)</td>
</tr>
<tr>
<td>More likely to eat at home in private</td>
<td>3, 4, 5, 13, 15, 21(4)</td>
<td>9</td>
<td>Culturally unacceptable (-)</td>
</tr>
<tr>
<td>Not an attractive meat, bloody</td>
<td>4, 21(2)</td>
<td>3</td>
<td>Aesthetics (-)</td>
</tr>
<tr>
<td>Limited availability/ not aware in supermarkets</td>
<td>8, 12, 13</td>
<td>3</td>
<td>Availability (-)</td>
</tr>
<tr>
<td>More preservatives than other meat</td>
<td>5</td>
<td>1</td>
<td>Unhealthy (-)</td>
</tr>
<tr>
<td>Some people will be worried by different processing methods</td>
<td>6</td>
<td>1</td>
<td>Farming/Processing (-)</td>
</tr>
<tr>
<td>Not interested in eating it</td>
<td>7</td>
<td>1</td>
<td>No interest (-)</td>
</tr>
<tr>
<td>Don’t come across it at all</td>
<td>8, 16</td>
<td>1</td>
<td>Awareness (-)</td>
</tr>
<tr>
<td>Don’t take notice of it</td>
<td></td>
<td>1</td>
<td>Awareness (-)</td>
</tr>
<tr>
<td>Might have disease</td>
<td>7</td>
<td>1</td>
<td>Concern over safety of meat (-)</td>
</tr>
<tr>
<td>Would need to be in forced situation to eat it</td>
<td>1, 20, 21(2)</td>
<td>4</td>
<td>(-)</td>
</tr>
</tbody>
</table>
5.5 Conclusion

This chapter shows that kangaroo meat is constituted at the intersection of various discourses of nationalism, domestication, and environment. How these sets of ideas intersect results in kangaroos being simultaneously constituted as a pest, threat to agricultural systems, national icon, exotic, different, specialty meat, healthy alternative and environmentally-friendly food stuff. These varying discourses intersect and work to construct the kangaroo meat as something to be enjoyed and embraced by some, yet, for others, as too challenging to consume as food. The next results chapter continues to explore the contradictory ways in which the kangaroo is constituted as food. Rather than examining what people think about the kangaroo and kangaroo meat, attention turns to how embodied experience are important in differentiating kangaroo meat as either edible or inedible.
Chapter 6

Visceral Experiences of and Invitation to Eat Kangaroo Meat

6.1 Introduction

This chapter presents results building on Longhurst et. al.’s (2008) ideas that embodied subjectivities have been left out of geographical research. Like Probyn’s (2000) *Carnal Appetites*, and Hayes-Conroy and Hayes-Conroy (2008) article ‘Taking back taste’ in *Gender, Place and Culture* I am interested in how the visceral experiences of food can shape, and are shaped by, a range of socio-political relationships. Hence, the design of this project allowed the exploration of not only the diversity of ideas about what participants’ think about kangaroos and kangaroo meat, but also to explore ‘culturally embodied differences’ of eating kangaroo in the home in the context of climate change. As outlined in the discussion of the methodology, exploring participants’ visceral experiences of kangaroo – the tastes, textures and aromas - was facilitated through the design of the project focusing on food and eating in both a metaphoric and real sense. In this project the participants’ bodies were used as instruments of research. All participants were invited to eat kangaroo as part of the study. Focusing on the embodied responses to eating kangaroo was to enable a deeper insight to what it means to embody the range of socio-political relationships surrounding eating kangaroo in the home. The aim of this chapter is to explore the visceral experiences (tastes, textures and aromas), as well as the gestures and glances that often go unnoticed in geographical research that have the potential to enrich understanding of how the act of consuming kangaroo meat is positioned in households. More specifically, this chapter explores what these embodied responses suggest about the relationship between eating kangaroo in suburban Wollongong homes and the ways in which eating kangaroo storied and imagined as an ethical alternative to beef and lamb.
6.2 Eating kangaroo: a content analysis of participants’ visceral experiences

Participants were invited to taste marinated and roasted kangaroo during the interviews and focus groups as an opportunity to evoke visceral experiences. The kangaroo tasting was also an opportunity to eat kangaroo for the anticipated large number of participants who may have never consumed kangaroo. Building on the ideas of Probyn (2000), eating kangaroo was one way to literary bring the socio-political relationships surrounding kangaroo to life through the visceral understanding of different geographies of the body and food. As Probyn explains, eating “brings our senses to life, it also forefronts the viscerality of life … the question of how to live today can be best seen at a ‘gut’ level” (2000: 7). The next sections explore how the visceral realms of eating kangaroo meat has the potential to provide insights to how people are either mobilised or inhibited from eating kangaroo at home in a context of climate change.

Table 6.1, and Figure 6.2, provide background to participants’ consumption record of kangaroo. Exactly half of the participants (19) had never tasted kangaroo. Of those who had eaten kangaroo before, the majority had tried the meat only once; and a handful had only tasted kangaroo a few times on special occasions in restaurants. Only two participants stated they consumed the meat regularly (weekly and monthly) at home. Again, these results are similar to recent studies by the Rural Industries Research and Development Corporation. The 2008 report Consumer Attitudes to Kangaroo Meat Products found 58% of those surveyed had tried kangaroo meat, with the majority of these consuming the meat once or a few times and rarely at home (Ampt & Owen, 2008).

Participants were asked to fill out a table of the main dishes prepared on an average week and the main component of that dish i.e. chicken or fish. A content analysis of the ‘meat/veg’ column of all completed meal plans (Figure 6.2) reveals kangaroo as not consumed as a regular meal in households in the Illawarra. The overwhelming favourite meat choice was chicken, followed by beef and fish. Lamb, ‘steak’, ‘mince’ and pork also rated highly.
These results mirror the unpublished findings from the UOW’s School of Earth and Environmental Sciences’ *Tough Times? Green Times? A Survey of the issues important to households in the Illawarra*. The survey contained specific questions on weekly meat consumption and reasons for consuming kangaroo meat. The section *Putting Food in the Shopping Trolley* asked respondents the main types of meat consumed in their household in an average week (including a kangaroo option) with almost the same percentage breakdowns for favourites of chicken, beef, and fish. Kangaroo was found to be consumed in 8% of households in an average week, a surprisingly high figure. For those households consuming kangaroo, the most common reasons for its choice were, in order of importance: low in fat, taste, cost, heart benefits, environmental reasons, organic.

Only 11 out of the total 29 participants took up the invitation to taste kangaroo during the interviews. For three of these participants (5, 7, and 12) it was their first time eating kangaroo. A content analysis of participants’ description of their visceral experiences communicated during kangaroo tastings are listed in Tables 6.2 and 6.3 below. These Tables provide a content analysis of the ways-of-being in the discursive and material environment that emerged from engaging kangaroo meat through taste, textures and aromas. As Hayes-Conroy and Hayes-Conroy (2008: 465) explain the visceral provides opportunities to explore “Memory, perception, cognitive thinking, historical experiences, and other material relations and immaterial forces … intersect with individuals’ sensory grasp of the world.”
Table 6.1: Number of times kangaroo meat consumed by participants (* denotes participants who tried kangaroo for first time during interview)

<table>
<thead>
<tr>
<th>Participant/Focus Group ID</th>
<th>Never Eaten Kangaroo</th>
<th>Tried it once</th>
<th>Tried few times on special occasions</th>
<th>Regularly eaten at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>x</td>
<td></td>
<td>X (weekly)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>X (monthly)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As illustrated in Table 6.2, around half of the respondents commented that kangaroo tasted ‘nice’ or ‘beautiful’. Interestingly, some participants who had such positive reactions to the meat also made connections to the health and environmental benefits of the meat (see Table 5.2 and responses in Chapter 5) For example Elise (47 with own business in Bellambi) found the meat to taste ‘beautiful’, but also commented:

Elise - *I know it's really low in fat and high in protein and I probably should eat it and I don't know why there's something about it...*

Interview (19/11/2009)

Similarly, Sam (46, student, Bellambi) thought the meat ‘tasted nice’ and commented:

Sam - *Yeah and I think I should buy that and I never do you know... yeah to be honest I think there is a lot to be said for eating our native fauna because obviously kangaroo live much more lightly in our environment and are much more suited to it compared to hard hooves of beefs and that.*

Interview (19/11/2009)

Still, for these participants there are undoubtedly other issues to be explored that influence their decisions to not consume kangaroo meat as a weekly meal choice. Two
participants made comparisons to beef or lamb. Of interest here is that those respondents who expressed that kangaroo tasted like beef or lamb then spoke about eating the kangaroo as a more enjoyable experience. Yet, it is important to remain mindful that these responses may tell us more about the subjectivities constituted by the researcher-participant relationships. Participants’ stomachs may have been churning, but they did not wish to appear rude, spitting out the meat.

As illustrated in Table 6.3, five participants evoked visceral experiences that suggested their sense of eating kangaroo was experiences as negatively different in their mouths: the meat was described as a ‘little tough’, ‘chewy’ or ‘dry’. Another described the flavour as ‘lingering’. Rather than drawing comparisons with familiar meat tastes, these participants spoke of kangaroo meat as being negatively ‘different’. As Probyn (2000) suggests, the visceral offer a starting point to begin unravelling ideas about difference. Working through these bodily sensations of chewing, tasting and aroma there is a sense that kangaroo does not belong in these participants’ mouths.

Table 6.2: Participants’ positive visceral experiences of eating kangaroo

<table>
<thead>
<tr>
<th>Positive visceral experiences of eating kangaroo</th>
<th>Interviewee No.</th>
<th>Total Number of Interviewees providing description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tender cut</td>
<td>12, 13, 20</td>
<td>1</td>
</tr>
<tr>
<td>Nice texture</td>
<td>12, 20</td>
<td>2</td>
</tr>
<tr>
<td>Great looking meat</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Tastes nice/Tasty</td>
<td>3, 4, 5, 7, 11, 13, 20</td>
<td>7</td>
</tr>
<tr>
<td>Tastes beautiful</td>
<td>10, 20</td>
<td>2</td>
</tr>
<tr>
<td>Tastes like a cross-between lamb and beef</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Tastes similar to cow</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Doesn’t overwhelm</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>What I remember</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Has flavour</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 6.3: Participants’ negative visceral experiences of eating kangaroo

<table>
<thead>
<tr>
<th>Negative visceral experiences of eating kangaroo</th>
<th>Interviewee No.</th>
<th>Total Number of Interviewees mentioning providing description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs chewing more</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>A bit chewy</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>A bit tough</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>A bit dry</td>
<td>2, 3</td>
<td>2</td>
</tr>
<tr>
<td>A bit dry</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Not bad</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Tastes nicer at the beginning than at the end</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Strong taste, lingering taste</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Marinade kills the flavour</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Can taste herbs</td>
<td>2, 5</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 6.4: Ideas evoked by participants while eating kangaroo (positive and negative)

<table>
<thead>
<tr>
<th>Ideas evoked while eating kangaroo</th>
<th>Interviewee No.</th>
<th>Total Number of Interviewees mentioning idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can tell it’s different</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Wouldn’t know it was kangaroo meat</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Probably should buy/eat it</td>
<td>10, 11</td>
<td>2</td>
</tr>
<tr>
<td>Different to what I thought it would taste like</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

However as discussed in Chapter 5, the idea of ‘difference’ discussed by participants can work both ways for the kangaroo meat. These ideas are summarised in Table 6.4, with one participant commenting that it was ‘different to what I thought it would taste like’; indicating that the ‘different’ taste was better than expected. Conversely, one participant contradicted these ideas of ‘difference’ stating that he wouldn’t have known what he was eating was kangaroo meat.
6.3 Disgust and abjection at eating kangaroo at home

The 18 participants who refused to eat kangaroo meat during the semi-structured interviews and focus groups often evoked the strongest visceral responses just at the sight and smell of the meat. These participants’ visceral responses to the sight and smell of cooked kangaroo were most notably disgust and abjection. Disgust is defined by Angyal (1941) as an ‘avoidance reaction directed mainly against oral incorporation’ (1941:6). Following Haynes-Conroy and Hayes Conroy (20008: 469) argument that visceral experiences can be thought of as a bodily-way-of-judging, then disgust is an embodied response that can reconstitute boundaries between foodstuffs and non-foodstuffs. The disgust is targeted against an object that is deemed to be dangerous, offensive and unacceptable to be close to, touched or consumed. Also important to note is Angyal’s assertion that the symbolic (experiential) aspect of the reaction of disgust consists of some form of an ‘emotional recoil’ from an object (Angyal, 1941: 6). Angyal (1941) also argued that the strongest disgust reactions are drawn out during eating. This again justifies the rationale of sampling kangaroo meat during interviews and focus groups to gain in-the-moment embodied responses. When participants evoked the emotion of disgust, at a gut level they underscored that kangaroo had no place on the weekly dinner plate in their homes.

For example, Donna’s (33, mother of two from Warilla) body language and words conveyed her disgust at the sight of the cooked kangaroo meat. The following notes from the research diary document Donna’s body language, facial expressions and language used during the focus group to discuss kangaroo:

Donna frequently used the word ‘no’ and ‘yuck’, and was very loud and vocal against kangaroo meat. Her body language also communicated her discomfort in eating kangaroo meat. When I brought out the prepared kangaroo meat for the focus group to try, Donna responded: Aarrrrrrghhh! Is it cooked or raw? Screwing up her face, she had a look of disgust written over her face. She also crossed her arms and lent back away from the table and the other participants at some stages. Very negative body language.

Research diary notes
(5/11/2009)
Like many respondents, Donna could not find the words to express her discomfort at the thought of eating kangaroo. Instead, she communicated her disgust through her facial expressions. Rozin, Lowery & Ebert (1994) have demonstrated how the emotion of disgust is communicated through facial body language. They refer to particular facial expressions as comprising a “disgust face”: raising of the upper lip, the gape of the mouth and the nose wrinkle (See Table 6.5 below) (Facial Action Coding System: Ekman & Freisan, 1978). Other participant’s gestures included pressing of the lips and shaking of the head. These types of gestures were most observable during focus groups where one person was speaking and others in the group would begin to shake their head slightly or shift their position from what they were doing. The ‘classic disgust’ face also became a visual cue for me to ask the group if anyone had a different opinion or experience.

Like Donna, Harriet (65, retiree from Thirroul) also communicated her emotions of disgust through her facial expressions and body language during a focus group of retired quilters in Thirroul Community Centre:

Harriet was very talkative throughout the beginning of the interview but as soon as I started to ask the kangaroo questions she went really quiet and screwed up her face with a frown and a look of disgust. It was pretty obvious she didn’t like when others mentioned the nice taste of kangaroo, and her body language became more noticeable when others in the group would discuss eating kangaroo, she would raise her eye-brows, moving her eyes and then continue sewing.

Research Diary Notes (2/12/2009)

Like Donna, Harriet chooses not to articulate in words how she feels about consuming kangaroo. However her disgust at the idea is plainly evident through her facial expressions and body language. Only much later in the group discussion does Harriet verbally express her abjection towards kangaroo meat with: “Oh no sorry I just couldn't (eat kangaroo)”. Harriet cannot bring herself to even consider kangaroo as a meal she would sit down to at her home dining-table. Harriet’s embodied responses are evidence of her constituting kangaroo meat as a repulsive foodstuff rather than beneficial for her health, farmers, ecologies and the climate.
**Table 6.5:** Common facial expression descriptions and examples from the Facial Action Coding System, components of the ‘disgust face’.

<table>
<thead>
<tr>
<th>AU (Action Unit)</th>
<th>Description</th>
<th>Example image</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Nose Wrinkler</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Upper Lip Raiser</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Lips part</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Jaw Drop</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Images - Carnegie School of Computer Science (2010) (Table adapted from Ekman & Freisan 1978).

Similarly, Krystal (28, single parent, Berkeley) also expressed a ‘look of disgust’, raising her lips and crinkling her nose, when the focus group was invited to eat kangaroo. The following participant observation notes below describe the situation of speaking with Krystal during a Cooking, Conversation and Community Group meeting at Unanderra Community Hall:

*I managed to sit down and speak with two women: with Krystal and Therese. Therese was very quiet and tended to give yes or no answers and left for a section of the discussion, but Krystal opened up a lot and her face showed a lot of disgust at kangaroo meat. This was at just mentioning the kangaroo meat, so I didn’t bring the meat out to show her because she looked like she was physically going to be sick just speaking about it. She also indicated she would never try it again.*
She really screwed up her face with a look of disgust and put her hands over her mouth several times when speaking about kangaroo meat.

Research diary notes (18/11/2009)

To underscore her visceral unease of eating kangaroo Krystal said during the focus group:

I just can't stand the smell of it...It smells disgusting, it smells like rotten meat...no thank-you. It just makes me sick; it just reminds me of changing my son’s nappy...aah...I won’t touch it.

Focus Group (18/11/2009).

The combination of Krystal’s words and her facial expressions communicated that she truly viewed kangaroo meat as disgusting food item that she would never consider eating again; possibly bordering on abjection.

Two important points are raised by Krystal’s embodied knowledge. The first refers to Julia Kristeva’s (1982) understanding of the abject. This provides a helpful term particularly to explore Krystal’s embodied response to the kangaroo meat as making her ‘feel sick’. Her reaction suggests that kangaroo meat operates to break down the cultural meanings of what is constituted as food, and what is not. Following Kristeva’a theory, the distinction between kangaroo and ‘normal’ and tasty food items is lost when kangaroo is presented to Krystal as a foodstuff. Hence, for Krystal, cooked kangaroo breaks down the social rules of what is food and what becomes abject. Donovan (2007) lists other foods that, like kangaroo, can prompt feelings of abjection – including seaweed, insects, cow tongue, octopus, gizzards, sheep brains, pig trotters, chicken feet and chicken giblets. As discussed by Julia Kristeva (1982), one social significance of the abject is that it disrupts the borders between what is constituted as the accepted, ‘proper’ or ‘normal’ social body. Krystal’s abjection towards kangaroo meat highlights the artificiality of the boundaries between culture/nature, human/animal, civilised/primitive. For Krystal, in the homes of Wollongong, the ‘proper’ social body does not eat kangaroo meat.

The second point refers to Krystal’s reference to the kangaroo meat as making her sick and reminding her of nappies and rotten meat. These again illustrate how her revulsion to kangaroo meat can be understood as a boundary violation. Clearly, Krystal does not wish
to incorporate kangaroo meat as part of her body. Her socio-moral disgust at eating kangaroo would contaminate her body and is denoted by her reference to her child’s nappies. For Krystal, kangaroo meat sullies her understanding of food, and should therefore not be eaten. She is repulsed by how kangaroo meat contaminates her understanding of what foods she prepares and consumes in the home. As seen in Figure 6.3 below, the dishes which Krystal is comfortable with and prepares weekly include: steak and vegetables, spaghetti, pizza, fish and chips and baked dinners. The main meats Krystal uses in these dishes are listed as chicken, beef and pork – *never* kangaroo.

**Figure 6.3:** Normal Weekly Dinner Planner for Krystal’s household completed during focus group.

<table>
<thead>
<tr>
<th>DAY</th>
<th>DINNER/DISH</th>
<th>Type of Meat/Veg</th>
<th>COOK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>MACARONI AND CHEESE</td>
<td>PACKED WITH MILK AND WATER</td>
<td>BOTH</td>
</tr>
<tr>
<td>Tuesday</td>
<td>STEAK OR CHOPS WITH MIX VEGS</td>
<td>5 KIND OF VEGS</td>
<td>BOTH</td>
</tr>
<tr>
<td>Wednesday</td>
<td>SPAGHETTI WITH SALAD</td>
<td>MINES MIX SALAD</td>
<td>SCHERRI (MOTHER)</td>
</tr>
<tr>
<td>Thursday</td>
<td>PIZZA</td>
<td>CHEESE, HAM, TOMATOED PASTE, PEPPER HAM</td>
<td>JACK (SON 13)</td>
</tr>
<tr>
<td>Friday</td>
<td>FISH + CHIP WITH SALAD (1/2 DAYS ONLY)</td>
<td>FISH, LETTUCES, BEET CHEESE, EGG, TOM</td>
<td>SCHERRI (MOTHER)</td>
</tr>
<tr>
<td>Saturday</td>
<td>LAMB LOINS</td>
<td>POTATOES, PUMPKIN, GREENS, CARROTS</td>
<td>SCHERRI (MOTHER)</td>
</tr>
<tr>
<td>Sunday</td>
<td>BAKE DINNER</td>
<td>CHICKEN - LAMB, BEEF - SOUP, POT, ONION, CABBAGE</td>
<td>SCHERRI (MOTHER)</td>
</tr>
</tbody>
</table>

Following Elspeth Probyn (2000) the importance of acknowledging disgust in embodying the different socio-political discourses surrounding eating kangaroo is because of this emotion’s dual ability to unite individuals and to draw boundaries between human/non-human and social groups. In short, disgust is more than an emotion or feeling, it is also about relationships that help materialise and define choices of social relationships (in this case between the edible and inedible). As Goody (1982) argues, eating is “a way of placing oneself in relation to others” (1982: 37). For Krystal the visceral operates to
constitute kangaroo as inedible. Not surprisingly, Krystal bans preparing and consuming kangaroo meat from her home. As Rozin et. al. (2008) argues her response falls into the ‘core disgust’ of food rejection, but also inappropriateness: the rejection of food classified by one’s culture as not edible (Rozin & Fallon, 1987).

Disgust at eating kangaroo may have also been evoked through laughter when invited to eat kangaroo. Interestingly, Rozin (2008) argues that there is a delicate balance between disgust and laughter, where disgust can be amusing when the subject or situation is not personally threatening (2008: 769). Similarly, Hemenover & Schimmack (2007) argue for some individuals laughter can be recognised as an alternate response to the ‘disgust face’. Laughter was observed particularly during focus groups when some group members were tasting kangaroo meat:

Carol – *Mmmm that’s beautiful [tastes kangaroo]*

Donna– *Mmmmmm that’s beautiful! [imitates previous speaker]*

[laughter]

Focus Group (5/11/2009)

In this example Carol’s visceral response upon tasting kangaroo was imitated by Donna and followed by sustained laughter, smiling and looking to other members of the focus group. While it is difficult to attribute laughter to any one comment or action, this may have been an example of Donna poking fun or enjoying the act of Carol consuming what she considered a taboo or non-food item. The laughter may also be of a nervous kind, an automatic response to a situation a person finds awkward or uncomfortable. When comparing previous participant observation notes and responses from Donna during the focus group, it becomes evident she first showed disgust at the prospect of consuming kangaroo, which turned to laughter and amusement when one of her friends decided to taste the meat in front of her. This follows Hemenover & Schimmack’s (2007) idea that spectators are more likely to interpret a perceived ‘disgusting’ situation as funny rather than the chief protagonist. Donna’s response also adds support to a growing literature that suggests that emotions and feelings of opposite nature (e.g. disgust and amusement) may be experienced during one situation (Hemenover & Schimmack 2007; Schimmack, 2001).
Again, how laughter generated by the invitation to eat kangaroo may be interpreted as indicating this practice may trouble understandings of the edible and inedible, was evident during the focus group of retired quilters in Thirroul. Laughter was documented when kangaroo meat was initially offered to the group in the research diary notes:

*I told the group I had brought kangaroo and asked if anyone wanted to taste or smell the meat. There were several ‘no’s’ at once and also some laughter, from the two women sitting directly across from me. Wasn’t sure what they were laughing at, the whole group then declined to taste any meat.*

Research Diary Notes (2/12/2009)

Later analysis of the transcripts revealed that two group members, Marina and Harriet were laughing at the idea of consuming kangaroo meat. These were two group members who also exhibited the strongest bodily language conveying disgust towards consuming kangaroo. Again, this supports the idea that ‘disgust stimuli often elicit amusement’ (Rozin et. al, 2008: 770). Interestingly, after the pair finished laughing, Marina stated ‘I’ll smell it but I won’t taste it’. However, even this curiosity was withdrawn when there was a general decline from the group as a whole to taste the meat, with the conversation quickly moving forward. The next section explores how the visceral response of disgust at eating kangaroo meat is embedded within discourses which constitute the kangaroo as a national emblem and a ‘cute’ childhood friend to millions.

6.4 Cute, Disgust and Kangaroos as ‘Skippy’

The kangaroo’s status as a national emblem evoked the visceral response of disgust (see chapter 5). Yet, more commonly, disgust was evoked by respondents when the kangaroo was imagined within intersecting discourses of nationalism, physical attractiveness, and international television star, Skippy. For example, Elise (47, Bellambi) spoke of her discomfort at eating kangaroo drawing on the intersection of ideas of attractiveness and nationalism:

Elise - *...I think they're so cute and it's like eating the national emblem.*

(Interview 19/11/2009)
The emotionally affective ‘cute response’ was common throughout the interviews and is in part explained by how the kangaroo is constituted as physically attractive. As Elise suggests, the attractiveness of the kangaroo may be in part explained because of how it is framed as a national icon. Other factors that may influence people’s perception of kangaroos as attractive is their potential framing as an endangered species, their size, and resemblance to humans in taking care of offspring in terms of a prolonged juvenile dependency (see Gunnthorsdottir, 2001). However, in this study, the cute response was demonstrated by the casting of an eastern grey kangaroo as Skippy in the 1960s television series. Anthropomorphism of a kangaroo within the television series ‘Skippy the Bush Kangaroo’, in part, accounts for the cute response; that is the “attribution of human mental states (thoughts, feelings, motivations and beliefs) to nonhuman animals” (Serpell 2008: 83). While no respondents kept a kangaroo as a pet, most were familiar Skippy.

The ninety-one episode series told stories of how one eastern-grey kangaroo provided social support for a single child growing up in the fictional Waratah National Park. Indeed, many participants discussed the kangaroo in terms of this Australian television series created for children by John McCallum, and produced from 1966-68. Skippy was clearly not a domesticated animal that could be taught tricks. Instead, Skippy was portrayed as a ‘wild’ kangaroo and animal companion that was attributed a range of human intellectual qualities, including oral communication skills through clicking and the ability to unlatch doors, dial telephones and even play the piano. Such anthropomorphism allowed Skippy to function for the key character in the series, a young boy whose mother had died, as both a guardian and provider of nonhuman social support.

The series was one way to showcase the then recently established New South Wales National Parks and Wildlife Service government department, set up in 1967. Skippy was subsequently screened in over eight countries including Canada, the United States of America, the United Kingdom, Cuba, Mexico and then Czechoslovakia; with a peak television viewing audience of over 300 million viewers a week (Idato, 2009). Eventually, the program was to be embraced the world over, sold in 128 countries and translated into 25 languages (ABC TV, 2008). In 1969, at the height of Skippy’s popularity the marsupial even completed a live national tour, parading through Australian streetscapes on a back of a truck to hundreds of thousands of screaming fans. According to the Australian Broadcasting Corporation (2008) more people turned out to catch a
glimpse of Skippy than for the visits by the Queen Mother (1966) and U.S. President Lyndon Johnson (1967) combined.

In Australia, long after the television show finished, the anthropomorphism of the kangaroo as Skippy was perpetuated through tourism, film and songs. The set where the television show had been shot became a tourist attraction in northern Sydney at the Ku-ring-gai Chase National Park and the adjacent Waratah Park (closed in 2003, and reopened as the Waratah Park Earth Sanctuary). At the Waratah Park, visitors could meet, feed and be photographed with the alleged descents of the original Skippy. Skippy also became a part of Australian popular culture through a feature film, its soundtrack, countless parodies on comedy shows and extensive merchandise (see Figure 5.3). As Craw (2008:93) points out, ‘Skippy’, and more commonly ‘skip’, are terms deeply embedded in Australian popular cultures as identity categories. For some Anglo-Australians ‘skip’ may be used to proudly identify one’s self as an Anglo (white) Australian, where as non-Anglo-Australians may use the terms in a derogatory sense.

**Figure 6.4:** Examples of *Skippy* merchandise.

Source: Author
Hence, it is perhaps not surprising that for some, eating kangaroo meat was the equivalent to dining upon a hunk of this childhood friend to millions. In this case the effect of anthropomorphism is to assure kangaroo meat is taboo for human consumption. For some the thought of digesting Skippy evoked disgust; illustrating attempts to reconfigure normative understandings of the edible and inedible. For example Donna, a 34 year old mother from Warilla, illustrates how the discourses of nativeness and Skippy intersect to stop her consuming kangaroo:

Donna - *Yeah I don’t like eating our Australian animals...yeah I think it’s pretty disgusting...I don’t like the look...don’t like the thought of eating Skippy.*”

(Focus Group 5/11/2009)

The kangaroo industry generalised Donna’s response as the ‘Skippy Syndrome’ (Porter, 2006; Oliver, 2006), and suggests it has hindered kangaroo consumption for decades. For Donna, the ‘Skippy Syndrome’ works to constitute kangaroo as inedible. English (2008: 8) compares the Skippy Syndrome to that of the ‘Bambi Syndrome’ surrounding the consumption of deer in many Western countries. Like Skippy, Bambi: the young deer in the animated film produced by Walt Disney, transformed all young deer into a childhood friend. Again following Kristeva’s (1981) theory, for Donna and Krystal the kangaroo existed as a subject sitting comfortably within the symbolic order, as a protector and friend, exemplified through media such as Skippy: The Bush Kangaroo. Some forty years after Skippy the Bush Kangaroo was first aired on television; visceral responses to eating kangaroo still draw upon anthropomorphic discourses of how an eastern grey kangaroo befriended the child of a single parent and Head Ranger living in the Australian bush. The visceral response of disgust at the thought of eating a childhood friend continues to work against the preparation and consumption of kangaroo meat in Wollongong homes.

6.5 Conclusion

Visceral experiences are a novel way to examine the socio-spatial relationships in which understandings of food are constituted. In this research project, presenting participants with cooked kangaroo on a plate to eat during the interview or focus group was a way to explore what it means to eat kangaroo in Wollongong homes. Through paying attention to satisfying and gut wrenching visceral experiences of eating kangaroo, further insights
were provided into the role of tastes, smells and textures in triggering memories and discourses that help unravel how kangaroo is positioned as both edible for some and inedible for others. It became apparent during the tasting that the participants who were comfortable with eating kangaroo and had satisfying experiences connected them in visceral ways to discourses of the potential environmental and health benefits. However, these participants were the minority. Instead, the sense of sight, smell, taste and texture often evoked disgust. Sometimes this disgust was beyond words and expressed in bodily language (screwed up noses, curled lips). In other instances disgust was expressed through laughter, when others were involved in tasting kangaroo. Furthermore, disgust was elicited when people situated the kangaroo at the intersection of the discourses of nationalism, nativeness and attractiveness. For some, eating kangaroo was understood as abject; breaking down the meanings of what is food and what is not. For those who situate eating kangaroo as ‘abject’, rather than eating kangaroo as a form of ethical and environmental responsibility, it becomes a source of contamination of a person’s body and contrary to their embodied sense of themselves.
Chapter 7
Conclusion

To conclude, this chapter first revisits the aims of the thesis, with an evaluation of how well they were achieved. The chapter also outlines the policy implications of advocating carbon migration and adaptation policies framed in terms of eating kangaroo and finishes by setting future research agendas for geography.

7.1 The theoretical aim

The theoretical aim of this thesis was to apply Elspeth Probyn’s (2003) concept of the spatial imperative of subjectivity to eating kangaroo in the home. Chapter 2 outlined how the conceptual framework of the spatial imperative of subjectivity provided a helpful conceptual lens for interpreting the preparation and consumption of kangaroo in the home because it highlighted normative assumption about a socially responsible/acceptable body. The performatve framework enabled identification of how those resistant to eating kangaroo constituted the meat as contaminating the body, and rendered unstable the division between the edible and inedible (abject responses). Physical and verbal expressions of disgust were mechanisms deployed by respondents to re-establish the boundary between the edible and inedible, creating strong connections and disconnections with eating kangaroo. Finally, Elspeth Probyn’s conceptualisation of the spatial imperative of subjectivity enabled interpretation of the discursive and visceral responses to eating kangaroo in the home. Thinking spatially enabled helpful insights into how taste is not only produced and reproduced chemically, but also culturally. Participants were often less resistant to eating kangaroo outside of their home, in restaurants or on vacation.

7.2 Food culture methodologies – a reflection

The methodological aim of this thesis was to establish rigour by critically reflecting on the techniques used to conduct research on eating kangaroo. Through the critical reflection explored in Chapter 3 (positionality statements, reflexive research diary), the research was found to impact on the researcher, just as much as the researcher shaped the
project. Rigour was also achieved through deploying a range of mixed-method approaches, including conventional and non-convention tools. Conventional qualitative tools included semi-structured interviews, transcription, open and closed questions with focus groups in community centres and one-on-one interviews held primarily in participants’ homes. To further capture the most rich and meaningful responses from participants, a non-conventional method was introduced with the tasting of kangaroo. Here, the idea was to use participants’ bodies as a research tool to document visceral (embodied) in-the-moment responses towards kangaroo consumption. The results of this project were enhanced by the presence of cooked kangaroo meat at each focus group and interview, even if respondents declined the invitation to eat. The method demonstrated how participants’ bodies can be successfully incorporated into the research design, enhance rigor and add to critical reflexivity by interacting and engaging with participants to a greater extent. Equally, discourse analysis was used to great success in identifying discourses pertaining to kangaroos, climate change and food cultures. To conclude, rigour was further enhanced in this project through the combination of a number of techniques which included the careful consideration of ethics in the research design, purposeful sampling of participants and triangulation of methods.

7.3 The analytical aim: interpreting eating kangaroo in the home

Thinking spatially about eating kangaroo in the home, the analytical aim of this thesis is to better understand the process by which people decided whether or not to eat kangaroo in a context of climate change. The results chapters provided empirical insights from the responses to the semi-structured interviews and focus groups to understanding of climate change and the role of the meat industry in producing greenhouse gasses (Chapter 4), what people think about eating kangaroo (Chapter 5) and the visceral responses associated with eating kangaroo in the home (Chapter 6).

Chapter 4 explored how climate change was constituted by participants. Results suggested that participants framed climate change in terms of an intersection of catastrophe, religion, science, economics and politics; which left people feeling committed, confused or sceptical of climate change. Despite strong expressed commitment to change behaviours and an active interest in the process, generally most participants did not connect food, and more specifically: the meat industry to high
greenhouse gas emissions. Instead, most participants expressed their enthusiasms to reduce water and energy consumption in their household, whereas altering the food they consume or reducing their red meat intake was not a priority, or even contemplated by most.

The key findings in Chapter 5 draw attention to what people think about kangaroos and kangaroo meat within the food cultures of Wollongong. Participants were found to discuss kangaroo in terms of intersecting discourses of nationalism, attractiveness, environmentalism and domestication. Rather than these discourses working to classify kangaroo as edible or non-edible, they work in varying and contradicting ways. The kangaroo exist outside binaries of food and non-food. When the kangaroo is not discussed as food, it is simultaneously presented as a pest, undomesticated, intelligent and national icon. When kangaroo is thought of as a food item, it is discussed as being exotic, native, gourmet, a resource and to some; a healthy and environmentally sustainable meat choice.

The results presented in Chapter 6 turned to the embodied subjectivities associated with the consumption of kangaroo meat in the home. The satisfying and negative visceral experiences of eating kangaroo demonstrated the role tastes, smells and textures hold in triggering memories and past lived experiences that contribute to bounding the meat as either edible or non-edible. Disgust was found to be a major emotional reaction associated with kangaroo consumption. Stimuli such as taste, smell, sight and texture evoked strong feelings of disgust, eliminating any potential health or environmental benefits. Using the body as a research tool, disgust at kangaroo consumption manifested itself in negative language on the face and body; and can also be expressed through laughter in a group situation. These complex visceral responses are perhaps indicative of the competing and contradictory discourses that surround the kangaroo and contribute for example; to the emotion of disgust being intertwined with the nationalistic discourse of ‘Skippy’. The kangaroo ultimately breaks down understandings of what is considered food and what is not, through concepts of ‘the abject’ and contamination of ‘the body’.

7.4 Policy implications

These results present some potential policy implications that could be presented to the Department of Climate Change and Energy Efficiency and/or The Kangaroo Industry of
Australia as recommendations. If the Australian Government were to seriously pursue the proposal by Wilson and Edwards (2008) for an increase in kangaroo consumption and reduction in the numbers of livestock to decrease Australia’s greenhouse gas emissions, several of these findings need to be considered. First, for many people, it would take more than the attribute of kangaroos being ‘environmentally friendly’ to make the meat a permanent fixture on their dinner table. Clearly, amongst this group of consumers, the kangaroo industry cannot rely on discourses of climate change alone to increase sales of kangaroo. Before any decisions are made to invest in the kangaroo industry as one to rival its livestock counterpart, the barriers to increased consumption articulated in this thesis need to be fully recognized. Rather than any one attribute that could be avoided by the kangaroo industry marketing department, it is the intersection of a number of competing discourses (nationalism, attractiveness, nativeness etc.) that contribute towards the public’s valuing of the kangaroo. Some participants more in favor of consuming kangaroo mentioned ‘price’ or ‘cost’ to the consumer would also be a contributor to their purchase decision. Yet, lower cost alone is not going to assure the increased regular presence of kangaroo meat at dining tables in Wollongong.

Given the strong resistances to eating kangaroo outlined in this thesis, promoting consumption of less red meat in general rather than kangaroos may be an option, as any reduction in the number of livestock would have the same effect of reducing national greenhouse gas emissions. However a move to lower meat diets appears to be hindered by current red meat consumption levels, as demonstrated in the weekly meal planner results in Chapter 6. Short-term changes to diet and meat consumption as a climate change adaptation and mitigation policy response are unlikely to be embraced wholeheartedly by all of the Australian public.

Promoting the increased consumption of kangaroo outside of the home, for example in restaurants could be one first intermediary step the kangaroo industry could take, considering many participants in this study already associated kangaroo meat with discourses of ‘exotic’ and ‘gourmet’ foods. Placing kangaroo on the menu of more everyday cafes, bistros, diners and perhaps fast-food outlets could help work towards kangaroo becoming a more widespread, common and accepted foodstuff for lunch or dinner.
7.5 Other Future Research Agendas

This thesis is only a beginning and presents a number of research agendas for the geographies of animals, geographies of food and tourism geographies. This thesis is just a small project set in a much larger project of understanding the importance of visceral responses to making sense of both human/non-human animal relationships and space.

In terms of geographies of food, the conceptual framework and methods outlined in this thesis could be applied to a range of other ‘alternative’ foods. In particular, using the body as an instrument of research presents exciting opportunities to expand geographic thought of how and why certain foods are constituted as different. Such examples of ‘alternative’ meats could include brain, liver, as well as other ‘feral’ species such as rabbit, camel; as well as other ‘native’ species such as crocodile and emu.

For animal geographies there is much opportunity to acknowledge the importance of visceral approaches to the relationships people have with different animals – and how they can help configure understandings of where and why they belong – or not. This thesis had strong findings for disgust. One extension could be investigating if non-traditional household pets such as pigs or rats elicit embodied emotions of disgust because they are considered ‘dirty’ animals; and because disgust is often associated with uncleanliness. Potential also exists for exploration of converse visceral emotions of joy and pleasure in relation to non-human animals in making places home.

Also, climate change appears to be opening up new research agendas in terms of ethics, animals and their carbon or ecological footprint. Such future research could pursue questions of whether some animals that have a lighter environmental impact on the land and atmosphere (like kangaroos) are considered to have more of a right to live or to be valued more by humans. Which other animals have large social value in terms of their greenhouse gas emissions? Are animals with larger greenhouse gas outputs condemned in the eyes of some environmentalists? Recent calls for camel eradication in Australia is just one example (Higgins, 2010).

Finally, a research agenda for geographies of tourism is opened to give closer consideration to the importance of what kinds of food people consume during holidays
and travel. Such research could explore why people are often more willing to eat kangaroo outside of their home and on holidays. Introducing the bodies of participants as research tools opens many possibilities for geographers.
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APPENDIX A: ETHICS APPROVAL

University of Wollongong

INITIAL APPLICATION APPROVAL
In reply please quote: HE99/283
Further Enquiries Phone: 4221 4457

14 October 2009

Mr Bryce Appleby
School of Earth and Environmental Sciences
University of Wollongong
NSW 2522

Dear Mr Appleby,

Thank you for your response dated 29 September 2009 to the HREC review of the application detailed below. I am pleased to advise that the application has been approved.

Ethics Number: HE09/283

Project Title: Identifying resistances to putting skippy on the dinner plate to combat climate change.

Researchers: A/Professor Gordon Waitt, Mr Bryce Appleby

Approval Date: 30 September 2009

Expiry Date: 29 September 2010

The University of Wollongong/SEESIAH Humanities, Social Science and Behavioural HREC is constituted and functions in accordance with the NHMRC National Statement on Ethical Conduct in Human Research. The HREC has reviewed the research proposal for compliance with the National Statement and approval of this project is conditional upon your continuing compliance with this document. As evidence of continuing compliance, the Human Research Ethics Committee requires that researchers immediately report:

- proposed changes to the protocol including changes to investigators involved
- serious or unexpected adverse effects on participants
- unforeseen events that might affect continued ethical acceptability of the project.

You are also required to complete monitoring reports annually and at the end of your project. These reports are sent out approximately 6 weeks prior to the date your ethics approval expires. The reports must be completed, signed by the appropriate Head of School, and returned to the Research Services Office prior to the expiry date.

Yours sincerely

[Signature]

A/Professor Steven Roozenys
Chair, Human Research Ethics Committee

Cc: A/Professor Gordon Waitt, School of Earth and Environmental Sciences
APPENDIX B: DRAFT INTERVIEW/FOCUS GROUP SCHEDULE (1)

In your household:

1. Who normally does the grocery shopping?
2. Who normally does the cooking?
3. Who normally does the meal planning?
4. In a typical week what is the main dinner meal:

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<tr>
<th>DAY</th>
<th>DINNER/DISH</th>
<th>COOK</th>
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<td>Monday</td>
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5. If you go out for dinner/to eat what would you normally order for your main meal?
6. Is kangaroo part of your normal weekly meal planning?
   why so? why not?

If no:
7. Have you ever tasted kangaroo meat?
   What did it taste like?
   Have you ever seen kangaroo to purchase in the shop?
   Would you know how to cook Kangaroo?
8. Under what circumstances might you consider eating Kangaroo?
9. There is a lot of political talk at the moment about climate change – What does ‘climate change’ or ‘carbon footprints’ mean to you?
10. What do you think are the biggest sources of carbon dioxide?
11. Would you consider eating kangaroo to reduce your carbon footprint?
APPENDIX C:
DRAFT INTERVIEW /FOCUS GROUP SCHEDULE
(2)

Section 1: In the Household
1. Who normally does the grocery shopping?
2. Who normally does the meal planning?
3. Who normally does the cooking?
4. From where has most of the influence on your cooking come from? Ideas?
   Recipes?
5. In the last week what was the main dinner/meal:

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<th>DAY</th>
<th>DINNER/DISH</th>
<th>Primary Meat/Veg</th>
<th>COOK</th>
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6. Why do you prepare theses dishes? (Price, cooking time, culture)

7. Are there any foods you reserve for special events or family gatherings?

8. How do your weekly dinner dishes differ from that of your family or friends?

9. What do you enjoy about eating these meat dishes? – (taste, smell, texture, proteins)
10. Is there anything you dislike about eating these meat dishes? (taste, smells etc)

11. More generally, are there any foods that disgust or offend you? Why?
12. How important is the nutritional/fat content when purchasing different meats?
13. How does price influence your food choices? What about when trying new things?
14. Do you like trying new foods?
15. Is the ethical treatment/farming of animals important to you?
**Section 2: Kangaroo**

16. Is kangaroo part of your normal weekly meal planning?

If yes:
17. Why do you eat it? (Environmental benefits, taste, cost, low fat, price, health etc)

If no:
18. Have you ever eaten kangaroo meat?

19. Would you like to taste some kangaroo meat?
   What did it taste like? Smell like? Describe the texture

20. Have you ever seen kangaroo to purchase in the shop?

21. Would you know how to cook Kangaroo? recipes?

22. Under what circumstances might you consider eating Kangaroo? (with friends, eating out, at home)

**Climate**

23. Have you thought about meat production/consumption as a contributor to GHG emissions before you completed this interview?

   Do you have any ideas about this? What does climate change mean to you?

24. Some scientists & conservationists are promoting kangaroo consumption as a way to reduce GHG emissions – Would you consider eating kangaroo / eating more to reduce your carbon footprint?

25. Are there any other thoughts or comments you would like to share with me?
APPENDIX D:
FINAL INTERVIEW/FOCUS GROUP SCHEDULE

Section 1: In the Household
12. Could you tell me about your weekly shopping practices -
   Who normally does the grocery shopping? where?
   meal planning?
   cooking?
13. From where has most of the influence on your cooking come from? Ideas?
   Recipes?
14. In the last week what was the main dinner/meal:

<table>
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<th>DAY</th>
<th>DINNER/DISH</th>
<th>Primary Meat/Veg</th>
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1. What do you enjoy about eating these dishes? – (taste, smell, texture, proteins)
2. Is there anything you dislike about eating these meat dishes? (taste, smells etc)
3. How important is the nutritional/fat content when purchasing different meats?
4. How does price influence your food choices?
5. Are there any foods you reserve for special events or family gatherings?
6. How do your weekly dinner dishes differ from that of your family or friends?
7. Do you like trying new foods? What impacts this? (ie price, cooking time, taste)
8. Are there any foods that disgust or offend you? Why?
9. Is the ethical treatment/farming of animals an important issue for you?
**Section 2: Kangaroo**

Determine from table whether kangaroo is part of interviewees weekly meal planning. If yes:

10. Why do you eat kangaroo? (Environmental benefits, taste, cost, low fat, price, health etc)

If no:

11. Have you ever eaten kangaroo meat?

12. Would you like to try some kangaroo meat, or be reminded of the taste?
   
   ➢ What did it taste like? Smell like? Describe the texture?

13. Where have you seen kangaroo meat for purchase? Butcher or supermarket?

14. Would you know how to cook Kangaroo? Recipes?

15. Under what circumstances might you consider eating Kangaroo? (with friends, eating out, at home)

**Section 3: Climate**

16. There is a lot of debate about the costs & science surrounding climate change and greenhouse gases at the moment (politics, media etc.) What do you think about these debates? Are they interesting or relevant to you?

17. Do you think the meat industry is responsible for producing large amounts of greenhouse gases?

18. What do you think about the role of the agriculture and meat industries in contributing to GHG emissions and climate change?

19. How do you think the meat industry should respond to climate change?

20. How do you think meat consumers should respond?

21. What do you think are the implications of eating more kangaroo meat?

22. Some scientists & conservationists are promoting kangaroo consumption as a simple way to reduce GHG emissions – Would you consider eating kangaroo regularly to reduce your carbon footprint?
5. Who normally does the cooking in your household?

4. Who normally does the meal planning in your household?

My household normally shops for food on a: DAILY BASIS - WEEKLY BASIS - MONTHLY BASIS - FORTNIGHTLY BASIS

3. Circle one of the following answers:

-_______________________________
  Bread

-_______________________________
  Dairy Products

-_______________________________
  Meats

-_______________________________
  Vegetables

2. Where do you normally purchase the following food items?

-________________________________________________________________________

1. Who normally does the food shopping?

Part 1: Normal Food Shopping Practices
<table>
<thead>
<tr>
<th>Day</th>
<th>COOK</th>
<th>Type of Meal/VEG</th>
<th>Dinner/Dish</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
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<tr>
<td>Saturday</td>
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<tr>
<td>Monday</td>
<td></td>
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</tr>
</tbody>
</table>

Part 2: Normal Weekly Main Dinner/Meal Planner
Part 3: Climate Science and Climate Economics

➢ How interested are you in debates about climate science?
   Put an ‘x’ somewhere along this scale to indicate your level of interest.

*not interested*   *very interested*

![Scale]

why?.......................................................................................................................... never thought about it

➢ How interested are you in debates about carbon trading?
   Put an ‘x’ somewhere along this scale to indicate your level of interest.

*not interested*   *very interested*

![Scale]

why?.......................................................................................................................... never thought about it

➢ Have these debates influenced what you do in your household?
   Put an ‘x’ somewhere along this scale to indicate your level of influence.

*no influence on household practices*   *some influence on household practices*   *great influence on household practices*

![Scale]

If yes, any examples?..................................................................................................

➢ Do you think the meat industry is responsible for producing large amounts of Greenhouse Gases?

No   Yes

➢ Would you consider eating kangaroo regularly to reduce your carbon footprint?

No   Yes
APPENDIX E: PARTICIPANT INFORMATION SHEET

PARTICIPANT INFORMATION SHEET

Food Cultures

The Purpose
The purpose of this project is to gain greater insights into the food cultures of Wollongong. The aim of the project is to reveal the diversity of weekly household meal plans in Wollongong and the reasons for people choosing particular foods.

The Focus
Food is important to everyone. The focus of this study is to uncover why people eat particular foods. What foods do you enjoy eating? What influences your food choices? Other questions will focus on different types of meat consumed in the household, including native animals.

What you will be asked to do
In a one-on-one interview, you will be asked to talk about your food choices and normal weekly meal plan. There are no right and wrong answers. The conversation will take about one hour and will be audio-taped to ensure accurate transcription. All material will always remain confidential. You will be given pseudonym if direct quotations from your conversation are used in the thesis or publications.

Your participation in the Food Cultures Project is greatly appreciated. Please be aware your involvement is completely voluntary and you may withdraw your participation at any time along with any data you have provided. Doing so will not affect your relationship with the university in any way.

The Project Organiser
If you have any enquiries about the research please contact:
Bryce Appleby (ph: 02 4284 4570; bsa772@uow.edu.au) or
Dr Gordon Waitt (ph: 02 4221 3684; gwaitt@uow.edu.au)
If you have any concerns or complaints regarding the way the research is or has been conducted, you can contact the Ethics Officer, Human Research Ethics Committee, of the University of Wollongong on (02) 42214457.

Thank you for your interest in this study
CONSENT FORM FOR PARTICIPANTS

Food Cultures

Bryce Appleby
School of Earth & Environmental Science, Faculty of Science

I have been given information about the Food Cultures Project and discussed the research project with Bryce Appleby who is conducting this research through the School of Earth and Environmental Sciences at the University of Wollongong.

I have been advised of the potential risks and burdens associated with this research. I understand this includes participating in a semi-structured one-on-one interview for around 1 hour. I have had an opportunity to ask Bryce Appleby any questions I may have about the research and my participation.

I understand that my participation in this research is voluntary; I am free to withdraw from the research at any time. My withdrawal from participation will not affect my relationship with the School of Earth & Environmental Sciences or with the University of Wollongong.

If I have any enquiries about the research, I can contact Bryce Appleby (02 4284 4570; bsa772@uow.edu.au) or Dr Gordon Waitt (02 4221 3684; gwaitt@uow.edu.au). If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong on 4221 4457.

By signing below I am indicating my consent to:
• participate in a one-on-one interview, 1 hour in duration held in a place of convenience;
• have discussions audiotaped by the researcher for later transcription and analysis;
• have any of my drawings reproduced in publications;
• be directly quoted in publications with use of a pseudonym.

I understand that the data collected from my participation will be used for scholarly publications, conference presentations and reports, and I consent for it to be used in that manner.

Signed........................................................................ Date............................................................... ....../....../......

Name (please print).................................................................................................................................................

Terms and conditions:
I understand that my personal particulars will be stored by Gordon Waitt, University of Wollongong, for a minimum of five years for record keeping and administrative purposes only and will not be supplied to any other person or organisation for any other purpose.
Food Cultures

What influences your food choices??
A study of the diversity of weekly household meal plans in Wollongong and the reasons for people choosing particular foods.

Needed:
Volunteers to participate in focus group discussions and interviews
APPENDIX I: EXAMPLE CODING EXTRACT

1. Meaning

1.1 Kangaroo as national emblem 1.2 National treasure 1.3 National emblem
1.4 National symbol 1.5 National icon 1.6 kangaroo as a nuisance
1.7 kangaroo as undomesticated 1.8 sustainable 1.9 similar to humans
1.10 kangaroo as specially 1.11 disgust 1.12 unique
1.13 commitment 1.14 sceptical 1.15

Climate change
1.13 commitment 1.14 sceptical 1.16 confused

2. Attitude

2.1 smart animal 2.2 poor baby kangaroo 2.3 beautiful nature
2.4 attractive animal 2.5 native 2.6 different animal
2.7 feral animal 2.8 pest 2.9 wild animal
2.10 crazy animal 2.11 meat diseased 2.12 meat healthy
2.13 meat poor people’s food 2.14 not available 2.15 different

Climate change
2.16 confused 2.17 concern 2.18 interest
2.19 needs action 2.20 no problem 2.21 community effort
2.22 big responsibility 2.23 distrust 2.24 debate needed

3. Experiences

Kangaroos
3.1 cause road accident 3.2 damage farms 3.3 hunting/shooting kangaroo hopping around

Kangaroo meat
3.4 buying in supermarket 3.5 seeing in supermarket 3.6 smelling
3.7 tasting 3.8 eating in restaurant 3.9 eating/cooking at home
3.10 seeing on cooking show 3.11 expensive 3.12 cheap
3.13 bad experience 3.14 good experience 3.15 tricked into eating it
3.16 didn’t know I was eating it

Climate change
3.16 weather 3.17 heat 3.18 sea level rise
3.19 ignore 3.20 community

4. Practice

4.1 eat less meat 4.2 no change 4.3 recycling
4.4 saving water 4.5 no plastic 4.6 save power
4.7 solar energy 4.8 saving 4.9 garden
4.10 teaching 4.11 less waste